THE IMPACT OF PERFORMANCE-BASED REWARD SYSTEM (PBRS) ON CUSTOMERS' PERCEIVED SERVICE OUTCOMES.

by

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Declaration

"I, Botshabelo Kealesitse, declare that the PhD thesis entitled *The impact of performance-based reward system (PBRS) on customers' perceived service outcomes*, is no more than 100 000 words in length including quotes and exclusive of tables, figures, appendices, bibliography, references and footnotes. This thesis contains no material that has been submitted previously, in whole or in part, for the award of any other academic degree or diploma. Except where otherwise indicated, this thesis is my own work".

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Botshabelo Kealesitse

ABSTRACT

The effective management of public sector services is a critical issue for governments around the world, prompted by consumer complaints about the poor quality of public sector services. As such, governments have initiated a range of reforms aimed at improving their services (Miller and Miller, 1991; Swindell and Kelly, 2005). One such reform includes the adoption of performance-based reward schemes (PBRS), which are aimed at motivating employees to improve their performance and thus ultimately improve service quality (Barrett & Turberville, 2001). Despite the growth in the use of these performance enhancement schemes, research on how the schemes impact customers' perceptions of service quality has been limited. Where research has been undertaken, it has focused more on employees' attitudes to performance incentives (Schwab 1974, Marsden and Richardson, 1994, Tornow and Wiley, 1991) and did not look at service outcomes. Additionally, the majority of the research in this area has focused on the private sector. As a result, it is important to examine the impact of PBRS on customers' perceptions of public sector service quality because customers are the recipients of these services and are therefore in the best position to determine whether there service quality has improved. The public sector is an important context, as they deliver a range of essential services to consumers and also operate differently than the private sector. Consequently, programs that work best in the private sector may not work well in the public sector (Chen et al., 2004).

This research examined the impact of PBRS on public sector service quality in Botswana by exploring whether different levels of customer oriented PBRS schemes impact customers' perceptions of service quality. Six government departments were examined, three categorised as having high levels of customer focus in their PBRS plans and three as having low levels of customer focus in their PBRS plans. Marketing research generally suggests that customer orientation should improve organisational performance and bring about high levels of customer satisfaction in both private (Narver & Slater, 1990) and public sector organisations (Cheng et al., 2004). Thus, it would be anticipated that customers should potentially be more satisfied if departments' reward schemes were more customer focused. In that regard, it was expected that government departments having high customer oriented PBRS

would perform better (i.e. have more satisfied consumers) than departments with low levels of customer focused PBRS programs.

Departments in the two categories of customer focus were compared using MANOVA and ANOVA to determine if there are differences in customers' perceived service quality. The MANOVA and ANOVA results were statistically significant, indicating that there were differences in customers' perceived service quality between the two categories of departments based on their level of customer focus in PBRS schemes. Post-hoc independent t-tests were undertaken to determine the direction of the difference in customers' perceived service quality between departments in the two categories of departments. Results revealed that departments with low customer oriented PBRS schemes unexpectedly performed better than departments with high customer focused PBRS schemes. These results were unanticipated and explanations for the contrary findings are discussed. As a follow-up, additional comparisons of the three departments within the same category of PBRS schemes were undertaken to further determine if additional differences existed within each grouping. The additional analysis revealed that differences existed in customers' perceptions of service quality between departments within each of the two categories. This may mean that while departments could be assessed as being similar in terms of the customer orientation of PBRS plans; their customers' perceived service quality could differ. It was concluded that each department provided unique services and that customers perceived each service differently. Findings implied that departments varied in terms of their service quality, making comparing departments with similar levels of PBRS customer orientation more difficult and less appropriate in projecting service outcomes such as customers' perceptions of service quality.

Dedication

This thesis is dedicated to my loving mother Rosinah Kealesitse who despite her financial status made great sacrifices to ensure that I benefited from education. She continued to support me even through my illness when I worked tirelessly to complete this thesis.

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CHAPTER 1
INTRODUCTION

1.1 Background to the research

Globally the public sector is a major service provider covering a wide variety of services that include among others education, rail/roads infrastructure, health, utilities, police, the army and other activities. These services are provided to citizens, visitors, as well as to private, and public sector organisations (Rowley, 1998; Wisniewski and Stewart, 2004). The public sector is entrusted with the responsibility of managing public resources on behalf of its citizens. As a custodian of these resources, the public sector is expected to show high levels of accountability and commitment to its customers through provision of good quality services (Wisniewski and Stewart, 2004; McAdam, Hazlet, and Casey, 2005; Sharma and Wanna, 2005). This implies that the public sector has an obligation to meet its customers' service needs.

In recent years, governments have been under increased pressure from public sector customers to improve service quality (Skelcher, 1992). Some governments have been accused of insensitivity to customers' needs (Caiden, 1998) and some cases customers have simply lost trust in the ability of their governments to deliver good quality services (Shah, 2005). Public sector customers are no longer indifferent and passive about the quality of services they receive from their governments, instead they demand high quality services (Skelcher, 1992). Recent advances in information technology have also increased the pressure for improvements in public sector service quality (Bolton, 2003). Information technology has made it easier for public sector customers to get access to information on service delivery from other countries, which they in turn use to gauge the performance of services in their countries (Bolton, 2003). This unfortunately puts more pressure on governments as customers compare their services with those of other governments and make demands for similar or better services (Bolton, 2003; Shah, 2005).

Generally, customers' complaints about service quality (in both private and public sectors) may arise as a result of a discrepancy between expected and perceived service. There are a range of gaps that may affect customers' satisfaction with services. Parasuraman' et al.'s (1988) SERVQUAL instrument identified five gaps that may affect customers' satisfaction with services. The service quality evaluations of consumers are discussed in section 5.3.5, page 261. Should there be any consistent areas in which gaps exist it would suggest that there are consistent issues of dissatisfaction across services, however, if the gaps for issues vary across services, it would suggest that each service has different issues of dissatisfaction. The results and implications of these similarities and differences are discussed within the section.

In response to pressure from their customers, governments in many countries have explored options to improve services (Miller and Miller, 1991; Skelcher, 1992; Donnelly, Wisniewski, Dalrymple, and Curry, 1995; Marshall, 1998; McAdam et al., 2005; Sharma and Wanna, 2005). Governments have been challenged to replace their traditional administration and come up with a structure that is more relevant to delivering high quality services (Jarrar and Schiuma, 2007; Manolopoulos, 2008). There is also a desire to refocus service delivery in the public sector such that it becomes more responsive to customers' needs (Wood, 1995; Manolopoulos, 2008). Thus, many governments have adopted a more results oriented and customer focused approach to management and delivery of services (Cheung, 1996; Parker and Bradley, 2000; Jarrar and Schiuma, 2007). Cheung (1996) for example, reports on the "…introduction of more business-oriented and consumer-oriented practices…" (p.37), in the Hong Kong public sector. In Australia, a public sector reform program was put in place as early as the 1980s (Marshall, 1998). Parker and Bradley (2000) also refer to "…a series of managerial reforms linked to public management…" (p.125), within the Australian public sector.

Key to the response of governments was the development of performance management approaches that could enhance the quality of public sector services (Brysland and Curry, 2001; Beer and Cannon, 2004). Some governments adopted performance measurements to evaluate employees' performance and examine their (employees) productivity (Jarrar and Schiuma, 2007). One of the programs suggested to enhance employees' performance was the use of pay for performance incentive schemes (Barrett and Turberville, 2001; Manolopoulos, 2008). These performance-based incentive schemes were in the form of variable rewards, which were directly related to the employees' performance (Doyle and Kleiner, 1994). Proponents of performance-based rewards believed that linking employees' performance to rewards would motivate employees to improve their performance and ultimately enhance the quality of services (Tornow and Wiley, 1991; Barrett and Turberville, 2001; Manolopoulos, 2008).

As will be discussed in section 2.4 of the literature review, the link between employees' performance and rewards can be explained using motivation theories such as expectancy theory, Hertzberg's two-factor theory, goal setting theory and equity theory. According to expectancy theory, employees are motivated to improve their performance if they believe that by working harder they will increase their performance outcomes, and that the resulting performance improvement will be adequately rewarded (Locke and Latham, 1990; Lawler, 1994). This implies that rewarding employees adequately could potentially improve organisational performance.

Hertzberg's two-factor theory suggests that employees are motivated to improve their performance by the existence of vital job factors known as motivators and hygiene factors. Motivators are usually non-monetary rewards such as sense of achievement, recognition, responsibility, actual job, advancement and growth (Chamberlin, Wragg, Haynes, and Wragg, 2002; Usugami and Park, 2006). The existence of these factors in the work place is believed to improve job satisfaction and lead to increased levels of employee motivation (Siemens, 2005). Their absence may demotivate employees and lead to poor performance (Usugami and Park, 2006). Hygiene factors are rewards and other job facets that do not significantly increase employee motivation but are necessary for maintaining levels of employee motivation for example salary, job security, company policy and others (Usugami and Park, 2006). The absence of hygiene factors could potentially lower employee motivation and result in poor performance (Chamberlin et al., 2002; Usugami and Park, 2006).

Goal setting theory proposes that employees are likely to be motivated to perform better provided they have specific, realistic and achievable performance goals (Locke and Latham, 1990). In addition, Locke and Latham (1990) suggest that employees would be motivated to improve performance if their performance goals are tied to incentives. In that way, the use of rewards tied to performance goals should potentially improve performance output and therefore service quality. Lastly, equity theory suggests that employees compare their effort on the job and the rewards they receive with what other employees performing the same task receive (Gomez-Mejia and Balkin, 1992; Lowery, Petty, and Thompson, 1995; Heneman and Werner, 2005). On the basis of this comparison they will determine whether they are being over or under-rewarded (Miner 2005). Equity exists where inputs (job effort) equal outputs (rewards) when compared to other employees performing the same job (Heneman and Werner, 2005). Thus, in accordance with this theory employees will be motivated to improve performance provided they believe that their rewards are equitable to their job performance when compared to other employees performing the same job.

Despite attempts by governments to introduce reforms aimed at improving service quality, they (governments) are often faced with constraints in their service delivery efforts. Service delivery within the public sector is usually accompanied by a bureaucratic process of checks and balances (for example, consensus building, equity and equal opportunity), which could negatively impact on service quality (Doyle and Kleiner, 1994). Checks and balances are part of the bureaucratic process which is common in public sector service delivery. They cause further delays in that most public sector services have to go through bureaucratic processes because of the regulated nature of many of the services provided. This potentially delays an organisation’s ability to make significant changes in their activities quickly, which may result in customers developing negative perceptions of ongoing low quality service delivery. Secondly, most governments operate on limited budgets that cannot be effectively distributed among all the competing needs of their customers (Andreassen, 1994; Donnelly et al., 1995). Unlike the private sector, where organisations finance their operations mainly through profit making, public sector organisations are not normally profit driven, and often have to strive to maximise the welfare of their customers with limited resources (Doyle and Kleiner, 1994). In view of resource constraints, governments often have to ration their budgets in order to reach as many customers as possible (Harber, Ashkanasy, and Callan, 1997; Needham, 2006). In that way governments may not be able to provide services in the range and quantity required by their customers thus making customer focused service delivery difficult within the public sector (Harber et al., 1997; Needham, 2006).

Secondly, unlike in the private sector where customers usually participate in the consumption of services by choice, public sector customers sometimes participate in services that they do not want, or plan to consume but are required to do so by the law (Davis, 2006; Donnelly, Kerr, Rimmer, and Shiu, 2006). These are usually regulatory and enforcement services such as police, payment of tax, speeding fines (tickets), and others, that do not directly benefit the consumers (Skelcher, 1992; Donnelly et al., 2006). The mandatory participation of consumers in these services makes the service experience less satisfying. In that regard, customers are less likely to provide meaningful and unbiased feedback about the quality of these services even if the departments that provide these services do an excellent job (Davis, 2006).

Another compounding factor is the nature of customers served by the public sector. Compared to the private sector, where organisations select markets they want to operate in, public sector organisations have limited choice, as they have a mandate to serve all their customers (Chen, Yu, and Chang, 2005). Governments have to provide services to varied customers ranging from individuals to private and public institutions, and these customers often differ in their service needs (Donnelly et al., 1995; Kelly, 2005). The public sector is concerned with fairness, equity and the welfare of all these customers when delivering its services (Chen et al., 2005). In view of the differences in customers' interests and needs, the public sector could face a difficult challenge in providing services that satisfy these different groups of customers (Rowley, 1998; Donnelly et al., 1995). In addition, differences in customers' needs could imply that what motivates one group in seeking services may conflict with another group's service requirements (Chen et al., 2005).

While governments face these challenges, they have an obligation to provide services to their customers, and thus have to devise means of addressing customers' needs effectively (Dorsch and Yasin, 1998; Sharifah, Mokhtar, and Arawati, 2000). Therefore, governments continue to tirelessly explore ways of effective delivering services to their customers (Manolopoulos, 2008). As discussed earlier in this section, governments had hoped that the use of performance enhancement reward schemes would aid in motivating employees to improve their service quality and customer satisfaction (Barrett and Turberville, 2001).

The adoption of performance incentives in both the public and private sectors has elicited interest from researchers who explored the effectiveness of such schemes (Meyer, 1975; Ingraham, 1993; Kohn, 1993; and Deci and Ryan, 1997; Manolopoulos, 2008). Some researchers have examined employees' attitudes to performance incentive schemes (Marsden and Richardson, 1994; Kellough and Selden, 1997; Mamman, 1998). Their main interest was on how these schemes affected employees' motivation and performance (Kohn, 1993; Marsden and Richardson, 1994; Manolopoulos, 2008). Researchers had different views about the efficacy of the incentive schemes, with some, notably Kohn (1993) strongly doubting the effectiveness of the schemes on improving employee motivation. Kohn (1993) argued against the use of performance incentives, as he believed they did not have a lasting effect of performance improvement. Beer and Cannon (2004) suggested that linking rewards to performance could encourage employees to set less realistic and easily achievable goals. Marsden and Richardson (1993) found, however, that the link between rewards and employee performance was weak. On the other hand, Manolopoulos (2008) examined the relationship between work motivation and organisational performance within the Greek public sector. He suggested that the use of intrinsic rewards could result in better public sector performance, rather than financial drivers.

While researchers held conflicting views about the effectiveness of rewards on employee motivation, governments and the private sector continued to use performance incentives (Beer and Cannon, 2004). The use of performance based remuneration schemes as part of public sector reform has not been confined to developed countries. Some governments in developing countries, for example Botswana, have also initiated these reforms. In the light of the continued use of performance based reward systems (PBRSs) in the public sector, this research explored whether differences in the level of customer orientation of PBRS affects the quality of services as perceived by public sector customers in Botswana. As will be discussed in section 4.6, comparisons were made between six government departments, three categorised as high and three as low customer oriented, in order to establish whether there were differences in customers' perceived service quality between the two categories.

This research focuses on the Botswana public sector where a performance based reward system (PBRS) was introduced in 2003. It is hoped, however, that the results from this research will be generally relevant to other public sectors that have implemented PBRS schemes or are planning to develop PBRS schemes as a means to improve service quality.

The next section provides a brief overview of how the Botswana public sector has responded to global challenges for service improvement in the public sector.

1.2 Historical background of the Botswana public sector and the introduction of performance based reward system (PBRS)

The republic of Botswana is a land locked country located in the middle of southern Africa with a population of approximately two million people. It covers a land area of 582,000 square kilometres (Moleboge, 2003). The country gained independence in 1966 from British colonial rule. At the time of independence it was classified as one the poorest countries in the world (Tsie, 1996). Its GDP in current prices was estimated at P36.9 million or roughly US$7 million. The government relied mostly on financial support from the British government to balance its budget (Marroquin, 2005; Republic of Botswana, 2006). This situation changed in the early 1980s following the discovery and development of diamond mines (Moleboge, 2003). In 1982 diamonds were the leading foreign exchange generator contributing 40% of total exports (Republic of Botswana, 2006). The country's per capita income grew from US$60 at independence to US$3000 in 1992 (Tsie, 1996). In 1999/2000 real GDP estimates increased to P15.4 billion (roughly US3 billion) representing a 7.7% growth rate due mainly to the Orapa diamond mine (Nordas, 2000). Income from the mining sector continues to be a major contributor to the growth of the country's economy, contributing a share of 35% of GDP and 50% of government revenue (Moleboge, 2003).

As a result of increased income from the mining sector, good governance, political stability and prudent management of the economy, Botswana has experienced rapid economic growth and moved from a low income to a middle-income country (Republic of Botswana, 2006). It was even awarded high economic ratings by Standard and Poor's at "A" for long term debt and Prime-1 for short term debt. Despite the rapid economic growth and high ratings from international bodies, the country's economic growth is threatened by reliance on minerals which are subject to global economic conditions such as recession. Nordas (2000) predicts that the Botswana economy may slow because the mineral sector is maturing and there is unlikely to be another boom in the near future. Tsie (1996) also suggested that the economy of Botswana had reached a plateau and that government spending was likely to outpace real government revenue.

In addition to the threat of relying on mining as a source of income, the Botswana government faces the challenge of HIV/AIDS, which could erode revenue from the mining sector (Gaolatlhe, 2006). The HIV/AIDS prevalence rate in Botswana was estimated at around 37% for the adult age groups (Avert.org, 2006) while the prevalence rate for the whole population was 19% (UNDP Botswana.org.bw, 2006). HIV/AIDS could impede the government's efforts to diversify the economy by requiring a large share of the government's budget and also reducing the workforce's productivity (Iyanda and Kealesitse, 2005). In a bid to reduce the negative effects of HIV/AIDS, the Botswana government makes large expenditures for health and social issues related to HIV/AIDS (Gaolatlhe, 2006).

Another challenge facing the Botswana government was the perception by consumers of poor public sector services (Hope, 1999). Customers raised concerns about lack of productivity in the Botswana public sector (Hope, 1999). Complaints usually related to issues such as lack of focus for government programs, poor responsiveness to customers' needs and a general poor customer service (Moleboge, 2003). In addition, customers perceived there was a general decline in employees' morale and motivation, and that affected the quality of basic services such as post offices, water distribution, and railways (Adamolekun and Morgan, 1999).

In response to challenges arising from consumer complaints the Botswana government embarked on a performance improvement drive (Adamolekun and Morgan, 1999). A number of initiatives were undertaken to improve employees' performance. The government focussed on programs targeting its employees as a starting point for improved productivity within the public sector (Adamolekun and Morgan, 1999). This culminated in the establishment of the Botswana

National Productivity Centre in 1993 whose mandate was to spearhead the campaign for productivity in both the public and private sectors (Hope, 2003; ILO.org, 2006). The government also adapted the Work Improvement Teams Strategy (WITS) from Singapore as an additional measure to guide its public sector productivity initiative (worldbank.org, 1996). The WITS technique advocates for collective responsibility in work effort to enhance the spirit of team-work and improved performance. It also encourages employees to qualitatively assess their individual and group outputs in a given task (Hope, 2003).

In order to coordinate performance improvement reforms in different units of the public sector, the Botswana government introduced the Performance Management System (DPSM, 2008). The Performance Management System (PMS) provides a framework that guides employees' performance towards achieving improved service delivery within the public sector. The PMS approach was initially rolled out to different departments of the government, but its adoption was made compulsory.

As a way of making PMS operational, the government introduced a performance based reward system (PBRS) in mid-2000 (DPSM, 2004). Incentive arrangements based on meeting performance targets, in the form of rewards were introduced to enhance performance (DPSM, 2004). The PBRS provided a link between the PMS and individual employee's efforts in the form of measuring performance against objectives set at the beginning of the planning period (DPSM, 2004). While the introduction of PMS and PBRS within the Botswana public sector could be considered a good idea in terms of improving public sector performance, it is not clear whether it has had the desired effect on service outcomes, as expected by customers. The purpose of this research is to examine differences (if any) in customers' perceptions of service quality arising from the use of customer focused PBRS within the public sector.

The next section briefly discusses the research purpose and objectives of the research. The discussion builds on to the significance of the study and its contribution to knowledge.

1.3 Purpose and objectives of the research

The idea of using performance based incentive schemes within the public sector was premised on the expectation that they would improve performance output and result in good quality services. As mentioned in section 1.1, different governmental departments introduced performance incentive schemes with the hope of enhancing their employees' performance. However, while governments continue to use these performance enhancement schemes, there has been very little empirical evidence linking the reward schemes to improvements in public sector performance and service quality. Expectancy theory suggests that the use of rewards would motivate employees to improve their performance provided that they (the employees) believe that their hard work would result in better performance, and that they will be adequately rewarded for their efforts (Lawler, 1994; Hong, Yang, Wang, Chiou, Sun, and Huang, 1995; Chamberlin et al., 2002). The improved performance resulting from the use of performance incentives is therefore expected to result in good quality services and satisfied customers (Schwab, 1974).

Previous attempts have been made to explore the impact of performance based reward schemes on employees' performance (Marsden and Richardson, 1994; Kellough and Selden, 1997; Mamman, 1998; Manolopoulos, 2008). The majority of these studies were conducted in the private sector where it is easier to objectively measure employees' output (Marsden and Richardson, 1994). These studies focused mainly on employees' attitudes to performance incentives (Marsden and Richardson, 1994; Kellough and Selden, 1997; Mamman, 1998). However, little attention was given to examining the effect of rewards on outcomes such as customers' perceived service quality. Manolopoulos (2008) studied the impact of intrinsic and extrinsic rewards on public sector employees' performance. However, like most of the previous studies, Manolopoulos's (2008) study did not link the effect of using intrinsic and extrinsic rewards to public sector customers' perceived service quality. It is important to understand whether the use of rewards in the public sector affects customers' perceived service quality. Customers are the recipients of the service and are, as a result, in a better position to determine whether there was any difference to the quality of services. This research attempts to fill the gap identified above by linking the use of performance incentive schemes such as PBRS, to customers' perceived service quality. The research is undertaken within the public sector context where such studies are limited.

Performance plans from ten Botswana government departments that responded to invitations to participate in this research, were evaluated to determine their extent of customer focus using content analysis. Three departments were categorised as low and three as high customer-focused on the basis of the level of customer orientation of their performance plans. Departments in the two categories were then compared to determine if differences in customer focus of PBRS impacted on the quality of services as perceived by customers. Customer orientation is important as it enhances the quality of services provided to customers and leads to higher levels of customer satisfaction (Deshpande, Farley, and Webster, 1993; Chen, Yu, Yang, and Chang, 2004). It was therefore expected that departments having high customer focused PBRS performance plans would perform better than departments with low customer focused PBRS performance plans, in terms of customers' perceived service quality.

The main objective of this research was to investigate the effect of different levels of customer orientation of performance based reward schemes on customers' perceived level of service quality. Specific objectives of the thesis were as follows:

i) To examine the extent to which PBRS plans for departments in the Botswana public sector were customer focused (oriented).

ii) To examine customers' perception of service quality for departments categorised as high and low customer focused within the Botswana public sector.

iii) To determine if the level of customer focus/orientation of departments' performance plans affects the level of perceived service quality.

The first objective was concerned with evaluating the PBRS performance plans from ten Botswana government departments that responded to invitations to participate in this research. The aim was to determine the extent to which the plans were customer focused/oriented. Departments' performance plans were evaluated using ten content analysis criteria to determine their level of customer orientation. Departments were then categorised as having high and low levels of customer focus/orientation based on the degree of customer focus of departments' performance plans. As will be discussed in section 4.2, following content analysis, three departments were identified within each of the two categories of customer focus (high and low).

The remaining four departments could not be allocated to either of the categories because they did not clearly meet the requirements for either low or high customer focus categories. Details regarding the content analysis process and results are provided in sections 3.6 and 4.2.

The second objective focused on measuring customers' perception of service quality for the six departments categorised as either high or low customer focused. A modified version of Parasuraman et al.'s (1988) SERVQUAL instrument was used to measure a sample of customers' perceived service quality for each of the six departments. The results for each department are provided in section 4.5. SERVQUAL scores were required to enable the researcher to make comparisons between departments in the high and low customer focus categories. This would assist in determining whether customers' service quality perceptions differed for departments categorised as either high or low customer focused.

The last objective focused on exploring the effect of different levels of customer focus of the PBRS scheme on customers' perceived service quality. Two hypotheses were proposed under this objective. The first hypothesis proposed that a customer focused PBRS has a statistically significant impact on customers' perceived service quality. The second hypothesis proposed that higher levels of customer focus/orientation within PBRS schemes would result in a higher level of perceived service quality. The first hypothesis was tested by comparing the two sets of departments' SERVQUAL scores, to determine if the level of customer orientation of PBRS schemes had a statistically significant impact on customers' perceived service quality. MANOVA and ANOVA were undertaken to test this hypothesis. Results indicated that there was a statistically significant impact, thus supporting the first hypothesis. The second hypothesis required comparisons of the mean SERVQUAL scores for departments between the two categories to determine which of the categories performed better than the other. Comparisons were undertaken using post-hoc tests. Results of these comparisons, as discussed in section 4.6, revealed that departments in the low customer focused category performed better than the high customer focused category. These results were not anticipated, and explanations for the contrary findings are provided in section 5.3.5.

1.4 Justification and significance of the research

This research contributes to our understanding of the impact that using performance incentives in the public sector has on the quality of services as perceived by customers. The research addresses two gaps that have been identified within the literature by, 1) linking the use of rewards with customers' perceived service quality and, 2) exploring the impact of different levels of customer focus/orientation of PBRS plans on customers' perceptions of departments' service quality. Given the limited number of studies addressing the link between the use of PBRS and customers' perceived service quality within the public sector, this research is expected to contribute to the existing literature and also to assist in determining the value of such schemes within the public sector. Furthermore, the results can be used to enhance the performance of the public sector by identifying areas of disparity between customer focused PBRS schemes, and customers' perceived service quality and recommending corrective action where necessary.

Figure 1. Theoretical link between customer-oriented PBRS and customer satisfaction

Customer satisfaction occurs as a result of the effective delivery of services by the organisation. Figure 1 illustrates a simple link between customer oriented PBRS, organisational performance and customer satisfaction. As indicated in Figure 1, for satisfaction to occur, services delivered have to match or exceed customers' expectations. The purpose of using PBRS is to reward employees in order to motivate them to improve their performance. PBRS is therefore expected to enhance employee performance where employees are motivated to perform better by their desire to meet performance targets and improve their rewards (Tornow and Wiley, 1991; Barrett and Turberville, 2001; Susseles and Magid, 2005). This improved performance is then expected to result in improved service quality and customer satisfaction.

Theoretically customer orientation is expected to improve organisational performance and bring high levels of customer satisfaction in both private (Narver and Slater 1990) and public sector organisations (Cheng et al., 2004). It would be anticipated that customers should potentially be more satisfied if PBRS were customer focused, i.e. delivering higher quality services that meet or exceed consumer's expectations. In that regard, high customer focused PBRS are expected to result in a higher level of satisfaction than low customer focused PBRS. While this link exists theoretically, it has not been proven empirically. Thus, this thesis examines the impact of low and high customer focused PBRS on customers' perceived service quality. Examining the link between departments with different levels of customer oriented PBRS and customers' perceived service quality is thus, the main contribution of this study.

The use of customers' opinions to investigate the effect of differing levels of customer focus of PBRS on customers' perceived service quality in this thesis is consistent with the marketing concept, which advocates treating the customer as the focus of organisational decision-making (Turner and Spencer, 1997). It is hoped that the results from this thesis will lead to a better understanding of the impact of differing levels of customer focus of PBRS on customers' perceived service quality within the context of the public sector. It is important to examine the impact of PBRS within the public sector context because some differences exist between the private and public sectors and therefore methods successfully implemented in the private sector may not be compatible with the public sector (Chen et al., 2004).

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It is anticipated that this understanding of the effect of customer orientation on service quality would help governments to redesign their reward schemes to make them even more customer focused resulting in better service quality and higher levels of customer satisfaction. Undertaking the study in Botswana, which is a developing country in Africa, could potentially also add to the existing literature concerning the impact of performance based reward schemes on customers' perceived service quality in developing countries. This is consistent with the view of Malhotra, Ulgado, Agarwal, Shainesh, and Wu (2005), who found that there were statistically significant differences in customers' perceived service quality between developed and developing countries. These were attributed to economic, cultural, and social factors. It is expected that the findings from this study would provide insights into customers' perceptions of public sector service quality in Botswana where a study of this nature had not yet been undertaken.

In conclusion, this research is among the first studies that examines the impact of PBRS in the context of the Botswana public sector. The results are therefore expected to aid the Botswana government in its effort to reform its public sector performance. For example, the results could be used to develop service improvement initiatives relevant to public sector services in Botswana as a means to address any deficiencies identified which may or may not be tied to PBRS schemes.

1.5 Definitions

In this section, some concepts and terms that have been used throughout this research are briefly defined.

1.5.1 Customer focus

The term customer focus as used in this thesis refers to attempts by government departments to address the needs of their customers when providing services. The definition of customer focus was borrowed from the customer orientation concept. Deshpande et al. (1993), for example, define customer orientation as "…the set of beliefs that puts the customer's interest first, while not excluding those of all other stakeholders such as owners, managers, and employees, in order to develop a long-term profitable enterprise" (p.27). Customer orientation therefore places emphasis on satisfying the customer. According to Korunka, Scharitzer, Carayon, Hoonakker, Sonnek, and Sainfort (2007), customer orientation in a broader context means "…the comprehensive, continuous collection and analysis of customer expectations as well as their internal and external implementation in an organization's services and interactions, with the objective of establishing stable and economically advantageous customer relationships on the long term" (p.308). Korunka et al. (2007) suggest that in the context of the public sector, customer orientation means "...providing a necessary service in such a way that it meets customers' needs in an optimum manner" (p.308). The definition from Korunka et al. (2007) was adopted when defining customer focus in this thesis. Thus, customer orientation in this research refers to the provision of necessary services to public sector customers in a manner that adequately addresses customers' needs and expectations within the confines of available resources.

Within this research, the terms customer focus and customer orientation have been used interchangeably to mean the same thing. Thus, where customer orientation is used it refers to customer focus as defined above.

1.5.2 PBRS

PBRS is an abbreviation for Performance Based Reward System. In terms of the definition used by the Botswana government (DPSM 2004) PBRS is a "…process that allows linkage between the Performance Management System (PMS) and individual accountability through the development of performance objectives and employee reviews in a manner that will encourage continuous improvement" (p3). In general terms, PBRS is an incentive scheme where employees are offered rewards for exceeding their performance targets in order to motivate them to improve their performance. It was introduced in the Botswana public sector as a way of enhancing employees' performance and improving overall service quality.

In this research PBRS is also used to refer to other performance enhancement schemes generally used by the private and public sectors to improve performance.

1.6 Outline of the thesis

This thesis is arranged into five chapters, excluding the bibliography (references) and appendices. Chapter one sets out the rationale for the thesis by discussing the research background, purpose and objectives of the research as well as the justification and significance of the study.

Chapter two has nine sections. Section 2.1 overviews public sector service delivery and discusses the pressure that governments face as a result of calls for improved services from public sector customers. Governments responded to this pressure by initiating performance improvements which included the use of PBRS (Barrett and Turberville, 2001). Section 2.2 briefly discusses public sector performance in Botswana and challenges faced by the Botswana public sector as well as initiatives taken to improve public sector performance in Botswana. Section 2.3 provides a definition of Performance Based Reward System (PBRS) on the basis of definitions obtained from several sources within the literature including McCollum (2001); DPSM (2004); and Harvey-Beavis (2003). Literature from both the private and public sectors was used to develop an operational definition of PBRS. Section 2.4 provides a discussion of the link between rewards and employee motivation, covering theories of motivation that include Expectancy Theory, Hertzberg’s Two-Factor Theory, Goal Setting Theory, and Equity Theory. These theories are used to describe how rewards could potentially motivate employees to improve their performance, which is expected to result in improved service quality.

Section 2.5 discusses literature on the unintended negative impacts of using rewards to try and motivate employees (Meyer, 1975; Kohn, 1993; Marsden and Richardson, 1994; Cardona, 2002). While rewards have the positive effect of motivating employees to improve their performance, they also have some negative effects that could potentially affect employees’ performance. For example, rewards may encourage individualism as opposed to teamwork (Heneman and Werner 2005). They may also encourage less regard for unrewarded tasks (Chamberlin et al., 2002). Section 2.5 provides more details on the potential negative effects of workplace rewards. Section 2.6 generally discusses services and their unique characteristics and how these unique factors affect service delivery within the public sector. Section 2.7 expands the discussion on public sector services by comparing public sector and private sector services in terms of similarities and differences. The major difference between the public and private sector services is the characteristics of their customers. The public sector provides services to multiple customers who often have different and competing needs (Wisniewski and Stewart, 2004; Kelly, 2005) while the private sector focuses on well-defined customer segments (Kelly, 2005). Section 2.8 dicusses the literature examining employees and their role in service delivery. Employees serve as a link between the organisation and its customers. Efforts to improve service delivery are often centred on employees. Finally, section 2.9 discusses the SERVQUAL instrument and its application in measuring service quality in both public and private sectors. Arguments for and against the use of SERVQUAL are also discussed.

Chapter three discusses the research methodology employed in this thesis and factors prompting the adoption of these methods. The chapter is divided into eight sections. Section 3.1 introduces the chapter and briefly covers the chapter structure. Section 3.2 discusses the methodological choices that are usually available to researchers, which are broadly covered under two areas of qualitative and quantitative methodologies. Section 3.3 covers the philosophical considerations that influence the researchers' choice of research methodology. The choice of research methodology is influenced by two philosophical underpinnings of ontology and epistemology. Section 3.4 discusses the research design that has been followed in this research, which employed a combination of both quantitative and qualitative methods. Section 3.5 covers the data collection process. Data collection was undertaken in two phases. The first phase involved the collection of qualitative data on departmental performance plans from the Botswana public sector to investigate the extent of customer focus of each department's performance plan. The second phase was a survey of customers' perceived service quality using the SERVQUAL instrument. Section 3.6 discusses how content analysis, the method used to analyse departments' performance plans, was conducted. Section 3.7 covers phase two of the data collection process, which involves a survey of customers using a modified SERVQUAL questionnaire. Lastly, Section 3.8 discussed the sampling procedure followed in this research. Convenience samples were used and the rationale for using this method is provided in section 3.8.

Chapter four provides the analysis and results of the data collected using the qualitative and quantitative approaches. Chapter four has six sections. Section 4.1 introduces the chapter and outlines the chapter structure. Section 4.2 provides the discussion on the content analysis process. The analysis in section 4.2 addressed the first objective of this research, which examined the extent to which PBRS schemes were customer oriented. PBRS schemes from ten Botswana government departments were evaluated using content analysis to categorise them into high and low customer focus. Section 4.3 describes the sample and population demographic characteristics. In section 4.4, the reliability of the SERVQUAL instrument is discussed to examine if the instrument measures what it was intended to measure. Section 4.5 covers the discussion on individual departments' SERVQUAL analysis. This section addressed the second objective of this research, which examined customers' perceptions of the quality of services from Botswana government departments categorised as high and low customer focused. SERVQUAL scores for each department are provided using both weighted and unweighted scores. SERVQUAL results identified the extent of service quality gap for each of the six departments across the five service quality dimensions suggested by Parasuraman et al. (1988). The results were reported for each department along the five service quality dimensions. This helped in identifying SERVQUAL dimensions requiring service improvements for each department.

Section 4.6 covers comparisons between the six departments' mean SERVQUAL scores to establish whether there were any differences between the overall department scores. This section addressed the requirements for the third objective which examined if the level of customer focus/orientation of departments' performance plans affects the level of perceived service quality. Comparisons were undertaken between departments within the two customer focus categories to explore differences in customers' perceived service quality across the five SERVQUAL dimensions. Departments were compared using the MANOVA, ANOVA and post-hoc tests. MANOVA and ANOVA results revealed that customer focused PBRS has a statistically significant impact on customers' perceived service quality across the five SERVQUAL dimensions. These results supported the first hypothesis which proposed that customer focus/orientation of PBRS has a positive impact on customers' perceived service quality. Comparison of SERVQUAL scores also showed that low customer focused departments performed better than high customer focused departments in terms of customers' perceived service quality. These results were not anticipated because high customer focused departments were expected to perform better. Comparisons were also done for departments within the same category of customer focus to identify similarities and differences between departments in the same category of customer focus. Results revealed that there were differences in customers' perceived service quality even among departments in the same category of customer focus. The implications of the unexpected direction of performance between high and low customer focused departments, as well as the differences between departments in the same category of customer focus, are discussed in section 5.5.1.

Chapter five provides a discussion of the implications of the results obtained in chapter four which is undertaken in nine sections. Section 5.1 introduces the chapter and briefly outlines the purpose of this research. Section 5.2 overviews the research objectives proposed in section 1.3. The section identifies how each objective was addressed in the analysis (chapter 4). Section 5.3 discusses the research findings and links them to the research objectives. The results revealed that high customer focused departments performed worse than low customer focused departments. These results did not support the second hypothesis, that higher levels of customer orientation in PBRS schemes would improve service quality. Possible reasons for the poor performance of the high customer focused departments are discussed in section 5.3.5.

Section 5.4 summarises the findings and discusses the possible conclusions from the research. As discussed earlier in this section, low customer focused departments performed better than high customer focused departments. In addition, customers' perceptions of service quality differ for departments within the same category of customer focus. The difference in customers' perceptions of service quality between departments within the same category of customer focus could be attributed to the unique nature of services. It can be concluded that individual departments provide services that were unique from other departments, even for those that were categorised as the same in regards to customer focus of PBRS. In that regard, the uniqueness of the service and not the category of customer focus, possibly determines customers' perception of service quality.

Section 5.5 provides a discussion of the implications associated with the research findings. The discussion is divided into theoretical implications (section 5.5.1) and managerial implications (section 5.5.2). Section 5.6 identifies the study contributions to practice and theory, while section 5.7 discusses the study's limitations and future research. Section 5.8 summarises chapter 5 linking the discussion to the research objectives and how each objective was addressed in the analysis. Finally, section 5.9 summarises the thesis.

1.7 Summary

This chapter outlines the foundation of the thesis. It starts with a background of the research, which is the foundation of the thesis. Aims and objectives of the thesis are also discussed. These provide the framework of what the researcher wanted to achieve when undertaking the research. This is followed by the justification and significance of the study. Here significant gaps within the literature regarding the impact of performance based reward schemes on customers' perceived service quality were identified. As indicated in the chapter, literature falls short of linking performance rewards schemes to customers' perceived service quality.

Three objectives were proposed for this thesis and each of these was addressed in the main body of the thesis. The third objective was addressed through two hypotheses, which were tested in chapter 4 of this thesis. The chapter concludes with an outline of the five chapters covered in this thesis.

The next chapter provides a review of the literature on public sector reforms, which have resulted in the use of PBRS to improve performance and service quality. Theories relating to the impact of performance enhancement schemes on employees performance and service quality are also discussed. The chapter concludes by discussing the measurement of service quality in both public and private sector settings using SERVQUAL.

CHAPTER 2
LITERATURE REVIEW

2.0 Outline of the chapter

This chapter provides a review of literature on performance based reward schemes within the public sector, customer orientation of public sector performance and customers' perceived service quality. The chapter (section 2.1.0) starts by providing a background of public sector service delivery and includes changes (to service delivery) undertaken to address increased customer expectations. Section 2.1.1 discusses the pressure that governments have faced as a result of calls for improved services from public sector customers. This pressure led some governments to initiate changes aimed at improving the quality of services within the public sector (Mc Adam et al., 2005; Donnelly et al., 1995). One public sector initiative has been the use of rewards to enhance employee performance.

Section 2.2 briefly discusses public sector performance in Botswana and challenges faced by the Botswana public sector as well as initiatives taken to improve public sector performance in Botswana. Section 2.3 suggests a definition of Performance Based Reward System (PBRS) on the basis of definitions obtained from several sources within the literature (OECD, 1993; McCollum, 2001; DPSM, 2004; Harvey-Beavis, 2003). Literature from both the private and public sectors have examined how the use of rewards can improve employee motivation and performance, which in turn improves organisations' efforts to achieve goals, including service quality. Comparisons are made between the public sector and private sector literature to examine compatibility of reward systems linked to employee performance in the public sector. Section 2.4 provides a discussion of the link between rewards and employee motivation, covering theories of motivation that include Expectancy Theory, Hertzberg's Two Factor Theory, Goal Setting Theory, and Equity Theory. In summary, the discussion in section 2.4 examines the effect of rewards on employees' job performance and their (rewards) ultimate effect on customers' perceived service quality. Section 2.5 discusses literature on the unintended negative impacts of using rewards to try and motivate employees (Meyer, 1975; Kohn, 1993; Marsden and Richardson, 1994; Cardona, 2002).

Section 2.6.0 discusses services generally, and their unique characteristics. It also discusses how these unique factors affect service delivery within the public sector. The construct of service quality and how it can be measured is then discussed. Service quality is important in the service industry as it affects customers' satisfaction with services. In the public sector, service quality is considered vital for increasing customers' satisfaction and reducing customers' complaints and perceived poor services from the public sector. Section 2.7 expands the discussion of public sector services. It compares public sector and private sector services in terms of similarities and differences. As indicated in section 1.6, the major difference between public and private sector services is the characteristics of their customers. The public sector provides services to multiple customer segments that often have different and competing needs (Wisniewski and Stewart, 2004; Kelly, 2005) while the private sector focuses on well-defined customer segments (Kelly, 2005). Thus the public sector has the challenge of satisfying multiple segments of customers.

Section 2.8 explores the literature examining employees and their role in service delivery. Efforts to improve service delivery are often centred on employees. For example, the Botswana government identified its employees as the starting point for addressing the problem of poor service quality within departments (Adamolekun and Morgan, 1999). Customer contact employees within the service industry serve as a link between the organisation and its customers (Chebat, Babin, and Kollias, 2002). It is therefore important to understand how these employees (both public and private sector) can best be motivated to perform effectively and efficiently. Specifically the aim of section 2.8 is to examine factors necessary for improved employee performance and most importantly how these might relate to improvements in service delivery to customers. Rewards are considered to be an important element in enhancing employees' performance (Barrett and Turberville, 2001).

This research aims to examine the impact of using customer focused performance based reward schemes, on the quality of public sector services as perceived by customers. The impact of performance based reward schemes is examined through a survey of customers' perceptions of the quality of service delivered by six Botswana government departments categorised as high and low customer focused, based on the extent of customer orientation of their performance plans. Customers' perceived service quality was measured using Parasuraman et al.'s (1988)

SERVQUAL instrument. Section 2.9.1 defines a customer in the context of the public sector and dicusses the differences between private and public sector customers. Section 2.9.2 discusses how customers (both private and public sector) evaluate service quality. Section 2.9.3 explores literature about the measurement of service quality in general. The SERVQUAL instrument and its application in measuring service quality are discussed in section 2.9.4. Arguments for and against the use of SERVQUAL are discussed in section 2.9.5. SERVQUAL is a tried and tested tool for measuring service quality, and it has been extensively used in research within the public sector (Brysland and Curry, 2001; McFadyen, Harrison, Kelly, and Scott, 2001; Donnelly et al., 2006). Section 2.9.6 discusses the applications of SERVQUAL within the public sector, and identifies why the instrument is suitable for measuring public sector service quality.

The next section is an overview of literature on public sector services.

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2.1.0 An overview of public sector service delivery

This section provides an overview of the literature on public sector performance. It focuses on changes undertaken by governments to improve the quality of services offered to their customers. The section examines recent changes in public sector service delivery, which have mainly been attributed to pressures emanating from increased customer expectations. The section covers the response by the public sector to this pressure by discussing government initiatives that have sought to better address customers' expectations. The discussion then focuses on public sector performance measurement, as many governments believed they could use performance measurement to improve service delivery (Wholey and Hatry, 1992; Thompson 1995; Osborne, Bovaird, Martin, Tricker, and Waterston, 1995; Kloot, 1999).

An overview of public sector services is important because it provides a framework for this research in terms of: 1) the nature and scope of public sector services; 2) how customers evaluate these services; and 3) ways in which the public sector responds to customers' expectations regarding improvement in service delivery. As will be discussed in this chapter, governments have introduced performance measurement and performance based reward systems to enhance public sector performance. This thesis aims to examine the impact of these initiatives, notably performance-based reward schemes on public sector performance by measuring customers' perceived service quality.

Globally, the public sector is a significant service provider, covering a large number of services such as education, health, police, utilities, roads, transport, army and many other services targeted at citizens, visitors, public and private companies (Rowley, 1998; Wisniewski, 2001; Wisniewski and Stewart, 2004). According to Rowley (1998), in the UK the public sector employs over five million people, which is almost 20% of the working population in that country. In Botswana, the public sector accounts for over 40% of the total employment (Nordas 2000). Given the public sector's large share in service provision and employment, it accounts for a significant investment in most countries' economies. For example in Scotland, Wisniewski and Stewart (2004) estimated the Local Government to account for about 15% of the total Scottish workforce while it accounted for a third of the total Scottish public sector budget. Since the public sector is entrusted with management of public resources, it is expected to show high levels of accountability and commitment to its customers through improved performance and service quality, and high regard to customer satisfaction (Wisniewski and Stewart, 2004; McAdam et al., 2005; Sharma and Wanna, 2005).

While governments are under pressure to meet the service expectations of their customers, their efforts to address such needs are hampered by several challenges. Public sectors often have to operate on limited budgets and are thus challenged to determine how to effectively allocate their limited resources to the competing needs of their customers (Andreassen, 1994; Donnelly et al., 1995). Another constraining factor in public sector service delivery is that governments have to serve varied customers with different and sometimes conflicting needs, thus making it difficult to satisfy all (Donnelly et al., 1995; Kelly, 2005). These customers may differ in terms of the way in which they evaluate services, their expectations of the service delivery and their participation in the service experience (Rowley, 1998). Despite all these challenges, governments have the responsibility of addressing the needs of all their customers and are thus challenged to devise better ways of meeting multiple needs and expectations (Dorsch and Yasin, 1998; Sharifah et al., 2000). This calls for public sector service delivery to be managed in a way that makes it more responsive to the needs of customers (Dorsch and Yasin 1998).

The next section (2.1.1) provides a discussion on the pressure for service improvement faced by the public sector and efforts undertaken by governments to address this pressure.

2.1.1 The push for service improvement

The effective management of public sector services is a critical issue globally and to governments at different levels (Donnelly et al., 1995; Orwig, Pearson, and Cochran, 1997; Sharifah et al., 2000). In some cases the public sector has been blamed for being insensitive to customers' concerns (Caiden, 1998) and has been viewed as a less productive sector contributing little to the country's economy (Mwita, 2000). This results partly from increased lack of customers' trust of the ability of the public sector to deliver services in line with customers' preferences (Shah, 2005). Citizens, like all customers, demand good quality services and continually call for improved responsiveness from their governments in terms of addressing service needs (Sharma and Wanna, 2005). As such customer satisfaction and accountability are considered important issues in the management of the public sector (Wisniewski and Stewart, 2004; McAdam et al., 2005; Sharma and Wanna, 2005).

The pressure arising from the need to address issues of accountability and customer satisfaction has meant that the public sector has had to reform activities and improve performance (Myers and Lacey, 1996; McAdam et al., 2005). A number of governments, especially western developed countries, have devised various means of addressing customers' concerns regarding improvements in public sector performance (Miller and Miller, 1991; Donnelly et al., 1995; Wisniewski and Donnelly, 1996; Swindell and Kelly, 2005). For example, Marshall (1998) reports the emergence of strategic management systems within the Australian government during the 1980s, which formed an integral part of the public sector reform program. The strategic management systems developed acted as a base for the implementation of public sector performance management strategies for the Commonwealth and State governments in Australia (Marshall, 1998). In the UK, Skelcher (1992) has discussed the "....sweeping service revolution that produced changes to public sector service delivery" (p.463), resulting in the public sector becoming more customer-focussed. This climate of change within the public sector was aimed at developing a performance oriented-culture that could see improvement in the efficiency and effectives of service delivery within the public sector (Wood, 1995; Barrett and Turberville, 2001).

The public sector has come to realise the importance of ensuring that their services are based on the needs and expectations of their customers (Wisniewski, 2001). In order to align their services to customers' needs some governments have even used market research to learn more about their customers' expectations, as well as their perceptions of services offered (Wisniewski and Donnelly, 1996). Gone are the days when governments provided uniform services to all customers; the public sector now seeks to provide good quality services that match customers' needs (i.e. market segmentation) which is more important given that customers are no longer passive recipients of services (Skelcher, 1992). This is in line with the market segmentation perspective, which views customers as having heterogeneous needs requiring that they are divided into segments of customers sharing similar service preferences (Lawson Tidwell, Rainbird, Loudon, and Bitta, 1996). In this way organisations (both private and public sector) should come up with services that are compatible with the needs of each segment or group rather than assuming that they are just one mass market with uniform needs (Zeithaml and Bitner, 2000).

Recent technological advances have also pressured governments to adopt a more private sector approach to service delivery (Bolton, 2003). Technological advances have "shrunk the world", making information on services more accessible (Bolton, 2003). Unfortunately the introduction of technology has in some instances eroded customers' confidence in the quality of public sector services, as it empowers customers to have easy access to vital performance information that was previously unavailable (Bolton, 2003). Customers can use this new information to gauge the performance of their public sector services as compared to others. Modern technology enhances customers' awareness of their rights, obligations, options and alternatives, as they share information with other customers (Bolton, 2003; Shah, 2005). This also encourages them to demand service improvements as well as strengthens calls for greater accountability from the government (Bolton, 2003; Shah, 2005).

In view of increased customer expectations, the public sector has had to explore options for improving service quality to address customers' expectations (Brysland and Curry, 2001; Beer and Cannon, 2004). Governments devoted more time to developing performance management approaches including the measurement and evaluation of employees' performance (Ghobadian and Ashworth, 1994; Caiden, 1998; Mc Adam et al., 2005; Shah, 2005). There was a general belief that rewards can help motivate employees to improve performance, which would then help organisations address customers' expectations. Barrett and Turberville (2001) suggest that rewarding employees on the basis of performance was critical to public sector reform, being a way to facilitate change in individual behaviour and work activity to achieve greater responsiveness of staff to public service users. Some governments, for instance, the Australian Public Service, introduced the idea of performance-related pay (PRP) within its public sector as early as 1983 (Barrett and Turberville, 2001) and thus linking rewards with performance in the public sector is not new.

The importance of rewards influencing employee performance is demonstrated by the abundance of research in this area, in both the public and private sectors. For example, a number of researchers investigated the effect of rewards on employees' performance (Meyer, 1975; Ingraham, 1993; Kohn, 1993; and Deci and Ryan, 1997), mainly to determine the efficacy of rewards in influencing the level of employees' performance. Kohn (1993) strongly argued against the use of rewards in influencing employees' performance, as he believed that rewards only had short-term effects. Other researchers examined employees' attitudes to rewards (Farh, Griffeth, and Balkin, 1991; Marsden and Richardson, 1994; Kellough and Selden, 1997; Mamman, 1998) with a view to establishing employees' perceptions of the rewards' effect on their motivation. Marsden and Richardson's (1994) research in this area found little perceived effect of rewards on employee performance. See section 2.5.7 for more discussion on the criticism of rewards in influencing employee motivation.

Despite differing views about the effect of rewards on employee performance and service outcomes there was a widespread adoption of pay-for-performance schemes such as performance based/related pay, employee share schemes, and others (Beer and Cannon, 2004) within both the private and public sectors. Many public sector organisations have adopted performance related pay schemes. For example, in order to improve the performance of the public sector in the OECD, many countries adopted the principle of pay for performance as way of improving efficiency and accountability within their public sectors (OECD 1997).

The idea of improving public sector performance is however, not solely the interest of developed countries, as some developing countries such as Botswana have also recently introduced performance enhancement schemes within their public sectors to assist in improving performance (DPSM, 2004). The Botswana version of the performance incentives was called the Performance Based Reward System (PBRS). This research focuses on examining how introducing such performance enhancement reward schemes within the public sector impacts service delivery and service quality, as perceived by customers. Even though the research focuses on the Botswana public sector, it is expected that the results obtained will be applicable to service delivery in other countries, although future research will need to explore the generalisability of this link.

The next section briefly discuses public sector performance in Botswana. It starts by providing a snapshot of the economic performance of the country. The discussion then moves on to overview initiatives undertaken by the Botswana government to improve public sector performance. The section concludes with a discussion of PBRS, as introduced in the Botswana public sector.

2.2.0 Botswana public sector performance

As indicated earlier, this research is based on performance within the Botswana public sector. It is therefore important to briefly overview the public sector in that country. This section covers a discussion of the economic performance of Botswana from the time of independence in 1966, to the present. The section briefly discusses reforms undertaken by the Botswana government to enhance employees' performance and productivity. The introduction of PBRS is also briefly discussed as an initiative meant to enhance public sector performance in Botswana.

2.2.1 A historical overview of Botswana's economic performance

The republic of Botswana is a land locked country located in the middle of southern Africa with a population of approximately two million people. It covers a land area of 582 000 square kilometres (Moleboge, 2003) with roughly 2/3 of its land covered by the arid Kalahari Desert. It is one of the few countries in sub-Saharan Africa that has acquired the reputation for good governance and economic growth (Hope, 2003). Its good governance is enshrined in its rule of law and transparency in the public sector structures (Hope, 2003). It also has a zero tolerance for corruption within the public and private sectors (Adamolekun and Morgan, 1999). The country gained independence in 1966 from British colonial rule. At the time of independence it was classified as one the poorest countries in the world (Tsie, 1996). Its GDP in current prices was estimated at P36.9 million or roughly US$7 million. The government relied mostly on financial support from the British government to balance its budget (Marroquin, 2005; Republic of Botswana, 2006). This situation changed in the early 1970s when the government was able to cover its recurrent budget without British assistance (Republic of Botswana, 2006). The economic performance of the country rose steadily in the 1980s following the discovery and development of diamond mines (Moleboge, 2003).

In 1982 diamonds were the leading foreign exchange generator contributing 40% of total exports (Republic of Botswana, 2006). The country’s per capita income grew from US$60 at independence to US$3000 in 1992 (Tsie, 1996). In 1999/2000 real GDP estimates increased to P15.4 billion (roughly US$3 billion) representing a 7.7% growth rate due mainly to the Orapa diamond mine (Nordas, 2000). Income from the mining sector continues to be a major contributor to the growth of the country’s economy, contributing a share of 35% of GDP and 50% of government revenue (Moleboge, 2003). Table.2.0 provides a detailed GDP contribution by sector for the years 1998/99 – 2002/03. A summary of the key events that occurred within the economy of Botswana is also presented in Table 2.1, with facts and figures illustrating key events and dates.

Table 2.0. Botswana Gross Domestic Product by Sector

Sector Total (P million)	**1998/99**	**1999/00**	**2000/01**	**2001/02**	**2002/03**
Agriculture	443.4	404.6	444.5	433.2	441.2
Mining	4,588.5	5,142.3	6,045.9	5,864.9	6,471.7
Manufacturing	661.4	684.3	682.5	682.5	703.3
Electricity and water	333.5	371.1	391.3	405.7	444.2
Construction	916.9	939.4	954.8	999.7	1,005.5
Trade, Hotels Restaurants	1,501.9	1,595.6	1,700.0	1,839.7	1,901.3
Transport	578.7	594.0	623.7	625.4	631.2
Banks, Insurance and business service	1,636.3	1,707.3	1,794.7	1,922.2	1,972.5
General government	2,333.3	2,474.3	2,640.6	2,861.0	2,965.5
Social and personal services	617.7	645.2	663.2	704.6	724.5
GDP	**14,295.6**	**15,238.8**	**16,554.8**	**16,905.8**	**18,038.1**

Source: www.SADCreview.com

As a result of increased income from the mining sector, good governance, political stability and prudent management of the economy, Botswana has experienced rapid economic growth and moved from a low income to a middle-income country (Republic of Botswana, 2006). It was even awarded high economic ratings by Standard and Poor's at "A" for long term debt and Prime-1 for short term debt.

Table 2.1 Facts and figures about the Botswana's economy 1966 - 1999

Year	Key events
1966	❖ Independence form the British rule. Botswana was classified as was one of the poorest countries. Its per capita income stood at equivalent of US$80. ❖ GDP in current prices was Botswana Pula P36.9 million. ❖ Total government budget was P 17.9 million. The government relied mostly on the British for grants to balance its budget. (Self-sufficiency in budget was achieved for the first time in 1972/73 budget year).
1982	❖ Diamonds become leading foreign exchange earner contributing 40% to the total exports value.
1989	❖ Diamonds' contribution to the economy continues to grow amounting to 89% of total exports.
1998/99	❖ Expansion of the Orapa diamond mine results in an increase of P15.4 billion to the GDP representing a growth rate of 7.7%

Source: www.gov.bw

Exchange rate: Botswana Pula P1 equivalent to US$ 0.1786 (roughly P5.60)

2.2.2 Challenges facing the Botswana government

Despite rapid economic growth in Botswana and its high economic ratings, Nordas (2000) predicts that the economy may slow because the mineral sector is maturing and there is unlikely to be another boom in the near future. Tsie (1996) also suggested that the economy of Botswana had reached a plateau and that government spending was likely to outpace real government revenue. The Botswana government has also noted the vulnerability of depending extensively on mineral revenues for its economic sustainability (SADCreview.com, 2006) and has embarked on policies and programmes aimed at diversifying the economy (Nordas, 2000). Such policies and programmes include provision of infrastructure and an enabling environment for private sector investment as well as focussing on performance enhancement within the public sector, with a view to improving productivity in both the private and public sectors (SADCreview.com, 2006).

The government of Botswana also faces other challenges (such as HIV/AIDS), which could erode revenue from the mining sector (Gaolatlhe, 2006). Botswana, like other Southern Africa countries, has been severely hit by HIV/AIDS. In Botswana the prevalence rate was estimated at around 37% (Avert.org, 2006) for the adult age groups while the prevalence rate for the whole population was 19% (UNDP Botswana.org.bw, 2006). HIV/AIDS could impede the government's efforts to diversify the economy by requiring a large share of the government's budget and also reducing the workforce's productivity (Iyanda and Kealesitse, 2005; OECD, 2005). In a bid to reduce the undesirable effects of HIV/AIDS, the Botswana government makes large expenditures for health and social issues related to HIV/AIDS (Gaolatlhe, 2006).

While the per capita GDP may not be affected significantly because of the revenue from capital intensively produced diamond mines, Greener, Jefferis, and Siphambe (2001) observed that the HIV/AIDS effect would result in an overstretched health system, which has limited facilities. They also projected a deepening degree of poverty as households lose their main breadwinners to HIV/AIDS. A study by the Botswana Institute for Development Policy Analysis (BIDPA, 2000) estimated the Botswana government expenditure would need to increase by between 7% and 18% by the year 2010, to cope with the increased costs of HIV/AIDS. Recently the bulk (52%) of Ministry of State President's budget for 2006/07 went to HIV/AIDS programs (Gaolatlhe, 2006), while some infrastructure projects planned for National Development Plan (NDP) nine had to be shelved in order to focus mainly on HIV/AIDS.

Another challenge facing the Botswana government was the perception by consumers of poor public sector services (Hope, 1999). Customers raised concerns about lack of productivity in the Botswana public sector (Hope, 1999). Complaints usually related to issues such as lack of focus for government programs, poor responsiveness to customers' needs and a general poor customer service (Moleboge, 2003). In addition, customers perceived there was a general decline in employees' morale and motivation, and that affected the quality of basic services such as post offices, water distribution, and railways (Adamolekun and Morgan, 1999).

In response to the challenges arising from customers' complaints for improved public sector employees' performance, the Botswana government embarked on a performance improvement drive (Adamolekun and Morgan, 1999). The Botswana government recognised that its employees played the important role in the drive towards improved economic performance of the country, and that they were also a key catalyst for national development (Adamolekun and Morgan, 1999). The government therefore focussed on programs targeting its employees as a starting point for improved productivity within the public sector (Adamolekun and Morgan, 1999). Productivity was considered to be an effective way of increasing the effectiveness of public sector employees by encouraging continuous improvement in performance levels while reducing expenditure (Hope, 1999).

The idea of performance improvement within the public sector led to the establishment of the Botswana National Productivity Centre in 1993 whose mandate was to spearhead the campaign for productivity in both the public and private sectors (Hope, 2003; ILO.org, 2006). Enhancing productivity was seen as one option for increasing output and boosting efficiency while efficiently using existing scarce resources (Hope, 2003). The government also adapted the Work Improvement Teams Strategy (WITS) from Singapore as an additional measure to guide its public sector productivity initiative (worldbank.org, 1996). The WITS technique advocates collective responsibility in work effort to enhance the spirit of team-work and improved performance. It also encourages employees to qualitatively assess their individual and group outputs in a given task (Hope, 2003).

A partnership arrangement was made between the Botswana Institute of Administration and Commerce (BIAC) and the Singapore Civil Service Training Institute to transfer WITS skills to the Botswana public sector (worldbank.org, 1996). According to OECD's (2005) report on Botswana, a total of 565 facilitators and 2500 team leaders have so far been trained while 1000 out of the planned total of 1150 teams have been registered under the WITS system. These teams undertook 700 projects of which more than 400 have been completed (OECD, 2005).

The next step for improving public sector performance was the introduction of the Performance Management System (PMS) within the Botswana public sector. This was aimed at enhancing the delivery of services by the Botswana public sector (Gaolatlhe, 2002). According to Hope (2003) the Botswana government introduced PMS as part of an ongoing process of improving public sector performance and the drive to improved service delivery. While the idea of PMS was proposed as early as 2002, full implementation was planned to start in 2004 and was to cover the entire public service (Gaolatlhe, 2002; Hope 2003). As of November 2004, most government ministries had realigned their structures and developed strategies to comply with PMS requirements (OECD, 2005).

In order to operationalise the PMS process, the Botswana government established a performance management tool known as Performance Based Reward System (DPSM, 2004). Incentive arrangements based on meeting performance targets, in the form of rewards were introduced to enhance performance (DPSM, 2004). The PBRS provided a link between the PMS and individual employee’s efforts in the form of measuring performance against objectives set at the beginning of the planning period (DPSM, 2004). According to the Directorate of Public Service Management (DPSM)’s 2004 report on PBRS, each government ministry was delegated the responsibility of ensuring that PBRS becomes operational under all departments. Ministries were all to report to the office of the Permanent Secretary to the President (DPSM, 2004) who had the responsibility to oversee the PBRS process.

While the introduction of PMS and PBRS within the Botswana public sector could be considered a good idea in terms of improving public sector performance, it is not clear whether it has had the desired effect on service outcomes, as expected by customers. The purpose of this research is to examine differences (if any) in customers’ perceptions of service quality arising from the use of customer focused PBRS within the public sector. It is hoped this research will shed light on the effectiveness of employee-targeted rewards such as PBRS on customers’ perceived service outcomes within the public sector setting. Ideally organisations that have high customer-focused services should have better service outcomes. The question that still remains is why organisations would want to focus their efforts on improving employees’ motivation through performance rewards while their real target was influencing customers’ perceptions of service delivery?

The next section discusses PBRS in terms of its definition, different types of PBRS schemes that have been proposed and the theories used to support the use of PBRS in motivating employees' performance.

2.3 What is PBRS?

There is no universally agreed definition for performance based reward systems/schemes (PBRS). A number of definitions have been suggested, and some of them are summarised in Table.2.2 and discussed later in this section.

Table 2.2 Definitions of PBRS

Author & Year	**Definition of PBRS**
Swabe (1989)	A system in which an individual's increase in salary is solely or mainly dependent on his/her appraisal or merit rating.
Harvey-Beavis (2003)	Three categories of pay for performance schemes being; individual based performance rewards (merit pay), group-based pay and skill-based pay.
DPSM (2004 pg 3)	A process that links Performance Management System (PMS) with individual accountability through the development of performance objectives and employee performance reviews in a manner that encourages continuous improvement.
Heneman and Werner 2005)	Individual pay increases based on the rated performance of individual employees in a previous time period.

The Directorate of Public Service Management (DPSM, 2004) of the government of Botswana defined PBRS as "…a process that links Performance Management System (PMS) with individual accountability through the development of performance objectives and employee performance reviews in a manner that will encourage continuous performance improvement" (p.3). Performance related pay schemes, merit schemes, employee bonus schemes, and awards are all included under this definition. Harvey-Beavis (2003) divides performance enhancement schemes into three categories, being; 1) individual based performance rewards or merit-pay, 2) group-based rewards, and 3) knowledge and skill-based rewards. The first category is where employees are rewarded on the basis of their individual performance outputs (McCollum, 2001), while the second category is whereby rewards are based on the performance outputs of a group of employees performing the same task (Harvey-Beavis, 2003). The third is based on acquired qualifications as well as skills and knowledge demonstrated by the employee, which are believed to increase the employee's performance (Harvey-Beavis, 2003).

Swabe (1989) distinguishes performance-related pay from others forms of rewards and defines it as "... a system in which an individual's increase in salary is solely or mainly dependent on his/her appraisal or merit rating" (p.17). Heneman and Werner (2005) also emphasise the aspect of salary in their definition when they talk about "… individual pay increases based on the rated performance of individual employees in a previous time period…" (p.6). They however acknowledged the existence of other forms of employee compensation programs that are not salary or even monetary based and emphasise that money is not the sole motivator of employees' behaviour. With a few exceptions (such as Baker, Jensen, and Murphy, 1988 and Susseles and Magid, 2005 who consider both monetary and non monetary rewards in their discussion of PBRS), most authors confine their discussion to monetary PBRS and focus primarily on pay as a mechanism for motivating employee performance (Swabe, 1989; Wood, 1995; Barrett and Turberville, 2001; McCollum, 2001; Cardona, 2002; Chamberlin et al., 2002; Heneman and Werner, 2005). Eastwood (2006) suggests that even though money is important for employee motivation, it is not enough on its own to effectively motivate employees. Non-monetary rewards also play an important role in employee motivation (Forrester, 2002; Eastwood, 2006). This thesis followed the suggestion from Eastwood (2006) and recognised the need to link both monetary and non-monetary rewards in employee motivation. Thus, in this thesis PBRS includes any form of reward system where employees are rewarded, financially and otherwise, on the basis of their level of performance on the job following an appraisal and comparison with set standards.

Under the PBRS approach, performance targets are set at the beginning of the planning period and employees are expected to meet or exceed these targets. To facilitate this performance planning, a binding contract between the employee and the supervisor detailing mutually agreed objectives and performance outcomes is signed at the beginning of the planning period (Marshall, 1998). Performance planning is an important part of the PBRS process, as it sets goals for the coming planning period and is usually developed collaboratively between the employer and employees (Susseles and Magid, 2005). It provides an opportunity for the supervisor and employee to meet, discuss performance plans for the coming year, expectations, targets and it acts as a reference point from which to decide whether or not the performance levels have been achieved (DPSM, 2004). Employee input is important for designing PBRS programs because it ensures employees buy into the programs, which is necessary for the programs to function well (Susseles and Magid, 2005). In this way PBRS helps to align the organisational objectives with the employees' performance objectives, ensuring a synchronised performance plan. Employees' performance is monitored closely and regular performance evaluations are undertaken at set checkpoints to ensure adherence to set performance plan (DPSM, 2004). At the end of the period, the employee is rewarded on the basis of the extent to which their performance matched set targets.

PBRS's logic is borrowed from the goal setting theory which advocates setting of clear and challenging performance objectives for employees in order to motivate their performance (Locke, 2004). PBRS builds on the idea of setting performance targets that are expected to act as an incentive for improved performance when employees strive to achieve them in order to qualify for rewards. The reported advantage of this method is that employees are clear on what is expected in terms of their performance targets during the planning period (Locke, 2004). The method also rewards for performance rather than other non-merit aspects such as the length of service and educational qualifications, which do not promote improved performance (Hoerr, 1998). According to Tomlinson (2000) performance based reward schemes often have support from political leaders because they believe that such schemes provide employees with the challenge of being accountable to their own contribution to job performance. However there is a danger of employees focussing too much on the set targets and ignoring areas that are not to be assessed (Locke, 2004; Beer and Cannon, 2004). A detailed discussion on goal theory and other motivation theories is provided in section 2.4.

According to Lee (2001), reward schemes based on performance are centred on three assumptions being:

1. Individuals' performance can be accurately or reasonably measured using set criteria.
2. The system should be able to influence an employee's decision to remain or leave the organisation. It should also influence their willingness to work harder for the organisation than those outside the system
3. An employee should place high value on rewards in the work place (p.3)

It is very important that those managing performance enhancement schemes such as PBRS be in a position to distinguish between poor and good performance (Meyer, 1975) in order to ensure that individuals are properly rewarded for their performance outcomes. Under the PBRS, good performance has to be rewarded through benefits or rewards, and average performer receives average rewards (Swabe, 1989). On the other hand, poor performance is not rewarded at all (Meyer, 1975; Swabe, 1989) and may result in disciplinary action depending on the level of under-performance. It is believed that the use of PBRS should assist in attracting and retaining high quality workers because such workers would feel that their ability is recognised and rewarded by the organisation (Lee, 2001; Chamberlin et al., 2002). More importantly, PBRS should communicate to the employees the performance behaviours that the organisation values and rewards (Chamberlin et al., 2002). Lastly, the success of PBRS depends on the extent to which employees value the rewards provided (Lee, 2001). Employees should have high regard for rewards and perceive them to be directly linked to their level of performance in order to be motivated to work harder (Lee, 2001).

The use of PBRS is expected to enhance performance where employees are motivated to perform better by their desire to meet performance targets and improve their remuneration (Tornow and Wiley, 1991; Barrett and Turberville, 2001; Susseles and Magid, 2005). An example of empirical support for the link between PBRS and employee motivation was found in a study of jockeys by Fernie and Metcalf (1999) who observed that there was an improvement in the performance of jockeys when they were paid according to results than when paid under the retainer system.

PBRS schemes have been used in both private and public sectors, although the public sector has lagged behind the private sector in the adoption of PBRS schemes (Asch, 1990; Marsden and Richardson, 1994; Chamberlin et al., 2002). According to the literature, pay-for-performance schemes could be an important and innovative ingredient in enhancing employee motivation and productivity in both public and private sectors (Kellough and Selden, 1997; Hoer, 1998; McCollum, 2001). Literature suggests that aligning rewards with the organisation's performance objectives can lead to improved employee performance and overall organisational effectiveness (Gomez-Mejia and Balkin, 1992; Allen and Kilmann, 2001).

According to Balkin and Gomez-Mejia (1987), rewards may actually help the organisation gain competitive advantage over its rivals. This usually occurs where rewards form an integral part of the overall organisational strategy and are considered to be an important motivator by employees (Gomez-Mejia, 1987). In fact pay for performance is expected to act as a change agent, and bring about changes in the way the organisation performs, its image to the clients, and to the overall service quality (Lawler, 2000). In the same view, Luthans and Stajkovic (1999) suggested that "…reward systems should go beyond rewarding outcomes such as number of products, service and sales revenues and focus on reinforcing employee performance by emphasising attributes such as customer service, employee satisfaction, leadership skills, service quality and others" (p51).

The next section provides a brief discussion of the theories linking rewards to employee motivation and improved performance. Possible disadvantages of using rewards to motivate employee performance are also discussed.

2.4.0 Theoretical support for the use of performance based reward systems in employee motivation

The link between performance and employee motivation can be explained in terms of motivation theories which include expectancy theory (Lawler, 1973; Barrett and Turberville, 2001), equity theory (Adams, 1965), and goal setting theory (Gomez-Meija and Balkin, 1992; Locke et al., 1988). A detailed discussion of these theories follows.

2.4.1 Expectancy theory

According to the expectancy theory, pioneered by Vroom (1964), performance is a function of: A) ***Expectancy;*** that is employees' belief that exerting effort on the job will lead to increased performance outcomes; B) ***Instrumentality***; which is the belief that improved performance will lead to rewards, and C) ***Valence*** which represents the perceived value of rewards that employees link to their performance outcomes (Locke and Latham, 1990). Expectancy theory supports the view that rewards are likely to motivate employees, if employees believe that by working harder they can improve their performance, and that improved performance will be highly rewarded (Hong et al., 1995; Chamberlin et al., 2002). Valence, which is the perceived value of the rewards, determines the amount of effort put on the job. In other words, if employees perceive the value of the rewards to be high, they are likely to put more effort into performing the job (Lowery, Petty, and Thompson, 1995).

Expectancy theory can be summarised in the form of three questions that employees would ask themselves (Cook, 1980). The first question that employees ask could be '*if I try harder, will it make a difference*?' Employees need assurance that additional effort on the job would make a difference in their level of performance. This question forms the expectancy component of the theory. Lawler (1994) suggests that expectancy represents an individual employee's "… estimate of the probability that he or she will accomplish their intended performance under the prevailing circumstances" (p.64). The second question is '*am I rewarded for what I produce*?' Here employees match their level of performance with the rewards they get. It is important that rewards be aligned to performance if at all the intention is to motivate employees performance. The last question is '*what is in it for me?* In other words how do I benefit from the rewards that I get from the job? Are the resulting rewards worth my effort on the job? Affirmative answers in all of the three questions are expected to lead to high levels of employee motivation and job performance (Cook, 1980).

2.4.2 Two factor theory

The second theory that could be used to link employee motivation to performance is Hertzberg's two-factor theory. This theory groups employee motivational factors into motivators and hygiene factors (Usugami and Park, 2006). Motivators are non-monetary rewards such as sense of achievement, recognition, responsibility, the actual job, advancement and growth (Chamberlin et al., 2002; Usugami and Park, 2006). Motivators usually lead to job satisfaction and increased levels of employee motivation (Siemens, 2005). They are considered an essential part of employee job motivation because their absence reduces employees' satisfaction with the job (Siemens, 2005) and may demotivate employees, and in the process negatively affects their job performance (Usugami and Park, 2006). For instance, a survey by the Management Advisory Board/ Management Improvement Advisory Committee in 1992 conducted on behalf of the Australian Public Sector, cited in Marshall (1998), found that the majority of public sector employees rated motivators such as personal recognition and career opportunities higher than bonus pay, which was viewed to be a hygiene factor, (hygiene factors are discussed later in this section).

PBRS as proposed by the Botswana government seems to have recognised the importance of non-monetary rewards in employee motivation because it emphasises non-monetary rewards such as recognition, promotion, awards, and other rewards as listed in the rewards menu from time to time (DPSM, 2004). In addition, the Botswana government recognised the importance of monetary rewards (hygiene factor) by ensuring that "…all employees performing above the unsatisfactory level are eligible for a salary increase" (p.16).

Hygiene factors are rewards and other facets of the job that do not significantly increase employee motivation but are necessary for maintaining certain levels of employee motivation (Usugami and Park, 2006). Examples of hygiene factors include factors such as company policy as it relates to employees and their job performance, employees' relationship with supervisors, working conditions, salary, status, security, and relationship with peers (Usugami and Park, 2006). According to Herzberg et al. (1959), financial rewards are a hygiene factor. Their argument was that while inadequate financial rewards can demotivate employees, there is a certain point beyond which money would no longer motivates employees. This is because the effect of hygiene factors on increasing employees' performance effort remains minimal because they do not promote the feeling of psychological growth by employees (Chamberlin et al., 2002).

The presence of hygiene factors such as monetary incentives is, however, a necessity in the work place because they make working less unpleasant (Chamberlin et al., 2002). As Siemens (2005) pointed out, "…the absence of hygiene factors often leads to job dissatisfaction while their presence is not a guarantee for employee job satisfaction" (p. 414). As a result, despite the minimal contribution that hygiene factors have on employees' psychological growth and consequently on their motivation, they (hygiene factors) are still important because they reduce job dissatisfaction (Siemens, 2005). In that way, hygiene factors have to be reinforced at all times to minimise the level of employee job dissatisfaction (Siemens, 2005).

It is important to note that according to Herzberg et al. (1959), the two factors of motivators and hygiene are not opposites, instead they are two unique constructs with different items contributing to each scale (Siemens, 2005). Lawler (1994) also believes that motivators and hygiene factors do not lie on a continuum ranging from satisfaction to dissatisfaction, but that the two factors exist in two different continua with motivators ranging from satisfaction to neutral and hygiene factors from dissatisfaction to neutral.

The two-factor theory has been criticised because it is perceived to be confusing. Early writers such as Opsahl and Dunnette (1966) questioned the assertion that money would not motivate employees but rather would reduce dissatisfaction (hygiene factor). They instead supported the view that money indeed had a significant role in employee job satisfaction. Another criticism for the two-factor theory was proposed by Lawler (1994), who argued that "…the theory implies that it is possible to have an employee who is very satisfied and very dissatisfied at the same time if the two factors do not lie on a continuum" (p.90). Lawler (1994) also noted that some of the issues such as an employee's working condition, which are listed as hygiene factors, would not increase or cause satisfaction but can only reduce dissatisfaction according to the two factor theory. The two-factor theory was also found to be not applicable in some industries (Ruthankoon and Ogunlana, 2003). For example Ruthankoon and Ogunlana (2003) tested Herzberg's two-factor theory in the Thai construction industry and found that the theory was not entirely applicable. They found that factors such as company policy and salary, which were considered hygiene factors in Herzberg's theory, actually had a significant role in employee motivation and were thus motivators. In addition, they found that recognition, the work itself, company policy and administration, interpersonal relations, as well as personal life and status were both hygiene and motivation factors.

From the above discussion, it is clear that the two-factor theory provides an important link between employee motivation and different work related conditions such as rewards (Usugami and Park 2006). However the theory may not be entirely applicable in some organisations (Ruthankoon and Ogulana 2003).

2.4.3 Goal setting theory

Goal setting theory can also be used to explain the link between incentives and employee performance. According to this theory, employees are likely to be motivated to perform better provided they have specific, realistic and achievable performance goals (Locke and Latham, 1990). Locke and Latham (1990) suggest that employees would be motivated to improve performance provided their performance goals are tied to incentives. Employees should consider their incentives to be substantial enough to influence commitment to achieving performance goals, and the goals should not be perceived to be impossible to attain (Locke and Latham, 1990; Gomez-Mejia, 1992). According to Gomez-Mejia and Balkin (1992), employees' devotion to task performance depends on the extent to which they believe attainment of goals would be rewarded. Rewards can therefore be used to motivate employees to accept and be committed to performance goals (Locke, Latham, and Erez, 1988; Locke and Latham, 1990), which is vital to improved job performance.

The establishment of goals provides employees with information on what the organisation values, as well as what it expects from its employees (Gomez-Mejia and Balkin, 1992). Rewards on their own will not make much sense in terms of performance expected from employees unless they are accompanied by goals to clarify performance expectations. In short, rewards are driven by goals or standards, and employees' performance would improve, provided clear performance goals are established from onset and rewards are made contingent on attainment of those goals (Gomez-Mejia and Balkin, 1992).

As was discussed in section 2.3, PBRS schemes are premised on the use of performance goals being set at the beginning of the planning period between the supervisor and the employee. Therefore the PBRS philosophy has borrowed from the goal setting theory as both emphasise the need to provide periodic performance feedback in relation to set goals just like reward schemes based on performance (Locke and Latham, 1990; Marshall, 1998; DPSM, 2004).

2.4.4 Equity theory

Equity theory provides another approach of conceptualising the impact of incentives on employees' motivation and job performance. According to Heneman and Werner (2005), equity theory can be conceptualised in the form of "… an exchange relationship between the employer and the employees" (p.29). In such a relationship, employees offer their inputs such as performance of assigned tasks as well as their skills and experience on the understanding that the employer will provide outputs, such as rewards in return for their efforts (Adams, 1965; Heneman and Werner, 2005). Employees will compare their effort on the job with rewards they receive, as compared against other employees performing the same task (Gomez-Mejia and Balkin, 1992; Lowery et al., 1995; Heneman and Werner, 2005). On the basis of this comparison they will determine whether they are being over or under-rewarded (Miner, 2005).

Equity exists where inputs (job effort) equal outputs (rewards) as compared to other employees performing the same job (Heneman and Werner, 2005). A feeling of being under-rewarded (inequity) occurs where employees perceive their input (effort) to output (rewards) ratio to be less than that of employees performing the same job (Heneman and Werner, 2005). On the other hand employees will feel over-rewarded if the ratio of inputs to outputs is significantly higher than that of other employees performing the same task. According to Miner (2005) "...inequity exists in both under-rewarded and over-rewarded outcomes" (p.136). A feeling of being under rewarded will result in anger and poor employee performance (Lowery and Thompson, 1995). According to equity theory, employees who feel over rewarded may be motivated to seek ways of reducing this inequity by increasing their performance (Lowery and Thompson, 1995; Miner, 2005).

In order to improve employees' performance, there is a need to equate rewards with employees' job effort (Gomez-Mejia and Balkin, 1992) for employees performing the same task, so that employees perceive that exerting more effort results in high rewards while less effort attracts less or no rewards (Ingraham, 1993). It is important that PBRS and other reward schemes, take into account this element of equity in order to motivate employees. For instance the results of a study by the OECD (1997) on performance related pay in the public sector found that lack of standards for ensuring equity in allocation of rewards negatively affected public sector employees' motivation. Another element of inequity occurs when employees feel that the rewards were too small to motivate employees (OECD, 1997). The OECD (1997) recommended that equity in terms of rewards for employees performing at the same level was an important operational requirement for performance enhancement schemes in the public sector.

Despite the preceding positive theoretical arguments and evidence for the use of performance enhancement schemes, such as PBRS, in motivating employee performance, there are some negative arguments against the efficacy of such schemes. The next section briefly discusses these unintended results of using reward systems that are based on employee performance.

2.5.0 Unintended consequences of using performance reward schemes

While tying rewards to performance has a crucial role in organisational effectiveness, such as improving employees' performance outcomes, it has been suggested that rewards may also have some negative consequences on employees' performance (Lawler, 1973; Cardona, 2002; Heneman and Werner, 2005). Pay for performance has been criticised by some researchers who believed that it had some inherent problems that may affect its use as an effective tool for employee motivation (Meyer, 1975; Kohn, 1993; Marsden and Richardson, 1994; Cardona, 2002; Burgesss and Ratto, 2003; Heneman and Werner, 2005). Below is a discussion of some of the consequences of PBRS that have been identified as negative in the literature.

2.5.1 Reduced cooperation between employees.

Performance reward schemes have been blamed for encouraging individuality at the expense of teamwork among employees (Gomez-Mejia and Balkin, 1992; Marsden and Richardson, 1994; Kellough and Selden, 1997; Hoerr, 1998; Heneman and Werner, 2005). A study by Marsden and Richardson (1994) on Inland Revenue staff (public sector) in the UK reported that 26% of their sample were less willing to cooperate with their colleagues and blamed this on the introduction of performance-related pay. Marsden and Richardson (1994) observed that performance-based pay sometimes undermines employees' morale as it often causes jealousy between staff. In the process, performance based reward schemes negatively impact on the spirit of team effort because of increased individualism motivated by the desire to achieve high personal rewards (Marsden and Richardson, 1994). Other researchers argued that where promotion is used as a reward for performance it may lead to lack of cooperation among peers competing for the same position (Lawler, 1973; Kellough and Selden, 1997) which may trigger internal conflicts and "mudslinging" among employees, and negatively affect their performance (Heneman and Werner, 2005).

Deming (1986) stated that emphasising individual performance appraisal as a way of motivating employees has significant potential limitations. He argued that individual appraisal which is part of the PBRS process often interferes with team-work and creates unhealthy competition and dissension among employees. It could also encourage employees to focus on short term results in order to out-compete their peers. Deming (1986) attributed differences in employees' performance to system characteristics such as the nature of the job, the organisation, and the product or service rather than to person characteristics. Deming's observations have been supported by others (e.g. Kohn, 1993). More recent research has found that most supervisors and employees are disappointed by the performance appraisal process (Soltanti, 2005). Soltani (2005) lamented the fact that despite considerable research revealing problems with performance appraisal and particularly with its link to Total Quality Management (TQM), few have researched how performance appraisal may better support improvement of quality management initiatives and thus organisational outcomes of which customer satisfaction would be one. Over the ensuing thirty years since Deming's comments, research has demonstrated that conflict can exist between the principles of TQM and the performance appraisal process; however Soltani (quoting Prince, 1996) suggested the important issue is that of designing the performance management system to fit the strategy and culture of the organisation ensuring this links to its quality strategy. Mwita (2002), in a study based in the local government sector in the UK, refers to authors advising against linking performance to rewards, and Shields (2007) reported that there was very limited success with PBRS in the Australian Public Service.

Competition and individualism among employees may actually work against the intention of performance related reward schemes (performance enhancement), especially in services where a group of employees all contribute to the ultimate service outcomes (Chamberlain et al., 2002). In this case rewards would foster competition as opposed to cooperation as individual employees try to compete with each other in the race for better rewards (Heneman and Werner, 2005). Heneman and Werner (2005) suggest that "…conflict arising from such competition for rewards could be damaging especially where employees depend on one another for the completion of the task" (p.47).

Gomez-Mejia and Balkin (1992) also pointed out that linking rewards to performance may sometimes lead to greater individual and unit performance but a decline in the performance of the entire organisation because of lack of synergistic interrelationship of different organisational units. This is not desired, because research has shown that the effectiveness of compensation schemes requires synergy between the schemes and the organisational strategies (Balkin and Gomez-Mejia, 1990). This implies that the success of performance enhancement schemes would require that such schemes be incorporated within the overall strategic focus of the organisation.

In order to minimise the potential lack of cooperation among employees there has been a suggestion that reward schemes based on performance be designed to reward groups instead of individual effort (McCollum, 2001). Rewarding teamwork has also been shown to improve employees' work commitment (Firestone and Pennell, 1993). It should be noted however that competition among employees is not always negative and individual based performance enhancement schemes may be successful where the nature of the task involves greater autonomy for employees (for example, sales personnel) and where competition is desired for excellence as in the case of academic staff at a university (Gomez-Mejia and Balkin, 1992). Besides, teamwork can inhibit the performance of individual top performers and may encourage '*free riding effect*' where some employees benefit from the group effort while their contribution is limited (Gomez-Mejia and Balkin, 1992; Burgess and Ratto, 2003). Given the positives and negatives of both team and individual based performance based reward schemes it may be advisable to design these schemes on the basis of the specific situation of each organisation and where programs are designed to minimise programs' pitfalls (Gomez-Mejia and Balkin, 1992; Lawler, 1994).

2.5.2 Difficulty of measurement

Assessing and evaluating employee performance is often a difficult task in the management of service organisations, especially if such evaluation is required for determining employee rewards (Gomez-Mejia and Balkin, 1992). It is often difficult to determine a fair and accurate evaluation of performance, and this creates problems in implementing the reward schemes (Pearce and Perry, 1983; Beer and Cannon, 2004). According to Cutler and Waine (2000), the central issue in debate against the use of performance related reward schemes was the lack consistency associated with performance measures. Performance measures were also found to be susceptible to manipulation therefore negatively affecting the authenticity of the reward process (Cutler and Waine, 2000).

It is even more difficult to determine an individual's level of rewards where the accomplishment of task performance involves a team (Gomez-Mejia and Balkin, 1992; Harvey-Beavis, 2003). This occurs mainly where several employees' inputs are required to complete a given task and such inputs are "...inextricably tied..." so that it is not be possible to judge each individual employee's contribution to the overall task (Gomez-Mejia and Balkin, 1992 p.250). The problem of measuring and evaluating performance also emanates from the fact that appraising performance is not completely objective because of the subjective human evaluation (Baker et al., 1988; Cardona, 2002). An example of this difficulty was reported by O'Donnell and O'Brien (2000), whose study of employees within the Australian Public Service (APS) found that employees were concerned about the subjective nature of the appraisal process when their supervisors measured their (employees) performance. Employees complained that the appraisal process was often ambiguous and left too much discretion to supervisors to make judgements about employee performance (O'Donnell and O'Brien, 2000 p.8).

The issue of subjectivity in the evaluation of employees' performance brings to the fore lack of trust and opposition to performance based reward schemes by employees (Malen, 1999). Employees often question the fairness of the performance evaluation criteria used for purposes of determining their rewards (Milkovich and Newman, 1999). This lack of trust in the performance evaluation criteria is sometimes driven by employees' perceptions of inequity between their input relative to compensation, as compared against other employees performing the same task

(Milkovich and Newman, 1999). According to Milkovich and Newman (1999), organisations are "…perceived to use fair performance evaluation and reward procedures by their employees, command high levels of employee commitment to performance standards" (p.291). Therefore, the evaluation of employees' performance has to be performed in a fair and transparent manner in order to enhance employee commitment to performance improvement (OECD, 1997). In addition, trust and transparency of performance evaluation increases acceptance of performance based reward schemes as valid, and thus reduce demotivation of employees (OECD, 1997).

2.5.3 Less regard for unrewarded tasks

Another possible pitfall of performance based reward schemes is that they (schemes) may encourage employees to focus too much on tasks and goals specified in the performance contract at the expense of important unrewarded tasks (Chamberlin et al., 2002; Lawler, 1994). While goal setting (often used in most performance enhancement schemes) is meant to encourage the accomplishment of targets, it may actually be counter-productive when employees focus on rewards while ignoring other important elements of the job (Chamberlin et al., 2002). For example Gomez-Mejia and Balkin (1992) noted that in the academic field it is common for staff to focus more on research in order to be rewarded accordingly in terms of pay, promotion and tenure, and this happens at the expense of other activities within the university such as committee involvement. Another example of this type of behaviour was found by Asch (1990) in a review of a Navy recruitment scheme, where recruiters were rewarded on the basis of reaching the target number of recruits on set dates. Asch (1990) found that recruiters compromised quality with quantity when recruiting because their main concern was reaching the target number in order to qualify for a reward.

2.5.4 Cost of implementation

While performance reward schemes are important for improving employee performance there is a cost associated with their implementation (Hoerr, 1998). This includes the costs associated with the administration of the schemes such as monitoring employees, appraising and management performance (Chamberlin et al., 2002). According to Harvey-Beavis (2003), successful implementation of performance reward schemes often requires additional funding. Where monetary rewards are used, increased salaries resulting from performance enhancement schemes would require increased revenue that contributes to additional costs (Beavis-Harvey, 2003). Lack of funding has been partly blamed for the discontinuation of some performance related pay schemes (Odden, 2000). In theory costs associated with employee rewards are expected to be offset by increased productivity from employees however this is often not possible in the public sector (Chamberlin et al., 2002) where results of improved performance may not necessarily mean a cut in costs given that the public sector is not usually profit focussed.

2.5.5 Negative effect on intrinsic motivation

Rewards, especially financial incentives, have been found to have a negative effect on employees' intrinsic motivation (defined later in this section) because they lessen individuals' self-determination (Deci, 1972; Kohn, 1993; Firestone and Pennell, 1993; Deming, 1993; Glasser, 1997). Table 2.3 lists the negative effects of rewards on employee motivation alongside the positive effects. The argument about the negative effects of rewards was advanced by Deci (1972) who suggested that rewarding people for work done tends to reduce the pleasure and motivation that they used to get from performing that task. Deming (1993) suggested that rewards remove employees' innate motivation, self-esteem and dignity thereby affecting their performance. Ramirez (1993) observed that rewards ignore the basic dynamics that motivate employees.

According to cognitive psychology reasoning, an activity has a motivation of its own which is independent of rewards, known as intrinsic motivation (Gneezy and Rustichini, 2000). Individuals are motivated to work by this intrinsic motivation, and the introduction of extrinsic rewards may actually have a negative effect on the overall performance of employees if it erodes this intrinsic motivation (Glasser, 1997; Gneezy and Rustichini, 2000). However it should be noted that while intrinsic motivation may be 'true motivation' as reflected in the cognitive psychology view, rewards are vital as they have been found to motivate employees especially non-monetary rewards or motivators (Usugami and Park, 2006). A study by Scott, Farh, and Podsakoff (1988) holds an opposing view to the idea that rewards reduce intrinsic motivation. The study actually found that rewards increase rather than decrease intrinsic motivation. In addition, Gerhart and Rynes (2003) also found that rewards increased intrinsic motivation.

Table 2.3 Effects of rewards on employees motivation and performance

Positive effects	**Negative effects**
Rewards increase employees motivation (Scott et al., 1988).	Rewards may reduce employees' pleasure and motivation of performing the task (Deci, 1972).
Monetary rewards can increase intrinsic motivation (Gerhart and Rynes, 2003).	They lessen employees' self-determination (Kohn, 1993).
Rewards increase salespeople's customer service response (Sharma and Sarel, 1995)	Rewards undermine employees' intrinsic motivation (Firestone and Pennell, 1993).
Increase employees' level of productivity (Kahn et al., 2001).	Divert employees from meeting intrinsic needs that drive human performance (Glasser, 1997).
	Rewards remove innate motivation, self-esteem and dignity (Deming, 1993).
	Their net effect is overall reduction in employee motivation and performance (Gneezy and Rustichini, 2000).
	They ignore the basic dynamics of what motivates employees (Ramirez, 2001).

In summary, it is clear that researchers are divided regarding the effect of rewards on employees' intrinsic motivation. That could help to explain why organisations continue to use rewards to motivate their employees to improve their performance despite the theoretical opinion that rewards reduce employees' motivation.

2.5.6 Reduction in risk taking and innovativeness

Rewarding employees on the basis of performance involves risk because while employees may strive for high performance, factors beyond their control may affect performance outcomes (Igalens and Roussel, 1999). Employees working under performance based reward schemes may therefore perceive risk associated with failure to achieve their performance targets especially where monetary rewards are used (Deckop, Merriman, and Blau, 2004). Risk averse (fear for risk taking) employees are more likely to perceive high levels of risk associated with the reward schemes and that may negatively affect their job performance (Deckop et al., 2004). For example, the study by Bloom and Milkovich (1998) found that rewards could inhibit performance for risk-averse employees and often motivate them to act conservatively to avoid performance failure and forfeiture of rewards. Reduction in risk-taking could lead to employees focussing narrowly on given tasks and thus, reducing innovativeness (Jenkis, Mitra, Gupta, and Shaw, 1998). This could result in commodification of services and a less professional workforce that cannot think innovatively due to focussing on assigned tasks for fear of failure (Adcroft and Willis, 2005).

2.5.7 Doubts on the effectiveness of rewards on employee motivation

A number of researchers have expressed doubts about the ability of rewards to improve employees' performance in a sustained way (Bevan and Thomson, 1991; Kohn, 1993; Marden and Richardson, 1994). In their study of private and public organisations, Bevan and Thomson (1991) found no compelling evidence to suggest that the use of performance management systems such as performance based reward schemes, was linked to improvement in employees performance. They even suggested that organisations using performance incentives do not show much of a difference in performance to those that do not have performance incentives. Kohn (1993) was also sceptical about the ability of performance-based pay to have any long-term effect on performance (see section 2.1.1). He argued that rewards do not create enduring motivation, but only have short-term effects on employee motivation that eventually disappear with time.

Beer (1993) pointed out that performance rewards have a short life span and that their effect would not last more than five years. He added that what remains after the five years would be an investment of time and money on "…endless redesigning of the incentive system..." with a view to starting a new cycle of performance improvement initiative (p.39). In addition, a study by Marsden and Richardson (1994) on Inland Revenue staff in the UK public sector did not find a strong link between performance rewards and employee motivation. As discussed in section 2.5.1, Marsden and Richardson (1994) concluded that performance based pay might actually demotivate employees. Their findings indicated that the "…majority of staff did not believe that performance based rewards had any significant motivational effect on their performance" (p.251). The results of a survey on senior executives from different parts of the world, on their perceptions of causes and consequences of rewards, by Beer and Katz (2003) also found that performance incentives did not necessarily motivate employees to improve their performance thereby casting doubt on the efficacy of performance based rewards in employee motivation and performance.

Despite the criticism and doubts about the efficacy of rewards in motivating employees, (Kohn, 1993; Marsden and Richardson, 1994; Kellough and Selden, 1997) the use of rewards still remains one of the common ways of attempting to enhance employees' performance (Gomez-Mejia and Balkin, 1992). Arguing in support of rewards, Gomez-Mejia and Balkin (1992) pointed out that their advantages outweigh disadvantages in motivating employees' performance. They likened the use of rewards to the justice system where crimes continue to occur despite the presence of the justice system but if the system was to be discontinued the situation would be worse.

In concluding this section, it could be said that rewards have been suggested as a means of improving employees' performance, which in turn should lead to higher service quality and increased customer satisfaction. However the impact of rewards on service quality depends on customers' perceptions. As discussed later in section 2.6.2, customers' perception of service output varies due to the unique characteristics of services. The next section discusses the general scope of services and how this applies to both the private and public sectors. The unique characteristics of services and their underlying implications to service delivery are discussed in section 2.6.2.

2.6.0 Nature and scope of services

This section provides a general discussion of services, including their definition and the unique characteristics of services. This discussion is important since it provides a background to understanding how services differ from goods and how they have to be treated in terms of employee management. It also provides insights into the unique nature of services that often make services hard to understand and manage. The discussion moves on to explore the implications of service characteristics to service providers and concludes by exploring services within the public sector.

2.6.1 Definition of services

The definition of services has been a contentious issue for academics (Gronroos, 1990; Payne, 1993; Gabbott and Hogg, 1997; Zeithaml and Bitner, 2000). According to Gabbott and Hogg (1997), a number of definitions for services have been suggested with none being universally accepted. In some cases there was even a debate on whether services constitute a distinctive subject area worth pursuing on its own (Payne, 1993). This identifies the difficult and often abstract world that service marketers face. An example of the various attempts to define services is found in Gronroos's (1990) review of the following eleven definitions of services from 1960 to 1987:

- Services - Activities, benefits, or satisfactions which are offered for sale, or provided in connection with sale of goods" (American Marketing Association 1960, p.21)
- "Services represent either intangibles yielding satisfactions directly (transportation, housing), or intangibles yielding satisfactions jointly when purchased either with commodities or other services (credit, delivery)" (Regan 1963, p.57)
- "Marketing Services- A market transaction by an enterprise or entrepreneur where the object of the market transaction is other than the transfer of ownership (or title, if any) of a tangible commodity" (Judd 1964, p.59)

- “ For the consumer, services are any activities offered for sale that provide valuable benefits or satisfactions; activities that he cannot perform for himself or that he chooses not to perform for himself” (Bessom 1973, p.9)
- “A service is an activity offered for sale which yields benefits and satisfactions without leading to a physical change in the form of a good” (Blois 1974, p.157)
- “Services (are) separately identifiable, intangible activities which provide want satisfaction when marketed to consumers and/or industrial users and which are not necessarily tied to the sale of a product or another service” (Stanton 1974, p.545)
- “A service is an activity or a series of activities which take place in interactions with a contact person or a physical machine and which provides consumer satisfaction” (Lehtinen 1983, p.21).
- “Services are any intangible benefit, which is paid for directly or indirectly, and which often includes a larger or smaller physical or technical component” (Andresen et al 1983, p.6)
- “A *service* is any activity or benefit that one party can offer to another that is essentially intangible and does not result in the ownership of anything. Its production may not be tied to a physical product” (Kotler and Bloom 1984, p.147 and Kotler 1988, p.477)
- “The meeting of customer expectations in the course of selling and post-sales activity through providing a series of functions which match or better the competition in a way which provides an incremental profit for the supplier” (Free 1987, p.75)
- “Services is something which can be bought and sold but which you cannot drop on your foot” (Gummesson 1987b, p.22)

Source: Gronroos (1990, pp. 26-27)

Gronroos (1990) observed that none of the definitions adequately addressed the service phenomenon. Some of the definitions focused mostly on “…activities that were rendered by service firms at that time” (p.26), and therefore left out some services. He ultimately suggested the following definition on the basis of what he said was a blend of definitions from Lehtinen (1983); Kotler and Bloom (1984) and Gummesson (1987) [*all quoted in Gronroos (1990*)]:

> *A service is an activity or series of activities of more or less intangible nature that normally, but not necessarily, take place in interactions between the customer and service employees and/or physical resources or goods and/ or systems of the service provider, which are provided as solutions to customer problem.* Gronroos (1990, p.27).

The above definition leads to the notion of conceptualising services as a process (Johns, 1999; Gronroos, 2000). In fact Gronroos (2000) goes on to suggest that customers consume the process rather than the final product. For example, Gronroos (2000) stated that "…it is during the consumption of the service process..." that customers experience the service and evaluate its quality (p.51). The consumption of this service process would thus be important in shaping the customers' perceived quality.

Payne (1993) acknowledged the difficulty of defining services and observed that this difficulty arises from the diversity of services some of which may not fit into the definitions suggested. Palmer (1994) observed that most products would have an element of services and goods and suggested that there was a need for a definition of services that accommodated all services including the '*grey*' areas between pure services and pure goods. Palmer (1994) suggested the following definition:

> The production of an essentially intangible benefit, either in its own right or as a significant element of a tangible product, which through some form of exchange satisfies an identified consumer need (p.3)

Palmer (1994) suggested that the service sector be conceptualised in terms of the degree of service orientation in order to distinguish goods from services while encompassing the grey areas between goods and services. He indicated that in practice, most products fall in between the two extremes of pure service with no tangible output and pure goods with no intangible product. This has been referred to as the goods and services continuum (Palmer, 1994; Lovelock, Patterson, and Walker, 2004), the tangibility spectrum (Zeithaml and Bitner, 2000), scale of market entities (Shostack, 1977), and intangibility and tangibility continuum (Payne, 1993). The use of the continuum helps in understanding the nature and scope of services as well as the difference between goods and services. Given that some services are multidimensional, in the sense that they have both tangible and intangible elements for example restaurant meals it is useful to have the continuum to help understand services especially their nature and scope (Lovelock et al., 2004).

While the continuum provides help in understanding services it is also lacking in the sense that it does not provide a clear distinction between goods and services (Payne, 1993). Based on the above discussion, it can be deduced that defining and understanding the scope of services is difficult and complex. This complexity arises from the fact that services have unique characteristics. These characteristics are intangibility, inseparability, perishability and heterogeneity (Gabbott and Hogg, 1997; pp.x-xi; Zeithaml and Bitner, 2000 pp.11-14; Palmer, 1994 pp. 3-6; Payne, 1993 p.7). Due to these unique characteristics customers would perceive service outputs differently (Zeithaml and Bitner, 2000). These characteristics bring challenges to both service providers and customers. While customers find it hard to predict the quality of services (Zeithaml and Bitner, 2000; Wong and Sohal, 2001), service providers are challenged to predict customers' likely response to the service output. A discussion of each of the service characteristics follows in the next section. Table 2.4 provides a summary of the implications of these characteristics to both service providers and customers.

2.6.2 Characteristics of services

This section provides a discussion of the four unique characteristics of services. Each characteristic is discussed briefly in terms of the challenges it brings to service delivery as well as the implications of those challenges to service providers in both private and public sector organisations.

2.6.2.1 Intangibility

Intangibility of services means that services do not have a physical dimension, and therefore cannot be seen, touched, smelt, tasted or even heard (Zeithaml and Bitner, 2000). This is unlike goods, which are tangible and exist in both time and space (Wong and Sohal, 2001). Services have to be experienced before one can evaluate their quality. Intangibility implies that customers frequently have to evaluate tangible clues of what they are to experience from the service during the service encounter prior to purchase (Bitner, Brown, and Meuter, 2000). In essence, customers may not be in a position to predict with certainty the quality of the service outcomes prior to purchase because of the abstract nature of the service offering (Zeithaml and Bitner, 2000; Edvardsson, Gustafsson, and Roos, 2005). This uncertainty tends to heighten customers' perceived risk in service purchases (Murray and Schlacter, 1990; Murray, 1991). According to Mudie and Cottam (1993), customers may have problems of evaluating the service "…even after receipt and consumption of the service" (p.8). This difficulty arises because while goods are high in 'search qualities' that a customer can use to evaluate alternatives prior to purchase and consumption of the product such as colour, smell, taste, size, aesthetic appeal, design and others, services lack these search qualities and have what is called 'credence qualities' which means that they are hard for customers to evaluate (Palmer, 1994, p.4; Lovelock et al., 2004 p.19).

Due to the intangibility of services, customers may purchase a service and derive value from it but they can never claim ownership of the service because there is nothing tangible to own or take home (Gronroos, 1990; Lovelock et al., 2004). On the other hand, service providers cannot protect their service output from competitors through patents because there is nothing to patent (Hoffman and Bateson, 2006). Intangibility of services implies that service providers have no tangible evidence or product to market to customers (Gilmore, 2003). In that way employees would face a big challenge of having to convince customers to buy a product that they cannot see or even evaluate prior to consumption (Gronroos, 2000). Service providers are often challenged to provide tangible evidence in order to assist customers in the evaluation of the service (Mudie and Cottam, 1993). Intangibility serves as the basis for other service characteristics and is the one that actually makes services evaluation more complex (Hoffman and Bateson, 2006). See Table 2.4 for a summary of implications of service characteristics to service providers and customers.

While most services are intangible in nature, the degree of tangibility differs from one service to another (Payne, 1993). Some services have a tangible product associated with them for example, and therefore may be considered to be less intangible (Payne, 1993). An example of such services would be restaurant meals, where a customer is able to see the meal that forms part of the service (Payne, 1993, Gronroos, 2000). However, as Gronroos (2000) puts it "...the essence of the service derives from its intangibility" (p.49).

2.6.2.2 Inseparability

The second unique characteristic of services is the inseparability of the service production and consumption. Unlike physical goods that are produced, sold and consumed later, in most service situations, service production and consumption have to occur simultaneously (Wong and Sohal, 2001). In that way service providers may not have the chance of enhancing the quality of their services in between the production and consumption of such services by their customers (Zeithaml, Parasuraman, and Berry, 1990; Gronroos, 2000). The extent of inseparability depends largely on whether the transaction involves interaction between the customers and service providers (face-to-face) or interaction between a machine and the customer (Gabbott and Hogg, 1997). Face-to-face transactions are highly inseparable because the customer and the service provider often have to be present to facilitate the service delivery and consumption process (Payne, 1993; Lynn, Lyte, and Bobek, 2000; Wong and Sohal, 2001). One implication of highly inseparable services is that customers have an important role to play in both the production and consumption of the service and their participation may have an effect in the resulting service outcomes (Lovelock et al., 2004). For example a citizen, who seeks medical help from a health facility, has to be physically present to receive help. If they do not provide correct information to the medical practitioner they may not get the right treatment for their ailment.

Table 2.4 Impact of service characteristics on employees and customers

Service Characteristics	Definition	Employee factors	Customer factors
Intangibility	Lack physical status, cannot be seen, touched, heard, tasted. Some services are supported by a tangible component.	.No tangible evidence for purposes of product promotion (Zeithaml and Bitner, 2000). .Employees provide evidence of tangibility to customers. .Employees perceived as part of the service.	.Not easy to evaluate service output (Gronroos, 1990p. 29; Mudie & Cottam, 1993 p..8). .No transfer of ownership to the customer (Gronroos 2000).
Inseparability	Production, distribution and consumption of most services occur simultaneously (Gronroos, 2000 ; Wong and Sohal, 2001).	.Service employees have to be present to produce service. .No buffer between service production and consumption (Zeithaml et al., 1990). .Centralised mass production more difficult (Berry,1987).	.Customer has to be present to consume service (Payne, 1993; Wong and Sohal, 2001). .Customer participates in service production (Lovelock et al. 2004 p. 17). .Customers interact with each other during service production, their perception of service quality may be affected by the presence of other customers (Grove and Fisk, 1997; Zeithaml and Bitner, 2000). Customer participation may negatively or positively affect service output
Perishability	Services cannot be stored for future use. Service cannot be resold	.Excess capacity cannot be stored for use when demand is high (Zeithaml and Bitner, 2000; Lovelock et al., 2004). .Need to adopt strategies for spreading demand levels to service production capacity. Need for strong service recovery.	Customers cannot return poor services to the service provider
Heterogeneity	Service output is difficult to standardise (Zeithaml et al., 1990; Wong and Sohal, 2001).	.Lack of precise specifications and production standards. Maintaining a consistent level of service quality is a challenge. (Zeithaml and Bitner, 2000; Hoffman and Bateson, 2006) Service quality varies from one employee to the next and may differ between customers served by the same employee. Employees performance affected by stress, mood, employee apathy, inflated demands from customers (Martin and Adams, 1999; Zeithaml and Bitner, 2000)	.Uncertainty of service output Customers unsure of the service quality prior to consumption (Czepiel et al., 1985). Customers' perceived service quality depends on employees' performance as output is judged real time (Mattsson, 1994).

Another implication of inseparability is that unlike goods, which can be produced at one factory and sold at decentralised outlets, inseparability of services means that centralised mass production is not possible (Berry, 1987). For highly inseparable services, customers may have to travel to the point of service production where they sometimes have to wait in a queue to get their service (Grove and Fisk, 1997). The presence and behaviours of other customers during service delivery may interfere with the customers' service experience (Grove and Fisk, 1997).

The problems associated with inseparability of services have been lessened by the advent of information technology (Mols, 1998). Users of technology-based services do not necessarily have to talk to service personnel or even interact with them. Their main point of interaction is the technology (e.g personal computer, ATM e.t.c) which facilitates the transaction (Payne, 1993; Meuter, Ostrom, Roundtree, and Bitner, 2000). According to Meuter et al. (2000) the use of technology fosters flexibility in terms of providing services where and when it is needed or consumed, thereby reducing consumers' waiting time and face-to-face transactions.

2.6.2.3 Perishability

Thirdly services are perishable; they cannot be stored for future use. Services are produced and consumed simultaneously (Gabbott and Hogg, 1997; Gronroos, 2000). In that way any excess capacity in services cannot be stored for the future when there is excess demand. Even though production facilities, equipment and labour may be held ready to provide the service during periods of high demand, that still represents the capacity to provide the service but not the service itself (Lovelock et al., 2004). As a result, fluctuations in customers' demand for services often pose challenges to service providers especially where such fluctuations are not easy to predict (Mudie and Cottam, 1993). Service providers are therefore challenged to devise means of spreading the demand levels to better deal with the available production capacity (Mudie and Cottam, 1993; Lovelock et al., 2004). For example mid month promotions could be used to attract customers and reduce crowding at the end of the month. Alternatively marketers, could try and predict fluctuations in demand, and then adjust capacity to deal with such fluctuations.

2.6.2.4 Heterogeneity/ Variability

Lastly, services are heterogeneous and therefore their production is difficult to standardise. The variability of service output has implications for both service providers and customers. The quality of the service output varies depending on the provider, as well as how and when it is provided (Mudie and Cottam, 1993). Different service employees within the same organisation may actually provide different services from time to time (Zethaml, Parasuraman, and Berry, 1990). It is even possible to have variations in service outputs from the same employee over time (Mudie and Cottam, 1993; Martin and Adams, 1999). This emanates mainly from the fact that most services are produced by humans and the consistency with which the quality of services produced can be standardised becomes difficult (Wong and Sohal, 2001). Employees tend to differ in their personalities and therefore interact with customers differently (Hoffman and Bateson, 2006). Factors such as stress, mood, employee apathy, poor customer service skills, inflated customer demands and pressure to cut costs have been found to dominate in shaping service employees' performance (Martin and Adams, 1999; Zethaml and Bitner, 2000). Given this lack of standardisation of services delivery, customers are often unsure of the outcome of the service that they are likely to get from the service producer (Czepiel, Solomon, Surprenant, and Gutman, 1985).

Unlike goods where quality control measures can be assured during production, service providers cannot have precise specifications and as a result standards of uniformity can never be assured (Wong and Sohal, 2001). It is difficult to maintain a differential service advantage over competitors given the variability of services (Hoffman and Bateson, 2006). As a result of variability, and service intangibility, service organisations cannot produce a finished product prior to sale, as is usually the case with goods, instead services are sold at the time of production and consumption by the customer (Beilharz and Chapman, 1994). In addition, because of the varied and intangible nature of services, customers would normally only be able to evaluate the service after purchase thereby increasing pre-purchase uncertainty.

The heterogeneity of services also occurs because of differences in customer perceptions of service output (Won and Sohal, 2001). Customers differ in terms of their perception of services, and they have different demands, preferences and definition of quality, they also have different reasons for wanting to buy the product, all of which affect customers' evaluation of the service output (Zeithaml and Bitner, 2000; Gilmore, 2003). As a result, the same service may be viewed as poor quality by one customer and high quality by another.

Due to the intangibility and variability of services, promotion of services is difficult because there is little physical evidence to promote (Hoffman and Batesson, 2006). Given that services are sold when produced, and that their production cannot be standardised, service providers' effort to promote services prior to production is likely to have less influence on customers' purchase decisions (Hoffman and Bateson, 2006). This is because, when compared to physical goods where customers have the opportunity to compare brands being promoted prior to purchase, with services there is no tangible evidence to use to make comparisons (Berry, 1987; Berry and Parasuraman, 1991).

However it has to be acknowledged that the impact of the four service characteristics differs among services. According Edvardsson et al. (2005) the unique characteristics of services are not generic. They therefore suggested that service characteristics could only be applied in relevant situations. Johns (1999) also observed that although services are commonly described as intangible, some services have a substantial tangible component. He suggested that rather than worrying about the difference between goods and services, focus should be on the proportion of service component. Within the literature there are arguments regarding the validity of the unique services characteristics (Beaven and Scotti, 1990; Gummesson, 1995; Vargo and Lusch, 2004).

According to Beaven and Scotti (1990), the definition of services is usually clouded by reference to goods manufacturing which is an area on its own. Beaven and Scotti (1990) called for consideration of services from a different perspective not influenced by manufactured goods. Gummesson (1995) argues that what customers buy is neither goods nor services, instead they buy "…offerings which render services which create value" (p.250). Based on that view, Gummesson (1995) suggested that the difference between goods and services as conceptualised in the four unique characteristics was outdated. Furthermore, Vargo and Lusch (2004) question the relevance of services characteristics used to differentiate goods from services. They argue that these characteristics are inaccurate and were influenced by the exchange conceptualised from the manufacturer's perspective. Their argument was based on an earlier position suggested by Beaven and Scotti (1990) and Gummesson (1995).

In summary, the foregoing discussion provides an overview of the nature and scope of services, their characteristics, and marketing implications arising from those characteristics. As indicated, services are complex and abstract and therefore difficult to conceptualise as compared to goods. This is evidenced in the several attempts by academics to define the scope of services which has often caused debates (Gronroos, 1990). The section concludes by discussing some arguments raised against the generic use of services characteristics in differentiating goods from services. While these arguments could be valid, there is limited empirical support for the suggested perspective and therefore in this study the four characteristics of services are assumed to be relevant.

The next section is a discussion of services in the context of the public sector. This is important, as the current study is based on public sector services. Differences in service delivery issues between the private and public sectors are also discussed here to highlight the difficulty of service delivery within the public sector.

2.7.0 The nature of public sector services

The nature and scope of services is the same in both private and public sectors. The major difference is that while services in the private sector are meant for profit, public sector services are largely sold at a minimal cost and in some cases they may actually be free (Donnelly et al., 1995). This emanates from the fact that public sector services are mainly meant to address the social good and welfare of the customers (Donnelly et al., 1995) rather than enhance the profitability of the organisation (Skelcher, 1992).

The main role of the public sector is to serve and add value to the community (Bennington and Cummane, 1998). According to Bolton (2003), the public sector's mission lies in the society that it serves. The success of that mission requires that the needs of customers or the community be satisfied (Bennington and Cummane, 1998). According to Seidle (1995), cited in Bennington and

Cummane (1998), just like their counterparts in the private sector, public sector customers require a responsive and reliable service from the public sector.

Governments have been urged to focus their attention on serving and empowering their citizens (Denhardt and Denhardt, 2000). Denhardt and Denhardt (2000) suggested that public sector employees should guard against controlling or '*steering*' the society' interests but should rather help citizens to articulate and meet those needs. Public sector employees should focus on how the needs of the society can be best met, rather than on how they (employees) can run the program efficiently (Edwards and Creagh, 1991). In that way the public sector would be "…a player who works closely with citizens…" to assist in meeting the needs of those citizens (Denhardt and Denhardt, 2000, p.554).

The public sector acts on a mandate they have from the citizens and as such they are expected to be accountable with public resources (Bolton, 2003). Indeed, some public sectors, including the Australian Public Service and the United Kingdom, have adopted customer focused initiatives such as service charters (citizen charter – UK) to set standards of performance that are expected by the community (Auditor-General, 2003). While these service charters are not expected to be an end in addressing customers' needs, they assist in proving a guide to addressing public sector customers' needs (Auditor-General, 2003).

While the private sector may focus its attention on customer segments that bring more revenue to the firm, it is generally uncommon to focus on profitable segments within the public sector (Donnelly, 1999). Even though some departments may aim for profits, most governments' services are available to all citizens irrespective of whether they (citizens) are rich or poor (Donnelly, 1999; Kelly, 2005). The public sector often gives more consideration to the plight of the society and as such equity and fairness play an important role in service delivery (Denhardt and Denhardt, 2000). In that way public sector employees are expected to diligently serve citizens as 'stewards of public resources' (Denhardt and Denhardt, 2000). Employees are expected to facilitate in the delivery of services on behalf of citizens rather than assume the ownership of public resources as would be the case in a business venture (Chapin and Denhardt, 1995).

One major difference between the private sector and public sector lies in the customer profile. The public sector has a multiplicity of customers who have competing and often mutually exclusive needs (Kinnell and MacDougall, 1997; Brysland and Curry, 2001). For example a customer who applies for permission to run an entertainment club next to a residential area may meet resistance from residents in that area who do not want to live next to a noisy business. Both the residents and the club owner are customers to the government and require attention from the government as their service provider. In some cases the public sector may have customers who are not willing to be customers (Chapin and Denhardt, 1995; Denhardt and Denhardt, 2000). An example of such a customer would be a taxpayer who has to pay tax from his earnings at the end of each month. Though the money is paid, the customer does not necessarily want to take part in the service transaction. Thus the customer unwillingly takes part in service transaction. These unwilling customers are more likely to have a negative experience with the service outcomes because they did not choose to participate in the consumption of these services (Chapin and Denhardt, 1995; Donnelly et al., 2006). This involuntary participation by customers is inconsistent with the core concept of marketing that advocates a symbiotic, voluntary nature of transaction between the buyer and seller (Wisniewski and Donnelly, 1996).

Addressing the competing and mutually exclusive needs of public sector customers requires proper identification and understanding of such needs (Wisniewski and Stewart, 2004; Rowley, 1997) and finding better ways of solving them. However this may be difficult because the multiple public sector customers may evaluate the service quality differently and their participation in the service experience may also differ (Rowley, 1997; Orwig et al., 1997; Kelly, 2005). These conflicting needs may hamper efforts by the public sector to address customers' needs because improvement in public sectors' performance may satisfy one segment of the customers while making others dissatisfied (Orwig et al., 1997; Kelly, 2005).

In some cases public sector customers do not have much choice in terms of service variety, especially where the public sector is a monopoly in the provision of services (Auditor-General, 2003). Examples of such services would be the Police service and the Immigration office that have not been privatised in most countries. In such monopolies it is the service provider that decides who gets what, when and how (Skelcher, 1992). In that way, customers cannot shop around for price, quality and other attributes as is normally the case in the private sector (Auditor-General, 2003). Sometimes customers find themselves relying on public sector services such as welfare benefits because of limited income (Bennington and Cummane, 1998). As a result customers may be ‘loyal recipients’ of the service not because they like the provider but because they do not have an option. In conclusion, while both the private and public sectors have voluntary customers, some public sector customers may actually have limited service options (Skelcher, 1992) and therefore are involved in an involuntary transaction.

The next section discusses the characteristics of services and their implications to public sector service delivery.

2.7.1 Characteristics of services and public sector service delivery

The four characteristics of services (see Table 2.4), apply equally to both the public sector and private sector services. As a result, these make service delivery within the public sector complex as well. Generally many public services are intangible and therefore lack physical characteristics which service providers and customers can use to evaluate the service quality (Rowley, 1998; Fountain, 2001). As a result, public sector customers, like their private sector counterparts, mostly make evaluations of service quality on the basis of their subjective perceptions of the service outcomes (Fountain, 2001). Since public sector organisations exist to serve the needs of citizens, they (public sector organisations) are often expected to be responsive, fair, and accountable to all citizens (Lamb, 1987). In that way citizens tend to hold high expectations of public sector services and may subject such services to greater scrutiny than is the case with private sector services (Lamb, 1987). Thus, the public sector should place emphasis on establishing appropriate customers’ perceptions of the service in order to help improve the quality of service output (Rowley, 1998). Within the public sector, some customers may not be aware of the service they are to get because they have never experienced it before (Brysland and Curry, 2001). This lack of awareness increases uncertainty about the expected service outcome (Brysland and Curry, 2001). The intangibility of services on the other hand, adds to the complexity of the service experience.

Due to lack of tangibility (intangibility) of public sector services and other services in general, it is difficult to produce uniform quality of service outcomes. As a result, public sector services output is mostly variable and difficult to standardise. As discussed earlier under section 2.6.2.4, this lack of standardisation of service output increases uncertainty over the quality of services that customers get (Czepiel et al., 1985). Within the public sector, the design and production of services is usually the responsibility of the service providers often with limited or no input from customers (Skelcher, 1992). As a result, there is significant power inequality between service providers and customers with regard to service relationships within the public sector (Butler and Collins, 1995). Given that service providers have more power than the customer in deciding the service output, customers' uncertainty of service output is increased (Skelcher, 1992). However, some governments have introduced consumer 'watchdog' policies, for example, the Citizen's Charter in the UK, to represent customers' views in service design and delivery (Butler and Collins, 1995; Rowley, 1998). In Botswana, the government has come up with public sector customer service standards that specify the minimum performance levels for individual departments and units within the Botswana public sector (DPSM, 2008).

Public sector services are inseparable which implies that service production, delivery and consumption occur simultaneously and in most cases, in the presence of customers (Fountain, 2001). Like in the private sector, public sector employees and customers have important roles in the service delivery process (Fountain, 2001). For example employees serve as the producers, quality control personnel, marketing agents and delivery agents during the service production (Fountain, 2001). As a result of inseparability of services, customers are often expected to participate in the service production as co-producers of the service. Customers' participation in the service production has significant implications in the resulting service output. According to Fountain (2001), public sector customers' ability and willingness to supply accurate and timely information is a significant input to the resulting service output. As indicated earlier in this section, some customers within the public sector may not be aware of the services they get from the service provider (Brysland and Curry, 2001), and as such their participation as co-producers could negatively affect the service output. This is because they have limited or no information that could assist service providers in the production and delivery of services (Brysland and Curry, 2001).

The public sector, just like the private sector, is affected by the perishability of services. Service perishability implies that services in the public sector are produced and consumed at the same time, thus cannot be stored for future use (Corcoran and McLean, 1998). Challenges brought by service perishability apply equally to both private and public sectors. As a result of perishability, public sector service providers are challenged to find better ways of managing their services to utilise time, space and delivery effectively. Refer to section 2.6.2.3 for more discussions on service perishability.

2.7.2 Section summary

In a concluding summary, this section discussed the differences between the public and private sector services. It has been observed that service delivery in the public sector could be more challenging than in the private sector. This arises mostly from the differences in customers served by the two sectors (Donnelly et al., 1995). However this difficulty should not make the improvement in public sector services insurmountable. Instead it provides challenges to service providers to seek more enhanced and focussed approaches and methods that are relevant to the public sector which can assist in improving the quality of services. As Wisniewski and Donnelly (1996) pointed out, "…it reinforces the need for public sector organisations to ensure that they are providing quality services that match customer expectations as closely as possible" (p.357).

The next section is a general discussion on the role that employees play in service delivery. It applies to service delivery in both the private and public sectors. Having discussed services in general and public sector service delivery it is appropriate at this stage to discuss how such services are delivered. The section discusses factors that are necessary for service employees to provide good quality services. As it has been discussed earlier, services characteristics are a challenge to employees and customers alike. This section discusses how employees' performance may be affected by these service characteristics. It also covers ways in which the effect of these characteristics can be minimised.

2.8.0 Employees' role in service delivery

This section covers the discussion of the role of employees in the delivery of services (in both private and public sectors) and how that affects customers' perceived service quality. The section explores work place factors that are necessary to enhance employees' performance. The section also examines how these factors affect employees' performance and service outcomes.

Employees are an important link between customers and the service as well as the organisation and its customers (Mudie and Cottam, 1993). In that way service employees are of key importance to both the employer and the customer (Mudie and Cottam, 1993). Given the complex nature of services, employees play an important role as producers of the service. As discussed earlier, services have unique attributes that make comprehension, delivery and evaluation very difficult as compared to goods (Gronroos, 2000; Zeithaml and Bitner, 2000). Customers purchasing goods have an opportunity to evaluate the quality of the product prior to purchase and their purchase decision is rarely influenced by the manufacturer of the product (Bourke et al., 2005). With service purchases, customers are influenced by employees and their perception of service quality would depend on the experience or encounter they had with the employees (Burke, Graham, and Smith, 2005).

As discussed in section 2.6.2.2, services are inseparable. This means that in most cases of service delivery, the employee and the customer have to be present to facilitate the service delivery process (Zeithaml and Bitner, 2000). The two parties (customers and employees) have separate roles in the service delivery process but each one's participation is vital, as it determines the output of the service (Zeithaml and Bitner, 2000). Understanding customers' expectations and designing services according to prescribed specifications may not be enough to ensure that the customer gets good quality services, until the delivery is done as specified (Zeithaml and Bitner, 2000) and thus service delivery relies on the employees. The importance of linking customers' expectations with the design and delivery of services according to customer specifications is discussed later in section 2.9.4, using service quality gap model (SERVQUAL).

Due to the inseparability of services, employees often participate directly in the production and delivery of services to customers (Zeithaml and Bitner, 2000). Customers consume the service as it is being produced and therefore have to rely extensively on the employees to provide desired quality of services. Customers derive information about the service and develop impressions about the quality of the service from these interactions with employees (Shostack, 1985; Bitner et al., 2000). Customers then use this experience to develop attitudes about the service provider and to decide on possible future service outcomes. If their experience was poor, it would result in a negative evaluation of the entire service offering (Bitner et al., 2000). In most cases the contact employees are seen as the service (Chung and Schneider, 2002). In the eye of the consumer employees are the only tangible evidence available, especially if they single-handedly produce the service (Zeithaml and Bitner, 2000; Chung and Schneider, 2002). Given that services experiences are intangible, the manner in which they are delivered goes a long way in influencing the customers' overall impression of the service quality and their satisfaction with the service offered (Schneider and Bowen, 1993; Yoon, Beatty, and Suh, 2001; Burke et al., 2005). As a result, poor performance by one employee, can negatively affect customers' perception of the organisation's entire service quality (Yoon et al., 2001).

Given the simultaneous production and consumption of most services and their heterogeneity (lack of standardisation), it is often difficult to have quality control checks prior to service delivery, to ensure that employees deliver good quality services to the customers (Schneider and Bowen, 1993; Burke et al., 2005). This highlights the need for employees to consistently produce the right service the first time. However, as was noted in section 2.6.2.4, standardisation of services is difficult because of the human involvement (employees and consumers) in the service production. Employees' performance may be affected by factors within their working environment (Martin and Adams, 1999; Zethaml and Bitner, 2000). Customers' role in service production on the other hand, may also affect the service outcomes in terms of their (customers) ability to accurately and clearly provide information needed at the appropriate time during the service production process (Fountain, 2001).

Customer contact employees are usually called boundary-spanning employees and are very important in service delivery (Chebat et al., 2002). According to Chebat et al. (2002), the success of service organisations depends mostly on the performance of customer-contact employees as they have more knowledge about the customers' requirements than other employees within the organisation (Chung and Schneider, 2002). As Zeithaml and Bitner (2000) put it "…they (employees) serve a critical function in understanding, filtering, and interpreting information and resources to and from the organization and its external constituencies" (p.289). They use the information acquired from interacting with customers to facilitate in production of services and to assist in organisational decision-making (Zeithaml and Bitner, 2000). Boundary-spanning employees tend to be closer to customers than other employees within the organisation (Schneider and Bowen, 1993). This closeness is not only felt by the employees themselves but it is also felt by the customers who interact with these employees during the service encounter (Schneider and Bowen, 1993). As part of the exchange, customers get exposed to the organisational service climate, which in turn affects their perceived service quality (Schneider and Bowen, 1993). As Schneider and Bowen (1993) suggested, "…the organizational climate visible to employees spills over on external customers as a consequence of psychological and physical closeness" (p.39).

As will be discussed later in section 2.9.3, customer service quality is affected by five dimensions of tangibles, reliability, responsiveness, assurance and empathy (Parasuraman, Zeithaml, and Berry, 1985). Employees are responsible for articulating these dimensions to the customers to influence their perceived service quality (Zeithaml and Bitner, 2000). For example, the reliability dimension depends on the extent to which employees are perceived to be reliable by striving to deliver the service as promised to the customer and in a responsive, attentive and prompt manner. In addition, organisations need employees to offer assurance and a caring and individualised service, pay attention to customers' needs, and adapt and be flexible in providing services to customers (Zeithaml and Bitner, 2000). As a result employees, and not the organisation, are in direct control of the service performance outcomes. It is therefore very important to manage boundary-spanning employees carefully because of the important role that they play (Hallowell, 1996) with regard to organisational performance. There is a need to ensure that the attitudes and behaviour of employees in both private and public sectors complement marketing programmes focused at customers (Lings, 2002).

While employees are very important to the success of an organisation (Cone, 1989), they are often subjected to more stressful working conditions, because they have to deal directly with customers (Zeithaml and Bitner, 2000). According to Zeithaml and Bitner (2000), customer service employees "… are expected to smile, make eye contact, and show sincere interest to all customers most of whom will be total strangers and whom employees may not see again" (p290). Some customers may be difficult to deal with, especially those that complain. This may be distressing especially where employees have to suppress their personal feelings for the sake of the organisation's success and yet are not given much recognition and respect in the organisation in terms of remuneration commensurate with their work (Zeithaml and Bitner, 2000). Other factors that may affect performance of employees include their mood swings, employee apathy, poor customer service skills, inflated customer demands and the pressures to cut costs (Martin and Adams, 1999; Zethaml and Bitner, 2000). Frustrated employees are less likely to be productive. This highlights the need to create a good working environment for employees to motivate them (employees) to improve their performance.

According to the internal marketing perspective, employees have to be satisfied in order to enhance their level of performance (Zeithaml and Bitner, 2000). If the organisation wants to get value from its employees, it must be prepared to offer them improved working conditions before expecting them to deliver good quality services to customers (Yoon et al., 2004). According to Burke et al. (2005), improving working conditions for employees would result in improved performance which translates to customer satisfaction. In that way, employee job satisfaction is antecedent to customer oriented performance behaviour (Hoffman and Ingram, 1992). This means employees have to be treated like internal stakeholders because their job satisfaction is important in influencing the delivery of good quality services to the external customers (Beilharz and Chapman, 1994; Malhotra and Mukherjee, 2004).

As internal stakeholders or internal market as defined by other authors, employees need to have a supportive working environment (Zeithaml and Bitner, 2000). This can be achieved by ensuring they are informed, educated, trained, adequately equipped and are being appropriately rewarded, to enable them to meet external customers' needs and expectations (Schneider, 1980;

Papasolomou-Doukakis and Kitchen, 2004). As Yoon et al. (2004) suggested, the first step in achieving improved employee performance and high service quality, as well as customer satisfaction, is to focus on the support and satisfaction of employees. Internal marketing is viewed as an effective strategic tool for achieving good quality services, as well as high levels of customer satisfaction and organisational success (George, 1990). Research has shown that promoting a good quality work climate for employees results in positive customer experiences (Schneider and Bowen, 1993; Yoon et al., 2004; Burke et al., 2005). Poorly treated employees may be stressed, dejected and have a low morale which would potentially negatively impact on their performance as well as that of the overall organisation (Schneider and Bowen, 1993).

According to Schneider and Bowen (1993), employees' perception of the organisation's climate positively correlates with the customers' perceived service quality. The way in which employees respond, that is their attitudes and behaviour to the organisational climate, has a direct influence on customers' evaluation of service quality (Yoon et al., 2001). Where employees respond positively, customers are more likely to perceive good service quality. Satisfied employees are likely to perform better and this performance translates into customer satisfaction (Yoon et al., 2004).

Schneider and Bowen (1993) suggest that high service quality can be achieved through creating two related but different climates, 1) the climate for service, and 2) the climate for employee well-being. The climate for service is achieved through providing logistical and systems support that enhances the delivery of high quality services to the customers. Under this climate customers should feel that their needs are addressed. The second climate is employee wellbeing and can be achieved through focussing on the needs of employees by embarking on human resources management practices that enhance employees' morale and satisfaction levels (Schneider and Bowen, 1993; Burke et al., 2005). According to Gonzalez and Gazaro (2006), employee job satisfaction is important in motivating employees to be more productive and to increase their effort on job performance.

Rewards are considered one of the important factors that contribute towards the enhancement of employees' performance (Gonzalez and Garazo, 2006). Rewards have been identified as a means of reinforcing important employee behaviours such as service excellence (Cone, 1989). As already indicated in section 2.1.1, rewards are expected to motivate employees to improve their performance. Lawler et al. (2001) pointed out that rewards should have an impact on employee motivation, depending on the degree to which such rewards are based on performance. Thus using rewards should enhance employees' performance (Hong et al., 1995, Lowery et al., 1995, Chamberlin et al., 2002). See section 2.4 for the discussion linking rewards to employees' motivation and improved performance.

In the next section the discussion focuses on how customers evaluate service quality. Having talked about the employees' role in service delivery it is appropriate to talk about how the service delivered (by employees) is evaluated by public sector customers to determine the level of service quality. This discussion is preceded by the definition of a customer in the context of the public sector. As already discussed, one of the factors that differentiates the private from public sector is the type of customers served by each sector. Public sectors often have to face multiple customers (Wisniewski and Donnelly, 1996).

2.9.0 Public sector customers' perception of service quality

2.9.1 Definition of the customer

In this section the discussion starts by defining a 'customer' in the context of the public sector. According to Rowley (1998), the concept of customer in terms of the public sector is complex. In terms of the private sector the question of 'who is the customer' tends to be more clear than it is the case with the public sector (Brysland and Curry, 2001). As Wisniewski and Donnelly (1996) noted, "the definition of the customer in the context of the public sector is not only difficult but may actually be inappropriate" (p.364). This arises from the fact that the public sector has diverse customers who benefit from its services. Customers in the public sector may range from individuals, groups, local community, employees, societies, companies, churches, government departments, and others (Wisniewski and Donnelly, 1996; Rowley, 1998). These different customers may have varying and conflicting interests which could cause difficulties to service providers in prioritising services to the different customer groups (Wisniewski and Donnelly, 1996). Due to differences in customers' preferences and needs, they (customers) may evaluate the service differently and may differ in terms of their service experience (Rowley, 1998). At the end of the day public sector services may please one group while not being acceptable to another. For example while a railway line may be considered an important development in a community, some citizens may not welcome it within their neighbourhood because of the noise generated.

In order to conceptualise these different customers better, researchers have sometimes referred to them as stakeholders (Wisniewski and Donnelly, 1996; Rowley, 1998; Wisniewski and Stewart, 2004; McAdam et al., 2005). These stakeholders include individual consumers, the community, families, government departments, private sector companies, staff, taxpayers, voters, board of directors and all other different groups of customers being serviced by the public sector (Rowley, 1998). All these stakeholders are important to the public sector. Thus, the public sector is responsible for ensuring the delivery of good quality services that meet the requirements of all these stakeholders.

Some of the stakeholders, for example taxpayers do not necessarily fit the definition of a customer as they are not voluntarily involved in the exchange process as would be the case in a customer/ service provider kind of relationship (Fountain, 2001). These stakeholders differ in terms of service preferences and demands from the public sectors (Rowley, 1998). These differing stakeholders' needs provide a challenge to the public sector and may prove difficult to deal with as compared to customers within the private sector (McAdam et al., 2005). As stated earlier in this section, the different customers (stakeholders) often have conflicting and competing needs which are difficult for the public sector to satisfy. In that way customer care approaches used in the private sector may not be enough to cater for the competing needs of stakeholders in the public sector (McAdam et al., 2005). For example, while the private sector first identifies and target market segments, in most cases this approach may not be suitable for public sector customers as services are available to all with the intention of improving the citizens' quality of life (Rowley, 1998; Fountain, 2001).

While acknowledging the existence of different stakeholders within the public sector, this research focuses on one group of stakeholders, household consumers, which is individuals receiving services from the public sector. These are what are defined as customers in the context of this research. Targeting this group of customers will assist in the focus of the discussions. It clarifies who is evaluating the service and thus who has to complete the service quality (SERVQUAL) questionnaire.

The next section discusses how customers evaluate service quality and it links that with how their expectations and perceptions of service quality could be measured.

2.9.2 Customers' evaluation of service quality

Having indentified the customer in the context of this research, the next step is to understand how the customer evaluates services. The understanding of customers' evaluation of service quality is an important step in the delivery of superior quality services (Bouman and van der Wiele, 1992). This requires an understanding of the mechanisms used by customers to evaluate service quality, and these are discussed in this section. It has been identified that expectations and perceptions are important determinants in the way customers evaluate service quality (Lovelock and Wirtz, 2004). As mentioned in 2.9.1, public sector customers are diverse and may have different and often conflicting perceptions of the quality of services offered (Rowley, 1998; Fountain, 2001; McAdam et al., 2005). It is thus important to know how these different customers evaluate service quality. The discussion here also applies to private sector customers.

Customers' evaluation of service quality is an interplay of their expectations and perceptions of service performance (Mudie and Cotttam, 1993; Zeithaml and Bitner, 2000; Lovelock and Wirtz, 2004). Customers purchase services to satisfy their needs. For these needs to be satisfied customers determine if their expectations of the service outcomes were met based on their perception of the service performance received (Webster, 1989; Mudie and Cottam, 1993; Lovelock and Wirtz, 2004). In that way service quality would be a measure of the extent to which the level of the service delivered matches customers' expectations (Webster, 1989). Expectations are formed prior to service consumption (Muddie and Cottam, 1993) and are usually influenced by customers' experience with the service provider, competing services and with similar services from a different industry (Lovelock and Wirtz, 2004). Where there is no prior experience with the service, customers may rely on word-of-mouth for their service expectations (Lovelock and Wirtz, 2004).

According to the expectancy disconfirmation theory, customer's evaluation of service quality is related to confirmation or disconfirmation of their expectations (Churchill and Surprenant, 1982). Confirmation of expectations occurs where a product performs as expected, on the other hand expectations are negatively disconfirmed when the product performs poorly and are positively disconfirmed when the product performance exceeds expectations (Churchill and Surprenant, 1982). Thus the extent of disconfirmation is measured through a simple subtraction of expectations from performance (P-E) (Parasuraman et al. (1988; 1991; and 1994). Negative disconfirmation represents customer dissatisfaction (Churchill and Surprenant, 1982) while a positively disconfirmed performance is expected to represent high levels of satisfaction (Swan and Trawick, 1981). In that regard, a zero disconfirmation, where performance equals expectations is more likely to result in satisfaction (Reisig and Chandek, 2001). Service providers are therefore challenged to meet or exceed the expectations of customers in order to satisfy their customers.

Since expectations play a significant role in customers' service evaluation, it is vital for service providers to understand how expectations are formed. Understanding how customers develop their service expectations as well as controlling and managing the conditions that influence these service expectations would help address the needs of customers (Webster, 1989). Johnston (1995) suggests two strategies for managing customers' expectations, which are based on his 'zone of tolerance' analogy. According to Berry and Parasuraman (1991), quoted in Johnston (1995 page 47), "*the zone of tolerance is a range of service performance that a customer considers satisfactory. A performance below the zone of tolerance will engender customer frustration and decrease loyalty. A performance level above the tolerance zone will pleasantly surprise customers and strengthen their loyalty*". The first strategy is to strive to satisfy customers by keeping their expectations within the zone of tolerance. This can be achieved by ensuring that customers do not have negative experiences (disconfirmation) that could lower the perceptions below the zone of tolerance or unusually positive experiences that are above the zone of tolerance (Johnston, 1995). Positively disconfirmed outcomes are to be avoided in this case as they could heighten customers' future expectations beyond the organisations' capabilities (Johnston, 1995). However, organisations intending to delight their customers may opt to consistently provide good quality services that match or even exceed customers' expectations above the zone of tolerance (Johnston, 1995).

However in most cases it is very difficult for service providers to determine what influences customers' expectations and manage such expectations (Webster, 1989; Zeithaml and Bitner, 2000). In a bid to control and influence customer expectations, some organisations may be tempted to exaggerate their service promises to customers with the hope of attracting more customers (Mudie and Cottam, 1993). Mudie and Cottam (1993) suggest that this is not advisable, because it only helps to raise customers' expectations and may lead to higher levels of dissatisfaction when such promises are not met.

Customer expectations are dynamic and tend to change over time and differ from person to person (Tse and Wilson, 1988; Zeithaml and Bitner, 2000). Expectations can also vary across customers depending on their individual circumstances and characteristics (Tse and Wilson, 1988; Zeithaml et al., 1990). Individuals with lower expectations are more likely to report high levels of service performance while those with high expectations are expected to perceive low levels of performance for the same service (Lovelock and Wirtz, 2004). Factors such as advertising, pricing, service and technology changes may also affect customers' service expectations (Lovelock and Wirtz, 2004). Generally customers' expectations for most services tend to increase with time as customers place more and more emphasis on improved service quality (Donnelly and Shiu, 1999). However it has to be pointed out that in some situations service expectations decrease, especially where customers had to readjust their expectation levels following unsatisfactory experience with the service.

Differences in service expectations can also be influenced by customers' demographic characteristics (Webster, 1989; Gagliano and Hathcote, 1994). A study by Webster (1989) observed that different demographic factors affected customers' evaluation of service quality. A related study by Gagliano and Hathcote (1994) on customer expectations and perceptions in retail apparel stores found that demographic factors of race, marital status and income were attributed to significant differences in customer service expectations and perceptions.

Despite the difficulty faced by service providers in understanding customers' evaluation of service quality, Parasuraman et al. (1985) observed that there were underlying dimensions commonly used by customers to evaluate service quality. These dimensions were tangibles, reliability, responsiveness, competence, courtesy, credibility, security, access, communications, and understanding the customer. The dimensions were later refined and collapsed to five categories, tangibles, reliability, responsiveness, assurance, and empathy. The criteria used by Parasuraman et al. (1985; 1988) to measure service quality were based on the findings of their survey which culminated in the development of an instrument for measuring customers' perceived service quality which they called SERVQUAL.

The dimensionality of service quality evaluations has been contested by academics, with some arguing that the five dimensions are not universal and may not be stable from context to context (Bourman and van der Wiele, 1992; Gagliano and Hathcote, 1994). Different numbers and types of dimensions have been observed by researchers as they applied Parasuraman et al.'s (1988) five dimensions in different contexts (Carman, 1990; Babakus and Boller, 1992; Gagliano and Hathcote, 1994). In some cases, service quality was even observed to be unidimensional (Babakus and Boller ,1992). The issue of dimensionality is discussed in section 2.9.5.

This research used the SERVQUAL instrument to measure customers' perceived service quality. The next section is a detailed discussion about SERVQUAL and its application in measuring service quality. Differing opinions on the applicability of SERVQUAL in measuring service quality are also discussed in section 2.9.3.

2.9.3 Measuring service quality

The concept of what is service quality has been debated among researchers and there is no consensus in its definition or, how it should be measured (Davies, Baron, Gear, and Read, 1999; Wisniewski, 2001). Without a clear definition it is difficult to know exactly what should be measured and how (Davies et al., 1999). A number of researchers notably Parasuraman et al.

(1985; 1988; 1991; 1994), Robinson (1999), Cronin and Taylor (1992; 1994), and Teas (1993; 1994) have debated how service quality could be measured. Parasuraman et al. (1985; 1988) came up with the widely used SERVQUAL instrument. This has however, been criticised by some (Cronin and Taylor, 1992; 1994; Teas 1993; 1994) for its perceived lack of consistency across all service settings. This debate is discussed in section 2.9.5.

A review of literature on service quality indicates that most of the early research on quality was confined to the goods manufacturing industry (Davies et al., 1999) while very little research was done in the area of measuring service quality (Webster, 1989). This was mainly attributed to the complexity and abstract nature of services which often made them elusive and difficult for researchers to define (Webster, 1989; Wong and Sohal, 2001). As a result, most definitions of quality were borrowed from the goods industry, where extensive research on quality control had taken place (Gronroos, 1990). For example in his study of quality performance of air conditioners in the U.S and Japan, Garvin (1983) measured quality by counting internal 'failures' or defects observed when the product was 'still in the assembly line' before leaving the factory, and external 'failures' or incidences where the product failed to perform as expected after installation in the field. Indeed the manufacturing industry had specifications and quality control measures that could be used to test whether the product conformed to required quality standards. While such a definition was appropriate for assessing goods quality, it would not offer much to the understanding of services quality, given that services cannot be subjected to the same quality control checks applicable to goods in the assembly line (Webster, 1989). Services intangibility and heterogeneity would make application of such control measures very difficult.

As discussed in section 2.9.2, service quality can be measured using the disconfirmation paradigm, where customers' service expectations are linked to their perceptions of the service performance (Gronroos, 1983; Parasuramn et al., 1988, Davies et al., 1999). According to Parasuraman et al. (1988) customers judge the quality of the service based on what they expect from the service provider and how they perceived the service provider performed. The majority of research on measuring service quality (both public and private sectors) thus moved to the disconfirmation paradigm and used the SERVQUAL instrument which measured the extent of the gap between performance and expectations (Parasuraman et al., 1985; 1988; 1991; 1994;

Donnelly and Dalrymple, 1996; Wisniewski and Donnelly, 1996; Brysland and Curry, 2001;Wisniewski, 2001; Donnelly et al., 2006).

2.9.4 SERVQUAL Instrument

SERVQUAL is an instrument for measuring customers' perceptions of service quality. It was developed by Parasuraman et al. (1985) based on results from a focus group study. This study comprised group discussions with consumers, and in-depth interviews with executives of four nationally recognised services being retail banking, credit card, securities brokerage, and product repair and maintenance. Parasuraman et al. (1985) sought to develop a conceptual framework for measuring customers' perceived service quality. This was inspired by what they saw as a lack of service quality measurement tools, despite the importance of service quality for both organisations and customers (Parasuraman et al., 1985).

As indicated earlier (section 2.9.3), most previous quality measurement techniques were borrowed from the goods manufacturing industry and were not relevant to the complexity of service quality (Webster, 1989; Davies et al., 1999). A study by Parasuraman et al. (1988) found that consumers' perception of service quality differed from managers' perception. A total of five (5) gaps related to these differences were revealed from the themes emerging from the focus group discussions. These gaps are illustrated in Figure.2, and each will be briefly explained. The gap model is also discussed in section 5.3.5, where it is used to explain the findings from this research.

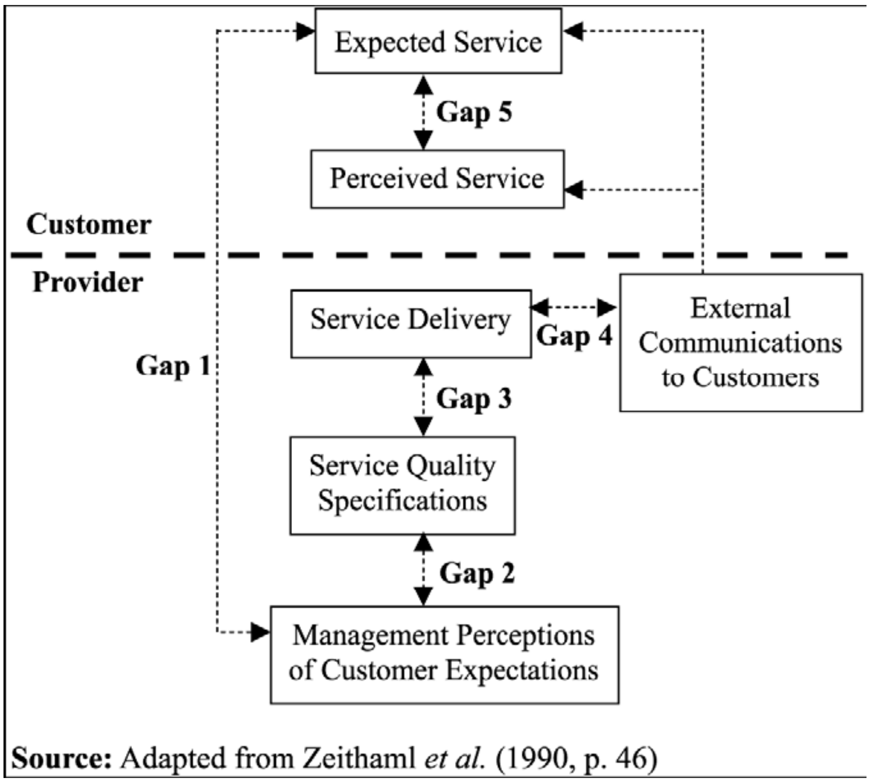


Figure 2.Conceptual model of service quality [SERVQUAL]

Gap.1

Gap 1, represents the discrepancy between management's perceptions of customer expectations and customers' expected service. While service providers may think they understand customers' service expectations it does happen that what they think does not match customers' expectations (Parasuraman et al., 1985). What customers perceive as service quality is usually different from what service providers think customers perceive as service quality. This gap may lead to service providers mistakenly providing what they believe to be adequate service while customers are dissatisfied.

Gap.2

This represents the gap between management's (service providers) perception of consumers' expectations and the translation of those perceptions into the firm's service quality specifications. As shown in Figure 1, this gap falls within the service providers' control and does not involve customers. Service providers usually have an idea of what customers expected.

However they may fail to provide such services according to customers' expectations due to a number of factors including resource constraints, market conditions, lack of commitment from employees and other factors (Parasuraman et al., 1985). The problem of resource constraints is common in the public sector and may sometimes result in rationing of services to reach as many consumers as possible (Doyle and Kleiner, 1994; Robinson, 2003). While governments may understand their customers' needs, they (governments) often face resource constraints which may mean that services are shared between customers and may not be adequate to fully satisfy every member of the community (Needham, 2006) (see section 5.3.5).

Gap.3

Gap.3, is the difference between service quality specifications/ standards and the actual service delivered. Service delivery is difficult to standardise especially in person-to-person service encounters (Schneider and Bowen, 1993; Burke et al., 2005). This problem arises from the unique characteristics of services discussed earlier (see section 2.6. for more details). Even though service providers may have service quality specifications in place, the ultimate quality of service delivered may differ due to variability of service output (Parasuraman et al., 1985). Thus the discrepancy in service delivery results from lack of standardisation of services and customers' expected service, and is represented in Parasuraman et al.'s (1985) Gap.3 (see also section 5.3.5)

Gap.4

Gap 4 occurs between what the service providers' external communications portray as the service quality and the actual service delivered. For example, if the media unreasonably raises customers' expectations of the service, it could lead to a difference between the promised service and what is actually delivered (Parasuraman et al., 1985). The difference between the service expectations portrayed in the media and other external communications, and the actual service delivered represent Gap.4.

Gap.5

According to the expectancy disconfirmation theory (Oliver, 1981; Swan and Trawick, 1981) customers evaluate the service quality by comparing their service expectations with their perceptions of service output. Where perceived service exceeds expected service, customers are more likely to be satisfied (Parasuraman et al., 1985; Mudie and Cottam, 1993; Zeithaml and Bitner, 2000). Where perceived service is less than expected service it may result in customer dissatisfaction (Parasuraman et al., 1985). The difference between customers' expected service and their perceived service outcomes was classified as Gap.5 (Parasuraman et al., 1985).

As discussed in section 2.9.2, measuring service quality involves subtracting customers' expectations from perceived service performance (P-E). In order to measure service quality using SERVQUAL, customers' expectations and perceptions about the performance of service output are recorded using a questionnaire comprising two sets of 22 statements (expectations and perceptions) across five dimensions (Tangibles, Reliability, Responsiveness, Assurance, and Empathy) (Wisniewski, 2001). A detailed discussion about the SERVQUAL instrument and how it works is provided in section 4.5. The quality of services provided by an organisation along the five dimensions is assessed for all customers by averaging their performance minus expectation scores on statements relating to specific dimensions (Zeithaml et al., 1990) (see section 4.5 for more details on the SERVQUAL process).

Following empirical tests of SERVQUAL, Parasuraman et al. (1988; 1991; 1994) suggested that the instrument was a versatile, reliable and valid measure of service quality in different service contexts provided it is modified to meet the specifications of the service organisation. They recommended that the instrument be left intact without adding or removing any of the dimensions. However, as discussed in the next section (2.9.5), the use of SERVQUAL for measuring service quality has been met with criticism, notably from Cronin and Taylor (1992; 1994), who proposed their own model called SERVPERF. A brief discussion of the debate against SERVQUAL follows in the next section.

2.9.5 Debate on the efficacy of SERVQUAL

Acceptance of SERVQUAL was not universal in academia, some authors questioned the efficacy of SERVQUAL for measuring service quality. As Robinson (1999) observed, "…it is apparent that there is little consensus of opinion and much disagreement over a number of conceptual and operational issues" (p.21). Cronin and Taylor (1992; 1994) cast doubt on SERVQUAL especially the expectations component. They argued that current performance best indicates the customer's perception of service quality and that service expectations are not that important in service quality evaluation. They maintained that the use of performance-minus expectations gap as a basis for measuring service quality lacked empirical and theoretical support (Cronin and Taylor, 1992; 1994). Cronin and Taylor (1994) argued that emerging literature in service quality evaluation supports their proposed model of SERVPERF as opposed to SERVQUAL. They cited studies by Peter, Churchill, and Brown (1992), and Brown, Churchill, and Peter (1992) who also argued against SERVQUAL especially on the use of difference scores (P-E) to measure service quality. Cronin and Taylor (1994) quoted an extract from the findings of a study by one of the co-authors of SERVQUAL (Zeithaml) in Boulding, Kalra, Staelin, and Zeithaml (1993) which stated:

> Our results are incompatible with both the one-dimensional view of expectations…Instead, we find that service quality is directly influenced only by perceptions (of ***performance***) (p.24).

The last part appears to support Cronin and Taylor's (1994) SERVPERF view that service quality is influenced by perceptions of performance.

Cronin and Taylor (1992; 1994) undertook a test of the validity of SERVQUAL to measuring service quality. Their results did not confirm the five (5) component structure (dimensions) from the SERVQUAL instrument. They observed that there was a poor fit between theoretical and measurement models for the 5 dimensions, however they did confirm 21 out of the 22 service items from SERVQUAL were appropriate. They modified these items to develop a model called SERVPERF which was, as the name suggests a service performance measure only. The difference between SERVQUAL and SERVPERF was that the former measured service quality on the basis of the disconfirmation gap theory while SERVPERF ignored the expectations aspect and relied on the evaluation of current service performance as an indicator of service quality.

Cronin and Taylor (1992; 1994) emphasised that their model (SERVPERF) was more appropriate for defining customers' behaviour and experience since it was a good predictor of service quality than SERVQUAL, which while diagnostic in nature appeared to lack the prediction ability. Cronin and Taylor (1992; 1994) argued that the predictive ability of SERVPERF made it a better indicator of service quality than SERVQUAL since current performance adequately captures customers' perceptions of service quality. They pointed out that disconfirmation theory was more relevant to customer satisfaction than perceived service quality (Cronin and Taylor, 1994). They further argued that SERVQUAL generalises the disconfirmation theory to the closely related constructs of service quality and customer satisfaction while the two are not the same thing.

Other researchers also questioned the ability of SERVQUAL to measure service quality. Teas (1993; 1994) argued that there was lack of congruence between the conceptual and operational definitions of SERVQUAL measure. He observed that the SERVQUAL expectations measure lacked discriminant validity in terms of attribute importance, performance forecasts, and classic attribute ideal-points. He therefore concluded that the variance in rating of service expectations is attributable to respondents' interpretation of the question than variance in their attitudes.

Robinson (1999) also observed that SERVQUAL had some shortcomings which cannot be ignored when researching service quality. He argued that SERVQUAL was best applicable in contexts that are close to its original setting, for example retail banking, appliance repair and maintenance. He went on to point out that managers required service quality measurements that are both predictive and diagnostic. Robinson (1999) pointed out that SERVQUAL's weakness was that it lacked predictive ability.

The issue of dimensionality of service quality has also been debated by other researchers (Carman, 1990; Freedman and Dart, 1993; Buttle, 1996; Robinson, 1999). Carman (1990) argued that while the stability of SERVQUAL dimensions is impressive these dimensions are not generic. He suggested that rather than use the five dimensions, seven to eight of the original SERVQUAL dimensions should be retained for analysis purposes. These could then be dropped depending on their performance during factor analysis. He also called for addition of new items to the service quality dimensions if required for the sake of enhancing reliability.

In further support of the argument against the dimensionality of service quality, Babakus and Boller's (1992) found after studying an Electric and Gas utility company that service quality was unidimensional. They experienced problems while trying to apply SERVQUAL's five dimensions in their study and suggested that it was not worth having a standard measurement instrument given that each service context had a unique dimensionality. On the other hand Freedman and Dart (1993) measured service quality in accounting firms, and found that service quality had seven dimensions rather than the five dimensions proposed by Parasuraman and colleagues. Whereas Buttle (1996) suggested that there were six instead of five service quality dimensions, Robinson and Pidd's (1998) study of management science projects found nineteen (19) service quality dimensions. These differences in service quality dimensions enhanced the argument against the five dimensions suggested by Parasuraman et al. (1988).

Speaking in defence of SERVQUAL, Zeithaml et al. (1990) argued that the five dimensions were derived from a "…rigorous and systematic analysis of customers' ratings through empirical research and therefore represent the core criteria with which customers evaluate service quality" (p.26). They supported their argument with multiple studies that demonstrated that each of the five dimensions were considered critical by customers (Parasuraman et al., 1991; 1994). Additional support for SERVQUAL dimensions came from Zeithaml and Bitner (2000) who suggested that when customers evaluate service quality, they do not perceive quality as a unidimensional concept but rather as a multiple factor construct. They concurred that there are five dimensions to service quality evaluation. Zeithaml and Bitner (2000) suggested that customers do not necessarily have to go through all of the five dimensions when assessing service quality, for example during a remote encounter with an ATM, empathy may not be applicable.

Parasuraman et al. (1994) maintained that though Cronin and Taylor's (1992) SERVPERF had a potential to predict service quality, it did not offer much more than SERVQUAL. They argued that SERVQUAL had empirical support from previous research that showed that service quality was the discrepancy between customers' expectations and perceptions such as Lehtinen and Lehtinen (1982); Bolton and Drew (1991) as well as Parasuraman, Zeithaml and Berry (1991). Arguing in support of the perceptions expectations conceptualisation, Parasuraman et al. (1994)

pointed out that their focus group discussions did not only uncover attributes of service quality. Instead, it went into uncovering the underlying psychological process through which customers made service quality evaluations. It is on the basis of the focus group discussions that the five underlying dimensions were uncovered.

Parasuraman et al. (1994) even suggested that SERVQUAL has diagnostic ability and argued that it is this diagnostic ability that makes it more important than SERVPERF which seemingly lacked diagnostic ability. Further support for SERVQUAL and disconfirmation paradigm was drawn from Bolton and Drew (1991) who pointed out that despite the predictive ability associated with service performance, performance-minus expectations model had more predictive ability than the performance only model. Parasuraman et al. (1994) acknowledged that the use of SERVQUAL model may be problematic in some circumstances, however the severity of such problems may not be large enough to affect the usefulness of the model and in addition such problems rarely occur.

Support for SERVQUAL was also received from other researchers (Lewis and Mitchell, 1990; Lam and Woo, 1997; Wong and Sohal, 2001). Wong and Sohal (2001) suggested that SERVQUAL was a more appropriate instrument for measuring service quality because it is comprehensive and empirically grounded. While acknowledging reservations cited by researchers such as Cronin and Taylor (1992); Teas (1993); and Babakus and Boller (1992) on the efficacy of SERVQUAL, Wong and Sohal (2001) pointed out that SERVQUAL has high reliability in terms of alpha coefficients and is therefore internally consistent. A test by Lam and Woo (1997) indicated a good internal consistency for SERVQUAL ranging from .678 to .945 Cronbach's alpha. As Lewis and Mitchell (1990) observed, given its wide use compared to other service quality measurement tools, SERVQUAL remains the most reliable instrument for measuring service quality until a better scale is found.

2.9.6 Applications of SERVQUAL in the public sector

Despite the debate about SERVQUAL, it is worth noting that unlike other service quality measurement instruments such as SERVPERF, SERVQUAL has enjoyed wide usage under different settings including the public sector (Donnelly and Dalrymple, 1996; Wisniewski and

Donnelly, 1996; Donnelly et al., 1995; Donnelly and Shiu, 1999; Curry and Herbert, 1998; Curry, 1999; Brysland and Curry, 2001; McFadyen et al., 2001; Donnelly et al., 2006). In a bid to test the applicability and potential usefulness of SERVQUAL in the public sector, Wisniewski and Donnelly (1996) applied an adapted SERVQUAL instrument on users of library services in the UK. Their findings suggested that SERVQUAL was useful in assessing customers' views of the current service as well as their service quality expectations. They observed that SERVQUAL can be used to establish customers' priorities in terms of service quality dimensions of tangibles, reliability, responsiveness, assurance and empathy. This could help management to group customers in terms of their needs and priorities and address these needs and priorities in accordance with the identified customer groups (Wisniewski and Donnelly, 1996). Donnelly and Dalrymple (1996) suggested that SERVQUAL was a useful tool in measuring service quality within the public sector. They however observed that SERVQUAL tends to work best in services that are closer to private sector services. Brysland and Curry (2001) applied SERVQUAL instrument on a number of services provided by the Community Services department of North Lanarkshire Council in the UK. They supported the use of SERVQUAL within the public sector because it is useful in assessing current levels of service quality. They argued that the service quality gaps observed in their study were useful in making future service developments.

Curry and Herbert (1998) suggested that the use of SERVQUAL was a good starting point for developing strategic management tools. They pointed out the importance of using SERVQUAL in the public sector given that it is capable of being tailored to a particular application environment. Wisniewski and Donnelly (1996) also observed through an empirical study that SERVQUAL was a useful tool in measuring service quality within the public sector. They observed that the success of SERVQUAL in the public sector is made difficult by the differences in customer characteristics as well as the difficult working environment. They suggested that there was a need to clearly specify customer categories prior to using SERVQUAL to enable comparison of responses from different customer groupings.

With the varied applications of SERVQAUL within the public sector, Brysland and Curry (2001) observed that the instrument has had extensive field-testing and refinement. This rigorous refinement and modification in the public sector setting makes it more trusted than the other tools for researchers and practitioners alike. Curry (1999) pointed out that SERVQUAL was seen to be a credible tool in the public sector provided it is tailored appropriately to the area of study. In addition Brysland and Curry (2001) contend that SERVQUAL is statistically valid and has been tried and tested in the field. This view was supported by McFadyen et al. (2001) who concurred that SERVQUAL was a valid and robust tool in measuring perceived service quality in a variety of settings including the public sector. A summary of some of the empirical research where SERVQUAL was used in the public sector is presented in Table 2.5

Table 2.5 application of SERVQUAL in public sector service quality measurement

Author and year	**Comments about SERVQUAL**
Donnelly and Dalrymple (1996)	Suitable for the public sector but works best for departments that offer services similar to the private sector.
Wisniewski and Donnelly (1996).	Applicable to the public sector but may encounter difficulties because of customer differences. Need to specify customer categories prior to applying SERVQUAL to deal with customer differences.
Curry and Herbert (1998)	Applicable in the public sector given that it is flexible and capable of being applied under different environments.
Curry (1999)	Suitable for measuring service quality in the public sector provided it is tailored to the study.
Brysland and Curry (2001)	Statistically valid within the public sector and benefits from extensive field-work testing and refinement as compared to other methods.
McFadyen et al (2001)	A generally robust measure in a variety of settings and valid within the public sector context.

2.9.7 Section summary

Given the different views expressed by researchers regarding the validity and reliability of SERVQUAL it is important to conclude by stating why SERVQUAL was used in this thesis. The arguments raised against SERVQUAL are considered valid and substantial. Despite SERVQUAL weaknesses, it continues to be used more frequently in assessing customers' perceived service quality (Lewis and Mitchell, 1990). It has also been applied within the public sector setting (Wisniewski and Donnelly, 1996; Donnelly et al., 1995; Donnelly and Shiu, 1999; Curry and Herbert, 1998; Curry, 1999; Brysland and Curry, 2001; McFadyen et al., 2001). It is therefore considered to be more appropriate for use in this research. The position adopted by this thesis is summarised in Lewis and Mitchell's (1990) observation that in the absence of a better alternative, SERVQUAL would remain a reliable instrument for measuring service quality.

2.9.8 Overall chapter summary

As a way of concluding this chapter, this section provides a brief summary of the main areas covered in the chapter. This chapter started by providing an overview of the public sector service delivery. It covered the initiatives undertaken by some governments to improve the performance of their employees with a view to delivering good quality services. Delivery of good quality services is no longer reserved for the private sector as many governments have moved towards a more customer-oriented service delivery (Miller and Miller, 1991; Donnelly et al., 1995; Swindel and Kelly, 2005). Many governments have realised the importance of performance improvement in response to the increased demand for high quality services from their customers (McAdam et al., 2005). Governments considered several options aimed at improving the performance of their employees and one such option was the use of rewards as a way of motivating employees (Barrett and Turberville, 2001).

Rewards are considered an important factor in enhancing employees' performance and job commitment (Cone, 1989; Gonzalez and Garazo, 2006). As discussed in section 2.4, the use of rewards to motivate employees in order to enhance their performance has been supported using motivation theories. Such theories included: 1) expectancy theory (Vroom, 1964; Hong et al., 1995; Chamberlin et al., 2002); 2) Herzberg's two factor theory (Marhall, 1998; Siemens, 2005; Usugami and Park, 2006); 3) goal setting theory (Locke and Latham, 1990) as well as 4) equity theory (Adams, 1965; Lowery and Thompson, 1995). On the other hand some arguments have been raised against the use of rewards as they were considered to have a negative effect on employees' intrinsic motivation. The use of rewards in employee motivation was also criticised for several reasons including; 1) encouraging individuality and conflict among employees (Gomez-Mejia and Balkin, 1992; Hoerr, 1998; Heneman and Werner, 2005); 2) encouraging employees to focus too much on rewarded tasks at the expense of unrewarded tasks (Chamberlin et al., 1992, Lawler, 1994); and 3) reduction in risk taking and innovativeness (Deckop et al., 2004). Despite this criticism, Gomez-Mejia and Balkin (1992) suggested that rewards should continue to be used because the advantages of using them outweigh their disadvantages.

Section 2.6.discussed the nature and scope of services and how their unique characteristics impact on service delivery in general and within the public sector. The intangibility of services implies that they lack physical status. Service providers (both private and public sector) have no tangible evidence to articulate and promote their services to customers. Customers also find it difficult to evaluate the service (Gronroos, 1990; Mudie and Cottam, 1993). Section 2.7.1 discusses how the characteristics of services affect public sector service delivery. Delivery of services within the public sector is more challenging than is the case in the private sector mainly because of the multiple customers or stakeholders that public sectors serve. These stakeholders often have competing and conflicting needs (Kinnell and MacDougall, 1997; Brysland and Curry, 2001). Attempting to address these needs could be difficult because improving performance may satisfy one segment or group while dissatisfying the other groups (Orwig et al., 1997).

Employees play an important role in service delivery because they serve as a link between the service provider and its customers (Mudie and Cottam, 1993). As discussed in section 2.6 services have unique attributes that make their evaluation by customers difficult. As a result, customers rely on employees to provide the tangible evidence for the service (Gronroos, 2000; Zeithaml and Bitner, 2000). Customers' perception of the service is influenced by their experience during the encounter with employees (Bourke et al., 2005). Employees' performance affects customers' perception of the service quality (Yoon et al., 2001; Bourke et al., 2005). Poor employee performance may negatively impact on customers' perception of the entire organisation's service quality (Yoon et al., 2001). Thus the success of the organisation depends on the performance of its employees during service delivery (Chebat et al., 2002).

In order for employees to effectively deliver services to customers they need to be satisfied (Zeithaml and Bitner, 2000). Employees require a good working environment to enhance their performance, which in turn results in improved service quality and customer satisfaction (Schneider and Bowen, 1993; Bourke et al., 2005). Employees' attitudes to their working environment have been shown to have a direct influence on customers' evaluation of service quality (Yoon et al., 2005). Good attitudes generally result in satisfied customers. Employees require proper training to improve their technical and interpersonal skills (Chebat et al., 2002, Lemmink and Mattson, 2002).

Understanding customers' evaluation of service quality is important in determining whether customers are satisfied or dissatisfied with the service delivered by employees (Bouman and van der Wiele, 1992). According to the disconfirmation theory, customers' evaluation of service involves matching service expectations against perceptions of service performance (Webster, 1989; Mudie and Cottam, 1993; Zeithaml and Bitner, 2000; Lovelock and Wirtz, 2004). Customers are satisfied when their perceived performance of the service is more or equal to their expectations, and are dissatisfied when service expectations exceed perceived performance of the service (Churchil and Surprenant, 1982). Expectations differ between customers over time (Tse and Wilson, 1988; Zeithaml et al., 1990) and may also be affected by customers' demographic characteristics (Gagliano and Hathcote, 1994). Section 2.9.2 provides a brief discussion of customers' evaluation of service quality.

Measuring customers' perceived service quality could help in understanding how customers evaluate service quality. Parasuraman et al. (1985) came up with an instrument for measuring service quality called SERQUAL. This instrument has been widely used under different contexts including the public sector (Donnelly and Dalrymple, 1996; Wisniewski and Donnelly, 1996; Brysland and Curry, 2001; Donnelly et al., 2006). However the use of SERVQUAL met criticism from other researchers (Cronin and Taylor, 1992; 1994; Teas, 1993; 1994). The debate was mostly focussed on the dimensionality of SERVQUAL (Carman, 1990; Babakus and Boller, 1992; Fredman and Dart, 1993; Buttle, 1996; Robinson and Pidd, 1998). Cronin and Taylor (1992; 1994) suggested a modified version of SERVQUAL called SERVPERF which was a performance only service quality measurement tool. Section 2.9.5 discusses the debate on the efficacy of SERVQUAL in more details.

Despite the criticism against SERVQUAL it has been suggested as an appropriate instrument for measuring service quality because it is empirically grounded (Wong and Sohal, 2001). In addition SERVQUAL has been shown to have high reliability and internal consistency (Lam and Woo, 1997; Wong and Sohal, 2001). Given the wide use of SERVQUAL in measuring service quality in both private and public sectors compared to other service quality tools, Lewis and Mitchell (1990) suggested that SERVQUAL would remain a reliable tool for measuring service quality until a better scale is found.

The next chapter discusses the methodology and methods followed to collect and analyse data for this research.

CHAPTER 3
METHODOLOGY

3.1.0 Introduction

This chapter discusses the various steps undertaken by the researcher to explore the objectives of this research. As discussed in the introduction, the main aim of this research is to investigate the impact of different levels of customer focus in performance based reward schemes on customers' perceived quality of services output. The major focus of the research is on service delivery within the public sector, and the Botswana public sector was selected as the research setting. The Botswana public sector was selected partly because the researcher comes from Botswana and, because in 2003 it (the Botswana public sector) introduced a performance based reward scheme under the umbrella of the government's Performance Management System (PMS). The purported purpose of the performance based reward scheme was to motivate employees to improve their performance, in order to enhance the quality of services they delivered to customers. This research explored whether different levels of customer focus in PBRS would affect customers' perceived service quality. In doing so, it examined the difference in customers' perceived service quality between departments categorised as high and low customer focused based on the extent of customer orientation within their PBRS plans. Customers are the recipients of the service output (i.e consumers) and were as such considered appropriate judges of the quality of services delivered by departments in both high and low customer focused categories.

The first part of this chapter (section 3.2.0) discusses the methodological choices that are usually available to researchers. These choices are broadly covered under two areas of qualitative and quantitative methodologies. Section 3.3.0 covers the philosophical considerations that influence the researchers' choice of research methodology. The choice of research methodology is influenced by two philosophical underpinnings of ontology and epistemology. More discussion on ontology and epistemology is in sections 3.3.1 and 3.3.2. Section 3.4 discusses the research design followed in this research. This research followed a combined quantitative and qualitative methods approach. A brief discussion on the combination of research methods is provided in section 3.4.1

Section 3.5 covers the data collection process. Data collection was undertaken in two phases. The first phase involved the collection of qualitative data on departmental performance plans from the Botswana public sector departments to investigate the extent of customer focus of each department' performance plan. Each department's performance plan outlined; 1) objectives that individual departments planned to meet, 2) strategies for meeting the objectives and, 3) time frames for attaining the objectives. Individual employees' performance objectives were directly linked to the departmental performance objectives. This was done in line with the requirements of the performance based reward scheme. Thus departmental performance objectives were found to be suitable for classifying organisations within this study. Content analysis was used to determine the level of customer focus of the departments' performance plans. The results of content analysis were then used to categorise departments in line with the extent to which their performance plans focused on customer service delivery. The second phase of the research involved a survey of customers' perceived service quality using the SERVQUAL questionnaire. Customers were asked to evaluate services received from six government departments, three categorised as high customer focused and the other three as low customer focused, based on department's performance plan. Details on categorisation of the departments' performance plans are provided in section 3.6.

Section 3.6 discusses the content analysis method, which was used to analyse departments' performance plans. The section covers the steps followed in the content analysis process. This started with the development of content analysis rules, which were developed from the literature on customer orientation and organisational goal setting (discussed further below). Content analysis was used to explore the extent of customer focus of the departments' performance plans. Thus, content analysis was used to categorise departments into high and low customer focus depending on the extent to which their performance plans were customer oriented.

Customer focus in this thesis refers to efforts made by public sector departments to link their services to improved delivery to final consumers. This meaning was derived from the concept of customer orientation as defined by Narver and Slater (1990), as well as Deshpande et al. (1993). These authors suggested that customer orientation should emphasise linking of organisational performance with customers' needs to create superior customer value. The rationale for adopting this definition was also derived from Korunka et al. (2007) who emphasised the need to deliver public sector services that optimally meet customers' needs. Thus customer orientation as discussed by Korunka et al. (2007), as well as Narver and Slater (1990) and Deshpande et al. (1993), shares a similar meaning with customer focus as defined in this research and the two are used interchangeably in this research. Section 3.6.1 discusses customer orientation and how it was used to develop content analysis rules.

Section 3.7 covers phase two of the data collection process. This involves a survey of public sector customers using a modified SERVQUAL questionnaire. The reasons for using SERVQUAL to assess customers' perceptions of service quality were drawn from the literature (see section 2.9.6). According to Zeithaml et al. (1990), service quality is the discrepancy between customers' expectations and their perceptions of the performance of the service. Perceptions and expectations are used to measure service quality partly because it is difficult to obtain objective measures of service quality and also because the actual service delivered varies from customer to customer (Boulding et al., 1993). SERVQUAL has been used in other public sector studies to measure perceived service quality (Donnelly et al., 1995; Donnelly and Dalrymple, 1996; Wisniewski and Donnelly, 1996; Orwig et al., 1997; Curry and Herbert, 1998; Curry, 1999; Brysland and Curry, 2001; McFadyen et al., 2001; Donnelly and Shiu, 2006). For example, Wisniewski and Donnelly (1996) applied an adapted SERVQUAL instrument on users of library services in the UK where they found SERVQUAL to be a useful tool in measuring perceived service quality within the public sector. The application of SERVQUAL within the public sector was discussed in section 2.9.6. In addition, section 3.7.0 discusses SERVQUAL and measurement of customers' perceived service quality in more detail.

Section 3.8 discussed the sampling procedure followed in this research. Convenience samples of public sector consumers were used and the rationale for using this method is provided in section 3.8. The next section briefly discusses the data analysis process used in the two phases of the research. It provides a summary of the data analysis process while more details are discussed in the relevant sections of this thesis.

3.1.1 Data analysis

The data collected in the first phase was analysed using a content analysis procedure. As mentioned earlier content analysis aided in categorisation of the departments into high and low customer focus. Four expert judges were requested to evaluate performance plans from ten Botswana government departments that agreed to invitations to participate in this research. Judges evaluated the performance plans using content analysis rules developed from the literature. Each department's performance objectives were analysed to determine the extent to which they (objectives) focused on service delivery to consumers. Responses from judges were collated to categorise the departments into high and low customer focus. The criteria for categorisation of departments was based on 1) the extent to which individual performance objectives were assessed as customer focused by judges (i.e 'Yes' responses from each judge per objective); and 2) the percentage of customer focused objectives as compared to other objectives within each department's performance plan. Departments with high overall average scores for both criteria were categorised as high customer focused while those with low overall average scores in both criteria were categorised as low customer focused. On the basis of the results of the content analysis, three departments were categorised as high and another three as low customer focused. The remaining four departments could not be categorised as either high or low customer focused because their performance across the criteria was inconsistent. For example, they performed well in one criterion and poorly in the other criterion. More details on content analysis are provided in sections 3.6 and 4.2.

The second phase of data collection was a survey of public sector customers perceived service quality using the SERVQUAL instrument. Data collected from the six departments within the two categories of customer focus were analysed using the SPSS computer program. SERVQUAL scores were calculated for the six departments to determine customers' perceived service quality for each department. Comparisons were then undertaken between departments within the two customer focus categories (low and high customer focus) to explore for differences in customers' perceptions of service quality across the five SERVQUAL dimensions using MANOVA, ANOVA and post hoc tests. These comparisons were required to examine if customers' perceived service quality varied with the level of customer focus of PBRS (i.e high or low customer focused). That is, the six departments were compared to determine which of the two categories performed better than the other. Comparisons were also undertaken for departments within the same category of customer focus to examine potential differences between departments within the same category. It was hypothesised that departments within the same category of customer focus will have similarities in performance. Differences in the performance of these departments may imply that PBRS had a differing impact on each department.

A brief discussion of the content analysis process is provided in section 3.6. Further details on how data was analysed using content analysis are discussed in the next chapter (section 4.2). Discussion on SERVQUAL and data analysis is provided in sections 3.7 and 4.5. Results of the SERVQUAL analysis and comparisons of departments within the two categories of customer focus are provided in sections 4.5 and 4.6 respectively.

The next section is a theoretical discussion of research methodology and the philosophy behind the choice of research methodologies.

3.2.0 Quantitative Versus Qualitative research methodology

This section covers the methodological options usually available to undertake research. In deciding on the research methodology, researchers are influenced by the research aims as well as the type of data that they have to collect. Researchers have to choose between different options of methodology which fall under two broad categories, quantitative and qualitative. Researchers may decide to use either one of the methodologies or a combination of the methodologies to carry out their research provided that they are appropriate to answer their (researchers) research questions.

These methodologies are sometimes influenced by what is commonly called research paradigms (Jean, 1992; Kuhn, 1996). “A paradigm is a set of beliefs that individuals use to make sense of the world or a segment of the world” (Crotty, 1998, p. 35). In other words it provides an insight into the way in which individuals look at and perceive the world (Kuhn, 1996). In terms of research, a paradigm guides the conceptual framework that researchers use in seeking to understand and make sense of reality (Popkewitz, 1984 cited by Maguire, 1987). Paradigms thus set boundaries for researchers in terms of the manner in which they can execute the research process, with regards to research methods, strategies for social inquiry as well as the purpose and use of knowledge (Maguire, 1987; Crotty, 1998). In that way, paradigms influence what researchers regard as accepted knowledge and ways of doing research (Crotty, 1998) and shapes researchers' "…perceptions and practices within their research disciplines" (Maguire, 1987, p. 11).

The choice of method is mostly influenced by major philosophical considerations (ontology and epistemology) underlying the research process (discussed in the next section). Both quantitative and qualitative research methodologies are based on the epistemological assumptions regarding the nature of knowledge and the methods of abstracting that knowledge, as well as ontological assumptions which relate to the nature of reality or the phenomena being investigated (Jean, 1992). These philosophical considerations are discussed briefly in sections 3.3, which influenced the choice of the research approach for this thesis.

3.3.0 Philosophical considerations in research methodology

This section discusses the assumptions that influence researchers in their choice of research methods. As stated in section 3.2.0, the choice of research methodology is influenced by a set of assumptions underlying each research methodology (Crotty, 1998). According to Crotty (1998) the choice of a method has to be supported by the statement of assumptions that have been brought into the research process and are reflected in the methodology. These assumptions though varied, tend to fall broadly into the philosophical areas of ontology and epistemology. A brief discussion of these assumptions follows:

3.3.1 Ontological assumptions

Ontological assumptions revolve around the question of '*what is*' with the nature of reality (Crotty, 1998). In other words it is an attempt to explain what reality is and why things happen the way they do. In a bid to explain reality, Jean (1992) suggests that two opposite assumptions of reality are objectivity and subjectivity (Jean 1992). According to the objectivist view, reality exists out there, intact and tangible, but it is independent of individuals' appreciation and cognition (Guba, 1990; Jean, 1992; Crotty, 1998). Thus, regardless of whether or not individuals perceive and attach meaning to this reality, it remains unchanged (Burrell and Morgan, 1994). An individual is thus; "...born into and lives within the social world that has its own reality, which cannot be created by that individual" (Burrell and Morgan, 1994 p.4). In order to create a better understanding of reality, objectivists suggest the need to study the causal relationships among the elements constituting reality (Jean, 1992; Burrell and Morgan, 1994).

The objectivist' view of reality is closely related to a theoretical position called positivism (Giddens, 1974; Guba, 1990; Crotty, 1998). Positivism holds the objectivist assumption that reality is independent of human cognition (Guba, 1990). Positivists assume that the world exists as a system of observable variables waiting to be discovered (Maguire, 1987). Positivists believe that the use of scientific methods of inquiry can assist in discovering the true meaning of reality (Maguire, 1987; Guba, 1990; Crotty, 1998). Scientific methods are those research methods that lack human involvement in arriving at the meaning of reality. The aim is to avoid the researchers' bias in the research process and produce scientifically verified knowledge (Guba, 1990; Kent, 1999). The results of such inquiry generate rules and theories that help to explain and sometimes provide a guide for understanding social behaviour (Maguire, 1987).

Objectivism has been criticised for its rigid assumption of an independent reality outside human cognition (Maguire, 1987; Guba, 1990). According to Maguire (1987), the assumption by objectivists that reality exists outside human conception is flawed because reality is humanly and socially created. In addition human beings are not passive spectators but rather participate actively in the construction of meaning. Thus Maguire (1987, p.19) argues that 'objectivity is illusion because it suggests that it is possible to separate the subject of knowledge, the knower, from the object, the known'

The opposite view to objectivism is subjectivism or constructivism. It assumes that the world consists of labels, names and concepts that are used to create the meaning of reality (Burrell and Morgan, 1994). According to the subjectivist view, reality is not discovered but it is constructed by human beings as they engage with the world they live in (Crotty, 1998). In that way understanding and interpretation of reality occurs when human beings interact with their environment and others and assign meaning to the world around them (Jean, 1992; Crotty, 1998).

Thus, in research, meaning is "…an expression of the manner in which the researcher as a human being has arbitrarily imposed a personal frame of reference on the world…" (Jean, 1992, p.89).

The next section is an extension of the discussion on philosophical assumptions that influence researchers' choice of methodology. Having discussed the question of '*what is'* reality, the next section looks into '*how*' reality or knowledge is created.

3.3.2 Epistemology

Epistemology is concerned with explaining the nature of knowledge in terms of how knowledge is created (Hill, 1995; Crotty, 1998). In research, epistemology provides the grounds for deciding on the kind of knowledge that is considered appropriate, adequate and legitimate for the inquiry at hand (Crotty, 1998). Hill (1995) suggests that research methodology is applied epistemology, and therefore methodology has to be supported by an epistemology. Researchers are as a result expected to point out, explain and justify the epistemology that informs their choice of research methodology.

The choice of epistemology is widely influenced by the ontological considerations within a particular discipline (Quattrone, 2000). The two dimensions of ontology (objective and subjective), play an important role on the epistemology and ultimately the methodology chosen to conduct the research. Sections 3.3.3 and 3.3.4 discuss how the ontological dimensions (Objective and subjective) as well as epistemological considerations affect the choice of research methodology.

3.3.3 Quantitative methodology

The objectivist view of an intact and independent reality encourages the researcher to adopt the epistemology of positivism (Jean, 1992). The researcher strives to observe, measure, analyse and predict relationships between components that comprise reality (Kent, 1999).

According to Kent (1999, p. 11), certain principles guide a positivist's search for reality and they include:

1. Only phenomena that can be observed can be used to validate knowledge
2. Scientific knowledge is arrived at through the accumulation of verified facts derived from systematic observation or record-keeping
3. Scientific theories are used to describe patterns of relationship between these facts to establish causal connections between them
4. The process is neutral and judgement free. Observations are uncontaminated by the scientist' own prediction. Thus ethical issues can be included only if they are included as part of the research.

Thus a positivist epistemology would result in the use of a scientifically guided research methodology where the aim is to explain and predict causal relations between elements that constitute reality (Jean, 1992; Quattrone, 2000). The success of the research process depends on the collection of data that can be quantified and analysed using mathematical formulas (Maguire, 1987), hence the use of quantitative methodology.

Positivists advocate the use of quantitative methodology to investigate and explain relationships between variables. The presentation of research findings under this methodology usually follows an approach that emphasises explicit, exact, scientific and formal procedures (Guba, 1990; Crotty, 1998; Sarantakos, 2005). For example, researchers have to use statistical rhetoric such as reliability, unidimensionality, validity, correlation, cause and effect relationships, to mention a few, which are in line with the scientific presentation of results (Kent, 1999). The whole research process is considered to be highly neutral and judgment free with limited room for personal bias (Kent, 1999; Sarantakos, 2005). As Sarantakos (2005, p.33) puts it, "...the task of the researcher is to discover the scientific laws that explain human behaviour using quantitative methods, similar to those of natural sciences".

According to Kent (1999, p.11) "*a researcher using quantitative methodology has to follow a number of steps in conducting their research which usually include, generating the research problem, coming up with expectations based on reality, generating hypothesis, defining* *variables, sampling, data collection, analysis of data, report of findings and relating findings to the theory*".

Critics of quantitative methodology argue that placing emphasis on quantitative research methods often leaves out important social phenomena that cannot be quantified (Maguire, 1987). In some cases "...complex social phenomena are reduced to meaningless quantitative results in a bid to follow the norms of the methodology" (Maguire, 1987, p. 22). Collins (1992) suggests that detachment of the researcher from the research process neutralises their (researchers) influence on the researched, thereby depersonalising and alienating them from the world they are supposed to study. "This reduces researchers to research tools that do not have a mind, while respondents become research objects and are treated as such" (Sarantakos, 2005, p.35).

In reality it is not possible to totally detach the researcher from the research process since their perceptions, expectations, experiences and interpretations ultimately become part of the research process (Brieschke, 1992; Collins, 1992). Therefore the researcher's subjectivity is considered an integral part of the research process. Collins (1992) suggests that the relationship between the researcher and the research should not be exclusive, but should be "... a continuous ebb and flow of information..." (p.184) Thus proponents of subjectivity suggest that it is a better option for undertaking research as opposed to objective quantitative methods (Brieschke, 1992).

In summary, quantitative methodology is appropriate in certain instances, for example in scientific research where emphasis is on explicit, exact, and formal procedures (Guba, 1990; Crotty, 1998; Sarantakos, 2005). It however has some limitations as already discussed above. These limitations can be reduced if it (quantitative methodology) is supported by qualitative methodology (Tashakkori and Teddlie, 1998). Section 3.3.5 discusses the advantages of combining qualitative and quantitative methodology in more detail.

In the next section this thesis discusses qualitative methodology. The discussion focuses on both the advantages and limitations of qualitative methodology.

3.3.4 Qualitative methodology

The subjectivist's view of reality advocates for appreciation of human involvement in the creation and shaping of knowledge (Jean, 1992). Subjectivist epistemology thus suggests that meaning or reality is not discovered but is rather imposed on the object by the subject, and in the case of research, by the researcher (Crotty, 1998). In other words, under subjectivist epistemology, the object being studied contributes less to the meaning or reality. Therefore researchers' input in the research process is recognised under subjectivism. The research methodology recommended by subjectivists is qualitative methodology. According to (Jean, 1992) qualitative research is "…a form of social interaction in which the researcher converses with, and learns about the phenomenon being studied" (p.92). In that way the researcher is part of the research process and is actively involved in creating the meaning of reality (Crotty, 1998; Kent, 1999).

Qualitative research is suggested as more applicable to the study of people and their environment (social sciences) than natural sciences (Bryman, 2001). The reason is that the object of research for natural sciences (chemicals, metals, atoms and others) cannot make sense of their environment and are easy to manipulate while people can, and are, able to attribute meaning to their environment. Thus proponents of qualitative research advocate the use of qualitative methodology when studying people as it enables the researcher to see through the eyes of the researched (Bryman, 2001). In addition, the social world needs to be studied from people' perspectives rather than treat them as objects that cannot attach meaning to their environment.

In order to embrace the effect of the environment in providing sense to what is being studied, a variation of the subjectivism commonly known as constructivism was suggested (Sarantakos, 2005). Constructivism is an epistemological position that recognises reality as being created through human practices as researchers interact with their environment (Crotty, 1998). Unlike the subjectivists who believe that researchers assign meaning to the objects being studied, constructivists believe that multiple realities are constructed as researchers interact with people and their environment (Crotty, 1998; Kent, 1999). Thus the whole process involves interaction and socialisation whereupon people learn, share and recognise the meaning of reality (Sarantakos, 2005). According to constructivist epistemology, researchers need to empathise with people they are studying to abstract reality (Kent, 1999). This involves engagement with the people concerned by observation of behaviour, and most importantly through asking those people (Kent, 1999).

Constructing meaning through engagement with people involves interpretation. Thus, the process by which information is extracted through interpretation is sometimes called interpretivism (Sarantakos, 2005). Under interpretivism, researchers seek information relating to people's views, opinions, perceptions and interpretations of the social world (Crotty, 1998). Subjectivism, constructivism, and interpretivism form part of a broader list of research methods commonly employed in qualitative research. In essence, qualitative research is a broad area with diverse research methods. In that way, it (qualitative research) may not be extensively discussed here, since this thesis is not solely qualitative.

Despite the positive contribution of qualitative methodology to the research process, it has some limitations. Qualitative methodology has been criticised for lacking in efficacy due to its inability to study with a degree of accuracy, the relationships between variables (Sarantakos, 2005). In qualitative research, the researcher is the main player, in the sense that he or she decides on what to concentrate on. In addition, what is observed and heard may not necessarily be the same as what another researcher will observe (Bryman, 2001). It is difficult to replicate and generalise the findings of qualitative research with ease because they are more likely to be restricted given that only a small number of cases is studied compared to large sample sizes common in quantitative research (Bryman, 2001). Consequently, the number of cases may not be representative of the majority of the population being studied. However, proponents of qualitative research argue that generalisations are made on the assumption that the findings and inferences made during the research are supported by sound theoretical reasoning (Mitchel, 1983). According to Ruyter and Scholl (1998), representativeness in the case of qualitative research is not concerned with the size of the sample representing the research population but rather representativeness in accordance with the subject of investigation.

Another possible disadvantage of using qualitative research is that it is difficult to subject findings of qualitative research to rigorous quality verification requirements such as reliability and validity (Creswell, 1994). Validity requires measurement of the object of enquiry and that is not possible in qualitative research because its purpose is not to measure but to generate ideas (Stenbacka, 2001). Thus, it would be difficult to prove the validity of qualitative research findings through measurement. On the other hand, reliability is concerned with producing the same result with consistency. This is not possible under qualitative research because of the involvement, influence, subjectiveness and the possibility of bias of the researcher in qualitative research. Qualitative researchers have, however, argued that quality verification using validity and reliability checks is not necessarily applicable to qualitative research because it owes its origin to scientific rhetoric and positivist paradigms common in quantitative research (Creswell, 1994; Stenbacka, 2001). Stenbacka (2001) even goes to the extent of suggesting that “...new concepts relevant to qualitative research be used instead of quality concepts borrowed from quantitative research” (p.555).

Both qualitative and quantitative research methodologies can be used in different situations depending on the aims and objectives of the study. According to Ellram (1996), most research is centered on four primary objectives. These are; “...exploration, explanation, description and prediction” (p.98). Research where the objectives are either exploration and or explanation would normally require qualitative research methods. This is because qualitative research has the ability to provide insight and explanation into a phenomenon that was relatively unknown (Ruyter and Scholl, 1998). It provides answers to questions such as ‘how or why’ which are common in exploration and explanation of phenomena (Ellram, 1996). On the other hand research that is descriptive and or predictive would, in most cases, require quantitative research methods that utilise statistical techniques to predict and describe relationships between variables (Ellram, 1996). This therefore implies that the choice between the two areas of methodology should not be driven by like or dislike of either method, but by the aims and objectives of the study as well as the nature of the study.

In some cases the two methods may be used jointly to cover for the weaknesses inherent in each method (Tashakkori and Teddlie, 1998; Amaratunga, Baldry, Sarshar, and Newton, 2002). The process of combining quantitative and qualitative research methods is called triangulation

(Bryman, 2001) or pragmatism (Tashakkori and Teddlie, 1998). The discussion on combination of qualitative and quantitative methods follows in the next section (3.3.5)

3.3.5 Combined quantitative and qualitative methods

The combination of qualitative and quantitative methods has been supported theoretically by many authors who included Uysal and Crompton (1985); Creswell (1994); Tashakkori and Teddlie (1998); Bryman (2001); Amaratunga et al. (2002); and Davies (2003). There has been a suggestion that quantitative and qualitative research methods are not dichotomous but rather can complement one another to produce improved research findings (Tashakkori and Teddlie, 1998). Those advocating the use of combined methods reject the forced choice between positivism and constructivism as none of the methods work best in isolation (Tashakkori and Teddlie, 1998). The use of combined methods, often called triangulation, has been found to alleviate the weaknesses linked with using either of the methods on their own (Tashakkori and Teddlie, 1998; Bryman, 2001; Amaratunga et al., 2002; Davies, 2003; Mangan, Lalwani, and Gardner, 2004). For example, Bryman (2001) suggests that "...in some instances neither qualitative nor quantitative research methods may be adequate on their own, thus researchers cannot rely on just one method and have to use both to support the research process" (p.450). Quantitative and qualitative methods complement each other by providing richness and details that are otherwise unavailable if each method were pursued separately (Jack and Raturi, 2006). Combining the methods provides a multidimensional insight into the research problem, and thus assists in getting a broader understanding as well as a truer analysis of the situation at hand (Davies, 2003; Mangan et al., 2004).

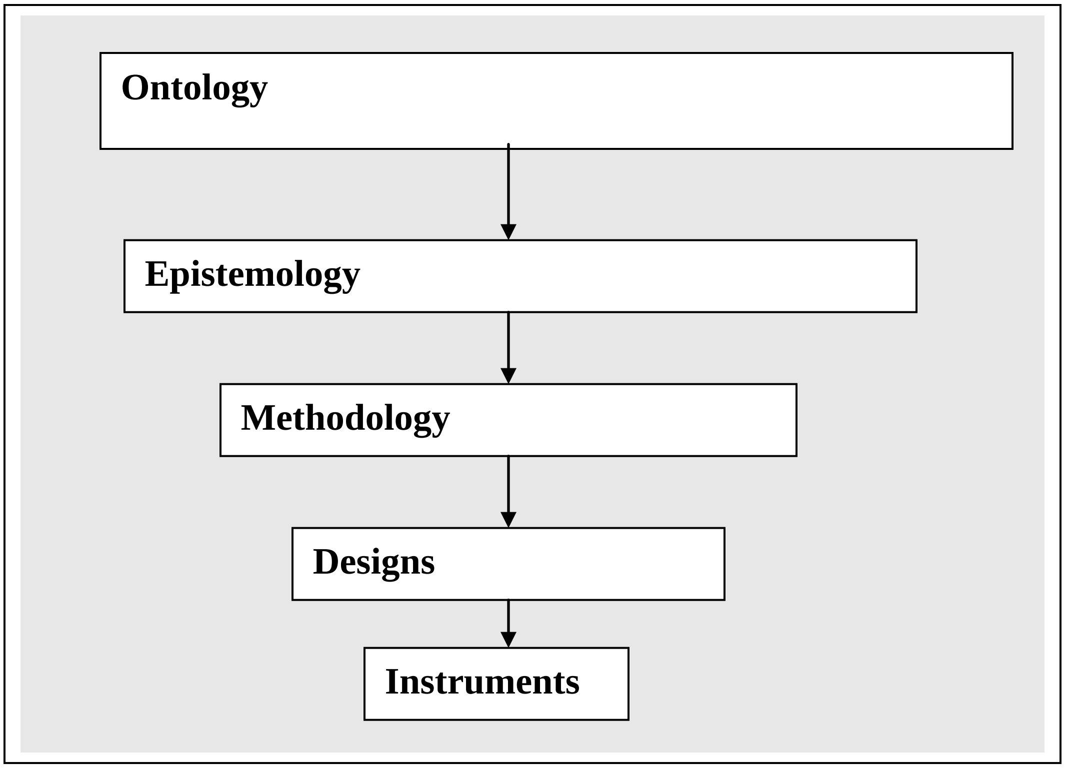
On the basis of an empirical study concerning decision makers' choice between seaport and ferry options, Mangan et al. (2004) observed that the use of combined methods yielded greater insights than it would have been the case if only a single method was used. Thus, the use of combined methods actually compensates for the weakness embedded in each of the research method by "... counter balancing the strengths of another" (Amaratunga et al., 2002, p.23). Triangulation provides confirmation to the research findings by improving the ability of researchers to draw conclusions from their studies thereby resulting in more robust and generalisable research findings (Jack and Raturi, 2006).

The next section discusses the research design followed in this research. As identified in the next section, this study followed a combined quantitative and qualitative methodology. Further details on how quantitative and qualitative methods were used to collect data in this thesis are provided in section (3.5.0).

3.4.0 Research design

Following the decision on the appropriate methodology to use in this study based on the ontological and epistemological assumptions, the next step is to decide on the research design. The choice of research design is influenced largely by the methodology (whether quantitative or qualitative) as well as the philosophical assumptions guiding the research process (ontology and epistemology). For example objectivist ontology will influence the researcher to follow a more positivist epistemology which emphasises the use of quantitative methods in the research process (Sarantakos, 2005). The research design will be more fixed and in line with the requirements of objectivism which advocate a scientific way of abstracting data. Ultimately the instruments to be used in collecting data will also be determined by the research design, and in the case of quantitative design, quantitative methods (for example survey) will be used to collect the data.

Thus, the process of deciding on the research design can be conceptualised in the form of a link starting from the philosophical underpinnings (Epistemology and Ontology). The philosophical underpinnings provide a guide to the methodology followed in the research process. Following the decision on the methodology the researcher has to decide on the research design guided by the research questions and aims. Ultimately the research design will influence the researcher on the choice of instruments to use in the execution of the research process (Sarantakos, 2005). Figure 3 illustrates these links in the form of a diagram.



Source: Adapted from Sarantakos (2005, p.29)

Figure 3. Steps in the research design process

3.4.1 Research design: Content analysis and customer survey.

In this research, the researcher adopted a two phase combined research methodology to collect and analyse data. The combined research methodology was found appropriate for this research because of the nature of data collected. Data (PBRS performance plans) collected from government departments in Botswana were mainly qualitative while the customer survey followed quantitative methodology. The first phase involved content analysis of the PBRS performance plans from Botswana government departments. Content analysis, which is a qualitative research technique, was used because performance plans collected from Botswana government departments were largely qualitative. In order to categorise the departments on the basis of these performance plans content analysis had to be undertaken. The second phase was a customers' survey using the SERVQUAL questionnaire. SERVQUAL was used to investigate customers' perception of the quality of services of the Botswana public sector. An investigation of customers' perceived service quality was required to explore differences in customers' perception of service quality between departments categorised as high or low customer focused.

More details on the application of the content analysis and SERVQUAL are provided in sections 3.6 and 3.7. Results of content analysis, SERVQUAL and comparison of departments are discussed in sections 4.2, 4.5 and 4.6 respectively.

This research followed a cross sectional design to achieve the aims of the thesis. According to Bryman (2001), cross sectional design involves the collection of data from more than one case at a single point in time. “The aim is to collect a body of quantitative and qualitative data in connection with two or more variables which will then be examined for relationships” (Bryman, 2001, p.41).

Since this study was based on a single service provider, being the Botswana public sector, it is tempting to assume that the research design applicable here would be the case study. However, a case study was considered less appropriate because the Botswana government though used as the base of the study, was not the sole focus of interest but was rather used as a representative of the public sector in general. According to McKee and Bell (1985) cited in Bryman (2001, p.49), “where a case itself is not the object of interest, but rather the location that forms the backdrop to the findings, it is more appropriate to describe the study as employing cross-sectional design rather than case study”. Bryman (2001) describes a case study as “…an object of interest on its own right upon which a researcher aims to develop an in-depth understanding” (p.49). The main interest in this thesis was not on the Botswana government per se but on the general public sector as a whole. Thus the use of the cross-sectional research design was appropriate for this thesis.

In this research, the main aim was to determine if differences existed in customers’ perceptions of service quality based on the level of customer focus of departments’ performance plans for two categories of departments defined as high or low customer focused. The need for establishing relationships among the variables and comparing between the two categories of customer orientation required the use of a cross-sectional design.

The next section (3.5) provides details on how data was collected and analysed using the two-phase methodological approach.

3.5.0 Data collection

As indicated earlier (section 3.1.0), data collection was done in two stages. The first stage involved the collection of qualitative data on the performance plans from different departments within the Botswana public sector while the second stage was a survey of customers' perception of service quality.

A summary of the two stages of data collection is presented in the Table 3.0 below. The table is followed by a brief discussion of the two stages of data collection.

Table 3.0 Data collection process under two-phase research methodology

Phase 1	▪ Research permit ▪ Request for performance plans from departments ▪ Vetting performance plans ▪ Content analysis of performance plans ▪ Categorisation of departmental performance plans in line with customer focus/orientation.	**Expected output:** Departments categorised as either high or low customer focussed.
Phase 2	▪ Development of SERVQUAL questionnaire ▪ Survey of customers' perceptions ▪ Data analysis of customers' responses for each department ▪ Comparison between the two categories of customer focus ▪ Comparison of departments within each category of customer focus	**Expected output**: Identification of gaps between customers' perceived service quality and the extent of customer focus of the performance plans. Explore for possible differences and similarities between departments in the same customer focus category.

3.5.1 Collection of qualitative data on departmental performance criteria

Prior to data collection the researcher applied for a permit to undertake research in Botswana as per the requirements of the Botswana government. The application was sent to the Office of President (OP) because this office (OP) oversees all ministries and departments within the

Botswana public service. The Office of President also coordinates the performance management system (PMS) and performance based reward system (PBRS). It monitors all ministries and departments to ensure adherence to the PBRS performance plans. It was thus found to be the appropriate source of information on PBRS. The OP approved the application and issued the research permit. However the researcher was advised to approach individual departments for information on departmental performances plans.

Upon approval of the permit, the researcher approached twenty departments within the Botswana public sector requesting information relating to their performance criteria under PBRS. Letters of introduction from both Victoria University where the researcher studied, as well as the University of Botswana (researcher's employer) accompanied all the requests. In addition, copies of the research permit from the Office of President, as well as the research proposal, were also sent with each request. Departments selected for this research were those whose services were mainly targeted directly to final consumers. This was in line with the aims of this research, which focused on individual final consumers' perception of service quality.

A combination of telephone calls and email follow-ups were used to increase the response rate. All requests were undertaken while the researcher was based in Australia. However, despite the phone calls and email follow ups, the response rate from the contacted departments was low, with only three responses received after four months. The researcher (with advice from supervisors) returned to Botswana to visit the twenty departments to facilitate the data collection process. Direct visits to the selected departments resulted in additional responses, with a total of fifteen responses received overall.

The data collected was mainly in the form of departmental annual performance plans. Each department's performance plan comprised performance objectives, expected performance targets, timelines for completion of targets, and strategies for attaining performance objectives. Most performance plans were tied to a planning period of one year. All the performance plans were checked to determine if they met the requirements of the research. The criteria for vetting the performance plans were; 1) whether the plans were from departments and not overall ministries and; 2) whether the plans focused on final consumers. Data (performance plans) were content analysed to categorise the departments' performance criteria according to their extent of customer focus. Section 3.5.2 discusses the preliminary vetting process while section 3.6.0 discusses the process used for content analysis of performance plans.

3.5.2 Vetting and categorisation of performance criteria

As stated in the previous section (3.5.1), data collected from the government departments went through a preliminary vetting process to determine whether it met the requirements of the content analysis. As a reminder, this thesis focused on departments whose services were targeted to individual customers or ultimate consumers rather than businesses. In that way, the first basic requirement was to establish if each performance plan directly addressed the delivery of services to individual customers. The departments whose performance plans focused on organisations as business consumers rather than final consumers were eliminated. An example of these departments was Animal Health and Production from the Ministry of Agriculture, which focused mainly on commercial farmers rather than final consumers. Secondly, the research focussed on individual departments rather than ministries that housed departments, therefore submissions representing overall ministries' performance plans were also excluded. .

During the process of vetting, three responses were found not to be suitable. Two were eliminated because the departments concerned delivered services that were not directly consumed by large numbers of final consumers and thus, customers would have limited ability to evaluate the services delivered by that particular department (For example the Department of Animal Health and Production). One submission (the third) was rejected because it covered a ministry rather than an individual department.

The remaining twelve responses were retained for the in-depth content analysis. Content analysis was undertaken to categorise the performance plans into low and high customer focus. Content analysis was chosen because it provided an objective and systematic way of analysing the content of the performance plans. Prior to content analysis, the researcher and supervisors met to develop the criteria for content analysing the performance plans. Based on these discussions, it was agreed that the analysis should focus on the extent to which the performance plans/criteria (performance objectives, strategies, planed performance initiatives, performance targets, timeliness and others) directly addressed customer service delivery. The criteria developed for evaluating the performance plans was guided by the literature.

The next section (3.6.0) provides a brief discussion of the content analysis process. Details on the actual content analysis of performance plans are discussed in chapter 4 (data analysis).

3.6.0 Content analysis

Following the vetting of the PBRS performance plans from the selected departments within the Botswana public sector (as described in section 3.5.2), the performance plans were evaluated using content analysis to categorise the departments in terms of the extent of customer orientation. The content analysis process involved five steps which are:

1. Development of content analysis rules
2. Invitation of experts to evaluate the performance plans
3. Development of guidelines for expert judges applying the rules and criteria
4. Evaluation of the customer orientation of departments' performance objectives (by experts).
5. Categorisation of departments on the basis of customer orientation scores from the experts

3.6.1 Development of content analysis rules and criteria

In this section, the process involved in developing the content analysis rules is discussed. Developing content analysis rules is the major step upon which the remaining four steps in the content analysis process are based. The first step was to develop the rules and criteria for categorising the departments on the basis of the extent of customer focus of their performance plans. This was in accordance with Schneider, Wheeler, and Cox (1992) who suggested that developing rules or criteria for categorisation of data was the first requirement in content analysis.

In this research the aim was to develop rules that could assist in categorising departments' performance plans into those that were high and low customer focussed. In terms of content analysis, a category is a set of criteria that relate to a specific theme (Sarantakos, 2005). Thus, it was expected that departments falling under the same category (either high or low) should share similarities in terms of their levels of customer focus. As mentioned in section 3.5.2, each department's performance plan comprised several performance objectives which indicated what the department intended to achieve during the planning period. These objectives were assessed using the rules and criteria developed (refer to Table 3.1), to categorise the departments into high and low customer focus on the basis of the extent of customer orientation of their PBRS performance plans.

According to Krippendorff (2004) cited in White and Marsh (2006), content analysis rules could be derived from a number of sources which include; 1) existing theories or practice, 2) the experience or knowledge of experts; or 3) from previous research. In this research, the content analysis rules and criteria were derived from the literature in order to gain theoretical support and enhance their salience. The researcher used literature from customer orientation as well as performance management and goal setting to develop the rules and criteria. These two areas of literature were found to be more relevant to the main objective of this research which was to explore the impact of customer orientation of performance based reward schemes on customers' perceived service quality. Therefore, literature on customer orientation and performance management formed the core of the rules. Section 2.3 of the literature review also briefly discusses goal setting. In this section (section 2.3), involvement of employees in setting of performance goals was identified as an important step in motivating employees to accept performance goals and thus improve their performance. Thus, Table 3.1 also makes links to section 2.3 of the literature review (for rules C6 to C9).

A total of eleven rules were developed from the literature, as the criteria for content analysing the performance plans. The eleven rules are summarised in Table 3.1, and the discussion on how they were developed from the literature follows.

Table 3.1 Criteria for categorising departments' performance plans

Rule	Criteria	Area of literature
C1 C2	Performance plans, objectives, and performance initiatives should be linked to customer service delivery to improve service quality and customer satisfaction (Deshpande et al., 2001; Cheng et al., 2004) The objectives should clearly show organisational efforts to identify customers' needs and expectations (Korunka et al., 2007), through collection of information on customers' needs and developing strategies for addressing these needs and expectations (Kohli, 1993).	Customer orientation
C3 C4 C5	Highly specific goals detailing what is expected to be achieved, and employees' role in achieving the objectives to improve performance (Bell, 1982; Gomez-Mejia and Balkin, 1992). Objectives should be expressed in quantitative terms to improve measurability of performance output. (Carlopio et al., 2001). Objectives must be challenging but achievable to motivate employees to improve their performance (Locke and Latham, 1990).	Goal clarity, employee performance and motivation
C6. C7 C8	Objectives have to be supported by clearly stated performance targets, or deliverables to motivate employees and enhance performance (Kaufman, 1988; Barrett and Turberville, 2001; Susseles and Magid, 2005). Objectives should include clear time frames for attaining desired performance targets (Rudman, 2003). Objectives have to be accompanied by specific **means** and **ends** that guide performance towards set targets (Carlopio et al., 2001)	Target setting and employee performance (*Also discussed in Section 2.3 of the literature review)*
C9	Employees should be involved in the setting of performance goals as it improves their commitment to those goals (Bell, 1982, Locke and Latham, 1990; Carlopio et al., 2001; Susseles and Magid, 2005)	Employee involvement in goal setting (*also discussed in section 2.3 literature review)*
C10 C11	There should be a clear allocation of performance roles to employees to enhance performance (Rainey, 1997) Objectives must clearly indicate accountability and responsibility of task performance to improve employees' commitment to performance	Role allocation and employee performance

As indicated in Table 3.1, the criteria for the first two rules (C1 and C2) were developed from literature on customer orientation. Customer orientation has been defined as the organisational culture that creates effective and efficient behaviours to produce superior customer value (Narver and Slater, 1990). Customer orientation involves linking of organisations' service delivery mechanisms to customers' needs and expectations (Desphande et al., 1993). Given its focus on customers' expectations, customer orientation is expected to result in the delivery of improved service outcomes (Desphande et al., 1993; Cheng et al., 2004). It has been argued that customer orientation improves organisational performance and brings high levels of customer satisfaction (Jaworski and Kohli, 1993; Hartline, Maxham III, and McKee, 2000; Cheng et al., 2004). Therefore it can be discerned that organisations (both private and public sector) having objectives that are customer oriented are more likely to satisfy their customers' needs.

Appiah-Adu and Singh (1998) emphasised that customer orientation should be considered "…an integral part of the overall organisational culture such that information on customers' needs, is considered alongside organisational values that reinforce the customer focus" (p.386). Customer oriented organisations strive to develop strategies aimed at identifying customers' needs and resolving them (Kohli, 1993). The emphasis on satisfying customers' needs and expectations is seen as a means for achieving organisational objectives (Huang and Dastmalchian, 2006). Customer satisfaction is an important objective in both public and private sectors. This implies that customer orientation should be embedded within the overall organisational performance strategy as a component of the performance strategy. In view of the suggestion from Appiah-Adu and Singh (1998), and the effect of customer orientation on customer satisfaction, it (customer orientation) was considered an important part of criteria for evaluating departmental performance plans and thus influenced the development of criteria (C1 and C2).

Customer orientation was initially conceived as a private sector initiative for enhancing customer satisfaction and loyalty with a view to increasing profitability and competitiveness (Huang and Dastmalchian, 2006). This perception has changed, since the public sector has also observed the need to be customer-oriented in order to effectively address the needs of its customers (Wisniewski, 2001). In the private sector context, the focus of customer orientation has been on individual customers with a view to increasing customer satisfaction and profitability (Jaworski and Kohli, 1993). However, making individual customers the measure of service delivery mechanisms may prove difficult within the public sector (Korunka et al., 2007). This arises from the multiple customer characteristics that public sectors have to serve (Kinnell and MacDougall, 1997; Brysland and Curry, 2001; Needham, 2006). Given the multiple and conflicting customers' needs, meeting the needs of all individual customers could be difficult. Thus, Korunka et al. (2007) suggest that customer orientation within the public sector should mean providing a necessary service in such a way that it generally meets customers' needs in an optimum manner, and this definition is adopted in this research. In evaluating the performance objectives, emphasis was placed on the extent to which the objectives strive to address customers' needs in an optimum manner. In this research the terms "customer orientation" and "customer focus" are used interchangeably to mean efforts by public sector departments to deliver services that meet customers' needs optimally. Thus, literature on "customer orientation" was used to develop rules for examining the extent of "customer focus" of departments' performance plans and objectives.

Rules C3 to C9 were developed from the literature on goal setting and employee performance. Criteria for rules C3 to C5 were developed from literature on goal clarity. Goal clarity refers to the extent to which goals lack ambiguity with regard to their measurability and verifiability (Bell, 1982). As discussed in section 2.3 (literature review), employees are motivated to perform better if they have clear and challenging performance goals (Locke, 2004). Performance objectives have to be clear in order to guide employees in terms of expected performance output (Bell, 1992). Employees' performance improves if they have clear goals with all the details of what is expected of them with regard to performance output (Gomez-Mejia and Balkin, 1992). Lack of goal clarity could result in organisational goal conflict, which often negatively affects employees' performance, as they (employees) may not know how to achieve vague goals (Wright, 2004; Pandey and Garnett, 2006). In view of the importance of goal clarity in enhancing employees' performance, it (goal clarity) was included as part of the criteria for evaluating performance objectives. Thus, rule C3 was derived from the literature on goal clarity. The words 'goal' and 'objective' are used interchangeably in this thesis to mean departmental performance objectives.

In order to enhance the clarity of performance goals they need to be "…specific, measurable, agreed, realistic, and time-framed" (Carlopio, Andrewartha, and Armstrong, 2001, p.319). Though performance objectives may be qualitative, they can be expressed in quantitative terms to improve measurability (Carlopio et al., 2001). For example the use of percentages to show desired performance outcomes such as '*we intend to cover 10% of citizens in 2006*' rather than vague statements such as '*we will strive to improve performance in 2006'* results in specific and measurable objectives. The use of quantitative and measurable goals would be important under PBRS as it could guide employees on the desired performance output. Thus, using quantitative and measurable objectives was considered an important requirement in performance objectives and was thus included as part of the criteria for evaluating performance objectives as rule C4.

Goals should be realistic, challenging but achievable (Locke and Latham, 1990; Carlopio et al., 2001). Performance goals have to be difficult and challenging but not out of the reach of employees (Rudman, 2003). Employees are less likely to accept goals that they perceive to be unreasonably difficult and unachievable and may be less motivated to perform tasks linked to such goals (Carlopio et al. 2001). Difficult and attainable goals increase the challenge on the job while motivating employees to adjust their performance levels to meet the desired targets (Rudman, 2003). According to Locke and Latham (1990), "…specific and difficult goals result in better performance than specific, less challenging, easy and vague goals" (p.240). In view of the requirement for realistic, challenging and achievable goals, as discussed above, rule C5 was developed.

While the literature emphasises the need for realistic, challenging and achievable goals, it does not appear to provide a clear benchmark that could be used to determine whether goals are challenging, realistic and achievable. In practice, the challenge and difficulty of goals would depend mostly on the employees' perceptions. It would also differ from organisation to organisation. Therefore it was difficult to set a specific benchmark for assessing whether goals were challenging. In this thesis a number of indicators were used to determine whether goals were realistic, difficult and challenging. These included the amount of work to be done, time allocated to the task, and resources allocated. For example, where goals were allocated short periods of time and there was significant amount of work to be done, such goals were considered less achievable. On the other hand where the amount of work to be done was considered small while time required for task completion was large, the goals were judged to be less challenging. Less challenging and unattainable objectives were categorised as low customer focused.

Goals must include targets, standards or desired performance indicators (Carlopio et al., 2001). These performance standards or indicators specify the amount of performance output necessary to achieve desired result (Kaufman, 1988). According to Kaufman (1988), performance indicators serve two purposes. These are: "1) to identify desired performance output; and, 2) to provide criteria for determining success or failure" (p.80). Thus performance targets provide an opportunity to benchmark actual performance against the desired performance and make adjustments for future performance where necessary (Perry and Potter, 1982; Carlopio et al., 2006). The implication from the above discussion is that performance standards and targets would be more useful when comparing actual performance against desired output (target). As suggested in section 2.3 of the literature review, using targets in performance based reward schemes (PBRS) is expected to enhance employees' performance as they (employees) strive to meet their set targets in order to achieve the desired rewards (Barrett and Turberville, 2001; Susseles and Magid, 2005). In that way, it would be appropriate to use targets and standards as part of PBRS to assist in determining employees' rewards. Employees would be rewarded on the basis of the extent to which their performance met (or failed to meet) the set performance targets. Rule C6 was therefore found to be relevant as part of the criteria for assessing customer orientation of government departments' PBRS performance plans.

Performance targets should be supported by clear time-frames (i.e. clear deadlines) to guide employees on the expected commencement and completion of the tasks (Rudman, 2003). Time frames have to be realistic in order to provide the challenge that is required to motivate employees (Rudman, 2003). In other words, time frames should not be too long as they may be less challenging or too short as that may put undue pressure on employees for task completion. Time frames would be required where PBRS are in place because employees are rewarded on the basis of achieving the planned performance output within the set time (deadline). Given that time frames are a vital component of performance plans, rule C7 was included as part of the criteria for categorising the performance plans.

Performance standards must have clear means and ends (Rudman, 2003). 'Means' refer to ways, facilities, methods, and resources required to accomplish the desired performance output (Kaufman, 1988; Rudman, 2003). 'Ends' specify the desired results or consequences of implementation of the means (Kaufman, 1988). Ends oriented performance objectives are encouraged because the results or performance output can be examined to determine whether the methods and means used were appropriate in meeting the desired targets (Kaufman, 1988). The implication here is that for performance objectives to be effective they should include ‘means’ (specifying among others, resources, materials, time frames) required to achieve the desired output. In addition, the desired performance output should be specifically stated in the form of ‘ends’. In view of the above discussion, the use of performance objectives that are accompanied by clear means and ends would be particularly important where a performance based reward scheme is in place. Thus, means and ends were found to be an important component of the criteria for evaluating performance objectives, hence rule C8 was conceived.

According to some authors, involvement of employees in the setting of performance goals is important since it improves employees’ commitment to those goals (Bell, 1982; Locke and Latham, 1990; Carlopio et al., 2001). It has been pointed out in section 2.3, that employee involvement in goal setting, is an integral part of developing performance based reward schemes. Employee input ensures that employees buy into the performance plans, and therefore increases their commitment to improved performance (Susseles and Magid, 2005). Bell (1982), argued that “…participation of employees in establishing goals and performance standards increases employees’ long term commitment to the goals rather than short term compliance that may result from lack of employees involvement in goal setting” (p.48). Employees generally have a strong feeling of responsibility for tasks when they are allowed to take part in setting their performance goals and standards (Bell, 1982).

Lack of employee involvement in goal setting may increase employees’ perceptions of alienation, and detachment from making a contribution to organisational success (Perry and Potter, 1982). It may also result in lack of commitment and cooperation in task performance, and ultimately to failure to achieve performance objectives (Oakland, 1999). It is important that employees’ individual performance objectives be in line with or fit within the overall organisational objectives (Carlopio et al., 2001). For example, in the case of performance based reward schemes, individual employees’ performance plans should be guided by departmental performance objectives. In view of the importance of employee involvement in goal setting as discussed above, rule C9 was developed.

In the case of the Botswana public sector, it was mandatory that all departments involve their employees in setting their (employees) performance objectives as part of the PBRS process. Individual employees' performance objectives were aligned to overall departmental objectives. Therefore the departments that participated in this study met the requirements for rule number C9. Thus, while rule C9 was suggested as part of the criteria for evaluating departments' PBRS performance plans, it was not used to evaluate performance plans from Botswana government departments because all departments had to meet the requirement for C9. In that way, only ten of the eleven rules applied to evaluating PBRS performance plans from the Botswana public sector.

Rules C10 and C11 were developed from literature on allocation of performance roles and responsibilities to employees as a way of enhancing performance. According to Earley and Lituchy (1991), assigning performance tasks to employees under challenging, and specific goals influences employees' feeling of self-efficacy. Yeo (2003) suggested that clear allocation of responsibility among employees helps organisations to achieve positive business outcomes. Role and goal allocation provide a feeling of purpose and direction as well as the desire to accomplish given tasks, thus stimulating performance improvement (Rainey, 1997). In other words employees feel directly responsible for the accomplishment of departmental goals allocated to them.

Given that allocation of performance roles helps to enhance employees' performance, as wasdiscussed earlier, it (role allocation) was included as part of the criteria for evaluating objectives, as rule C10. Accountability and responsibility of task performance were viewed as important components of the role allocation process. Though employees could be allocated performance roles, there has to be someone who is ultimately accountable for the overall performance output. This is usually a senior employee within the department. Rule C11 was developed on the basis of the need to have someone who oversees the performance of other employees. It is an extension of rule C10, with just the addition of an overall overseer of performance output from other employees. In this research, departments that showed accountability and responsibility for performance objectives were regarded as having high potential for improved performance. On the other hand, departments with little or no role allocation were considered to have less potential for improved performance and were thus classified as low in the performance criteria.

Having developed the rules, the next step was to put the rules into operation. The researcher developed guidelines to be followed when evaluating the performance objectives. Section 3.6.2.2 briefly discusses the development of these guidelines. The next section covers the discussion of the remaining four steps in the content analysis process.

3.6.2 Application of the content analysis rules

This section covers the discussion on the last four steps in the content analysis process. As discussed in the previous section (3.6.1), development of the rules was the first step in the content analysis process. The discussion on the development of the rules was therefore lengthy. The remaining four steps build on the first one, and were concerned with the application of the rules to evaluate the departmental performance plans. These steps are briefly discussed in the subsections that follow.

3.6.2.1 Invitation of experts to participate in the evaluation of performance objectives.

Once the rules were ready for use, the next step was to apply these rules to evaluate the performance plans and determine the extent of customer orientation within each plan. In order to enhance the salience of the evaluation process, expert judges were invited to participate in the evaluation of performance plans. A total of four experts took part in the evaluation, and these were; the researcher, two external human resources experts from the Australian public sector, and one of the researcher's supervisors who was an expert in human resources management. Emphasis was placed on experts who had a background in human resources management because evaluation of performance objectives was considered to be relevant to human resources experts. Human resources experts were first asked to examine the rules and determine whether they could be used to evaluate customer focus of departmental performance objectives. Based on comments from human resources experts, some changes were made to the rules to make them more applicable to the evaluation of performance plans.

The use of multiple experts in content analysis has been supported by some authors including Kolbe and Burnett (1991) as well as Milne and Adler (1999) because they believed it can help to improve the reliability of the content analysis rules. Thus, in this research more than one expert was used to enhance reliability of content analysis results. Since content analysis is susceptible to the researcher's bias, using external experts also provides reliability and accuracy checks on the researchers' work (Kolbe and Burnett, 1991). According to Milne and Adler (1999), it is important for the rules to be reliable "...to enable replicable inferences to be made from the data drawn from content analysis" (p. 238).

Experts were requested to evaluate all ten departments' performance objectives using the content analysis rules. In order to assist the experts in applying the rules, guidelines on how to evaluate the performance plans were developed. The next section provides a brief discussion of how these guidelines were developed.

3.6.2.2 Development of guidelines for the judges

Following the invitation of experts to participate in evaluating the departmental performance plans, the next step was to develop guidelines that would be followed by experts when they evaluate the plans. The guidelines served as the framework for evaluating the objectives. Refer to Figure.4 for details about the guidelines.

Guidelines to expert judges.

1. This task involves assessing performance based reward schemes (PBRS) from ten departments in the Botswana public sector.

2. Each department has a performance plan made up of a number of performance objectives. A list of performance objectives from each department is provided. Your first task is to identify performance objectives that address service delivery to final consumers rather than to organisations or business customers (Business –to- business). If you think the objective is final consumer focused you simply have to write 'Y'. You write 'N' if you feel the objective is not consumer focused.

3. For each of the objectives that you have indicated as addressing final consumers, please assess them using the rules provided. At this stage you are asked to refer to the departmental performance plans for more information about the objectives. Assess each objective in line with the criteria specified under each rule. In the relevant column listed on the worksheets for each department, indicate by a 'Y' or 'N' whether you think the objective meets or does not meet the criteria for the rules.

4. Once you have evaluated all the departments we ask that you send us your results.

5. Finally you are requested to assess the extent to which you believe departmental plans as written provide a means of linking individual employees' performance (or group performance) to achievement of customer orientation.

Figure 4. Guidelines for evaluating the performance objectives

These guidelines were provided to all four experts and each expert was asked to independently evaluate the performance plans using the rules developed earlier (Section 3.6.1). Experts were provided with copies of the rules, which were in essence Table 3.1 with the exception of rule 9, which was already met by the Botswana public sector (as mentioned earlier in Section 3.6.1).

Following the development of guidelines and rules, judges were ready to undertake the evaluation of the performance objectives. The next section discusses how the evaluation of the objectives was done.

3.6.2.3 Evaluation of performance plans.

At this stage, experts were requested to use the guidelines and rules provided to evaluate the departments' performance plans. Each department's performance objectives were assessed using the ten rules. Experts were given worksheets containing lists of performance objectives from the ten departments participating in the study. An example of these worksheets is shown in Table 3.2 (For the Botswana national library service). Detailed information about the departments' performance objectives was contained in the departments' performance plans which were also provided to experts. The plans and objectives from each department were used as the basis for content analysis.

Table 3.2 Worksheet for the Botswana National Library Service

Objectives	Is the objective focussed on final consumers?	**Criteria for assessing the objectives**									
	Y/ N	**C 1**	**C 2**	**C 3**	**C 4**	**C 5**	**C 6**	**C 7**	**C 8**	**C 9**	**C 10**
1. To promote life long learning, research and recreation nationwide through the provision of multimedia information resources											
2. To promote employee growth and development through implementation of appropriate recruitment, training and staff retention policies											
3. To satisfy customer needs by providing relevant information resources											
4. To ensure a cost-effective service through prudent resources management											
5. To achieve organisational efficiency and effectiveness by ensuring a high level of participation, accountability, responsibility and transparency.											
6. To improve the quality of service to the nation (public) through sustained collaboration with stakeholders.											

Experts were requested to independently assess the performance objectives from the ten departments. As indicated in the guidelines, experts were to first identify the objectives that focussed on final customers' (consumers) service delivery. If an expert believed that the objective addressed the delivery of services to ultimate or final consumers, they would indicate that by writing a 'Y' in the second column adjacent to the relevant objective in Table 3.2. Where the objective was not final consumer focused, experts would write an ‘N’ representing ‘no’. The objectives that were identified as not being final consumer focused (marked ‘N’) were dropped. These objectives were left out of further analysis because they were less relevant to the aims of this thesis. As a reminder, this study is focused only on final consumers and not business customers. Thus, only objectives that were found by the experts to address final consumers were retained for further analysis to examine their extent of customer focus.

Objectives identified as ultimate customer focused went through further analysis using the criteria specified in the rules. Each objective was assessed to determine if it met or failed to meet the criteria specified under the rules. Experts were asked to refer to departmental performance plans for more information about the performance objectives. This would assist them in deciding whether or not the objectives met the requirements. As was the case with the selection of customer oriented objectives, experts wrote ‘Y’ to indicate that they were satisfied that an objective met the requirements of a rule. An ‘N’ denoting ‘No’ was also written to indicate that the objective failed to meet the requirements stated under the rule.

Following the evaluation of the performance objectives, experts were then requested to send their responses to the researcher. The experts’ responses were analysed to assist in determining the extent of customer focus of each department’s performance plan. As will be discussed in the next section, the extent of customer focus was determined by the average ‘Y’ responses for each department’s performance objectives. The extent of customer focus was then used as part of the criteria for categorising the departments into high and low customer focus.

The next section provides a brief discussion on how the categorisation of the departments’ performance plans into high and low customer focus was done.

3.6.2.4 Categorisation of the departments

After all the objectives were analysed, responses from the four experts were collated and summarised to determine the extent of customer focus of departments’ performance plans. The total of the ‘Y’ responses for each objective, across the ten rules, was calculated for the ten departments. Table 3.3 is an example of the summarised ‘Y’ responses from one of the departments (Clinical Services) as scored by one of the experts.

The last column in Table 3.3 shows the total ‘Y’ responses from each objective. At the end of this column is the average ‘Y’ response. The average ‘Y’ response was calculated for all the departments to determine their extent of customer orientation. More details on the process of calculating the average ‘Y’ response and how it was used to facilitate in categorisation of departments is discussed later under content analysis in chapter four, Section 4.2.3.

Following categorisation of the departments’ performance plans, reliability of the results obtained from content analysis was measured. Calculation of reliability is an important step in every research as it gives the data stability and quality (Rust and Cooil 1994). Reliability was measured using Rust and Cooil’s (1994) Proportional Reduction in Loss (PRL) approach. The PRL approach measures the inter-judge/expert reliability, and was thus found suitable for this study where more than one expert was used in the evaluation of the performance plans. More details on measurement of inter-judge reliability is provided in chapter four, Section 4.2.1

Table 3.3 Evaluation of Departments’ performance objectives

Objectives	**Rules**										**Total**
	C1	C2	C3	C4	C5	C6	C7	C8	C10	C11	
Develop a draft strategy to address top four (4) conditions by 31/03/2007	Y	Y	Y	Y	N	Y	Y	Y	N	Y	8
Provide cervical cancer screening for 25% of women aged 20-65 years by 31/03/07	Y	Y	Y	Y	N	Y	Y	Y	N	Y	8
Establish trauma management services by 31/03/07	Y	Y	Y	Y	N	Y	Y	Y	N	Y	8
Reduce waiting time for selected services	Y	N	Y	Y	N	Y	Y	Y	N	Y	7
To achieve 80% of essential medicines supply by 31/03/07	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	9
Total	**5 Y**	**4 Y**	**5 Y**	**5 Y**	**1 Y**	**5 Y**	**5 Y**	**5 Y**	**0 Y**	**5 Y**	**8** average ‘Y’ response

Once content analysis was complete the next step was to undertake a survey of customers' perceived service quality of departments categorised as either high or low customer focused. This was done in line with the main objective of this thesis which was to explore differences in customers' perceived service quality under different levels of customer focused PBRS. The SERVQUAL instrument was then used to measure customers' perceptions of service quality.

The next section provides a discussion of SERVQUAL as an instrument for measuring customers' perceived service quality and why it was selected to be used in this thesis.

3.7.0 Customer survey using SERVQUAL

This section discusses the use of SERVQUAL instrument in general and covers its application in the public sector. Justification for choosing to use SERVQUAL in this thesis is also provided. SERVQUAL is an instrument used to measure customers' perceptions of service quality and was developed by Parasuraman et al. (1985) and modified by the same authors in 1988 and 1994 in response to criticism from other authors (refer to section 2.9.5 for more details on the criticism of SERVQUAL).

SERVQUAL was chosen for data collection in this study because it has been suggested as a useful tool in measuring service quality within the public sector (Curry and Herbert, 1998; Brysland and Curry, 2001; McFadyen et al., 2001). McFadyen et al. (2001) strongly supported SERVQUAL as a valid and robust tool in measuring perceived service quality in a variety of settings both in the private and public sectors. It is particularly useful where organisations want to compare their efforts to improve performance with customers' perceptions of service quality, in order to identify perception gaps (Donnelly et al., 1995). Brysland and Curry (2001) suggested that among others, SERVQUAL could be used to evaluate the impact of service improvement activities carried out to address customers' expectations and priorities. In that way SERVQUAL was found to be relevant to this thesis where we attempted to explore whether customers' perceived service quality differed for departments categorised as high and low customer focused based on the extent of customer focus of their performance plans.

The development of the SERVQUAL questionnaire was preceded by a rigorous empirical testing which proved that it could be applied across a broad range of services with only minor modifications (Parasuraman et al., 1985; 1988; 1991; 1994; Donnelly et al., 1995). In addition the majority of research on measuring customers' perceived service quality within the public sector has used SERVQUAL (Donnelly and Dalrymple, 1996; Wisniewski and Donnelly, 1996; Brysland and Curry, 2001; McFadyen et al., 2001; Reisig and Chandek, 2001; Wisniewski, 2001; Donnelly et al., 2006). Brysland and Curry (2001) observed that SERQUAL has had extensive field-testing and refinement. They argued that the rigorous refinement and modification of SERVQUAL in the public sector setting, makes it more trusted than the other tools for researchers and practitioners alike. More discussion on the application of SERVUQAL in the public sector is provided in section 2.9.6

As discussed in the literature review, section 2.9.5, SERVQUAL has met criticism from some authors who challenged its efficacy in measuring service quality (Cronin and Taylor, 1992; 1994; Teas, 1993; 1994; Robinson, 1999). Most of this debate centred on dimensionality of SERVQUAL. Despite such criticism, SERVQUAL evolved and continued to be used more widely than the other methods suggested by critics such as SERVPEF. As a result it continues to be recommended as an appropriate tool for measuring service quality (Lewis and Mitchell, 1990; Wong and Sohal, 2001). More discussion on the criticism of SERVQUAL is in section 2.9.5 of the literature review.

The next section discusses how the SERVQUAL instrument was modified for the purpose of this study. The discussion also covers how the instrument was used to measure customers' perceived service quality from the departments participating in this study.

3.7.1 Development, modification and application of the SERVQUAL instrument

The SERVQUAL instrument contains 22 statements measuring customers' expectations of the service as well as a corresponding set of 22 statements to measure customers' perceptions of the service delivered by a selected service provider (Parasuraman et al., 1991). The two sets of 22 statements from the SERVQUAL questionnaire are categorised in terms of five dimensions of service quality being tangibles, reliability, responsiveness, assurance and empathy. Respondents are asked to rate their expectations and perceptions of performance on a seven-point Likert scale ranging from 1 (strongly disagree) to 7 (strongly agree).

In this research, the SERVQUAL questionnaire was adopted with only minor modifications to reflect the departments from the Botswana public sector participating in the study. As discussed in section 2.9.4, Parasuraman et al. (1988; 1991; 1994) have suggested that SERVQUAL can be used under different contexts provided it is modified to meet the requirements of the context being researched. In order to assist in the development of a SERVQUAL questionnaire that meets the requirements of the public sector context, previous studies measuring public sector service quality using SERVQUAL were examined. For example, a public sector SERVQUAL questionnaire was obtained from Mcfadyen et al. (2001). Reference was also made to questionnaires from Anderson (1995) who also measured service quality in the public sector using SERVQUAL.

The two sets of 22 statements from the SERVQUAL questionnaire were modified to reflect the services provided by the six participating departments within the Botswana public sector. The first set of 22 statements was designed to measure customers' expectations (denoted by letter E) about public sector departments in general, providing services within the service area being investigated (Wisniewski and Donnelly, 1996). The second set of 22 statements measured customers' perceptions (P) of the services provided by the department being assessed. As stated earlier in this section, the two sets of 22 statements were evaluated by public sector customers using a seven-point likert scale ranging from strongly disagree (1) and strongly agree (7). In line with the suggestion from Parasuraman et al. (1988; 1991) and Wisniewski and Donnelly (1996), no labels were attached to middle scores 2 to 6 in the likert scale.

A SERVQUAL questionnaire was developed for each of the six participating departments. In each questionnaire, the expectations and perceptions statements (22) specified the name of the department being assessed to ensure that respondents only evaluated services relating to the specified department. A screening question was asked at the beginning of every questionnaire to ensure that only customers, who experienced services from the selected departments within the last year, responded to the questionnaire.

In order to measure customers' perceived service quality from the six departments, the difference between the ratings assigned to expectations versus perceptions statements was computed (Zeithaml et al., 1990). In other words, the customers' expectations scores were subtracted from their perceptions scores (P-E). A positive result from this computation indicated that customers' expectations were met for that statement. A negative result indicated that customers' expectations exceeded the perceived service for that statement. The quality of the services provided by the six departments was measured along the five dimensions of service quality (tangibles, reliability, responsiveness, assurance and empathy). The summary of expectations and perceptions scores across the five dimensions was calculated for each of the six departments. Expectations were subtracted from perceptions to determine the extent of the gap between the two. Weighted averages were then calculated for each dimension and added (totalled) together to achieve the overall SERVQUAL score for each department (see Section 4.5 for details).

SERVQUAL scores for the two sets of departments belonging to the two categories of customer focus were compared to explore for differences in customers' perceived service quality resulting between the two categories of customer focus. Ideally it was expected that departments belonging to the two categories would differ in customers' perceptions of service quality. Customers from low customer focused departments were expected to perceive low service quality because they got less customer focused services while those in high customer category were expected to perceive high service quality because of better customer focused services they received. Details regarding the performance of departments within the two categories of customer focus are covered in section 4.6. Comparison was also undertaken for departments within the same category of customer focus. This was meant to ascertain similarities and or differences in customers' perceptions of service quality for departments within the same category. Differences between departments within the same category would imply that their customers perceived service quality differently. This could raise issues that require further explanation. Details on the implications of the findings are discussed in Section 5.5.

The next section provides a discussion on the steps taken to collect data after the development and modification of the SERVQUAL questionnaire. The section covers the sampling procedure and ends with a discussion on the pretesting of the questionnaire.

3.8.0 Sampling

Following the development of the survey (SERVQUAL) questionnaire, the next step was to decide on whom to collect the required data from. The process of selecting suitable respondents for a study is commonly called sampling. Zikmund (2003) suggests a seven-stage process that is usually followed by researchers when selecting respondents for a survey. The process is illustrated in Figure 5, and was used to guide the selection of the sample for this thesis. As indicated, the seven-stage process was only used as a guide and thus the steps were not strictly followed. The sampling process is discussed in the next section (3.8.1).

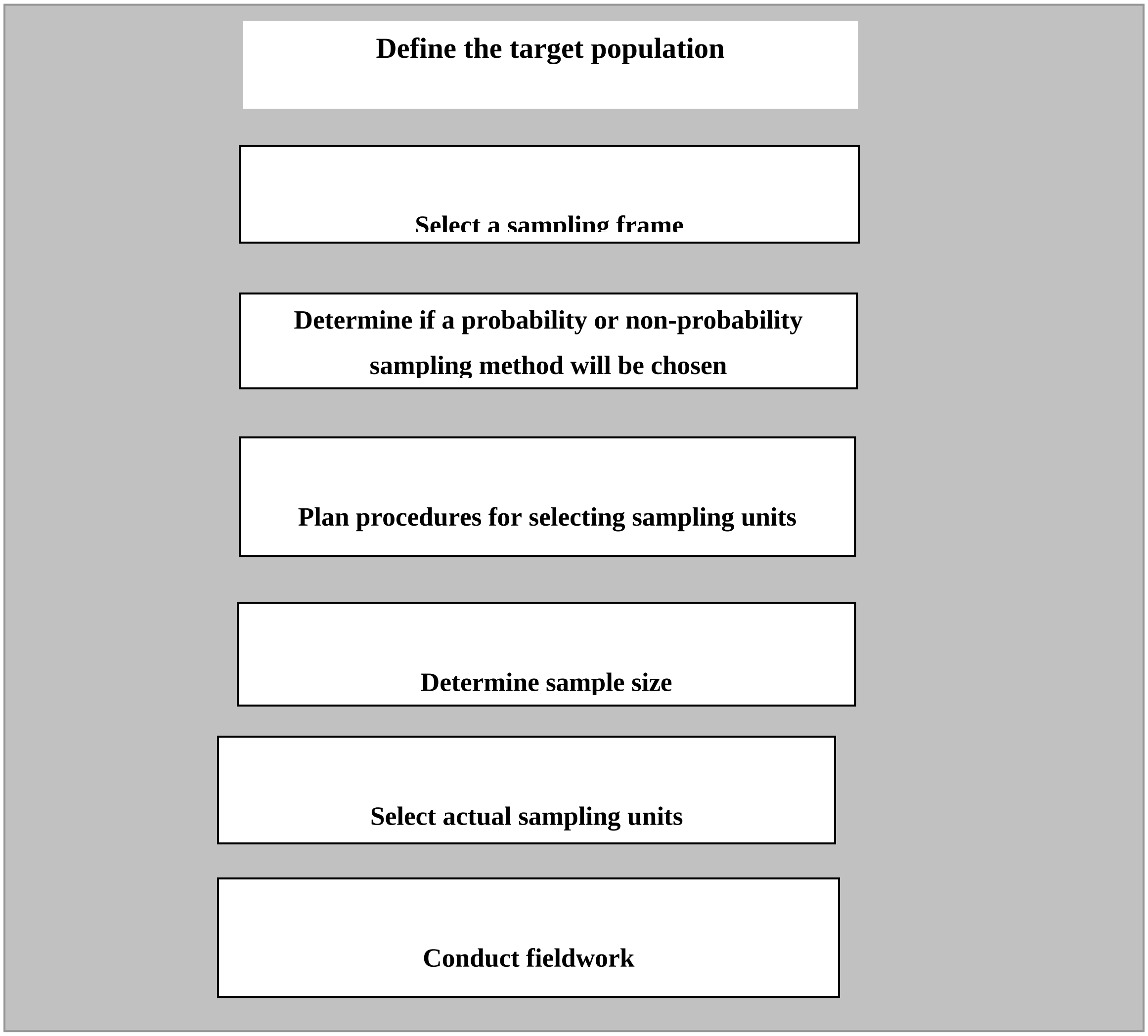


Figure 5. Stages in the selection of a sample

Source: Adapted from *Zikmund* (2003, p.372)

3.81 Sampling process

The starting point in the sampling process was to decide on the target population or the complete set of population elements from whom data was to be collected. The target population provides the relevant source of respondents for the survey (Zikmund, 2003). It is important that the target population be clearly defined to enable proper selection of the sample. This ensures that data collected is relevant to the target population (Zikmund, 2003). In addition, the representativeness of the research findings to the target population would also be improved. The target population in this thesis comprised all adult final consumers who received services from the six departments participating in this study. The services should have been consumed after the introduction of PBRS within the Botswana public sector. Business customers were excluded from the target population because they did not constitute final consumers. Secondly, this thesis specifically aims to investigate final consumers' perceptions and not business customers, thus making business customers irrelevant to the thesis.

The second step was to decide on the sampling frame. A sampling frame is a complete list of members of the target population from whom the sample could be drawn (Zikmund, 2003; Babbie, 2004). If the target population is known, the list of people within the target population forms the sampling frame. The sampling frame for this thesis consisted of adult final consumers residing in major cities across Botswana who have received services from one of the six departments participating in this study. Different cities were targeted in order to ensure the sample was representative of all users. While this gives a general description of the sampling frame, it was not possible to get complete lists of customers for the departments selected for this research. This was because generally Botswana public sector departments did not keep customer lists and if they (lists) were there, these would not be available to the researcher due to privacy policies. Respondents for the research were sourced from customers residing in a cross section of cities, because all of the targeted departments had service outlets in the cities examined. In addition, the cities had a higher population as compared to other areas, thus increasing the chance of getting a representative sample. Limited time for the fieldwork location in Botswana, coupled with travel budget constraints also influenced the selection of the places.

In order to increase the possibility of getting relevant information for this study, only customers who received services within a period of twelve months prior to the survey were included in the study to ensure they have recent memories of the service quality delivered. It was important to ensure that respondents were customers who received services from the six departments. Respondents were asked to confirm whether or not they had received services from the participating department prior to completing the SERVQUAL questionnaire. Those who did not receive services were excluded from the survey.

Having identified the sampling frame, the next step was to decide on the method for selecting the sample from the sampling frame. A decision had to be made regarding whether to use probability based or non-probability sampling methods. Probability sampling methods give all members of the target population a nonzero chance of being selected for the sample (Zikmund, 2003). The use of probability-based sampling methods required customer lists from which the sample could be drawn. Departments within the Botswana public sector do not keep complete lists of their customers and even if they did, access to such lists would be inappropriate.

According to Emory (1985), probability based sampling is often time consuming and expensive because of the need to make repeated callbacks to ensure that all selected sample members are contacted. This study had to be done within a limited time frame (within the limits of a thesis) which would have been affected if an attempt was done to use probability sampling. Thus, probability sampling could not be undertaken even if the researcher wanted to. Taking into account the costs and time constraints, the researcher was restricted to non-probability sampling. Convenience sampling was used to collect the data. Convenience sampling has been used before when measuring public sector quality using SERVQUAL instrument. For example, a study undertaken by Orwig et al. (1997) to investigate the validity of SERVQUAL in the public sector opted for the use of convenience sampling. In the absence of customer lists, methods involving random selection of respondents (probability sampling) were also found to be less feasible because it was possible to pick respondents who did not actually get services from the selected departments.

Following the decision on sampling methods, the next step was to decide on the sample size. Selection of the appropriate sample size is important in research as it affects the representativeness of research findings. The size of the sample varies depending on a number of factors which include; the purpose of the research, population size, the risk of selecting a “bad” sample, and allowable sampling error (Israel, 2003). Other factors to be considered include; the level of variance of the population, magnitude of acceptable error, and level of confidence or risk (Israel, 2003; Zikmund, 2003). Different formulae and tables have been suggested for determining sample sizes (Morse, 1999; Israel, 2003; Zikmund, 2003). In some cases computer programmes were also recommended for estimating the sample size (Morse, 1999). The main objective is to select a sample that closely resembles the characteristics of the target population.

In most cases approaches used in estimating sample sizes assume that simple random sampling was used (Israel, 2003). Therefore, the tables and formulae suggested could be less applicable where other sampling designs were used (Israel, 2003). Where non-probability sampling was used, (as in this research), a different approach for sample size determination is necessary. Sudman (1976) suggested that a minimum sample size of one hundred (100) respondents was required where comparison between groups was necessary. If the groups were to be further subdivided, each subgroup should have a minimum of 20 to 50 elements (Israel, 2003, Sudman, 1976). Sudman (1976)'s suggestion of sample size determination was found to be more appropriate for this thesis and was thus adopted. This was because the research was concerned with comparing customers' perceptions of service quality between two groups of departments. On the basis of the suggestion by Sudman (1976) a sample of one hundred and fifty (150) respondents per department was selected, to allow for flexibility and cater for non-response and rejected responses. At the end an overall sample size of nine hundred (900) was selected for the six departments. With the sample size known, the final step was to collect the data using the SERVQUAL questionnaire.

Prior to collecting the data, it was important to pre test the questionnaire and identify any areas that should be changed or adjusted on the basis of the response from the pre test. The next section briefly discusses the pre testing of the SERVQUAL questionnaire.

3.8.2 Questionnaire pre-testing and data collection

Having identified the sample, the next step was to pre-test the modified SERVQUAL questionnaire, to determine its applicability to the Botswana public sector context. The questionnaire was pre-tested by staff from the Department of Marketing at the University of Botswana who are both familiar with the survey instrument and are also consumers of public services in Botswana. Given that SERQUAL is a standard questionnaire most staff members found it suitable for use in the public sector context. A few comments made were with regard to reflecting the specific departments selected to participate in the study. It was also suggested that for each department, there has to be a brief description identifying the department's services being examined. This could help in differentiating departments that provided similar services (for example departments of Public Health, and Clinical Services). These comments were incorporated into the final version of the questionnaire prior to undertaking the survey. Brief descriptions of each department are included in appendix iv.

Data collection was undertaken in Gaborone, Maun, Serowe, Mabutsane, Francistown and Jwaneng. As indicated in the thesis, a total of 900 questionnaires were targeted for this study and 150 respondents were sought for each of the six departments. Twenty five (25) SERVQUAL questionnaires from each department were distributed in each city/major centre. Thus a total of 150 questionnaires were distributed in each city or major centre. Three research assistants were tasked with collecting data using a mall intercept technique. Customers for the six departments were requested to complete the SERVQUAL questionnaire while research assistants provided assistance in completing the questionnaire when required. The research assistants actively assisted in the completion of the questionnaires and screened all participants, i.e. only people who were familiar with the targeted service were included and thus all 900 questionnaires were successfully completed. The research assistants unfortunately did not track how many people were invited to participate but were not aware of given services or whether people declined the invitation to participate in the survey, as such it is not possible to determine the response rate. The departments were not willing to provide data on the number of people they dealt with and thus it was also not possible to discuss the overall sample size for individual departments.

Following the data collection, data was input into the SPPS computer program for analysis. The next chapter discusses how the data was analysed. It starts with a discussion of the content analysis, providing details and results of the content analysis. The chapter also covered the analysis of data collected using the SERVQUAL instrument.

CHAPTER 4

DATA ANALYSIS

4.1.0 Introduction

This chapter covers the discussion of the qualitative and quantitative data analysis. As discussed in section 3.1.0, data collection in this research was undertaken in two phases. The first phase involved collection of data pertaining to departments' PBRS performance plans, and the second phase was a survey of customers' perceived service quality using SERVQUAL. The analysis of data was also divided into two parts, in line with the two phases of data collection. The first part of the analysis focused on data collected from the government departments (departments' PBRS performance plans), which were evaluated using content analysis. Content analysis involved examining the PBRS performance plans of ten Botswana government departments selected for potential inclusion in this study to determine the extent to which they (performance plans) were customer focused. Details regarding the process of content analysis are covered in the next section (4.2).

Content analysis facilitated in categorising departments into high and low customer focus on the basis of the customer focus within their performance plans. Categorisation of departments was important because it enabled the researcher to select six departments, three that were low and three that were high customer focused which could then be explored in stage 2 of the research. The two categories of customer focus were required in stage 2 to explore the impact of the level of PBRS schemes' customer focus on customers' perceived service quality.

The second part of this chapter (sections 4.3-4.6) covers the analysis of data collected through the customer survey of six departments identified in stage 1 as high or low customer focused. This section covered quantitative analysis of the survey data and was concerned with evaluating customers' perceived service quality of the government departments. Section 4.3 describes the sample and population demographic characteristics. The discussions here focus on examining whether the sample was representative of the population of consumers. It is important to establish whether the sample is representative of the population as it affects the extent to which the results could be ascribed to the whole population (Janes, 2001). The distribution of the sample across the six departments was also explored to identify differences in respondents' demographic characteristics between the departments.

Data analysis was done using the Statistical Package for the Social Sciences commonly known as SPSS. In section 4.4, the reliability of the SERVQUAL instrument was assessed to examine if the instrument was measuring what it was intended to measure, using Cronbach's alpha. The five SERVQUAL dimensions were examined for reliability to determine the internal consistency of the SERVQUAL instrument. Reliability scores were also calculated for individual departments' dimension scores to determine the consistency of the SERVQUAL instruments across the departments. Following reliability measurements, data were analysed to determine the service quality scores for the six departments.

Section 4.5 covers the discussion on the SERVQUAL analysis. As mentioned in chapter 3 (section 3.1), the SERVQUAL survey instrument was used to collect the data required for the second phase of the research. Data analysis first focused on determining the extent of the gap between customers' expectations and their perceptions of the quality of services provided by each of the six departments. The aim was to determine the individual SERVQUAL dimensions gap scores as well as the overall SERVQUAL scores for each department. The relative importance attached to each of the five SERVQUAL dimensions by the respondents was also measured because it has the potential to influence customers' overall quality perceptions (Parasuraman et al., 1988). Respondents were asked to allocate points to each dimension such that the sum of all points was 100. The importance points (also called importance weights), were then used to calculate the weighted SERVQUAL scores.

Both weighted and unweighted SERVQUAL scores were calculated to measure the departments' service quality. Mean scores were calculated for individual SERVQUAL statements and the scores were aggregated according to the five SERVQUAL dimensions to produce the average dimension scores. Average dimension scores were added up to produce the unweighted SERVQUAL scores. To calculate the weighted SERVQUAL scores, dimension importance weights were multiplied with the dimension scores to get the weighted average dimension scores. Weighted average dimension scores for each department were then summed to get the department's weighted SERVQUAL score.

In section 4.6, comparisons were undertaken between the six departments' mean SERVQUAL scores to establish whether there were any differences between the overall department scores. Comparisons between departments in the two customer focus categories using MANOVA, ANOVA and post hoc tests, would establish whether differences existed between the departments that could be attributed to the level of customer focus within the PBRS schemes. These comparisons were conducted for both weighted and unweighted SERVQUAL scores. Two hypotheses were tested, to examine if 1) customer-focus of PBRS performance plans affects customers' perceived service quality; and 2) whether varying levels of customer focus of the PBRS performance plans improves customers' perceptions of service quality. Comparison of the departments was also done within each category of customer focus, to establish if any differences existed between departments within each category. Ideally departments within the same category of customer focus would have similarities in customers' perceived service quality if belonging to the same category results in homogeneity in the quality of services delivered.

4.2.0 Data analysis Part I Content analysis

Chapter 3 discussed the process involved in developing content analysis rules to categorise Botswana government departments into high and low customer focus. As was stated in section 3.6, four experts were requested to evaluate the PBRS performance plans from the departments selected. The four experts evaluated the PBRS performance plans using content analysis guidelines and response sheets that were provided by the researcher. In this section (i.e 4.2.0), responses from the experts are analysed in order to determine the extent to which departments' performance plans were customer focused.

In this research, multiple experts were invited to participate in the evaluation of performance plans in order to improve the reliability of the content analysis process. Perreault and Leigh (1989) suggest that using more than one individual to assess qualitative data (as is the case with content analysis) is more accurate than relying on the judgment of one individual. In addition, content analysis assessment may be subjective, therefore relying on one individual could negatively affect the reliability and validity of the results. Even where there is a consensus among the judges, the researcher should be concerned with whether the judgment is right (Rust and Cooil, 1994). It was therefore important to examine the reliability of the responses from the set of experts before categorising the departments.

The next section discusses the measurement of reliability of the responses from the four experts.

4.2.1 Inter-judge reliability

Experts' responses were analysed to assess their reliability. Measurement of reliability is important as it gives stability and quality to the data obtained (Rust and Cooil, 1994). In addition, determining reliability is a necessary step in ensuring the content validity of the results (Iacobucci and Duhachek, 2003). Reliability is such an important part of research that even where authors used well-established scales, they are still expected to report on the reliability of their data (Iacobucci and Duhacheck, 2003). However, determining the reliability of qualitative judgments (data) is often difficult and less precise (Perreault and Leigh, 1989; Krippendorff, 2004). The process is even more complex where several people are involved in assessing qualitative data because of the differences in their judgments (Lunz et al., 1994). As Lunz et al. (1994) observed "when a judge makes assessments of the quality of the performance of a task, there will likely be variance among the grades given by different judges…" (p.913).

The difficulty in measuring the reliability of qualitative data is compounded by scarcity of tools for measuring such reliability (Rust and Cooil, 1994). Some authors have suggested different methods for measuring qualitative data reliability (Perreault and Leigh, 1989; Rust and Cooil, 1994). Pearreault and Leigh (1989) proposed a measure that assumed the observed agreement between judges was a function of a true level of reliability which is unknown. According to this measure, when there is perfect agreement among the judges the reliability is one (1). Rust and Cooil (1994) suggested the Proportional Reduction in Loss (PRL) approach to reliability measurement as an improvement to Pearreault and Leigh's (1989) method. Under the PRL approach, reliability is measured by calculating the proportion of agreement among the judges.

This is calculated as the total number of pairwise agreements among the judges divided by the total number of possible pairwise decisions (Rust and Cooil, 1994, p.5).

In this research the reliability of responses from experts was measured using Rust and Cooil's (1994) Proportional Reduction in Loss (PRL) approach. The PRL approach seemed relevant to this research because it accommodates measurement of reliability of responses from more than two judges. According to the architects of PRL (Rust and Cooil, 1994), the approach works along the same lines as Cronbach's alpha with reliability ranges of between zero where the is no reliability, and one where the reliability is perfect.

As discussed in section 3.6, each expert was requested to enter their responses (on predetermined criteria) into a worksheet (refer to Table 3.2 for an example of the experts' worksheet). Responses from individual experts were examined to determine the extent of agreement between the experts' evaluation of the PBRS performance objectives under each department's performance plan. Where a judge marked an objective as customer focused (i.e meeting the criteria being assessed), their initials will appear in the column adjacent to that objective and criteria being assessed. Table 4.1 illustrates a summary of agreements between experts for one of the departments (Department of Tourism). Under each objective, the list of initials for experts (judges) who evaluated the objective is provided. Some experts did not evaluate some of the objectives because they assessed them (objectives) as not being customer focused. Thus, it was necessary to provide a list of experts who evaluated the objective in order to assist in calculating the inter-judge agreement for those (experts) who assessed the objective. Inter-judge agreement is based on the number of experts assessing the objective. The proportion of inter-judge agreement is calculated by dividing the total for judges' agreements by the total possible agreements. Total possible agreements occur where all the judges agreed that the objective was either customer focused/oriented or not. As shown in Table 4.1, the proportion of interjudge agreement for the department of Tourism was 53% or 0.53. The proportion of inter-judge agreement gives the reliability of the experts' assessments and ranges between one and zero. Its interpretation is similar to the Cronbach's alpha coefficient. Tables showing inter-judge agreements for other departments are attached in appendix II while summaries of judges' assessments are included in appendix I.

Table 4.1 inter-judge reliability for the Department of Tourism

Objectives (*Experts in italics)*	Inter-judge agreement per criteria for assessing the objectives.										Agree ments	Total possible agreements
	C1	C2	C3	C4	C5	C6	C7	C8	C9	C1 0		
Increase in customer satisfaction *Experts/judges A, B1, B2, W*	B1 B2 W (3	B2 (3)	B2 (3)	B1 W (2)	B2 (3)	B1 B2 W (3)	B1 B2 W (3)	B2 (3)	(6)	(6)	35	60
Reduce response rate *Experts B1, B2, W*	B1 B2 W (3)	B2 (1)	B2 (1)	B1 W (1)	B2 (1)	B1 B2 W (3)	B2 W (1)	B2 (1)	B2 W (1)	B2 (1)	14	30
Increase tourism awareness Experts/Judges A1, B1, B2	B2 (1)	B2 (1)	B2 (1)	B1 B2 (1)	B2 (1)	B2 (1)	B2 (1)	B2 (1)	(3)	(3)	14	30
Totals											**63**	**120**

Proportion of inter-judge agreement; 63/120= **53% (0.53)**

Table 4.2 shows a summary of the inter-judge reliability for all the ten Botswana government departments included in phase 1 of this study. As can be seen from the table, the majority of the departments had reliability figures of 0.5 and above. Rust and Cooil (1994) suggested that as a rule of thumb, users of PRL should follow the recommendation by Nunnally (1978) of a minimum of 0.7 alpha for acceptable levels of reliability. However they did acknowledge that the 0.7 alpha was just a rule of thumb and in some cases higher or lower levels of reliability could be acceptable. Only one department had an inter-judge reliability of more than 0.7 (Trade and Consumer Affairs 0.72). This shows that the majority of the departments had low levels of inter-judge reliability.

The low levels of inter-judge agreement could be attributed to the differences in experts' assessment. As mentioned later in section 4.2.2, experts had different opinions on whether the objectives met or did not meet the criteria for assessment. Thus the results for customer focus for the ten departments varied between the four experts. Experts' assessments usually vary due to a number of factors including severity or leniency of judges, knowledge and experience with the problem being assessed (Lunz et al., 1994). Even when experts are trained to grade or evaluate performance, differences in their grading would still be difficult to eliminate (Lunz et al., 1994). While differences in experts' judgments are hard to eliminate, these differences could possibly affect the level of inter-judge agreement. A judge who is too strict or too lenient is most likely to differ from other judges in terms of assessment.

In this research experts made varied judgments about the extent to which they thought the departments' performance objectives were customer focused. Some of the experts were less stringent while others were very strict in their assessments of the departments' performance objectives. In view of the differences from the judges' assessments, the levels of inter-judge agreements were possibly affected resulting in low levels of reliability as observed in Table 4.2 In this research, a decision was made to set the acceptable level of reliability at 0.5 alpha taking into consideration differences in the experts' judgments. In addition, assessing customer focus based on PBRS criteria is potentially difficult more especially because there are no known previous studies that followed the same process. In view of these circumstances, the researcher opted for a lower level of acceptable reliability (0.5 alpha), however it is acknowledged that this could negatively affect the reliability of the results of this study. In that regard, the low acceptable level of reliability is considered one of the limitations of this study.

Table 4.2 Summary of inter-judge reliability for the ten departments

Department	**Proportion of inter-judge agreement/reliability**
Culture and Youth	0.57
Trade and consumer Affairs	0.72
Wildlife and National Parks	0.49
Botswana National Library Service	0.57
Independent Electoral Commission	0.6
Civil and National Registration	0.57
Tourism	0.53
Clinical Services	0.51
Social Services	0.60
Public Health	0.68

Having measured the reliability of experts' assessment, the next step was to analyse the responses from the experts in order to categorise the departments into high and low customer focus. Section 4.2.2 discusses the analysis of the judges' assessment of the departments' performance objectives.

4.2.2 Analysis of judges' responses

At this stage, responses from the experts were examined to determine the extent of customer focus of departments' performance objectives. As was discussed in section 3.7, experts were asked to assess each performance objective from the ten departments that took part in phase 1 of the study. Their responses were recorded on worksheets, which contained each department' performance objectives. Table 4.3 is an example of a complete worksheet for one the participating departments (Clinical Services) as assessed by of the expert (W). As mentioned in section 3.7, experts were requested to write a 'Y' to show that they agreed that an objective met the requirements of a rule, and an 'N' to show that the objective did not meet the requirements.

Table 4.3 illustrates what expert W thought was the extent of customer focus/orientation of the objectives from the Department of Clinical Services. As shown in the worksheet, expert W thought that two of the five objectives from the Department of Clinical Services were customer focused. Expert W also thought that the two customer focused objectives (2 and 5) did not meet the criteria for rules C2 and C5.

Table 4.3 Worksheet for the Department of Clinical Services (per expert W)

Objective	Is the objective focused on final consumers?	Criteria for assessing the objectives									
	Y/ N	**C1**	**C2**	**C3**	**C4**	**C5**	**C6**	**C7**	**C8**	**C10**	**C11**
1. Develop a draft strategy to address top four (4) conditions by 31/03/2007	N										
2. To provide cervical cancer screening services for 25% of women aged 20- 65 attending IDCC and hospital based MCH at 26 hospitals by 31/03/2007	Y	Y	N	Y	Y	N	Y	Y	Y	Y	Y
3. To establish trauma management system at two referral hospitals by 31/03/2007	N										
4. To achieve 80% of essential medicines at Central Medical Supplies by 31/03/2007	N										
5. To reduce waiting time for selected services	Y	Y	N	Y	Y	N	Y	Y	Y	Y	Y

The four experts differed on their assessment of customer focus of the departments' performance plans across the ten departments included in this research. Worksheets illustrating the assessment of the departments' performance objectives by the four experts are included in appendix I.

Worksheets for different departments give some insights into experts' views regarding the extent of customer focus of individual departments' performance objectives. The information contained in worksheets is however not sufficient to determine the extent of customer focus of departments' performance plans. There was a need to further analyse the responses from experts and aggregate them to get an overall view of each department's extent of customer focus. Section 4.2.3 discusses the process involved in determining the customer focus of each department's performance plan.

4.2.3 Determining the customer focus/ orientation of departments' performance plans

Responses from the four experts were aggregated to assist in determining the customer orientation of each department. Determining the customer orientation of the departments' performance plans facilitates categorising the departments as either high or low customer focused. This is needed to achieve the objectives of this research and examine the impact of customer focus/orientation of departments' PBRS performance plans on customers' perceived service quality.

As already stated, the responses from the experts provided mixed information regarding each department' customer focus. In order to assess the level of customer focus of each department's performance plan, a two step process was followed. The first step was to calculate the average 'Yes' response for each department per expert. This was calculated as the total number of 'Yes' responses that an expert gave to each objective under the ten assessment criteria (rules) for each department, divided by the number of objectives in that department. If all the objectives were perfectly met, and the experts' responses were all 'Y', then the average 'Y' response would be ten (10), which is the equivalent of the ten rules used to assess departments' performance objectives, with the average 'Y' response for each department ranging between zero and ten (10). Table 4.4 is an illustration of the average 'Y' response for the Department of Culture and Youth as assessed by expert B2. Objectives are represented by codes obtained from the performance plans. The average 'Y' response is shown at the end, as 3.17 or 3.2%. This indicates that according to expert B2, performance objectives from the Department of Culture and Youth did not do well in meeting the requirements of the evaluation criteria (rules). As shown in Table 4.4, most of the responses from judge B2 were 'N', which means the objectives failed to meet the requirements and thus, supporting the low average 'Y' response.

Table 4.4 average 'Y' response for the department of Culture and Youth (by expert B2)

Objectives	**Rules**										**Total 'Y'**
	C1	**C2**	**C3**	**C4**	**C5**	**C6**	**C7**	**C8**	**C10**	**C11**	
C1	Y	N	N	N	Y	Y	Y	N	N	Y	5
C3	N	N	N	N	N	N	Y	N	N	Y	2
C5	Y	N	N	N	Y	Y	Y	N	N	Y	5
C6	Y	N	N	N	N	N	Y	N	N	Y	3
P4	N	N	N	N	N	N	Y	N	N	Y	2
L1	N	N	N	N	N	N	Y	N	N	Y	2
Average 'Y' response											**3.17**

The above process was followed in calculating the average 'Y' response for the remaining nine departments for each expert. Table 4.5 shows a summary of the average 'Y' responses for the ten departments across the four experts. Experts' names are represented by the first letter of their given names. The total average 'Y' response for the four experts was calculated for each department. The departments were then ranked on the basis of their total 'Y' response from the highest to the lowest. Departments with a high total average 'Y' response were ranked high and those with lower total average were ranked low. Ranking of the departments was necessary as it facilitated in the categorisation of the departments. Once the departments were ranked, it was possible to select those targeted for the customer survey.

In this research, six departments, three high customer focused and three low customer focused, were targeted for the customer survey. On the basis of the average 'Y' response, the top three departments were allocated to the high customer focused category and these were Clinical Services 6.31, Trade and Consumer Affairs 5.7 and Civil and National Registration 5.46. On the other hand the bottom three departments allocated to the low customer focused category were Culture and Youth 4.15, Social services 3.62 and Tourism 3.48.

Table 4.5 Department rankings based on total average 'Y' response

Departments	Average 'Y' response per judge				Average for all judges	Department ranking
	Judge A	**Judge B1**	**Judge B2**	**Judge W**		1 (highest) 10 (lowest)
Trade and consumer Affairs	2.25	7.80	6.50	6.25	**5.7**	2
Wildlife and National Parks	0	9.17	4.00	4.25	**4.36**	6
Tourism	0	7.25	2.67	4.00	**3.48**	10
Independent Electoral Commission	0.20	8.10	5.29	6.10	**4.92**	5
Botswana National Library Services	1.00	7.75	4.67	4.00	**4.36**	6
Civil and National Registration	1.50	8.00	7.33	5.00	**5.46**	3
Clinical Services	0	9.25	8.00	8.00	**6.31**	1
Culture and Youth	1.71	8.20	3.17	3.50	**4.15**	8
Public Health	2.50	7.75	5.71	5.71	**5.42**	4
Social Services	0	6.56	2.82	5.10	**3.62**	9

The researcher and the research supervisors (advisors) met to discuss the departments' rankings on the basis of the average 'Y' response (Table 4.5), and they observed that while the average 'Y' responses could be used as part of the criteria for ranking the departments, it was not adequate on its own. They further observed that the ranking of departments could also be affected by other factors especially the proportion of customer-focused objectives to the total objectives that each department had. Ideally a department that had a high percentage of customer focused performance objectives was more likely to satisfy customers' needs than a department having only a few objectives that addressed service delivery to customers. Therefore, the percentage of objectives that were customer focused was considered an important part of the criteria for determining departments' customer orientation.

The percentage of customer-focused objectives was calculated for the ten departments. As discussed in section 4.2.2, experts were requested to identify customer-focused objectives from each department and record that in their worksheets as part of the criteria for examining customer orientation. On the basis of the number of objectives identified by each judge as customer focused, the percentage of customer focused objectives was calculated for each of the ten departments. Percentages from all the four judges were then averaged for each department. Departments that had a higher average percentage of final consumer focused objectives were considered to be more customer-focused than those with a lower percentage. The departments were then ranked on the basis of the average percentage of customer-focused objectives. Table 4.6 provides the percentages from each expert, the average percentage of customer- focused objectives, as well as the department rankings.

Table 4.6 Percentage of customer focused objectives

Department	**% of customer focused objectives per judge**				**Average % for all judges**	**Department Ranking**
	Judge A	**Judge B1**	**Judge B2**	**Judge W**		
Trade and consumer Affairs	4/13= 31%	5/13=38 %	5/13=38%	4/13=31%	34.5	7
Wildlife and National Parks	3/14=21%	6/14=43 %	6/14=43%	4/14=29%	34	8
Tourism	2/12=17%	4/12=33.3 %	3/12=25%	2/12=17%	23	10
Independent Electoral Commission	5/14=36%	10/14=71 %	7/14=50%	10/14=71%	57	3
Botswana National Library Services	3/6=50%	4/6=67%	3/6=50%	3/6=50%	54	4
Civil and National Registration	2/11=18%	5/11=45 %	3/11=27%	5/11=45%	33.8	9
Clinical Services	2/5=40%	4/5=80%	5/5=100%	2/5=40%	65	1
Culture and Youth	7/21= 33%	10/21=48 %	6/21=29%	6/21=28.6 %	35	6
Public Health	6/12=50%	8/12=67 %	7/12=58%	7/12=58%	58	2
Social Services	6/18=33%	9/18=50 %	11/18=61%	10/18=56%	50	5

On the basis of the departments' rankings in Table 4.6, the top three and high customer focused departments were Clinical Services (65%), Public Health (58%) and Independent Electoral Commission (57%). The bottom three (low customer focused) departments were Wildlife and National Parks (34%), Civil and National Registration (33.8 %) and Tourism (23%).

Having assessed the departments' level of customer orientation using the two methods (average 'Y' response and percentage of customer focused objectives), the next step was to use the methods to categorise the departments into high and low customer orientation. The next section discusses the categorisation of the departments.

4.2.4 Categorisation of the departments

Following content analysis, the final step was to categorise the departments into high and low customer focus. As mentioned in section 4.2.3, departments' performance plans were categorised on the basis of the average 'Y' responses from experts as well as the percentage of customer focused objectives. Tables 4.25 and 4.26 in the previous section provided the rankings of the departments on the basis of both methods. There were inconsistencies with regard to the rankings of some departments in both Tables 4.25 and 4.26. These departments either had higher rankings for average 'Y' response but lower rankings for percentage of customer focused objectives and vice versa. An example of these departments was Civil and National Registration, which was ranked high at position three for average 'Y' response but performed poorly on the basis of percentage of customer-focused objectives where it was ranked position 9. This inconsistency was also identified in other departments, such as Trade and Consumer Affairs, which ranked position 2 on average 'Y' response but ranked position 7 for percentage of customer focused objectives. Other departments with inconsistent rankings were Botswana National Library Service, and Social Services. Due to the inconsistency of these departments' rankings, it was decided that it was not possible to categorise them as either high or low customer focused.

Despite the inconsistency observed in the four departments discussed above, six of the ten departments showed consistency in their ranking. These departments were either ranked lower (position six and higher) for both average 'Y' response and percentage of customer focused objectives, or had high rankings (positions five and below) in both. An example of such departments was Clinical Services, which was consistently ranked at position one for both average 'Y' response and percentage of customer focused objectives. In order to facilitate categorisation of the departments into high and low customer orientation, it was decided that departments with rankings of position five or below in both percentage of customer focused objectives and average 'Y' response be categorised as '*high customer focused*'. Departments having rankings of position six and above in both cases were categorised as '*low customer focused*'. Table 4.7 shows the rankings of the departments using both the average 'Y' response and average percentage of customer-focused objectives. The overall ranking for each department is also indicated. Where departments' rankings were inconsistent, they were allocated an 'inconsistent' rank. From Table 4.7, six departments had consistent rankings. Three of these departments fell into the high customer focused category while the other three were in low customer focused category.

Table 4.7 departments' overall rankings

Department	**Average 'Y' response and department rank**	**Average percentage of customer focused objectives and rank**	**Overall rank**
Trade and consumer Affairs	5.7 (2)	34.5 (7)	Inconsistent
Wildlife and National Parks	4.36 (6)	34 (8)	**4**
Tourism	3.48 (10)	23 (10)	**6**
Independent Electoral Commission	4.92 (5)	57 (3)	**3**
Botswana National Library Services	4.36 (6)	54 (4)	Inconsistent
Civil and National Registration	5.46 (3)	33.8 (9)	Inconsistent
Clinical Services	6.31 (1)	65 (1)	**1**
Culture and Youth	4.15 (8)	35 (6)	**5**
Public Health	5.42 (4)	58 (2)	**2**
Social Services	3.62 (9)	50 (5)	Inconsistent

On the basis of the overall rankings and customer focus category, these six departments were selected for customer survey (phase 2 of data collection).

High customer focused/ orientation (position 5 and below)

1. Clinical Services (position 1 in both cases)
2. Public Health (positions 4 and 2)

3. Independent Electoral Commission (positions 3 and 5)

Low customer focused/oriented

1. Wildlife and National Parks (positions 6 and 8)
2. Culture and Youth (positions 8 and 6)
3. Tourism (position 10 in both cases)

Having categorised the departments into high and low customer orientation, the next step was to undertake the SERVQUAL survey for the departments in the two categories of high and low customer focus. The survey was undertaken to allow the researcher to examine the impact of customer focus of departments' PBRS performance plans on customers' perceived service quality.

The next section discusses the analysis of data collected using SERVQUAL instrument.

4.3.0 Data analysis part II

This section covers the discussion on the quantitative data analysis and findings from data collected in the second phase. Quantitative data were collected using the SERVQUAL survey instrument and were analysed using SPSS. The analysis was undertaken to examine customers' perceived service quality for government departments categorised as either high or low customer focused. As discussed in Section 3.6, categorisation of the departments was based on the extent of customer focus of their (departments) PBRS performance plans. Thus, in the process of examining customers' perceived service quality, the effect of customer focus of the departments' PBRS plans on customers' perceived service quality would also be explored. The ultimate aim is to determine whether the use of PBRS had any impact on public sector customers' perceived service quality.

The discussion in this section is divided into three parts:

i) Demographic profile of respondents

ii) Analysis of the individual department's SERVQUAL scores

iii) Comparison between the different departments and testing the hypothesis.

4.3.1 Sample profile (demographics)

The discussion here focuses on the respondents' demographic information or sample profile. There is a need to understand the demographic distribution of the sample as it aids in ascertaining whether or not the sample is representative of the targeted population. The sample was drawn from the Botswana population; the starting point is to establish whether the sample is representative of Botswana consumers of services from the six departments. Determining sample representativeness is important since the sample is only part of the total population of consumers for these services and could potentially not be a true reflection of the characteristics of the population. Sample representativeness is important as it gives the researcher the confidence to ascribe the results of the survey to the whole population (Janes, 2001). On the other hand, lack of sample representativeness could result in systematic differences between the sample and the population (Chadwick, 1991) and generalisations made between the two (sample and population) would be fundamentally flawed (Wilcox, Bellenger, and Rigdon, 1994).

In view of the importance of sample representativeness, quantitative data analysis started with a description of the sample demographics. The sample profile was then compared with the Botswana population data to identify similarities and differences, as we do not have data on the consumers of each of the target services.

A sample of 900 respondents aged 18 years and over, who were customers of one of the six Botswana government departments (150 per department) examined in this study, were interviewed. Table 4.8 shows a summary of the overall sample distribution in terms of gender, age group, employment status, monthly income and education level.

As shown in Table 4.8, a total of 494 males and 406 females responded to the survey. Males accounted for almost 55% and females 45% of the respondents. According to the Central Statistics Office of Botswana (C.S.O), the gender distribution in Botswana is 52% female and 48% male. A comparison of the sample profile with the Botswana population female to male gender ratio shows that gender distribution in the sample is slightly skewed towards males. This skewed distribution has the potential to affect the survey results, only if gender impacts on responses received.

Table 4.8 Overall sample demographic distribution

Variable	Parameter	Respondents Count	Percentage
Gender	Male	494	55
	Female	406	45
Age group	18- 25 years	260	28.9
	26- 35 years	301	33.4
	36- 45 years	189	21
	46- 55 years	113	12.6
	Over 55 years	37	4.1
Employment	Unemployed	255	28.3
	Self-employed	225	25
	Employed technical	83	9.2
	Employed administrative	261	29
	Employed academic	76	8.4
Income	Less than P 500	247	27.4
	P501- P1, 500	107	11.9
	P1, 501- P3, 000	77	8.6
	P3, 001- P4, 500	73	8.1
	P4, 501- P6, 000	64	7.1
	P6, 001- P7, 500	71	7.9
	P7, 501- P10, 000	40	4.4
	Over P10, 000	221	24.6
Education	No formal education	10	1.1
	Primary school	115	12.8
	High school	368	40.9
	University	324	36
	Diploma/Degree	83	9.2
	Post graduate		

In terms of ages, the 26-35 years are the majority within the sample at 33.4% followed by the 18-25 years 28.9%. The high number of respondents in both the 18-25 years and 26- 35 years age groups is consistent with the age distribution in the Botswana population. According to figure 5, which shows the Botswana population pyramid by age group, lower age groups including 18-25 years and 26-35 years contribute a larger share to the population. In Table 4.9 which provides additional demographic information on Botswana population, the report on age structure for the

Botswana population by Nair (2004), also shows that the percentage population decreases as age group increases. The sample distribution in terms of age groups is consistent with the Botswana population. That is expected to enhance the representativeness of the sample.

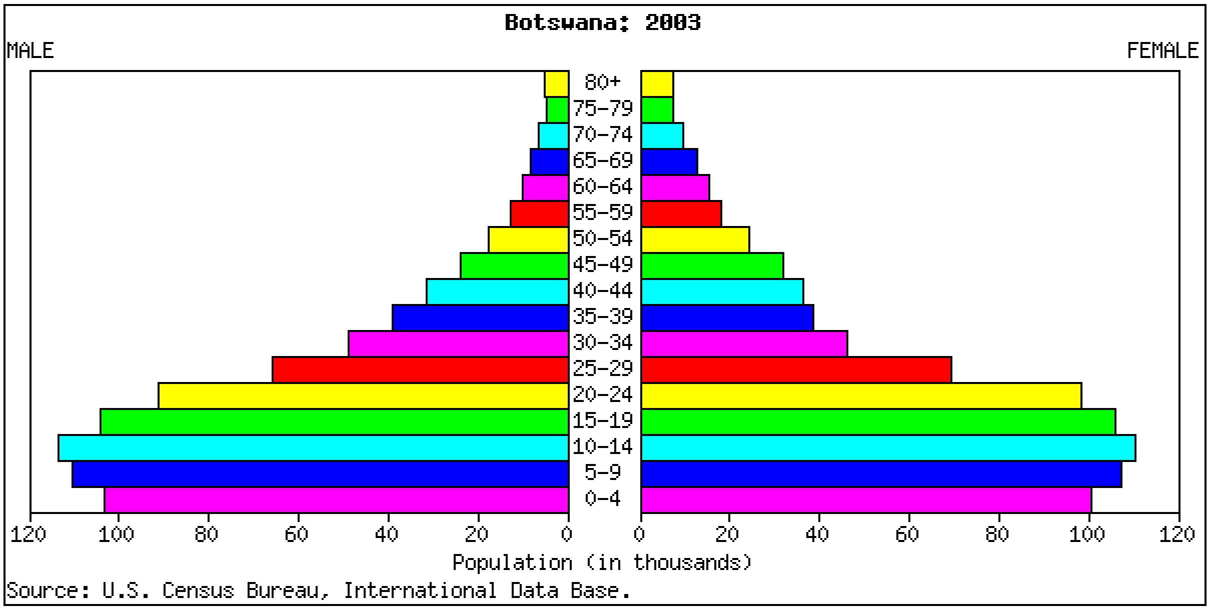


Figure 6 Botswana population pyramid

Table 4.9 presents further demographic information about the Botswana population. The population distribution is listed in age groups, and the percentage count for each age group is given in the adjacent column. This table supplements the information contained in Figure 5. According to Table 4.9, the number of people in each age group decreases as age increases. In that way, the number of people in the 26-35 years age group is expected to be less than those in the 18-25 years age group. In the sample, the 26-35 years age group has a larger percentage of respondents than the 18-25 years (33.4% versus 28.9%). In that respect, the age distribution with regards to the 26-35 years is not completely consistent with the Botswana population demographics. The implication is that the 26-35 years were over represented in the sample and this could affect the representativeness of the results pertaining to that age group, if the services examined are targeted to the population overall.

Table 4.9 Botswana population demographics

Variable	**Parameter**	**Count/Percentage**	**Source**
Gender	Male Female	48% 52%	Botswana government Central statistics office (C.S.O) 2007
Age structure	0-14 years 15-19 years 20- 24 years 25-29 years 30-34 years 35-39 years 40-44 years 45-49 years 50-54 years 55-59 years 60-64 years 65 years and over	36.6% 12.2% 10.2% 8.8% 6.8% 5.7% 4.65% 3.8 % 2.7% 2.0% 1.7% 5%	Nair (2004).
Employment	Unemployed rate	23.8%	Nationmaster.com
Income	Average monthly earnings	P3, 417	C.S.O (2007)
Education	National literacy Male literacy Female literacy	81.2% 80.4% 81.8%	C.S.O (2007)

In the sample (Table 4.8), the over 55 years age group has the lowest number of respondents (37) which accounts for just 4.1% of the sample. This is fairly representative of the over 55 years age group in Botswana. According to Nair (2004) and as shown in Table 4.9, people aged 65 years and over account for 5% of the Botswana population. The over 55 years in this sample includes people who are 65 and over. Thus the sample response of 4.1% for the over 55 years is consistent with the 5% for people aged over 65 years in Botswana. In that way, the sample results would be representative of the Botswana population with regards to the over 55 years age group.

With regards to employment, Table 4.8 shows that 28.3% of the respondents were unemployed. The unemployment rate in Botswana stands at around 23.8% (Nation master.com). This is lower than the 28.3% of the unemployed respondents observed in the survey. As shall be discussed later in section 4.32, the unemployed response was high because of the large number of unemployed youth respondents for the Department of Culture and Youth. Given the large unemployment statistics in the sample, the sample is less representative with regard to employment status. This could have an impact on the results if employment status significantly affects responses.

According to the Botswana Central Statistics Office, the average monthly income in Botswana stands at P 3, 417 (P denotes the Botswana currency). On the other hand, the median monthly income in this research is 4.00 which translates to P3, 001 - P4,500 income category in the questionnaire (refer to Table 4.10). The P3, 417 for the Botswana population is within the same range as the median income in this study. The sample is therefore consistent with the population in that regard. This is expected to increase the representativeness of the sample results to the Botswana population.

Table 4.10 income distribution

Respondents' gender	Median	N	Income category
Male	4.00	494	P3,001- P4,500
Female	3.00	406	P1,501- P3,000
Total	4.00	900	P3,001- P4,500

The distribution of respondents by level of education shows that the majority of the respondents were well educated. Figure 6 illustrates the level of education attained by the respondents. As indicated in the diagram, most of the respondents had high school qualifications, followed by university qualifications (diploma and degree) and primary school certificates. Only a few respondents had no formal education qualifications.

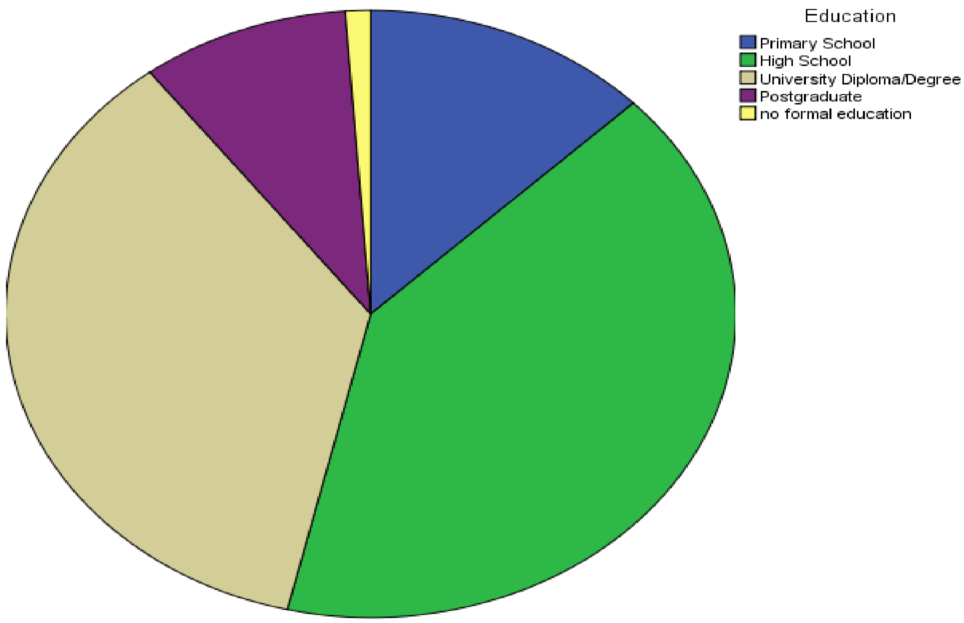


Figure 7 respondents' level of education

While respondents were well educated there were some illiterate respondents. Table 4.11 shows respondents' education level by gender. According to the table, 1.1% of the respondents did not have formal school qualifications. Some of these respondents would probably be illiterate. Botswana, like other developing countries has a proportion of people who could not go to school for various reasons. As shown in Table 4.9 the adult literacy level in Botswana is approximately 81.2%. Thus, almost 19% of people in the country are considered illiterate. The literacy level observed in the sample (only 1.1% illiterate) is much better than the overall Botswana literacy level. This could be attributed to the fact that the respondents for this survey were mainly sourced from cities and towns and were more likely to be literate than the general population.

In terms of gender, female respondents were generally more educated with only 0.2% having no formal education respondents compared to 1.8% for the males. Table 4.9 shows that the Botswana gender based literacy rate is 80.4% for males and 81.8% for females. Thus, females are slightly more literate than their male counterparts. This is consistent with the results obtained in the sample where the difference in literacy levels between males and females is at a level of just over 1%. 47% of females had secondary school qualifications compared to 35.8% of males. Males had a higher percentage in university qualifications of 38.9% while females had 32.5%.

Table 4.11 Education levels by gender

Education level	Count	Respondent's gender		
		Male	Female	Total
Primary School	Count	71	44	115
	% within Respondent's gender	14.4%	10.8%	12.8%
High School	Count	177	191	368
	% within Respondent's gender	35.8%	47.0%	40.9%
University Diploma/Degree	Count	192	132	324
	% within Respondent's gender	38.9%	32.5%	36.0%
Postgraduate	Count	45	38	83
	% within Respondent's gender	9.1%	9.4%	9.2%
No formal education	Count	9	1	10
	% within Respondent's gender	1.8%	.2%	1.1%
Total	Count	494	406	900
	% within Respondent's gender	100.0%	100.0%	100.0%

In summary there are some minor differences between the sample demographic statistics and the Botswana population. The minimal differences observed suggest that the sample is deemed to be generally representative of the Botswana population. While the overall sample is generally representative, there are some differences in respondents' demographics based on the individual departments examined.

The next section discusses distribution of respondents in the six government departments.

4.3.2 Departments' sample distribution

The last section described the overall sample demographic characteristics and made comparison with the Botswana population. As observed, the sample has slightly more males than females than occurring in the Botswana population. In this section individual departments are evaluated on the basis of gender, age group, employment, income and education. The distribution of respondents' demographic characteristics is also examined along these variables.

Table 4.12 shows respondents' distribution by department and gender. In terms of departments' gender distribution, the departments of Public Health, and Independent Electoral Commission had equal numbers of respondents (75) for both sexes. Given the Botswana gender distribution of

52% female and 48% male, the 50/50 spilt in these two departments is gender marginally different, although close to the Botswana distribution. Clinical Services and Wildlife & National Parks had more male responses at 61.3% and 75.3% respectively. The gender distribution was more skewed to males in the department of Wildlife and National Parks. This might potentially have an effect on the results obtained from the two departments especially Wildlife and National Parks which has a much higher percentage of male customers. The Department of Wildlife and National Parks provides services that include among others, issuing of hunting permits to the public. Given that hunting is usually done by males, it could be expected that the majority of customers for this department would be male.

Table 4.12 Respondents distribution by department and gender

			Respondent's gender		
			Male	Female	**Total**
Department name	Clinical Services	**Count**	92	58	150
		% within department % overall sample	(61.3%) 18.6%	(38.7%) 14.3%	(100%) 16.7%
	Public Health	**Count**	75	75	150
		% within department % overall sample	(50%) 15.2%	(50%) 18.5%	(100%) 16.7%
	Independent Electoral Commission	**Count**	75	75	150
		% within department % overall sample	(50%) 15.2%	(50%) 18.5%	(100%) 16.7%
	Culture and Youth	**Count**	72	78	150
		% within department % overall sample	(48%) 14.6%	(52%) 19.2%	(100%) 16.7%
	Wildlife and National Parks	**Count**	113	37	150
		% within department % overall sample	(75.3%) 22.9%	(24.7%) 9.1%	(100%) 16.7%
	Tourism	**Count**	67	83	150
		% within department % overall sample	(44.7%) 13.6%	(55.3%) 20.4%	(100%) 16.7%
	Total	**Sample Count**	(54.9%) 494	(45.1%) 406	(100%) 900
		% within respondent's gender	**100.0%**	**100.0%**	**100.0%**

With the exception of Wildlife and National Parks and Clinical Services, the disparity in gender distribution was generally small. The departments of Tourism, and Culture & Youth have slightly high percentages of female respondents at 55.3% and 52% respectively. The Department of Culture and Youth has a 52% female and 48% male distribution. This distribution is consistent with the Botswana population with 52% female and 48% male. This enhances the representativeness of the sample for this department to the overall Botswana population. In the case of other departments, the slightly biased gender distribution may have some minimal effects on the results.

Table 4.13 Respondents distribution by age group

Department name	**Age group**					
	18-25 years	26-35 years	36-45 years	46-55 years	Over 55 years	Total
Clinical Services	59	51	22	12	6	150
	22.7%	16.9%	11.6%	10.6%	16.2%	16.7%
Public Health	66	41	31	11	1	150
	25.4%	13.6%	16.4%	9.7%	2.7%	16.7%
Independent Electoral Commission	30	60	41	16	3	150
	11.5%	19.9%	21.7%	14.2%	8.1%	16.7%
Culture and Youth	70	52	10	13	5	150
	26.9%	17.3%	5.3%	11.5%	13.5%	16.7%
Wildlife and National Parks	9	29	47	45	20	150
	3.5%	9.6%	24.9%	39.8%	54.1%	16.7%
Tourism	26	68	38	16	2	150
	10.0%	22.6%	20.1%	14.2%	5.4%	16.7%
Total	(28.9%) **260**	(33.4%) **301**	(21%) **189**	(12.6%) **113**	(4.1%) **37**	**900**
	100.0%	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**

Table 4.13 shows the distribution of respondents by age group. As might be expected given its target group, the Department of Culture and Youth has the highest number of respondents in the 18-25 years age group totalling 70 or 27%. It was followed by the Department of Public Health at 25.4% (66 respondents) and Clinical Services at 22.7% (59 respondents). The Department of Culture and Youth is responsible for among others, the development of youth by encouraging their (youth) participation in the economic, social and political life of Botswana. (Brief descriptions of departments' services are included at the appendix iv) The department provides services such as youth recreational facilities, and the youth grant, which is a loan provided to

out-of-school youth (18-25 years) to start profit making business ventures. Consequently, this department is expected to have a large proportion of youth as its customers than the other five departments.

Table 4.14 respondents' income distribution

Monthly Income	**Department name**						**Total**
	Clinical services	Public Health	Independent Electoral Commission (IEC)	Culture and Youth	Wildlife and National Parks	Tourism	
Less than P500	47 (31.3%)	33 (22%)	23 (15.3%)	69 (46%)	41 (27.3%)	34 (22.7)	**247 (27.4%)**
P501- P1, 500	16 (10.7%)	12 (8%)	3 (2%)	36 (24%)	13 (8.7%)	27 (18%)	**107 (11.9%)**
P1, 501- P3, 000	13 (8.7%)	2 (1.3%)	3 (2%)	17 (11.3%)	15 (10%)	27 (18%)	**77 (8.6%)**
P3, 001 – P4, 500	9 (6%)	3 (2%)	8 (5.3%)	15 (10%)	13 (8.7%)	25 (16.7%)	**73 (8.1%)**
P4, 501- P6, 000	13 (8.7%)	13 (8.7%)	10 (6.7%)	5 (3.3%)	8 (5.3%)	15 (10%)	**64 (7.1%)**
P6, 001- P7, 500	6 (4%)	27 (18%)	11 (7.3%)	5 (3.3%)	11 (7.3%)	11 (7.3%)	**71 (7.9%)**
P7, 501- P10, 000	7 (4.7%)	12 (8%)	13 (8.7%)	3 (2%)	5 (3.3%)	0 (0%)	**40 (4.4%)**
Over P10, 000	39 (26%)	48 (32%)	79 (52.7%)	0 (0%)	44 (29.3%)	11 (7.3%)	**221(24.6 %)**
Total	150 (100%)	150 (100%)	150 (100%)	150 (100%)	150	150	**900 (100%)**

Table 4.14 provides respondents' income distribution by department. The majority of respondents (27.4%) earned less than five hundred Botswana Pula (P) per month (P500 is equivalent to almost AU$100). The Department of Culture and Youth has the highest number of respondents in the less than P500 category at 46% while Independent Electoral Commission had the lowest proportion at 15.3%. The large number of respondents earning less than P500 in the Department of Culture and Youth could be attributed to the fact that most of the respondents were youth, and some were still at school or were unemployed. Therefore their monthly earnings are expected to be low.

The second highest number of respondents (24.6%) earned over P10, 000 per month. The majority of respondents for the Independent Electoral Commission (52%) earned more than P10, 000 per month. On the other hand the Department of Culture and Youth had a 0% or no respondents in the over P10, 000 category. For the reasons already mentioned, that most respondents in this department were youth, it is possible that none of the majority of people using this department's services would have reached earnings of P10, 000. As stated earlier the majority of respondents in this department earned less than P500. With the exception of the over P10, 000 income category, which had a high percentage of respondents, there was an inverse relationship between income category and the number of respondents. When income per month increased, the number of respondents decreased between the 'less than P500' and the P10, 000 income categories. In Section 4.31 it was identified that the average monthly income in Botswana is P3,417 and that this was within the same range as the sample median income (P3,001-P4,500). In that way the sample is considered to be representative of the population in terms of income distribution. As we did not have data for income distribution among the different age groups in Botswana, the average monthly income was considered appropriate for making comparisons between the sample and population.

Table 4.15 shows the employment status of the respondents by department. Just over one fourth of the respondents were unemployed (28%). As observed in Section 4.31, the percentage of unemployed respondents in the sample (28.3%) is slightly higher than the overall Botswana unemployment rate of 23.8%. The difference could be attributed to the large number of unemployed youth (respondents) who got services from the Department of Culture and Youth. For the employed, 225 (25% of the sample) were in self-employment category. The majority (261) of the respondents were employed in administrative fields. The lowest employer was the academic category with only 76 or 8.4% of the total respondents. It was followed by the technical category with 9.2% (86 respondents).

Table 4.15 respondents' employment status

Employment status	**Department name**						**Total**
	Clinical Services	Public Health	IEC	Culture and Youth	Wildlife and National Parks	Tourism	
Unemployed	51 (34%)	47 (31.3%)	29 (19.3%)	60 (40%)	34 (22.7%)	34 (22.7%)	255 (28.3%)
Self-employed	35(23.3%)	11 (7.3%)	16 (10.7%)	63(42%)	62 (41.3%)	38 (25.3%)	225 (25%)
Employed Technical	16(10.7%)	13(8.7%)	16 (10.7%)	4(2.7%)	18 (12%)	16 (10.7%)	83 (9.2%)
Employed administrative	30 (20%)	70(46.7%)	65 (43.3%)	15(10%)	29 (19.3%)	52 (34.7%)	261 (29%)
Employed academic	18 (12%)	9 (6%)	24 (16%)	8 (5.3%)	7 (4.7%)	10 (6.7%)	76 (8.4%)
Total	150	150	150	150	150	150	900

When it comes to respondents' employment by department, as expected based on the services delivered, the Department of Culture and Youth has the highest number of unemployed respondents totalling 60, or 40% of the unemployed respondents. Clinical Services had the second largest unemployed respondents at 34%. Respondents for the Department of Clinical Services were adults (18 years and over) who have had services from any government health facility such as hospitals. It is expected that both employed and unemployed people would visit a government health facility for health services. However some of the employed people may prefer to use private health facilities for quicker and better services. Therefore unemployed people are more likely to visit government health facilities than the employed, hence the high level of unemployed response for Clinical Services.

Table 4.16 shows education level by department. As it has been discussed in Section 4.31, respondents in this research were generally well-educated. Only 10 respondents or 1.1% of the sample did not have formal education qualifications. According to this table, the highest number of respondents with no formal education qualifications was for the Department of Wildlife and National Parks, which had 5 respondents. The Department of Tourism has the highest proportion of respondents with university qualifications at 48%. As discussed in Section 4.5, the Department of Tourism is responsible for formulation and execution of programs designed to promote tourism in Botswana. It is possible that some of its customers would be tourists seeking information about tourist facilities. These customers will potentially have high qualifications and money to spend on tourist activities. This could explain why the department has a high number of respondents with university diplomas and degrees.

Table 4.16 respondents' education level by department

Level of Education	**Department name**						
	Clinical Services	Public Health	IEC	Culture and Youth	Wildlife and National Parks	Tourism	**Total**
Primary School	17 (11.3%)	9(6%)	6(4%)	20 (13.3)	52 (34.7%)	11(7.3%)	115 (12.8%)
High School	53(35.3 %)	63(42%)	78(52%)	96 (64)	28 (18.7%)	50 (33.3%)	368 (40.9%)
University Diploma/Degree	60(40%)	56(37.3)	51(34%)	21(14)	64 (42.7%)	72 (48%)	324(36%)
Post graduate	18(12%)	22(14.7 %)	15(10%)	10(6.7%)	1 (0.7%)	17(11.3%)	83 (9.2%)
No formal education	2(1.3%)	0 (0%)	0 (0%)	3 (2%)	5 (3.3%)	0 (0%)	10 (1.1%)
Total	150	150	150	150	150	150	900

Generally the highest proportion of respondents across the six departments had high school qualifications (40.9%) followed by university qualifications at 36%. This is to be expected since most people would like to advance beyond primary school. The Botswana national literacy level stands at 81.2% (table 4.9), which implies that approximately 19% of people in Botswana are iliterate. On the other hand, the sample demographics show that only 1.1% of the respondents had no formal education qualifications. The literacy level in the sample (approximately 99%) was not consistent with the overall population and may impact in the results if education affects responses.

4.3.3 Section summary

The demographic profile of the sample shows that the male to female proportion is 55%:45%. The largest sample of males was for the Department of Wildlife and National Parks. The Department of Culture and Youth had more younger respondents 18-25 years. When it comes to education the majority of the respondents were educated, with only 1.1% of respondents who had no formal education qualifications. Males had a higher percentage in university qualifications of 38.9% while females had 32.5%.

Most respondents were employed in the administrative sector (29%) while the academic sector was the lowest employer (8.4%). In terms of average monthly income, most respondents earned less than P500. This could be attributed to the large number of unemployed respondents for the Department of Culture and Youth. The median monthly income for the sample was in the range of P3, 001 to P4,500. This is consistent with the Botswana average monthly income of P3, 417.00 (CSO).

With a few exceptions (Wildlife and National Parks, and Clinical Services), the sample distribution was generally consistent with Botswana population demographics. It is expected that this would enhance the representativeness and validity of the sample to the Botswana population.

The next section discusses the findings of the SERVQUAL survey. SERVQUAL results from the six departments are reported using both weighted and unweighted gap scores. The results show how customers perceived the quality of services for each of the six government departments participating in the study. Service quality is measured in terms of the difference between customers' expected service and their perceived service experience.

4.4.0 Measuring customers' perceived service quality using SERVQUAL

The previous section looked at sample distribution with a view to establishing the representativeness of the sample to the Botswana population. As observed, the sample was generally representative of the Botswana population. As the sample was representative, it is expected that the results obtained in this study would be generally applicable to the Botswana population using services from the six departments.

This section discusses the results of the SERVQUAL survey, investigating customers' perception of service quality for each department. Results for each department are reported on the basis of the performance minus expectations scores (P-E) gap scores for the five SERVQUAL dimensions. The discussion also focuses on the implications of the overall SERVQUAL scores for departments' future service improvements (although this is not the focus of the research). SERVQUAL dimension scores for each department are examined to determine the magnitude of the gap between customers' expectations and perceptions. High dimension gap scores usually make a large contribution to the overall SERVQUAL score. Identifying dimensions with large negative gap scores would assist departments in targeting service areas that required urgent improvements. Thus, departments would be able to prioritise their service improvements and target individual dimensions with the largest negative gaps. In developing their PBRS performance plans, departments would also be able to target dimensions that require service improvements. This would result in PBRS performance plans being more customer-focused and result in improved service quality.

The next section looks into the reliability of the modified SERVQUAL instrument used in this research and the results are reported.

4.4.1 Reliability of SERVQUAL instrument

Prior to reporting the results of this survey, it is vital to test the reliability of the modified SERVQUAL instrument used in the data collection. Yockey (2008) defines reliability as "…the consistency or repeatability of scores on some measure of interest" (p.49). The aim of a reliability test is to establish the extent to which the survey instrument would produce consistent results if it were applied to a different set of respondents. Parasuraman et al. (1988; 1991) tested the internal consistency of SERVQUAL and found it to be reliable. Reliability of SERVQUAL has also been tested within a public sector context (Orwig et al., 1997; Fuentes, 1999; Donnelly et al., 2006) and acceptable levels of internal consistency were obtained. Despite the acceptable levels of reliability observed in the previous studies, it is important that the instrument's reliability be tested in the specific context of this study. As with all applications of SERVQUAL, the instrument used in this study was also slightly modified to make it relevant to the departments studied. Since the instrument was modified, it was different from the original instrument by Parasuraman et al. (1988; 1991) and therefore it had to be tested for internal consistency. In addition, the internal consistency of survey instruments such as SERVQUAL depends also on the responses from the survey (Cook and Thompson, 2000). In other words, it is possible for the survey instrument to exhibit high reliability scores in one survey and low scores in another survey of respondents.

The internal consistency of dimensions within the modified SERVQUAL instrument were tested using Cronbach's Coefficient Alpha. Cronbach's alpha coefficient has been used to test the reliability of the SERVQUAL instrument in previous public and private sector studies (Babakus and Mangold, 1992; Triplett, Yau, and Neal, 1994; Orwig et al., 1997; Fuentes, 1999; Cook and Thompson, 2000; Badri, Abdulla, and Al-Madani, 2005; Donnelly et al., 2006). In this research, Cronbach's alpha coefficient was calculated on perception and expectation scores across the whole sample, as well as for each department. The overall sample alpha scores using SPSS are reported in Table 4.17.

Table 4.17 Results of the Cronbach' Coefficient Alpha reliability test

Dimension	**Cronbach' Coefficient Alpha**	
	Perceptions	Expectations
Tangibles	0.753	0.832
Reliability	0.859	0.888
Responsiveness	0.845	0.832
Assurance	0.843	0.889
Empathy	0.844	0.853

Cronbach's alpha reliability coefficient normally varies between zero (0) and one (1). Alpha scores indicate the correlation of items from the survey instrument (Nunnally, 1978). The closer the values are to 1 the greater the internal consistency. The acceptable level of reliability for alpha coefficients depends on the nature of the study. However, as a rule of thumb, Nunnally (1978) suggested alpha coefficient level of 0.70 or higher as a generally acceptable level of reliability.

From Table 4.17 it can be seen that scores for all five perception and expectation dimensions are above the 0.7 threshold. The alpha scores indicate that the internal consistency of the SERVQUAL instrument was high and thus the scores obtained were reliable. The instrument is therefore suitable to use in the study.

Reliability scores were also calculated for individual departments. Tables with detailed results for the different departments are attached in appendix VI. The results show that the alpha coefficients for all five expectations and perceptions dimensions are above the 0.70 threshold for five of the six departments. The IEC had an expectations alpha score of 0.689 for empathy while of the other expectation and perception dimensions had alpha coefficients above 0.70. The alpha for empathy expectations (0.689) is very close to the 0.70 threshold, and is thus considered acceptable. It is therefore suggested that the reliability scores for expectations and perceptions, both individual departments and the whole sample satisfied the minimum requirement of 0.70 Cronbach's alpha coefficient. This indicates an acceptable level of reliability for the SERVQUAL instrument. The instrument therefore produced an acceptable level of internal consistency for both individual departments and the overall sample.

Having established that the modified SERVQUAL instrument was reliable, the next step was to compute the SERVQUAL scores for individual departments. The scores were used to determine the extent of the gap between respondents' expectations and perceptions of the departments' service quality. Knowing the gap scores would aid management to identify dimensions that required service improvement initiatives.

4.5.0 Measuring departments' SERVQUAL scores

The first step in determining departments' SERVQUAL scores was to calculate the gap scores for each of the 22 pairs of expectation/and perception statements. All calculations followed Parasuraman et al. (1988; 1991) SERVQUAL protocol. Scores from the 22 expectation statements were subtracted from the corresponding 22 perception statement scores to obtain gap scores for each respondent. There were 150 respondents for each department which translates to 150 sets of 22 gap scores per department. The gap scores were calculated as follows:
Perception score (P) **–** (minus) Expectation score (E) = gap score.

The second step was to calculate the dimension scores. The 150 sets of 22 gap scores obtained in the first step were allocated to the five SERVQUAL dimensions of tangibles, reliability, responsiveness, assurance and empathy in line with Parasuraman et al. (1991). The 22 gap scores were distributed among the five dimensions as follows:

Dimension	Items
Tangibles	items 1 to 4
Reliability	items 5 to 9
Responsiveness	items 10 to 13
Assurance	items 14 to 17
Empathy	items 18 to 22

The gap scores under each dimension were summed and divided by the number of items under that dimension resulting in mean dimension gap scores. The dimension gap scores indicated the extent of disparity between respondents' expectations and their perceptions of service delivery for that dimension. A negative dimension score indicates that respondents' expectations were higher than their perceptions of service quality, therefore customers were dissatisfied with the service quality. A positive dimension score on the other hand implies that expectations were less than perceptions, thus customers were satisfied with the service. To calculate the departments' unweighted SERVQUAL score, dimension scores are summed and divided by five (the number of dimensions).

The unweighted SERVQUAL score provides an indication of the extent to which the department's services met or failed to meet customers' expectations of service quality for the department. A negative SERVQUAL score shows that overall, the department failed to meet respondents' expectations of service quality. On the other hand, a positive score shows that the department's customers were satisfied with the overall service quality. The unweighted SERVQUAL score does not consider the relative importance (or weight) of the dimensions from the respondents' perspective (Wisniewski and Donnelley, 1996; Badri et al., 2005). It is important to calculate the weighted SERVQUAL score because that score is based on the importance of the dimensions from customers' point of view.

The process of obtaining the weighted SERVQUAL score involves a number of steps. The process starts with allocation of importance weights to the five SERVQUAL dimensions. During data collection, respondents were asked to allocate points/weights out of a total of 100 to the five dimensions. Points allocated to each dimension are summed and divided by the number of respondents in each department (150 respondents) to obtain dimension weights. The dimension weights are then multiplied with gap scores, resulting in weighted average scores. The weighted average scores are then summed to get the weighted SERVQUAL score.

The next section provides a brief discussion of the SERVQUAL scores for the six government departments examined in this study. The process just discussed was applied in getting the scores for each department. Tables were used to illustrate the dimension scores for the departments.

4.5.1 Departmental unweighted and weighted SERVQUAL scores

This section discusses the individual departments' SERVQUAL scores. Tables 4.38 – 4.43 have been used to illustrate the SERVQUAL scores for each department. Both weighted and unweighted scores are shown in the tables. The scores are used to show the extent of the gap between customers' expectations and their perceptions of service quality. Each table is followed by a brief discussion of the scores obtained for each department. The discussion examines both weighted and unweighted scores to explain the magnitude of the gap scores and their implications on future service improvement decisions.

4.5.2 Department of Clinical Services

Table 4.18 shows the results of SERVQUAL scores for the Department of Clinical Services. The summary scores of the five dimensions are shown in columns 2 to 5. As a general observation, all dimension scores are negative, indicating that the Department of Clinical Services did not meet respondents' service expectations across the five dimensions. The results show that across dimensions there were different gap scores; with tangibles having a gap score of –1.81, reliability –2.05, responsiveness –1.80, assurance –1.76, and empathy –1.77. Reliability had the largest gap score at -2.05 while assurance was the smallest at -1.76. The gap scores for tangibles (-1.81) and responsiveness (-1.80) were very similar. The same applies to gap scores for assurance and empathy which were -1.76 and -1.77 respectively.

Table 4.18 SERVQUAL scores for the Department of Clinical Services

Dimension	**Perception score**	**Expectation score**	**Gap score (P-E)**	**Importance Weights**	**Weighted average score**
Tangibles	4.45	6.26	-1.81	25.25	**-0.46**
Reliability	3.98	6.03	-2.05	19.87	**-0.41**
Responsiveness	4.27	6.07	-1.80	20.33	**-0.37**
Assurance	4.45	6.21	-1.76	19.68	**-0.35**
Empathy	4.44	6.21	-1.77	14.87	**-0.26**
	Unweighted SERVQUAL score –1.84				
			Weighted SERVQUAL score		**-1.85**

Individual dimension weights show that tangibles had the highest weight at 25.25. This implies that customers for the Department of Clinical Services placed more importance on tangibles than the other dimensions. The lowest weight was allocated to empathy (14.87). Responsiveness came second (20.33), reliability third (19.87), and assurance fourth (19.68). A comparison of dimensions indicates that though reliability had a large gap score (-2.05), its importance weight of 19.87 is lower than tangibles (25.25) and responsiveness (20.33).

The overall unweighted SERVQUAL score (-1.84) is very close to the overall weighted SERVQUAL score (-1.85). These scores provide an overall indication of customers' perceived service quality. Both the weighted and unweighted SERVQUAL scores for this department indicate that customers were generally dissatisfied with service quality with an overall gap of -1.85 between customers' expectations and perceptions of service quality.

The results point towards the need to improve service quality in all dimensions to address the disparity indicated by the negative dimension gap scores. However, service improvements have to be prioritised, starting with the dimensions that require urgent attention. As a general guide, departments could use the importance weight of the dimension as a determining factor for prioritisation. As already mentioned, dimension weights reflect the importance attached to the dimension by the customers. It would thus, be rational to start with dimensions that are highly valued by customers especially where those dimensions have large gap scores. From Table 4.18, tangibles dimension has the largest importance weight at 25.25, largest weighted score of –0.46 and it also has the second largest gap score of -1.81. In view of the importance attached to tangibles and its large gap score, the Department of Clinical Services should give tangibles priority when it undertakes service improvement. Eventually service improvements should be undertaken for all the dimensions because they have negative gap scores. Thus, when setting its PBRS performance plans, the Department of Clinical Services should identify the possible cause of disparity between customers' expectations and perceptions for the five dimensions, giving priority to tangibles. The PBRS performance objectives relating to each dimension should then be modified and enhanced so that they become more customer-focused in order to improve service quality.

The Department of Clinical Services is responsible for ensuring access to proper health care in Botswana. It is directly responsible for monitoring the performance of government hospitals and other health facilities in addressing the public's health needs. This department differs from the Department of Public Health in that the latter is concerned mostly with public health education. The Department of Public Health is covered in the next section. The high reliability gap score for the Department of Clinical Services is somewhat expected as most people would be concerned about getting the right level of health service. People are also likely to be concerned about the HIV/AIDS which is currently a major health problem in Botswana (as discussed in section 2.2). Government health facilities are often overstretched thus issues like failure to provide services at the promised time are expected. In health care there is no room for error as that could impact on people's lives, hence reliability of the services is of major concern.

Tangibles are allocated the highest weight, probably because health services require some physical facilities that facilitate in service delivery. For example hospitals and other health facilities cannot function effectively without vital equipment such as x-ray machines, blood pressure monitoring equipment, operating theatres, and others. Customers are more likely to perceive these physical facilities as part of the service and thus, their (facilities) absence could affect customers' perception of service quality. Therefore, the PBRS performance objectives for this department should target the tangibles aspect of service delivery in order to be more customer-focused and improve levels of customer satisfaction.

4.5.3 Department of Public Health

Table 4.19 shows the SERVQUAL dimension scores for the Department of Public Health. All the gap scores are negative which generally implies that respondents' expectations exceeded their perceptions of services delivered by this department. From the table, tangibles had a gap score of –1.72, reliability -2.40, responsiveness at -2.16 and assurance at -2.03 and empathy –1.87. This department had the highest gap scores when compared to the other five departments taking part in this study. Table 4.19 shows that customers' perceptions were at moderate levels ranging from 4.21 to 4.91, while average expectations were exceptionally high with a range of 6.58 to 6.75. In fact, the expectation scores for this department were very close to the maximum possible score of 7. The high expectations for this department are attributed to the fact that it provides health services. The Department of Public Health is responsible for public education on controlling and eradication of diseases such as TB, diarrhoea, polio, leprosy, HIV/AIDS, and others. The department also provides public education on issues such as safe sexual practices and reproductive health, safe motherhood and child health, food and nutrition, and good health practices. As identified in the previous section (4.5.2), health services are considered essential by consumers, thus customers' expectations for this department are expected to be high. The high expectations coupled with moderate perceptions contributed to large gap scores for this department.

The weighted and unweighted SERVQUAL scores for this department were –2.05 and –2.04 respectively. These scores are also higher than other departments' SERVQUAL scores. This means that the department generally had the highest service quality gap (between customers' expectations and perceptions of service quality). Given its high dimension gap scores, as well as the high weighted and unweighted SERVQUAL scores, this department requires urgent service improvement.

Table 4.19 SERVQUAL scores for Department of Public Health

Dimension	Perception score	Expectation score	Gap score (P-E)	Importance Weights	Weighted score
Tangibles	4.91	6.63	-1.72	20.3	**-0.35**
Reliability	4.21	6.61	-2.40	20.9	**-0.5**
Responsiveness	4.42	6.58	-2.16	20.7	**-0.45**
Assurance	4.67	6.70	-2.03	20.1	**-0.41**
Empathy	4.88	6.75	-1.87	18	**-0.34**
Unweighted SERVQUAL score 10.18/5=-2.04					
Weighted SERVQUAL score = -2.05					

When deciding on service improvement, the department has to consider the importance weights for each dimension (as suggested in section 4.5.2). The importance weights for tangibles, reliability, responsiveness, assurance and empathy were 20.3, 20.9, 20.7, 20.1 and 18 respectively. Since reliability has the largest importance weight (20.9) as well as the highest gap score of -2.40, the department has to target reliability as a priority area for service improvement. This implies that the department has to review its PBRS performance objectives with a view to making its service delivery more reliable. Setting PBRS objectives that address the reliability of services would improve the extent of customer focus of service delivery, which would result in satisfied customers. While priority is given to reliability, other dimensions would also require service improvements as they have negative gaps. Thus, the process of reviewing and modifying PBRS performance objectives to address the disparity between customers' expectations and perceptions should be applied to all dimensions. The ultimate objective is to reduce the service quality gap and come up with PBRS performance objectives that are more responsive to customers' needs.

As discussed earlier in this section, the Department of Public Health is responsible for public education on prevention, controlling and eradication of diseases. Members of the public therefore rely on this department for information relating to good health practices. It is vital that information provided be correct to control the spread of diseases (e.g TB, HIV/AIDS). Thus reliability is of major importance in the department's services. The department has to be highly responsive to address major disease outbreaks such as polio, cholera, diarrhoea and others. Responsiveness is necessary to avoid catastrophic incidents arising from the spread of otherwise preventable and controllable diseases. The assurance dimension also needs attention mainly because clients need to be assured that the information they got from the department could help in addressing their health needs. At the end, all the dimensions need urgent attention to reduce the gaps identified.

4.5.4 Independent Electoral Commission (IEC)

The IEC is responsible for conducting elections and government referenda. Its services include registration of voters, issuing election material during the time of elections, monitoring elections, tackling voter apathy, and ensuring easy access to polling stations by all voters. Respondents comprised of eligible voters who have had an encounter with services offered by this department in the last twelve months. Table 4.20 presents the results of respondents' expectations and perceptions of the quality of services from this department. According to the results, all the dimensions have negative gap scores, which is a sign that the quality of services from IEC generally fell short of meeting respondents' expectations. Overall weighted and unweighted SERVQUAL scores are –1.74 and –1.73 respectively. The negative SERVQUAL scores are an indication that overall, the department's services did not meet customers' expectations of service quality.

An examination of the individual dimensions shows that tangibles, reliability, responsiveness, assurance and empathy had gap scores of –1.67, -2.19, -1.91, -1.28 and –1.58. Importance weights for these dimensions were 19, 22, 21.6, 19.7, and 17.7. Reliability carries the highest importance dimension weight at 22 points as well as a large gap score at –2.19. The large importance weight and gap score makes reliability a priority target for service improvement. The IEC is faced with the challenge of aligning its PBRS performance objectives with customers' expectations to improve service quality. The department has to address the reliability of its services when setting up its PBRS performance objectives.

Table 4.20 SERVQUAL scores for Independent Electoral Commission

Dimension	Perception score	Expectation score	Gap score (P-E)	importance Weights	Weighted score
Tangibles	4.83	6.5	-1.67	19	**-0.32**
Reliability	4.38	6.57	-2.19	22	**-0.48**
Responsiveness	4.74	6.65	-1.91	21.6	**-0.41**
Assurance	5.38	6.66	-1.28	19.7	**-0.25**
Empathy	5.05	6.63	-1.58	17.7	**-0.28**
Unweighted SERVQUAL score -8.63/5 = -1.73					
			Weighted SERVQUAL score = -1.74		

While priority is given to reliability, other dimensions would also require service improvement to address the negative gap scores. IEC should focus its attention on improving service delivery under the responsiveness dimension. This dimension has the second largest importance weight (21.6) and gap score (-1.91). The IEC should improve the responsiveness of its PBRS performance objectives to align them to customers' expectations. Aligning responsiveness dimension to customers' expectations would assist in closing the gap between customers' expectations and perceptions and would improve customers' perceived service quality.

Assurance has the lowest gap score at -1.28. The small gap score is attributed to a high perception score of 5.38. This is an indication that the department did well in addressing customers' expectations under this dimension. However, the fact that the gap is negative means service improvements are still required for this dimension. Empathy has the second lowest gap score (-1.58) as well as the lowest importance weight (17.7). In view of the low gap score and importance weight for this dimension, it does not require urgent service improvement as compared to others. Therefore the IEC has an opportunity to divert funds earmarked for improving service delivery to other dimensions of urgent need like reliability and responsiveness both of which have high importance weights and gap scores. Generally all dimensions require attention to close the negative gap scores. However the department has to prioritise the improvement of its PBRS performance objectives taking into consideration importance weights of individual dimensions and gap scores.

4.5.5 Department of Tourism

The Department of Tourism is responsible for formulation and execution of programs designed to promote tourism in Botswana. It monitors operations of tourist ventures in Botswana to ensure adherence to specified rules and regulations. It issues licenses to tourist facilities such as lodges, hotels, safari camps and others. At individual customer levels it deals with customers who enquire about tourism facilities in Botswana. It also provides information on tourist areas. Members of the public interested in starting tourism ventures also visit this department for advice. The department also provides training to individuals who are interested in running tourism related businesses on matters such as service quality. Respondents for this department were individuals who received services in a personal capacity (not as a business). This was done in line with the objectives of this study, which is focused on individual customers as opposed to business customers. The objective was to examine individuals as opposed to businesses' perceived service quality with a view to determining the effect of PBRS on service quality.

Table 4.21 shows the results of the SERVQUAL scores for the Department of Tourism. All the dimension scores are negative, which is an indication that respondents' expectations exceeded their perceptions of service quality. Dimension gap scores for tangibles, reliability, responsiveness, assurance and empathy were –1.35, -1.51, -1.54, -1.39 and –1.02 respectively. Importance weights ranged from 22.34 (reliability), to 18 (empathy). Reliability had the largest importance weight (22.34) and second highest gap score (-1.51). While responsiveness has the largest gap score its importance weight (19.06) is lower than that for reliability.

Gap scores for this department are generally low which implies that the department did well to meet its customers' expectations. However a closer look at the scores shows that its expectation scores are lower when compared to other departments (with the exception of Culture and Youth). On the other hand, perception scores for this department are within the range of perception scores from other departments. If expectations for this department were at the same level as other departments' scores, the gap scores would have been higher. Thus, the major cause for the lowest gap scores in this department is the low expectation scores.

Table 4.21 SERVQUAL scores for Department of Tourism

Dimension	Perception score	Expectation score	Gap score (P-E)	Importance Weights	Weighted score
Tangibles	4.60	5.95	-1.35	21	**-0.28**
Reliability	4.39	5.90	-1.51	22.34	**-0.34**
Responsiveness	4.44	5.98	-1.54	19.06	**-0.29**
Assurance	4.64	6.03	-1.39	19.6	**-0.27**
Empathy	4.75	5.77	-1.02	18	**-0.18**
Un weighted SERVQUAL score -6.81/5= -1.36					
			Weighted SERVQUAL score = -1.36		

In the research process some respondents indicated that the department was very slow in responding to their requests. They complained about understaffing which partly contributed to the delays in service delivery. Though the SERVQUAL questionnaire did not provide for capturing these complaints, they are included as the researcher noted that they had a direct impact on customers' perception of service quality service quality and they assist in explaining the results.

As was noted in other departments, reliability also has a high gap score (-1.51) here. In this department, reliability has the highest importance weight at 22.34 implying that the respondents consider it to be more important than other dimensions. Its weighted score is -0.34 which is higher than responsiveness at -0.29 though responsiveness ranks highest in gap scores. This shows that in real terms reliability has a higher gap score than responsiveness and therefore requires a higher priority than responsiveness when service improvement is considered. In view of the large importance weight and gap scores for this dimension, it should be targeted as a priority area for service improvement. PBRS objectives for this department should be reviewed so that they address the reliability of service delivery.

Empathy has the lowest importance weight (18) and gap score (-1.02). The lowest importance weight for this dimension is a sign that empathy was less important to customers when they evaluated services from this department and thus its impact on service quality is lower than the other dimensions. The lowest gap score on the other hand indicates that the difference between customers' expectations and perceptions was small. Considering its low gap scores as well as low importance weight, this dimension does not require urgent service improvement. In other words, other dimensions should have priority over empathy when service improvements are considered.

In conclusion, since the Department of Tourism has low expectations across the five dimensions, it could take advantage of the low expectations and come up with improved service quality that exceeds these expectations.

4.5.6 Department of Culture and Youth

This department covers two divisions being Culture and Youth**.** The Youth division mainly covers issues relating to promotion of the status of the youth of Botswana through the creation of a conducive environment for youth to participate in the economic, social and political life of the country. The Culture division is responsible for preservation and promotion of national culture, which is necessary for nation building. The Culture division generally serves as the focal point for policy, operational direction and coordination of national, district, and local cultural programs. Respondents targeted for this department were youth as well as adults who received services from any of the two divisions for this department.

Table 4.22 lists the weighted and uweighted SERVQUAL scores for the Department of Culture and Youth. As observed in other departments, dimension scores for Culture and Youth are negative implying a shortfall between customers' expectations and perceptions of service quality. Reliability has the largest gap score at -1.22 followed by responsiveness at-1.19 while the lowest is assurance at -1.01. The gap scores between dimensions varied from -1.22 to -1.01. From Table 4.22, this department had the lowest dimension gap scores compared to the other five departments. This implies that the difference between respondents' expectations and their perceptions of service quality was generally smaller. Respondents' expectations in this department were generally lower than expectations in all other departments. All expectations were below an average of 6. Thus, the low gap scores for this department could be attributed to its low expectations scores.

Table 4.22 SEVQUAL scores for Department of Culture and Youth

Dimension	Perception score	Expectation score	Gap score (P-E)	Importance Weights	Weighted score
Tangibles	4.75	5.89	-1.14	21.2	**-0.24**
Reliability	4.3	5.52	-1.22	22.5	**-0.27**
Responsiveness	4.57	5.76	-1.19	19.03	**-0.23**
Assurance	4.79	5.80	-1.01	18.48	**-0.19**
Empathy	4.50	5.67	-1.17	18.79	**-0.22**
Un weighted SERVQUAL score -5.73/5 = -1.15					
			Weighted SERVQUAL score = -1.15		

This department has a high gap score (-1.22) and importance weight (22.5) for reliability, meaning that it has to focus more on improving the reliability of its services. The high gap score for this dimension is an indication that customers felt that the department's service delivery was not reliable. The department should focus on improving services by reviewing its PBRS performance objectives and emphasising the reliability aspect of service delivery. While responsiveness has the second largest gap score its importance weight and weighted score are lower than tangibles. This could be an indication that respondents perceived tangibles as being more important than responsiveness. Assurance has the lowest gap score (-1.01) and importance weight (18.48). This makes it the last target for service improvement.

Generally this department has the lowest weighted (-1.15) and unweighted SERVQUAL (-1.15) score compared to the other five departments. Weighted and unweighted SERVQUAL score are equal. The low SERVQUAL scores are attributed to the small gap scores between perception and expectation scores. This department did well in terms of addressing the expectations of its customers. However there is more room for improvement as the gap scores are all negative.

As is the case with the Department of Tourism, this department also has low gap scores. It could take advantage of the low expectations by coming up with performance improvement initiatives that even exceed customers' expectations.

4.5.7 Department of Wildlife and National Parks

The Department of Wildlife and National Parks is responsible for protecting wild animals within the country to ensure proper care and sustainable use. Other responsibilities include anti-poaching, and issuing of game hunting permits to both local and international hunters. The department assists the public in creation of community-based revenue generating activities through sustainable utilisation of wildlife resources within their communities. Respondents for this department were people aged 18 years and over who received any of the services offered by this department in the last twelve months. Table 4.23 lists the results of the SERVQUAL survey of the department's service quality.

Table 4.23 SERVQUAL scores for Department of Wildlife and National Parks

Dimension	Perception score	Expectation score	Gap score (P-E)	Importance Weights	Weighted score
Tangibles	4.25	6.26	-2.01	25	**-0.5**
Reliability	4.25	5.98	-1.73	23	**-0.4**
Responsiveness	4.40	6.07	-1.67	19	**-0.32**
Assurance	4.46	6.24	-1.78	18	**-0.32**
Empathy	4.37	5.89	-1.52	15	**-0.23**
Un weighted SERVQUAL score -8.71/5 = -1.74					
			Weighted SERVQUAL score = -1.77		

Tangibles has the largest gap score (-2.01) and importance weight (25) making it the first target for service improvement. In general terms the reasons for the high tangibles score could be that customers would like to have modern looking physically appealing offices and equipment. However this may not possible as some of the offices for this department are located in remote parts of the country where wild animals and national parks are located. Such offices are likely to be different to those in larger metropolitan areas and therefore the requirement for appealing office equipment would be a challenge for this department. The Department of Wildlife and National Parks should focus on improving tangibles dimension as a priority area in its PBRS performance plans for future service improvements.

Reliability has the second largest weighted score (23) while it comes third in terms of gap scores (-1.73). This emphasises the relative importance of reliability in influencing customers' expectations of service quality. Reliability seems to be important in all the departments as evidenced by its high gap scores and importance weights. In most studies undertaken in both private and public sectors, reliability has consistently had high importance weights (Parasuraman et al., 1991; Anderson, 1995; Brysland and Curry, 2001; Wisniewski, 2001; Curry and Sinclair, 2002; Donnelly et al., 2006). In that regard, reliability should be among dimensions in the priority list when service improvements are considered.

Empathy exhibits the lowest gap score (-1.52) and importance weight (15). While the dimension requires service improvements because of the negative gap scores, it should possibly be considered after other dimensions are addressed. Generally, all the dimensions require service improvement due to negative gap scores. Thus, in overall, the department has to come up with an improved PBRS performance plan that addresses service improvement across the five dimensions.

This section discussed the measurement of SERVQUAL scores for individual departments. Scores for each department were examined to determine the implications of such scores for future service improvements.

The next section summarises the discussion in section 4.5.

4.5.8 Section summary

This section is a summary of the discussions in sections 4.5. The results from individual departments' SERVQUAL scores have revealed that all the departments have negative SERVQUAL scores. This is an indication that generally the departments did not deliver services that met their customers' expectations. SERVQUAL scores varied from department to department with the highest gap score being for the department of Public health at –2.05 while the lowest score was for Culture and youth at –1.15.

Table 4.24 presents a summary of the dimension gap scores for the six departments. The gap scores give an indication of the magnitude of the difference between customers' perceptions and expectations of service quality. The size of the gap score serves as a guide to the management of these departments regarding dimensions that require service improvement. The high dimension scores for the Department of Public Health imply that the department requires urgent service improvement.

As shown in table 4.24, reliability has the largest dimension gap in most departments. This is an indication that departments did not meet customers' expectations in relation to the reliability of services. Service improvements for the six departments should target reliability as a priority area.

Table 4.24 departments' dimension gap scores

Department	**Dimensions**				
	Tangibles	Reliability	Responsiveness	Assurance	Empathy
Clinical Services	-1.81	-2.05	-1.80	-1.76	-1.77
Public Health	-1.72	-2.40	-2.16	-2.03	-1.87
Independent Electoral Commission	-1.67	-2.19	-1.91	-1.28	-158
Culture and Youth	-1.14	-1.22	-1.19	-1.01	-1.17
Tourism	-1.35	-1.51	-1.54	-1.39	-1.02
Wildlife and National Parks	-2.01	-1.73	-1.67	-1.78	-1.52

The decision on the nature and magnitude of service improvement should not rely entirely on the dimension gaps. To come up with a meaningful decision regarding service improvements aimed at meeting customers' expectations, management has to make comparisons between the gap scores and the relative importance of each dimension to respondents (Anderson, 1995). Relative importance weights assist in ranking the dimensions on the basis of the importance attached to them (dimensions) by customers. Dimensions having both high importance weights and large negative gap scores should be given priority when deciding on service improvements.

Generally, departments in the high customer focused category had the largest gap scores when compared to departments in the low customer focused category. The large dimension gap scores result from the fact that the departments in the high customer focused category mainly provided essential services. For example, two of the high customer focused departments (Clinical Services and Public Health) provided health services, which are considered essential by customers. Unlike most services, the consumption of health services is often mandatory, as customers do not have a choice to defer the need for these services. Walker and Baker (2000) suggest that customers' evaluation of service performance differs between essential and less essential service dimensions. For essential services, customers are less tolerant to deviation from expected performance outcomes than they do for less essential services. The amount of tolerance for poor service performance is also known as zone of tolerance. The zone of tolerance is small for essential services (Walker and Baker, 2000). Given that health services are essential services, customers' zone of tolerance for poor service quality in regards to these services is expected to be small. Thus, customers are expected to have high service expectations for the Departments of Clinical Services and Public Health. This potentially explains why both departments had high dimension gap scores when compared to departments in the low customer focused category.

Table 4.25 Summary of departmental dimension weights

Dimension	Wildlife and National Parks	Culture and Youth	Tourism	IEC	Public Health	Clinical Services
Tangibles	25	21.2	21	19	20.3	25.25
Reliability	23	22.5	22.34	22	20.9	19.87
Responsiveness	19	19.03	19.06	21.6	20.7	20.33
Assurance	18	18.48	19.6	19.7	20.1	19.68
Empathy	15	18.79	18	17.7	18	14.87

Table 4.25 shows a summary of the importance weights for the five dimensions across the six government departments. Once again reliability consistently has a high importance weight in most departments. It was ranked first in four out of the six departments, second in one department, and third in another department. In view of the high importance weights for the reliability dimension across the six departments, it should be the first area for service improvement. Empathy consistently comes last in most departments with the exception of Culture and Youth where it is ranked fourth. The low empathy weights are consistent with results from other studies conducted in both public and private sectors (Parasuraman et al., 1991; Wisniewski, 2001; Badri et al., 2005). In line with its low gap scores and importance weights, empathy should be the last in terms of resource prioritisation when performance improvement is done.

In this section the discussion focused on individual departments and their SERVQUAL scores. It is important to move further by looking at the relationship between the departments' scores. In the next section, dimension scores are compared across departments to examine the relationship between departments. Firstly, the ordering of the five SERVQUAL dimensions across the six departments was examined. Kruskal-Wallis nonparametric test was used to rank the dimensions to identify differences in dimensions ranking across the six departments. Then comparisons were undertaken using MANOVA and ANOVA with a view to understanding how the customer focus of the departments' performance plans impacts on customers' perceived service quality.

4.6.0 Comparison of SERVQUAL scores across departments

The previous section (4.5) discussed the measurement of SERVQUAL scores for the six government departments. The discussion focused on individual departments' SERVQUAL scores and their implications for future service improvements. In this section, the six departments' SERVQUAL scores are compared to identify differences in the five dimensions across departments. Comparisons were undertaken in two parts. The first part involved the use of nonparametric tests to compare the rankings of the five dimensions across the six departments. Nonparametric tests were used to generate rankings of dimensions across the six departments to identify differences in dimensions ranking between the departments. Nonparametric tests were used as a prelude to the parametric tests. Parametric tests (MANOVA, ANOVA and T-tests) were then undertaken to make comparisons between departments in the two categories of customer focus, to establish if customer focus impacts on customers' perceived service quality. The results from the parametric tests were used to test the hypotheses proposed in this study.

4.6.1 Comparison of departments using a nonparametric test

In this section departments are compared to determine the ordering of the five dimensions across the six departments. Differences in the ordering would imply that the SERVQUAL dimensions differ between high and low customer-focused departments. Such differences would identify that service performance differ and thus any service improvements between the two categories would potentially need to also differ, as departments would have to address different deficiencies in service quality. Nonparametric tests are used at this stage because the intention is not to determine the magnitude of the difference but to establish if there any differences in ranking of dimensions based on the services being considered. In section 4.6.2, parametric tests are used to determine the magnitude of the difference between dimensions.

Dimension scores of the six departments were ranked using the Kruskal-Wallis test and the results are shown in Tables 4.46 and 4.47. Kruskal-Wallis test was selected because it enables comparison of more than two independent groups at once. It is relevant to this research where six departments were compared across five SERVQUAL dimensions. Table 4.26 presents the mean dimension scores and mean rankings (in brackets) for the six departments. Results in Table 4.26 reveal that the dimension mean scores and ranks differ across the six departments. The five dimensions did not have consistent rankings across the six departments. For example tangibles had mixed rankings ranging from first to fifth in the six departments, thus suggesting that tangibility was viewed differently, relative to the other dimensions, across the six departments

Table 4.26 Departmental dimension mean scores rankings

Dimensions	**Departments and mean rank scores**					
	Clinical Services	Public Health	IEC	Culture & Youth	Wildlife & National Parks	Tourism
Tangibles	388.16 **(5)**	466.33 (**1**)	489.23(**1**)	523.77 (**4**)	349.91 (**5**)	485.60 (**2**)
Reliability	455.40 (**1**)	394.01 (**2**)	412.63(**4**)	526.38 (**3**)	440.92 (**3**)	473.67 (**3**)
Responsiveness	431.77 (**3**)	392.50 (**3**)	413.01(**3**)	548.47 (**2**)	462.65 (**1**)	454.60 (**4**)
Assurance	419.82 (**4**)	376.61 (**5**)	482.59(**2**)	553.57 (**1**)	424.91 (**4**)	445.49 (**5**)
Empathy	443.33 (**2**)	385.30 (**4**)	412.21(**5**)	508.38 (**5**)	461.10 (**2**)	492.68 (**1**)

The Kruskal-Wallis test (Table 4.27) was significant across the five dimensions meaning that the five dimensions differ in rankings across the six government departments. These results are consistent with the dimension mean scores in Table 4.26 which also showed that the dimensions differed across the six departments. As shown in Table 4.27, the Kruskal-Wallis test scores for individual dimensions were: tangibles, X^2 (5,N =900)=49.70, $p<.05$; reliability, X^2 (5, N =900) = 24.51, $p<.05$; responsiveness, X^2 (5,N= 900) = 33.08, p<0.5; assurance, X^2 (5,N= 900) =41.66, p<.05 and empathy, X^2 (5,N =900) = 24.46, p<.05.

Table 4.27 Kruskal-Wallis Test Statistics[a,b]

	Tangibles	Reliability	Responsiveness	Assurance	Empathy
Chi-Square	49.703	24.510	33.076	41.660	24.464
df	5	5	5	5	5
Asymp. Sig.	.000	.000	.000	.000	.000

a. Kruskal Wallis Test

b. Grouping Variable: Department name

In conclusion, comparison of the departments' SERVQUAL scores as discussed in this section showed that there was a significant difference in the ranking of the five dimensions across the six departments. The differences between the five dimensions ranking across the six departments imply that the performance on each dimension was ordered differently in the six departments. It may also mean that improvement in service quality needs to potentially differ across the six departments.

In the next section (4.6.2) parametric tests were undertaken to determine the magnitude of the difference between the dimensions. The magnitude of the difference between the dimensions is required for exploring the research objectives and hypotheses.

4.6.2 Measuring the impact of departments' customer focus on customers' perceived service quality

The previous section discussed the ranking of the SERVQUAL dimensions across the six departments using nonparametric tests. The results showed that the five dimensions were ranked differently in the six departments. In this section parametric tests are used to further compare departments on the basis of the five dimensions. Departments in the two categories of customer focus were compared using MANOVA, ANOVA and post hoc tests to determine the impact of customer focus of PBRS performance plans on customers' perceived service quality. The rationale for making the comparisons was to explore the research objectives and hypotheses. The hypotheses are tested in sections 4.6.4 and 4.6.5.

As was described in section 3.1, the departments included in this study were categorised into high and low customer focus or orientation based on the extent of customer focus of departments' PBRS performance plans, as defined through experts undertaking content analysis of PBRS plans. The previous section compared departments on the basis of the rankings of the five SERVQUAL dimensions. While the rankings differ, this analysis does not identify whether the differences could be attributed to customer focus of departments' PBRS performance plans or some other factor. Ideally departments that have been identified as having high customer focused PBRS performance plans would be expected to deliver services that better meet customers' expectations than departments with low levels of customer focused PBRS plans, and thus their customers should perceive departments to have higher service quality.

Comparisons were made between the two categories of departments based on the degree that their PBRS were customer focused (high and low customer focus) to determine if there are any differences in customers' perceived service quality. Inferential statistics (e.g MANOVA, ANOVA and *t*-tests) were used to examine the relationships in more detail. When undertaking comparisons the choice of the inferential statistics is normally influenced by the number of dependent and independent variables in the relationship being studied. In this study, the five service quality dimensions were the dependent variables while customer focus (categorised as high and low) was the independent variable. Thus there were five dependent variables (dimensions) and two independent variables (customer focus categories). Francis (2004) suggests the use of MANOVA where there are several dependent variables measuring different aspects of the same theme. MANOVA is also suitable where there are multiple (two or more) dependent variables, across groups (Hair, Black, Babin, Anderson, and Tatham, 2006). MANOVA was therefore found to be the appropriate tool for examining the relationship between the set of customers' perceived service quality (i.e the five dimensions) and departments' customer focus.

The MANOVA test was undertaken for both unweighted and weighted SERVQUAL scores to explore potential differences arising from variations in dimensions' importance weights. In addition to the MANOVA tests, ANOVA and post-hoc tests were undertaken to further explore the magnitude of the impact that customer focus of PBRS has on customers' perceived service quality. The results from the MANOVA, ANOVA and post-hoc tests formed the basis for testing the hypotheses proposed for this study. Details on the MANOVA, ANOVA and post-hoc tests results and implications are discussed in sections 4.6.3 through 4.6.6.

4.6.3 MANOVA test for unweighted SERVQUAL

As indicated in the previous section, a MANOVA test was undertaken for both unweighted and weighted SERVQUAL scores to provide for differences arising from dimension importance weights. MANOVA tests were undertaken to make comparisons between departments in the two categories of PBRS customer focus in order to determine whether customer focus of PBRS produces any significant differences in the five SERVQUAL dimensions (customers' perceived service quality). Further discussions of the MANOVA test are provided in Section 4.6.4.

Before undertaking the MANOVA test, it was important to examine whether the assumptions applicable to MANOVA hold and thus enable MANOVA tests to be run. These assumptions tests apply to the homogeneity of variance for dependent variables (Levene's test), and the equivalence of the covariance matrices (Box's M test). The results of the Levene's test as shown in Table 4.28, revealed that overall for each department, there were no significant differences in variance for the five dimensions of service quality. The assumption has not been violated since there is equality of variance for the dependent variables. Equality of variance is important as it enhances the reliability of results, as well as supporting the robustness of the MANOVA statistics (Brace, Kemp, and Snelgar, 2006).

Table 4.28 Levene's Test of equality of error variances[a]

	F	df1	df2	Sig.
Tangibles	.158	1	898	.691
Reliability	1.461	1	898	.227
Responsiveness	2.530	1	898	.112
Assurance	.126	1	898	.723
Empathy	1.575	1	898	.210

Tests the null hypothesis that the error variance of the dependent variable is equal across groups.

a. Design: Intercept + Focus

The next step was to test the assumption of equality for covariance matrices. The Box' M test (Table 4.29) was significant, indicating that the observed covariance matrices for the dependent variables were not equal, thus the assumption was violated. Violation of this assumption could potentially affect the validity of MANOVA results. However, Brace et al. (2006) suggest that this test is very sensitive when sample sizes are small and unequal. The requirement for an adequate sample size is vital since MANOVA can be markedly affected by sample size (Hair et al., 2006). Violation of this assumption has a minimal impact with large sample sizes and groups of equal sizes (Hair et al., 2006). The impact of violating the equality of covariance is expected to have a minimal impact in this study because departments selected for this study were allocated an equal number of respondents (150). In addition, Hair et al. (2006) suggest that group sizes of a minimum of 20 per group would be sufficient for the MANOVA tests. The sample size used in this study was relatively large (150 per department or 900 respondents overall). Thus the relatively large sample (900 respondents) coupled with the equal group sizes (150 per department) is expected to reduce the impact of violating the equality of co-variance matrices assumption observed in the Box's test.

Table 4.29 Box's Test of equality of covariance matrices

Box's M	63.880
F	4.233
df1	15
df2	3.247E6
Sig.	.000

A correlation test was also performed to ensure that dependent variables were not strongly correlated. MANOVA tests assume that there is no correlation among the dependent variables as they (variables) are expected to measure different aspects of the construct (Tabachnick and Fidell, 1989). When dependent variables are strongly correlated, it would be difficult to separate individual variables' contribution from the overall effect (Brace et al., 2006). Brace et al. (2006) suggest that pairs of dependent variables should not exceed a correlation level of 0.90 to enable MANOVA test to be meaningful.

Table 4.30 presents a summary of the correlation scores for the five dimensions measuring perceived service quality. As illustrated in the table, the correlation coefficients measured using Pearson's correlation range from 0.49 to 0.79. The results show that there are significant correlations among the dependent variables. In some instances the correlation coefficients are high (i.e 0.797), however they are still acceptable because they do not exceed the threshold of 0.90, suggested by Brace et al. (2006).

Table 4.30 Correlation coefficients for the SERVQUAL dimensions

		Tangibles	Reliability	Responsiveness	Assurance	Empathy
Tangibles	Pearson Correlation	1	.666**	.598**	.552**	.493**
	Sig. (2-tailed)		.000	.000	.000	.000
	N	900	900	900	900	900
Reliability	Pearson Correlation	.666**	1	.797**	.703**	.608**
	Sig. (2-tailed)	.000		.000	.000	.000
	N	900	900	900	900	900
Responsiveness	Pearson Correlation	.598**	.797**	1	.758**	.631**
	Sig. (2-tailed)	.000	.000		.000	.000
	N	900	900	900	900	900
Assurance	Pearson Correlation	.552**	.703**	.758**	1	.703**
	Sig. (2-tailed)	.000	.000	.000		.000
	N	900	900	900	900	900
Empathy	Pearson Correlation	.493**	.608**	.631**	.703**	1
	Sig. (2-tailed)	.000	.000	.000	.000	
	N	900	900	900	900	900

**. Correlation is significant at the 0.01 level (2-tailed).

Given that the requirement for homogeneity of variance (Levene's test) was met and that the impact of violating the equality of covariance was minimal, the next step was to undertake the MANOVA test to compare the departments in the two categories of customer focus across the five SERVQUAL dimensions.

4.6.4 Comparison of departments using MANOVA.

The MANOVA test was undertaken to explore possible differences in customers' perceived service quality that could be attributed to departments' customer focus. This test was required to provide answers to the third objective of this thesis. The third objective as mentioned in chapter 1, which was to determine if the level of customer focus/orientation of departments' performance plans has any effect on customers' perceived service quality.

In order to explore the impact of customer focus of PBRS on customers' perceived service quality (third objective), two hypotheses were proposed. The first hypothesis (H1) focuses on the question of whether customer focus/orientation of PBRS performance plans had an impact on customers' perceived service quality. In line with the tenets of customer orientation, customer focused PBRS performance plans were those that addressed the effective delivery of services to the customers. Ideally if PBRS performance plans were customer focused, it is expected that customers would be more satisfied with the service quality than for departments whose PBRS plans were not customer focused. In that way, customer focus should have an impact on customers' perceived service quality. Based on that understanding, the first hypothesis proposes that customer orientation has a statistical significant impact on customers' perceived service quality. On the other hand, the null hypothesis (H1a) suggests that there is no impact from customer focus. Thus the proposed hypotheses were as follows:

H1a. Customer focus of PBRS has no impact on customers' perceived service quality.

H1b.Customer focus/orientation of PBRS has a statistical significant impact on customers' perceived service quality

A MANOVA test comparing the unweighted SERVQUAL scores for the two categories of departmental levels of customer focus was undertaken to test the first hypothesis. Results from the MANOVA test are presented in Table 4.31. The MANOVA procedure reports results using four test statistics being Pillai's Trace, Wilks' Lambda, Hotelling's Trace and Roy's Largest Root. All the tests are equally important but Pillai's Trace is commonly used by researchers because of its robustness to violation of MANOVA assumptions than the other three tests (Francis, 2004). In that way Pillai's Trace was used in this study.

The results show that Pillai's Trace were significant, meaning that statistically significant differences between the variables measuring customers' perceived service quality (SERVQUAL dimensions), are defined by departments' customer focus. Pillai's Trace = 0.056, $F(5,894) = 10.587$, $p = 0.000$, partial eta squared = .06 (6%). The significant results obtained imply that differences in the two groups of PBRS customer focus (high and low) had an impact on the set of dependent variables (SERVQUAL dimensions). Partial eta squared indicates the proportion of customers' perceived service quality that can be attributed to departments' customer focus. As a rule of thumb, Brace et al (2006) suggest that eta values larger than 14% indicate a large effect. The eta value of 6% obtained in the analysis is generally moderate. Thus, while customer focus has an effect on customers' perceived service quality as indicated by significant MANOVA test, the effect is moderate.

Given that the results from the MANOVA test show that PBRS has a significant impact on customers' perceived service quality, the null hypothesis is not accepted. On the other hand the results support the first hypothesis (H1b) which proposes that customer focused PBRS has a statistical significant impact on customers' perceived service quality. In that regard H1b is accepted.

It has to be noted that this test looks at the set of dimensions across the two categories of customer focus. The test results would be different if any of the dimensions or multiple dimensions were different between the two groups. Additionally, while the test shows that there were differences in customers' perceived service quality arising from departments' PBRS customer focus, it does not give or tell the direction of the difference. There is a need to undertake further tests to determine the direction and magnitude of the difference in customers' perceived service quality between the high and low customer focused departments. This is done later in this section, when the second hypothesis is explored.

Table 4.31 MANOVA test for unweighted SERVQUAL scores

Effect		Value	F	Hypothesis df	Error df	Sig.	Partial Eta Squared
Intercept	Pillai's Trace	.562	2.297E2[a]	5.000	894.000	.000	.562
	Wilks' Lambda	.438	2.297E2[a]	5.000	894.000	.000	.562
	Hotelling's Trace	1.285	2.297E2[a]	5.000	894.000	.000	.562
	Roy's Largest Root	1.285	2.297E2[a]	5.000	894.000	.000	.562
Focus	**Pillai's Trace**	**.056**	**10.587[a]**	**5.000**	**894.000**	**.000**	**.056**
	Wilks' Lambda	.944	10.587[a]	5.000	894.000	.000	.056
	Hotelling's Trace	.059	10.587[a]	5.000	894.000	.000	.056
	Roy's Largest Root	.059	10.587[a]	5.000	894.000	.000	.056

a. Exact statistic

b. Design: Intercept + Focus

Having determined that customers' perceived service quality differs across the two categories of customers focus the next step was to establish which of the variables differ significantly between the two categories. This involves the use of univariate F (ANOVA) tests of between subjects for each of the dimensions between the two groups of departments. Table 4.32 presents the results of the univariate F ratios for the variables being studied. As shown in Table 4.66, the univariate tests were significant, which indicates that all the five service quality dimensions differ across the two categories of customer focus. Individual dimensions results were: tangibles [F(1, 898)=4.63, p<0.05], reliability [F(1,898)=36.36, p<0.05], responsiveness [F(1,898)=16.12, p<0.05], assurance [F(1,898)=7.00, p<0.05] and empathy [F(1,898)=19.51, p<0.05]. Thus, customers' perceived service quality varies significantly across customer focus groups.

The use of univariate ANOVAs to follow-up significant multivariate tests could lead to the possibility of committing a type I error (Brace et al., 2006) as there are multiple comparisons this increases the chance of differences arising. In order to avoid this error, the Bonferroni adjustment to the alpha level is undertaken. The p value for determining significance (which is commonly set at 0.05), is divided by the number of dependent variables to obtain the Bonferroni adjusted alpha level. Thus, in this study the adjusted alpha level would be 0.05/5 =0.01alpha. When the

Bonferroni adjusted alpha level was applied, tangibles dimension was not statistically significantly different between the two categories of customer focus; (F(1,898) =12.72, p= 0.03).

Table 4.32 test of between-subjects effects

Source	Dependent Variable	Type III Sum of Squares	Df	Mean Square	F	Sig.
Corrected Model	Tangibles	12.721[a]	1	12.721	4.626	.032
	Reliability	120.122[b]	1	120.122	36.355	.000
	Responsiveness	53.047[c]	1	53.047	16.123	.000
	Assurance	20.551[d]	1	20.551	7.007	.008
	Empathy	56.450[e]	1	56.450	19.506	.000
Intercept	Tangibles	2353.867	1	2353.867	856.069	.000
	Reliability	3082.470	1	3082.470	932.921	.000
	Responsiveness	2636.822	1	2636.822	801.443	.000
	Assurance	2139.062	1	2139.062	729.329	.000
	Empathy	1996.898	1	1996.898	690.024	.000
Focus	**Tangibles**	**12.721**	**1**	**12.721**	**4.626**	**.032**
	Reliability	120.122	1	120.122	36.355	.000
	Responsiveness	53.047	1	53.047	16.123	.000
	Assurance	20.551	1	20.551	7.007	.008
	Empathy	56.450	1	56.450	19.506	.000
Error	Tangibles	2469.162	898	2.750		
	Reliability	2967.088	898	3.304		
	Responsiveness	2954.506	898	3.290		
	Assurance	2633.761	898	2.933		
	Empathy	2598.772	898	2.894		
Total	Tangibles	4835.750	900			
	Reliability	6169.680	900			
	Responsiveness	5644.375	900			
	Assurance	4793.375	900			
	Empathy	4652.120	900			
Corrected Total	Tangibles	2481.883	899			
	Reliability	3087.210	899			
	Responsiveness	3007.553	899			
	Assurance	2654.312	899			
	Empathy	2655.222	899			

While the results have shown that customer focused PBRS performance plans has an impact on perceived service quality, the direction of the impact still needs to be established. The second hypothesis focuses on determining the direction of the impact from customer focus of PBRS. Within the literature it has been suggested that customer focus/orientation results in customer satisfaction (Cheng et al., 2004; Korunka et al., 2007). On the basis of that understanding, it is expected that customers of high customer focused departments would be more satisfied than those in the low customer focus category. The second hypothesis therefore proposes that the more customer-focused the PBRS performance plans the higher the level of customer satisfaction. The null hypothesis (H2a) suggests that differing levels of customer-focus of PBRS plans do not make a difference in customers' perceived service quality. Thus, the proposed hypotheses were as follows:

H2a. Increasing the level of customer-focus of PBRS has no effect on customers' perceived service quality

H2b. The more customer-focused the PBRS the higher the level of customers' perceived service quality and satisfaction.

In order to address the second hypothesis there is a need to undertake further post-hoc tests. Given that there were only two customer focus categories, independent t-tests were most appropriate undertaken for this post-hoc testing to determine the direction of the impact of customer focus on customers' perceived service quality. Table 4.53 shows the descriptive statistics for the two categories of customer focus (i.e the performance on each dimension were summed for the three departments within each group).

Table 4.33 the impact of customer focus on service quality

	Customer focus/orientation	N	Mean	Std. Deviation	Std. Error Mean
Tangibility	High customer focus	450	-1.7361	1.68470	.07942
	Low customer focus	450	-1.4983	1.63127	.07690
Reliability	High customer focus	450	-2.2160	1.85758	.08757
	Low customer focus	450	-1.4853	1.77696	.08377
Responsiveness	High customer focus	450	-1.9544	1.85435	.08741
	Low customer focus	450	-1.4689	1.77245	.08355
Assurance	High customer focus	450	-1.6928	1.67889	.07914
	Low customer focus	450	-1.3906	1.74561	.08229
Empathy	High customer focus	450	-1.7400	1.61878	.07631
	Low customer focus	450	-1.2391	1.77974	.08390

Table 4.33 shows that departments in high customer focus category performed worse in terms of customers' perceived service quality. The high customer focus category had lower mean scores when compared to the higher scores for the low customer focus category. This means that generally, departments in the low customer focus category were perceived as delivering a better service quality (i.e customers were more satisfied or less dissatisfied given means are negative) than those in the high customer focus category. These results were not anticipated and were in fact inverse to those hypothesised, because, ideally, high customer focused departments were expected to perform better than low customer focused departments.

Table 4.34 presents the t-tests results for the two categories of customer focus. Levene's test is not significant for all dimensions ($p>.05$), indicating that requirement for equality of variance has been violated. Given that Levene's test was violated the bottom row t-values (equal variances not assumed) were used to make comparisons between the departments. The t-test was significant in all the five dimensions showing that the two categories were different and that the low customer focus group performed better than the high customer focus.

Table 4.34 Independent Samples Test for unweighted SERVQUAL

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference Lower	Upper
Tangibility	Equal variances assumed	.158	.691	-2.151	898	.032	-.23778	.11055	-.45474	-.02082
	Equal variances not assumed			-2.151	897.069	.032	-.23778	.11055	-.45474	-.02082
Reliability	Equal variances assumed	1.461	.227	-6.030	898	.000	-.73067	.12118	-.96850	-.49284
	Equal variances not assumed			-6.030	896.238	.000	-.73067	.12118	-.96850	-.49283
Responsiveness	Equal variances assumed	2.530	.112	-4.015	898	.000	-.48556	.12092	-.72288	-.24823
	Equal variances not assumed			-4.015	896.174	.000	-.48556	.12092	-.72288	-.24823
Assurance	Equal variances assumed	.126	.723	-2.647	898	.008	-.30222	.11417	-.52630	-.07815
	Equal variances not assumed			-2.647	896.640	.008	-.30222	.11417	-.52630	-.07815
Empathy	Equal variances assumed	1.575	.210	-4.417	898	.000	-.50089	.11341	-.72347	-.27831
	Equal variances not assumed			-4.417	890.050	.000	-.50089	.11341	-.72347	-.27831

Given that departments in the high customer focus category did not perform better than those in the low customer focus category in terms of perceived service quality, the second hypothesis (H2) was rejected. H2 is rejected because it proposes that there is a positive relationship while the results show an inverse relationship between customer focus of PBRS and customers' perceived service quality. The null hypothesis is also rejected because it suggests that there were no differences between high and low customer focused departments when customer focus of PBRS was increased. The results showed that were differences between the two categories of customer focus.

Having tested the hypotheses using unweighted SERVQUAL scores, the next step was to re-run the test using weighted SERVQUAL scores to provide for the differences arising from the dimension importance weights. The next section discusses the MANOVA and post-hoc test results for the weighted SERVQUAL scores. As was described in section 4.5, dimension weights reflect the importance attached to SERVQUAL dimensions by customers. Adjusting for importance weights may affect the original dimension scores. In order to cater for potential differences in dimension scores resulting from importance weights, a MANOVA test was undertaken for weighted dimension scores.

4.6.5 MANOVA for weighted SERVQUAL scores

This section discusses the results of MANOVA tests using weighted SERVQUAL scores. As indicated in Section 4.5 the use of weights when measuring service quality, enables the respondents to show by allocation of points, the importance of each SERVQUAL dimension to them. As mentioned earlier, dimension scores are likely to change as a result of adjusting for importance weights, thus the MANOVA procedure was repeated for the weighted scores and the results for the different tests were summarised in tables. Prior to undertaking the MANOVA, assumptions tests for MANOVA were conducted. Levene's test for equality of variance was performed and the results are as shown in Table 4.55.

Table 4.35 Levene's Test for weighted SERVQUAL scores

	F	df1	df2	Sig.
Weighted tangibles score	.057	1	898	.811
Weighted reliability score	1.228	1	898	.268
Weighted responsiveness	9.417	1	898	.002
Weighted Assurance score	2.528	1	898	.112
Weighted empathy score	1.264	1	898	.261

Tests the null hypothesis that the error variance of the dependent variable is equal across groups.

a. Design: Intercept + Focus

Levene's test was not significant for all but one dimension (responsiveness) meaning that variance was equal in the four dimensions. Thus, the requirement for equality of variance was not violated in four of the five dimensions. Given the large sample size and equal sample sizes among the six departments, lack of equality of variance for responsiveness was expected to have only a minor effect on overall results. Brace et al. (2006) suggest that where there are equal sample sizes and a reasonable number of respondents, the MANOVA test remains valid even with modest violations of its assumptions.

The test for equality of covariance was also conducted and the results are as illustrated in Table 4.36. The Box’s test of equality of covariance matrices was significant indicating lack of equality of covariance, and thus has been violated. As discussed earlier (Section 4.64), violating this assumption is not expected to have a major effect on the results since the sample size was large.

Table 4.36 Box's Test for weighted SERVQUAL

Box's M	67.561
F	4.477
df1	15
df2	3246837.158
Sig.	.000

a. Design: Intercept + Focus

Table 4.37 summarises the MANOVA test results. The results were statistically significant, meaning that customer focus of departments’ performance plans resulted in differences in the dependent variable (customers’ perceived service quality). According to the results F (5,894) = 6.23, p <0.0005; Pillai’s Trace = 0.03; partial eta squared = 0.03. The MANOVA results for weighted SERVQUAL scores are similar to the unweighted scores as they both indicate that customer focus had an impact on customers’ perceived service quality. However the partial eta squared is low (3%) indicating that the effect of customer focus of PBRS on customers’ perceived service quality is generally low. As stated in Section 4.6.4, partial eta of 14% and more is considered to have a large effect on the dependent variable (Brace et al., 2006).

Table 4.37 MANOVA test for weighted SERVQUAL SCORES

Effect		Value	F	Hypothesis df	Error df	Sig.	Partial Eta Squared
Intercept	Pillai's Trace	.553	2.210E2	5.000	894.000	.000	.553
	Wilks' Lambda	.447	2.210E2	5.000	894.000	.000	.553
	Hotelling's Trace	1.236	2.210E2	5.000	894.000	.000	.553
	Roy's Largest Root	1.236	2.210E2	5.000	894.000	.000	.553
Focus	**Pillai's Trace**	**.034**	**6.230**[a]	**5.000**	**894.000**	**.000**	**.034**
	Wilks' Lambda	.966	6.230[a]	5.000	894.000	.000	.034
	Hotelling's Trace	.035	6.230[a]	5.000	894.000	.000	.034
	Roy's Largest Root	.035	6.230[a]	5.000	894.000	.000	.034

a. Exact statistic
b. Design: Intercept + Focus

A follow-up ANOVA test was conducted to examine the impact of customer focus on perceived service quality. Individual ANOVA F scores were explored using an adjusted Bonferonni alpha of 0.01 (0.05/5) and the results are shown in Table 4.38.

Table 4.38 Test of between the subjects effects for weighted SERVQUAL scores

Source	Dependent Variable	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	Weighted tangibles score	982.822[a]	1	982.822	.559	.455	.001
	Weighted reliability score	24058.078[b]	1	24058.078	10.512	.001	.012
	Weighted responsiveness	44492.871[c]	1	44492.871	24.166	.000	.026
	Weighted Assurance score	20475.225[d]	1	20475.225	15.337	.000	.017
	Weighted empathy score	19536.585[e]	1	19536.585	15.123	.000	.017
Intercept	Weighted tangibles score	1133018.321	1	1133018.321	644.969	.000	.418
	Weighted reliability score	1524500.553	1	1524500.553	666.127	.000	.426
	Weighted responsiveness	1129118.760	1	1129118.760	613.265	.000	.406
	Weighted Assurance score	762638.335	1	762638.335	571.250	.000	.389
	Weighted empathy score	557093.056	1	557093.056	431.252	.000	.324
Focus	**Weighted tangibles score**	**982.822**	**1**	**982.822**	**.559**	**.455**	**.001**
	Weighted reliability score	24058.078	1	24058.078	10.512	.001	.012
	Weighted responsiveness	44492.871	1	44492.871	24.166	.000	.026
	Weighted Assurance score	20475.225	1	20475.225	15.337	.000	.017
	Weighted empathy score	19536.585	1	19536.585	15.123	.000	.017
Error	Weighted tangibles score	1577518.356	898	1756.702			
	Weighted reliability score	2055165.209	898	2288.603			
	Weighted responsiveness	1653360.369	898	1841.159			
	Weighted Assurance score	1198861.127	898	1335.035			
	Weighted empathy score	1160040.759	898	1291.805			
Total	Weighted tangibles score	2711519.500	900				
	Weighted reliability score	3603723.840	900				
	Weighted responsiveness	2826972.000	900				
	Weighted Assurance score	1981974.688	900				
	Weighted empathy score	1736670.400	900				
Corrected Total	Weighted tangibles score	1578501.179	899				
	Weighted reliability score	2079223.287	899				
	Weighted responsiveness	1697853.240	899				
	Weighted Assurance score	1219336.352	899				
	Weighted empathy score	1179577.344	899				

Results in Table 4.38 show that tangibles dimension was not statistically significant, *F* (1,898) = 0.56, *p*= 0.455, partial eta squared =0.001. The partial eta is also very low (0.1%) supporting the ANOVA results that customer focus did not have a statistically significant impact on tangibles dimension. Thus, it can be concluded that customer focus of departments' PBRS largely influenced customers' perceived service quality of reliability, responsiveness, assurance and empathy, but not tangibility, when dimension importance weights are taken into consideration. MANOVA and ANOVA results obtained using weighted SERVQUAL scores overall are similar to the unweighted SERVQUAL scores results. They all indicate that customer focus of PBRS performance plans had an impact on customers' perceived service quality. The first hypothesis (H1b) proposing that customer focus of PBRS has a statistically significant impact on customers' perceived service quality is thus supported by both weighted and unweighted SERVQUAL.

In order to measure the magnitude of the direction of customer focus on perceived service quality, a post hoc t-test was conducted and the results are reported in Tables 4.39 and 4.40. Table 4.39 shows the descriptive statistics for the two categories of customer focus and the weighted dimensions. Results in Table 4.39 show that once again departments in low customer focus category performed better than those in the high customer focus category in terms of mean scores. As indicated, the mean scores for the low customer focus were higher than the scores for the high customer focus category.

Table 4.39 impact of customer focus on perceived service quality using weighted SERVQUAL scores

	Customer focus/orientation	N	Mean	Std. Deviation	Std. Error Mean
Weighted tangibles	High customer focus	450	-36.5261	42.43667	2.00048
	Low customer focus	450	-34.4361	41.38276	1.95080
Weighted reliability	High customer focus	450	-46.3271	46.87462	2.20969
	Low customer focus	450	-35.9867	48.78499	2.29975
Weighted responsiveness	High customer focus	450	-42.4511	45.32448	2.13662
	Low customer focus	450	-28.3889	40.34859	1.90205
Weighted Assurance	High customer focus	450	-33.8794	38.26380	1.80377
	Low customer focus	450	-24.3400	34.72680	1.63704
Weighted empathy	High customer focus	450	-29.5387	32.25547	1.52054
	Low customer focus	450	-20.2204	39.28351	1.85184

Table 4.30 presents the *t*-tests results for the two categories of customer focus. Levene' test was statistically significant for responsiveness dimension, therefore the bottom row values of t will be used to make comparisons between the departments. The results indicate that all but one dimension (tangibles) were significant (Which is consistent with ANOVA). As observed earlier,

there seems to be no difference in terms of the effect of customer focus of departments' PBRS plans on tangibles dimension. Once again the results show that the departments within the two categories of customer focus differed for four out of the five dimensions. Customers for departments in the low customer focus category perceived a better service quality than those in the high customer focus category. The results for both weighted and unweighted SERVQUAL are similar.

Table 4.40 Independent Samples *t*-test for weighted SERVQUAL

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference Lower	Upper
Weighted tangibles	Equal variances assumed	.057	.811	-.748	898	.455	-2.09000	2.79420	-7.57393	3.39393
	Equal variances not assumed			-.748	897.433	.455	-2.09000	2.79420	-7.57393	3.39393
Weighted reliability	Equal variances assumed	1.228	.268	-3.242	898	.001	-10.34044	3.18929	-16.59977	-4.08112
	Equal variances not assumed			-3.242	896.571	.001	-10.34044	3.18929	-16.59979	-4.08110
Weighted responsiveness	Equal variances assumed	9.417	.002	-4.916	898	.000	-14.06222	2.86058	-19.67643	-8.44802
	Equal variances not assumed			-4.916	886.124	.000	-14.06222	2.86058	-19.67653	-8.44792
Weighted Assurance	Equal variances assumed	2.528	.112	-3.916	898	.000	-9.53944	2.43588	-14.32012	-4.75877
	Equal variances not assumed			-3.916	889.682	.000	-9.53944	2.43588	-14.32018	-4.75871
Weighted empathy	Equal variances assumed	1.264	.261	-3.889	898	.000	-9.31822	2.39611	-14.02085	-4.61559
	Equal variances not assumed			-3.889	865.233	.000	-9.31822	2.39611	-14.02109	-4.61535

In conclusion, customer focus of departments' PBRS plans has an impact on customers' perceived service quality, thus hypothesis H1b was accepted. However, the direction is inverse to that proposed by the second hypothesis (H2b). PBRS schemes may have resulted in improvements in customer service over time (i.e before PBRS to after their introduction). However, the researcher did not have access to data on customers' perceived service quality prior to this study and this cannot be tested. Thus, these results make it impossible to suggest that customer focused PBRS schemes improve customer service quality or to what extent this is improved in the absence of data on perceived service quality prior to PBRS. Given that the low customer focused departments performed better than the high customer focused departments (i.e inverse direction of customer focus impact) hypothesis H2b is rejected. More on the implications of the inverse relationships between the high and low customer focused departments is to be discussed in Chapter 5.

The next section discusses comparison of the departments within each category of customer focus. The aim is to examine whether differences exist between departments within the same category of customer focus. This has been undertaken to better understand the results suggesting that high customer oriented PBRS departments performed worse that those with low customer focused PBRS. Thus there may be something associated with individual departments that could possibly explain the inconsistent overall results. As described earlier in this section (4.6.5), low customer focused departments performed better than high customer focused departments in terms of customers' perceived service quality. Given the unanticipated results in regard to customer focus, there was a need to examine possible reasons why this arose. This will possibly enable the researcher to explain the results.

4.6.6 Comparison of departments within the same customer focus category

In the previous sections (4.6.4 and 4.6.5), departments were compared across the two categories of PBRS customer focus. As already mentioned, the results showed that customers for the low customer focused departments perceived a better service quality than those in the high customer focused departments. In this section, comparison is undertaken for the three departments within each category of customer focus. Departments within the same category of customer focus were compared to explore for possible differences in perceived service quality between these departments. Given that departments in the same category have similarities in terms of the level of customer focused PBRS, it is hypothesised that there will be no differences in perceived service quality between them (departments). However if comparisons reveal that differences exist between departments in the same category, then customer focused PBRS would potentially impact differently on each department's customers' expectations and perceptions dimensions. In that regard, overall levels of PBRS may be the inappropriate measure, even though theory suggests this should explain results (i.e that PBRS should improve consumer outcomes).

In order to make comparisons between the three departments in each customer focus category MANOVA, ANOVA and post-hoc t-tests tests were undertaken using both weighted and unweighted SERVQUAL scores.

4.6.6.1 Comparison using unweighted SERVQUAL scores

In this section, departments within each customer focus group were compared using unweighted SERVQUAL scores. Before undertaking the MANOVA, assumptions tests for MANOVA were conducted. Box' test of equality of covariance was performed and the results are shown in Table 4.41. The results revealed that Box's test was statistically significant for both high and low customer focused departments. This implies that the assumption for equality of covariance was violated in both high and low customer focused departments. As mentioned in Section 4.6.3, Box' test is very sensitive where small and unequal numbers of respondents are used. The impact of violating this test is expected to be minimal since the three departments in each category of customer focus had equal numbers of respondents (150) and the overall sample collected for this study was large. Brace et al. (2006) suggest that violating Box's test assumption would affect the validity of the MANOVA results especially where sample sizes are small and unequal.

Table 4.41 Box's Test for unweighted SERVQUAL scores

High customer focus	Box's M	84.687
	F	2.778
	df1	30
	df2	633135.609
	Sig.	**.000**
Low customer focus	Box's M	133.477
	F	4.378
	df1	30
	df2	633135.609
	Sig.	**.000**

Tests the null hypothesis that the observed covariance matrices of the dependent variables are equal across groups.

a. Design: Intercept + Dept

Table 4.42 shows the results of Levene's test for the three departments within each of the two categories of customer focus. Results for the high customer focused departments were statistically significant for the assurance dimension. Results for other dimensions were not significant thus satisfying the requirements for this assumption. Given that assurance dimension violated the assumptions for Levene's test, the results for high customer focused departments concerning this dimension could be potentially affected. The impact of violating this assumption is, however, expected to be minimal because a large sample (900 respondents) was used in this thesis (Brace et al., 2006; Hair et al., 2006).

Levene's test for low customer focused departments was also statistically significant for all the five dimensions meaning that the assumption has been violated. Violating Levene's test could possibly affect the reliability and robustness of the MANOVA test results (Brace et al., 2006). It is however hoped that the large number and equal distribution of respondents among the three departments in the low customer focused category would reduce the impact of violating this assumption. As mentioned in section 4.6.5, Brace et al. (2006) suggest that where there are equal numbers of respondents in each group, and a reasonable number of respondents, the MANOVA test remains valid even with modest violations of its assumptions.

Table 4.42 Levene's Test for unweighted SERVQUAL scores

Customer focus/orientation		F	df1	Df2	Sig.
High customer focus	Tangibility	1.733	2	447	.178
	Reliability	.694	2	447	.500
	Responsiveness	1.250	2	447	.288
	Assurance	**6.046**	**2**	**447**	**.003**
	Empathy	2.765	2	447	.064
Low customer focus	Tangibility	5.826	2	447	.003
	Reliability	4.151	2	447	.016
	Responsiveness	3.310	2	447	.037
	Assurance	6.639	2	447	.001
	Empathy	5.914	2	447	.003

Tests the null hypothesis that the error variance of the dependent variable is equal across groups

a. Design: Intercept + Dept

MANOVA test results for the unweighted SERVQUAL scores within each customer focus group are summarised in Table 4.43. Results show that the MANOVA test was statistically significant for departments within both high and low customer focused groups. This implies that customer focused PBRS plans resulted in differences between the performance of the three departments within each category of customer focus, i.e there were differences in customers' perceived service quality within each of the two categories of customer focus.

Table 4.43 MANOVA results for unweighted SERVQUAL scores

Customer focus/orientation	Effect		Value	F	Hypothesis df	Error df	Sig.	Partial Eta Squared
High customer focus	Intercept	Pillai's Trace	.640	1.573E2	5.000	443.000	.000	.640
		Wilks' Lambda	.360	1.573E2	5.000	443.000	.000	.640
		Hotelling's Trace	1.775	1.573E2	5.000	443.000	.000	.640
		Roy's Largest Root	1.775	1.573E2	5.000	443.000	.000	.640
	Dept	**Pillai's Trace**	**.075**	**3.452**	**10.000**	**888.000**	**.000**	**.037**
		Wilks' Lambda	.926	3.465[a]	10.000	886.000	.000	.038
		Hotelling's Trace	.079	3.478	10.000	884.000	.000	.038
		Roy's Largest Root	.061	5.460[b]	5.000	444.000	.000	.058
Low customer focus	Intercept	Pillai's Trace	.503	89.609[a]	5.000	443.000	.000	.503
		Wilks' Lambda	.497	89.609[a]	5.000	443.000	.000	.503
		Hotelling's Trace	1.011	89.609[a]	5.000	443.000	.000	.503
		Roy's Largest Root	1.011	89.609[a]	5.000	443.000	.000	.503
	Dept	**Pillai's Trace**	**.105**	**4.938**	**10.000**	**888.000**	**.000**	**.053**

		Wilks' Lambda	.897	4.958[a]	10.000	886.000	.000	.053
		Hotelling's Trace	.113	4.979	10.000	884.000	.000	.053
		Roy's Largest Root	.084	7.454[b]	5.000	444.000	.000	.077

a. Exact statistic

b. The statistic is an upper bound on F that yields a lower bound on the significance level.

c. Design: Intercept + Dept

Follow-up to ANOVA tests were undertaken to explore potential differences between individual departments in each category. The results are presented in Table 4.44. Results for the high customer focus category show that the ANOVA test was not significant for tangibles, reliability, responsiveness and empathy. This implies that there were no differences between the three departments in the high customer focus category (Public Health, Clinical Services and IEC) across these four dimensions. The ANOVA test was however statistically significant for the assurance dimension. Thus overall, the three high customer focused departments were generally similar.

The ANOVA results for the low customer focused departments (Table 4.44) indicate that there were statistically significant differences in four dimensions (tangibles, reliability, assurance and empathy). This implies that departments in the low customer focus category (Culture and Youth, Wildlife & National Parks, Tourism) differed in regards to four of the five dimensions. Responsiveness was the only dimension that was not significant, indicating similarity between the three departments under that dimension.

Table 4.44 ANOVA test for unweighted SERVQUAL within the same customer focus group

Customer focus/orientation			Sum of Squares	df	Mean Square	F	Sig.
High customer focus	Tangibility	Between Groups	1.455	2	.728	.256	.775
		Within Groups	1272.895	447	2.848		
		Total	1274.351	449			
	Reliability	Between Groups	9.005	2	4.502	1.307	.272
		Within Groups	1540.320	447	3.446		
		Total	1549.325	449			
	Responsiveness	Between Groups	10.542	2	5.271	1.537	.216
		Within Groups	1533.399	447	3.430		
		Total	1543.941	449			
	Assurance	Between Groups	42.747	2	21.373	7.813	.000
		Within Groups	1222.842	447	2.736		
		Total	1265.589	449			
	Empathy	Between Groups	6.375	2	3.187	1.218	.297
		Within Groups	1170.205	447	2.618		
		Total	1176.580	449			
Low customer focus	Tangibility	Between Groups	63.251	2	31.625	12.493	.000
		Within Groups	1131.560	447	2.531		
		Total	1194.811	449			
	Reliability	Between Groups	19.969	2	9.984	3.193	.042
		Within Groups	1397.795	447	3.127		
		Total	1417.763	449			
	Responsiveness	Between Groups	18.074	2	9.037	2.901	.056
		Within Groups	1392.490	447	3.115		
		Total	1410.564	449			
	Assurance	Between Groups	45.050	2	22.525	7.610	.001
		Within Groups	1323.122	447	2.960		
		Total	1368.172	449			
	Empathy	Between Groups	19.684	2	9.842	3.137	.044
		Within Groups	1402.507	447	3.138		
		Total	1422.192	449			

The ANOVA test gives an overall picture of the degree of similarity between the three departments within each category of customer focus. However it is important to know how departments within the same category differ as this could assist exploring the hypotheses and objectives of this research. It would also possibly help in understanding why low customer focused departments performed better than high customer focused/oriented departments. Paired independent *t*-tests were undertaken to make further comparisons between departments to explore for possible differences and similarities between departments within each customer focus category. Departments were paired to ensure that each department was compared with the other two departments within the same category of customer focus. The high customer focused departments were compared in pairs as follows:

a) Clinical Services Vs Public Health
b) Clinical Services Vs Independent Electoral Commission
c) Public Health Vs Independent Electoral commission.

The results of the comparisons are presented in Tables 4.45 to 4.47.

Table 4.45 Within customer focus comparison Clinical Services Vs Public Health

Customer focus/orientation		Levene's Test for Equality of Variances F	Sig.	t-test for Equality of Means T	Df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference Lower	Upper
Tangibles	Equal variances assumed	1.044	.308	-.440	298	.660	-.08333	.18931	-.45589	.28922
	Equal variances not assumed			-.440	297.160	.660	-.08333	.18931	-.45590	.28923
Reliability	Equal variances assumed	1.024	.312	1.608	298	.109	.34400	.21392	-.07698	.76498
	Equal variances not assumed			1.608	296.761	.109	.34400	.21392	-.07698	.76498
Responsiveness	Equal variances assumed	.307	.580	1.653	298	.099	.36500	.22081	-.06954	.79954
	Equal variances not assumed			1.653	297.288	.099	.36500	.22081	-.06954	.79954
Assurance	Equal variances assumed	.815	.367	1.309	298	.192	.26667	.20375	-.13430	.66764
	Equal variances not assumed			1.309	297.026	.192	.26667	.20375	-.13431	.66764
Empathy	Equal variances assumed	.013	.908	.490	298	.625	.09733	.19875	-.29379	.48846
	Equal variances not assumed			.490	297.974	.625	.09733	.19875	-.29379	.48846

Table 4.45 shows the results for the independent *t*-tests comparing Clinical Services and Public Health. Levene’s test is not significant for all the five dimensions meaning that there is equality of variance, thus the assumption for equality of variance was not violated. This is important because violation of the assumption for equality of variance may affect the robustness and validity of the results (Brace et al., 2006).

The independent t-test results show that the two departments (Clinical Services and Public Health) did not differ statistically across the five SERVQUAL dimensions. In all the five dimensions the independent *t*-test was not statistically significant. This shows there is no difference in the dimensions for these two high customer focused PBRS departments. The two departments provide similar services (health services), thus, their customers' perceptions are similar.

Table 4.46 Within customer focus comparison Clinical services Vs Independent Electoral Commission

Customer focus/orientation		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference Lower	Upper
Tangibles	Equal variances assumed	3.414	.066	-.709	298	.479	-.13833	.19514	-.52237	.24570
	Equal variances not assumed			-.709	294.508	.479	-.13833	.19514	-.52238	.24572
Reliability	Equal variances assumed	1.050	.306	.644	298	.520	.13600	.21109	-.27942	.55142
	Equal variances not assumed			.644	297.538	.520	.13600	.21109	-.27942	.55142
Responsiveness	Equal variances assumed	1.046	.307	.522	298	.602	.10833	.20745	-.29993	.51659
	Equal variances not assumed			.522	296.225	.602	.10833	.20745	-.29994	.51660
Assurance	Equal variances assumed	6.293	.013	-2.642	298	.009	-.47833	.18102	-.83457	-.12210
	Equal variances not assumed			**-2.642**	**287.152**	**.009**	**-.47833**	**.18102**	**-.83462**	**-.12204**
Empathy	Equal variances assumed	4.783	.030	-1.046	298	.297	-.18933	.18109	-.54571	.16704
	Equal variances not assumed			-1.046	284.741	.297	-.18933	.18109	-.54578	.16711

Table 4.46 presents the independent t-test results for departments of Clinical Services and Independent Electoral Commission (IEC). Levenes' test was not statistically significant for tangibles, reliability and responsiveness, thus the assumption for equality of variance was not violated. However, the test was significant for assurance and empathy both of which had significance values of less than 0.05. Brace et al (2006) suggest the use of the bottom row values for t if Levene's $p< 0.05$ as is the case with assurance and empathy dimensions. Additionally, independent t-test provides the bottom row t values as an option if equal variances are not

assumed. Thus, the bottom *t* values for assurance and empathy dimensions were used in making comparisons between Clinical Services and Independent Electoral Commission.

Results of independent t-test showed that the difference between Clinical Services and IEC was not statistically significant (i.e $p > .05$) for tangibles, reliability, responsiveness and empathy. Thus, the two high customer oriented departments' level of performance on these four dimensions was similar. However the difference existed for the assurance dimension between Clinical Services and IEC, and was statistically significant, implying that the two departments' performance differ with respect to assurance (t = -2.64, df = 287.15, p = 0.009). These results imply that generally the two departments (Clinical Services and IEC) were similar as they differ in only one dimension (assurance). Thus, customer focus of PBRS generally had similar effects on customers' perceived service quality in the two departments.

Table 4.47 within customer focus comparison Public Health Vs Independent Electoral Commission

Customer focus/orientation		Levene's Test for Equality of Variances F	Sig.	t-test for Equality of Means T	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference Lower	Upper
Tangibles	Equal variances assumed	.711	.400	-.275	298	.783	-.05500	.19996	-.44852	.33852
	Equal variances not assumed			-.275	297.066	.783	-.05500	.19996	-.44853	.33853
Reliability	Equal variances assumed	.001	.980	-.954	298	.341	-.20800	.21798	-.63698	.22098
	Equal variances not assumed			-.954	297.810	.341	-.20800	.21798	-.63698	.22098
Responsiveness	Equal variances assumed	2.441	.119	-1.204	298	.229	-.25667	.21313	-.67610	.16276
	Equal variances not assumed			-1.204	293.351	.229	-.25667	.21313	-.67612	.16279
Assurance	Equal variances assumed	11.858	.001	-3.974	298	.000	-.74500	.18747	-1.11393	-.37607
	Equal variances not assumed			**-3.974**	**280.619**	**.000**	**-.74500**	**.18747**	**-1.11403**	**-.37597**
Empathy	Equal variances assumed	4.274	.040	-1.592	298	.112	-.28667	.18006	-.64102	.06769
	Equal variances not assumed			-1.592	285.775	.112	-.28667	.18006	-.64109	.06775

Table 4.47 presents the independent t-test results for comparing the departments of Public Health and IEC. Levene's test was not significant for tangibles, reliability and responsiveness, thus the assumption for equality of variance was not violated for those dimensions. The test was significant for assurance and empathy implying that equality of variance cannot be assumed for the two dimensions. As discussed earlier, the bottom row of the *t* values (equal variances not assumed) was used for assessing results pertaining to the two dimensions in line with Brace et al.'s (2006) suggestion.

Results showed that the departments of Public Health and IEC did not differ significantly for tangibles, reliability, responsiveness and empathy. In the four dimensions the significance level was more than the recommended 0.05 threshold (i.e $p > .05$). This implies that these two high customer focused PBRS departments had similar levels of perceived service quality across the four dimensions. Independent *t*-test was statistically significant for the assurance dimension (t = -3.974, df = 280.62, p = 0.000) which implies that the two departments (Public Health and IEC) differed with regard to the assurance dimension. These results imply that the two departments were generally similar as they differ in only one dimension.

In concluding the results for the high customer focused departments, it has been observed that the three high customer focussed departments were generally similar. Table 4.48 summarises the results for comparing the three high customer focused departments using unweighted SERVQUAL scores. The departments of Clinical Services and Public Health were similar across the five dimensions while the other department pairs (Clinical Services/IEC and Public Health/IEC) differed only in one dimension. In both cases the departments differed with respect to the assurance dimension. Given that the three departments are generally similar, then it is most likely that there are no internal issues affecting customers' perceived service quality between the three departments within the high customer focused PBRS category using unweighted SERVQUAL scores.

Table 4.48 comparisons between the three high customer-focused departments (unweighted SERVQUAL)

Department pairs	**Dimensions and statistical significance**				
	Tangibles	***Reliability***	***Responsiveness***	***Assurance***	***Empathy***
Clinical Services/ Public Health	Not statistically significant	Not statistically significant	Not statistically significant	Not statistically significant	Not statistically significant
Clinical Services/ IEC	Not statistically significant	Not statistically significant	Not statistically significant	Statistically significant (**different**)	Not statistically significant
Public Health /IEC	Not statistically significant	Not statistically significant	Not statistically significant	Statistically significant (**different**)	Not statistically significant

The next step was to make comparisons between departments within the low customer focused category to identify potential differences and similarities between them. The low customer focused departments were also compared in pairs and were grouped as follows:

1. Culture and Youth Vs Wildlife and National Parks
2. Culture and Youth Vs Tourism
3. Wildlife and National Parks Vs Tourism

Post-hoc independent t-tests were undertaken for the three department pairs to identify similarities and differences between the departments. The results of the *t*-tests are presented in Tables 4.69 to 4.71.

Table 4.49 within customer focus Culture and Youth Vs Wildlife and National Parks

Customer focus/orientation Culture and Youth: Wildlife and National Parks		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	Df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Tangibles	Equal variances assumed	4.543	.034	5.325	298	.000	.88167	.16559	.55580	1.20753
	Equal variances not assumed			5.325	289.005	.000	.88167	.16559	.55576	1.20757
Reliability	Equal variances assumed	1.640	.201	2.726	298	.007	.51467	.18880	.14311	.88622
	Equal variances not assumed			2.726	295.112	.007	.51467	.18880	.14310	.88624
Responsiveness	Equal variances assumed	3.244	.073	2.539	298	.012	.47667	.18776	.10716	.84617
	Equal variances not assumed			2.539	291.056	.012	.47667	.18776	.10712	.84621
Assurance	Equal variances assumed	9.010	.003	4.316	298	.000	.77500	.17955	.42165	1.12835
	Equal variances not assumed			4.316	285.730	.000	.77500	.17955	.42159	1.12841
Empathy	Equal variances assumed	6.624	.011	1.861	298	.064	.34667	.18630	-.01996	.71329
	Equal variances not assumed			**1.861**	**288.365**	**.064**	**.34667**	**.18630**	**-.02001**	**.71334**

Table 4.49 presents results for comparing the departments of Culture & Youth and Wildlife and National Parks. Levene’s test was statistically significant for tangible, assurance and empathy thus violating the assumption for equality of variance. In view of the violation of equality of variance, the bottom row *t* values were used for making comparisons between the two

departments in regards to tangibles, assurance and empathy. Levene's test was not significant for reliability and responsiveness dimensions, implying that there was equality of variance. Thus, the results with regard to these two dimensions would be more robust.

Results for the independent t-test revealed that the test was statistically significant in four dimensions (tangibles, reliability, responsiveness and assurance). This implies that these two low customer focused PBRS departments (Culture & Youth and Wildlife and National Parks) appeared to perform differently on tangibles, reliability, responsiveness and assurance. The t-test was however not significant for the empathy dimension (t = 1.86, df =288.37, p= 0.06). This means that the departments of Culture & Youth and Wildlife and National Parks were similar with respect to empathy dimension but overall there were statistically significant differences.

Table 4.50 within customer focus Culture and Youth Vs Tourism

Customer focus/orientation Culture and Youth: Tourism		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference: Lower	Upper
Tangibles	Equal variances assumed	2.065	.152	1.101	298	.272	.21833	.19834	-.17199	.60866
	Equal variances not assumed			1.101	288.644	.272	.21833	.19834	-.17204	.60871
Reliability	Equal variances assumed	2.574	.110	1.342	298	.181	.28933	.21559	-.13495	.71361
	Equal variances not assumed			1.342	290.811	.181	.28933	.21559	-.13499	.71366
Responsiveness	Equal variances assumed	.775	.379	1.562	298	.119	.34000	.21771	-.08845	.76845
	Equal variances not assumed			1.562	292.164	.119	.34000	.21771	-.08849	.76849
Assurance	Equal variances assumed	.760	.384	1.771	298	.078	.38167	.21546	-.04234	.80567
	Equal variances not assumed			1.771	290.418	.078	.38167	.21546	-.04238	.80572
Empathy	Equal variances assumed	1.053	.306	-.696	298	.487	-.15333	.22039	-.58705	.28038
	Equal variances not assumed			-.696	291.024	.487	-.15333	.22039	-.58709	.28042

Table 4.50 presents the independent t-test results for the departments of Culture and Youth, and Tourism. Levene's test was not significant in all the five dimensions implying that the assumption for equality of variance was not violated. Thus, the results would be more robust as the assumption has not been violated.

Results for the independent t-test revealed that there was no difference between the two departments (Culture & Youth and Tourism) across the five dimensions. The independent t-test was not statistically significant across the five dimensions. Thus, the effect of customer focused PBRS on customers' perceived service quality was similar in the two departments across the five dimensions. The results imply that departments of Culture & Youth and Tourism were generally similar in performance.

Table 4.51 Within customer focus Wildlife and National Parks Vs Tourism

Customer focus/orientation: Wildlife and National Parks/ Tourism		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	Df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference Lower	Upper
Tangibles	Equal variances assumed	10.960	.001	-3.571	298	.000	-.66333	.18574	-1.02887	-.29780
	Equal variances not assumed			-3.571	266.224	.000	-.66333	.18574	-1.02905	-.29762
Reliability	Equal variances assumed	7.826	.005	-1.087	298	.278	-.22533	.20726	-.63320	.18254
	Equal variances not assumed			-1.087	280.176	.278	-.22533	.20726	-.63331	.18264
Responsiveness	Equal variances assumed	6.178	.013	-.667	298	.505	-.13667	.20483	-.53976	.26642
	Equal variances not assumed			-.667	274.960	.505	-.13667	.20483	-.53989	.26656
Assurance	Equal variances assumed	11.422	.001	-1.973	298	.049	-.39333	.19935	-.78564	-.00102
	Equal variances not assumed			**-1.973**	**264.337**	**.050**	**-.39333**	**.19935**	**-.78585**	**-.00082**
Empathy	Equal variances assumed	10.649	.001	-2.433	298	.016	-.50000	.20549	-.90440	-.09560
	Equal variances not assumed			-2.433	269.002	.016	-.50000	.20549	-.90458	-.09542

Table 4.51 presents the results for comparing the departments of Wildlife & National Parks and Tourism. Levene's test was statistically significant in all of the five dimensions, implying that the assumption for equality of variance was violated. This could affect the robustness and validity of the results (Brace et al., 2006). However the independent t-test provides for the use of *t* values in the bottom row when variances are not equal, thereby reducing the impact of violating the equality of variance. Therefore, the bottom row of the t values was used in making comparisons between the two departments across the five dimensions.

The independent t-test was statistically significant for tangibles and empathy dimensions implying that the two departments differed in performance on tangibles and empathy. The test was not significant for reliability, responsiveness and assurance (equal variances not assumed for assurance given violation of equality of variance) meaning that the two departments (Wildlife & National Parks and Tourism) had similarities under reliability, responsiveness and assurance.

Table 4.52 comparisons between the three low customer-focused departments (unweighted SERVQUAL)

Department pairs	**Dimensions and statistical significance**				
	Tangibles	***Reliability***	***Responsiveness***	***Assurance***	***Empathy***
Culture & Youth/ Wildlife & National Parks	Statistically significant (**different**)	Statistically significant (**different**)	Statistically significant (**different**)	Statistically significant (**different**)	Not statistically significant
Culture & Youth / Tourism	Not statistically significant	Not statistically significant	Not statistically significant	Not statistically significant	Not statistically significant
Wildlife & National Parks / Tourism	Statistically significant (**different**)	Not statistically significant	Not statistically significant	Not statistically significant	Statistically significant (**different**)

In conclusion, the results for low customer focused departments were mixed. Table 4.52 presents a summary of the comparisons between the three low customer oriented departments. In the first department pair (Culture and Youth Vs Wildlife and National Parks) the departments differed in four out of five dimensions while the second pair (Culture and Youth Vs Tourism) the departments were similar across the five dimensions. In the last pair (Wildlife and National Parks Vs Tourism) departments differed with regards to two dimensions only. Thus with the exception of Culture and Youth and Tourism, where the departments were similar across the five dimensions, the three departments were generally different.

When compared to the high customer focused PBRS departments, the performance of low customer focused PBRS departments was generally more different. The observed difference between departments in the low customer focused category implies that the impact of customer orientation of PBRS on customers' perceived service quality differs across the three departments. In addition, if the impact of customer focused PBRS differs across the three low customer-focused departments, it means that the performance of these departments would possibly differ under the same level of customer focused PBRS. This might possibly explain the unanticipated direction of differences between the high and low customer focused departments observed in the main results.

In the next section, departments in the two categories of customer focus are compared using weighted SERVQUAL scores. This is done to cater for differences in dimension weights resulting from adjusting for importance weights. As already mentioned (Section 4.6.5), adjusting for importance weights could potentially change the dimension values, thus necessitating exploring weighted dimension scores separately.

4.6.6.2 Comparison using weighted SERVQUAL scores

The MANOVA, ANOVA and post-hoc t-tests were re-run using weighted SERVQUAL scores to cater for dimension importance weights. The results for the two categories of customer focus are summarised in Table 4.55. Before undertaking the MANOVA, assumptions tests (Box and Levene's tests) were conducted. The results for Box's test for equality of covariance are summarised in Table 4.53. The results were statistically significant for both high and low customer focus categories. This assumption has been violated and would potentially affect the MANOVA results. However, as it has already been discussed in previous sections (4.6.4 and 4.6.5), it is hoped that the effect of violating the assumption will be minimal given that departments in each customer focus category were allocated equal numbers of respondents and the overall sample size was relatively large.

Table 4.53 Box's Test of Equality of Covariance Matrices for weighted SERVQUAL scores

High customer focus	Box's M	84.736
	F	2.779
	df1	30
	df2	6.331E5
	Sig.	.000
Low customer focus	Box's M	168.728
	F	5.535
	df1	30
	df2	6.331E5
	Sig.	.000

Tests the null hypothesis that the observed covariance matrices of the dependent variables are equal across groups.

a. Design: Intercept + Dept

Table 4.54 shows the results for Levene's test of equality of variance. Levene's test for high customer focused departments was statistically significant for assurance dimension while all other dimensions were not significant. This implies that the test was violated for assurance dimension only. Violation of the assumption for equality of variance may affect the reliability and robustness of the MANOVA test results (Brace et al., 2006). The effect of violating this assumption is, however, expected to be minimal given the large sample size and equal numbers of respondents allocated to each department.

Levene's test results for low customer focused departments were statistically significant for responsiveness, assurance and empathy. Tangibles and reliability were not significant and thus did not violate this test. The statistically significant results for responsiveness, assurance and empathy violated the assumptions of this test. Violating this test could affect the reliability of MANOVA results for the low customer focused departments. In that regard, MANOVA results of the three dimensions (responsiveness, assurance and empathy) should be used with caution taking into consideration that they violated the assumption for equality of variance. However, as suggested earlier (sections 4.6.4 and 4.6.5), the effect of violating this assumption should be minimal given the large sample size and equal numbers of respondents for each department in the low customer focused category.

Table 4.54 Levene's Test for weighted SERVQUAL scores

Customer focus/orientation		F	df1	df2	Sig.
High customer focus	Weighted tangibles	.827	2	447	.438
	Weighted reliability	2.662	2	447	.071
	Weighted responsiveness	.479	2	447	.620
	Weighted Assurance	5.375	2	447	.005
	Weighted empathy	2.045	2	447	.131
Low customer focus	Weighted tangibles	1.168	2	447	.312
	Weighted reliability	1.831	2	447	.162
	Weighted responsiveness	3.727	2	447	.025
	Weighted Assurance	7.444	2	447	.001
	Weighted empathy	6.747	2	447	.001

Tests the null hypothesis that the error variance of the dependent variable is equal across groups.

a. Design: Intercept + Dept

The results for the MANOVA test for weighted SERVQUAL scores are presented in Table 4.54. The results were statistically significant for both high and low customer focused departments. This implies that there were significant differences in customers' perceived service quality of at least some of the dimensions between departments within both high and low customer focused categories. The MANOVA results for weighted and unweighted SERVQUAL scores are similar as they both indicate that customer focus had an impact on customers' perceived service quality within each customer focus category.

Table 4.55 MANOVA test for weighted SERVQUAL scores

Customer focus/orientation	Effect		Value	F	Hypothesis df	Error df	Sig.	Partial Eta Squared
High customer focus	Intercept	Pillai's Trace	.628	1.498E2[a]	5.000	443.000	.000	.628
		Wilks' Lambda	.372	1.498E2[a]	5.000	443.000	.000	.628
		Hotelling's Trace	1.691	1.498E2[a]	5.000	443.000	.000	.628
		Roy's Largest Root	1.691	1.498E2[a]	5.000	443.000	.000	.628
	Dept	Pillai's Trace	.091	4.240	10.000	888.000	.000	.046
		Wilks' Lambda	.911	4.252[a]	10.000	886.000	.000	.046
		Hotelling's Trace	.096	4.264	10.000	884.000	.000	.046
		Roy's Largest Root	.071	6.307[b]	5.000	444.000	.000	.066
Low customer focus	Intercept	Pillai's Trace	.498	87.987[a]	5.000	443.000	.000	.498
		Wilks' Lambda	.502	87.987[a]	5.000	443.000	.000	.498
		Hotelling's Trace	.993	87.987[a]	5.000	443.000	.000	.498
		Roy's Largest Root	.993	87.987[a]	5.000	443.000	.000	.498
	Dept	Pillai's Trace	.129	6.132	10.000	888.000	.000	.065
		Wilks' Lambda	.874	6.157[a]	10.000	886.000	.000	.065
		Hotelling's Trace	.140	6.183	10.000	884.000	.000	.065
		Roy's Largest Root	.101	8.950[b]	5.000	444.000	.000	.092

a. Exact statistic

b. The statistic is an upper bound on F that yields a lower bound on the significance level.

c. Design: Intercept + Dept

A follow-up ANOVA test was conducted to further explore for differences in customers' perceived service quality between the three departments within each category of customer focus. Results for the ANOVA test are presented in Table 4.56. The results were statistically significant for tangibles, reliability and assurance under the high customer focus PBRS departments, (i.e departments in the high customer focus category differed with regards to tangibles, reliability and assurance dimensions).

The ANOVA test for low customer focused departments was statically significant for tangibles, reliability and assurance dimensions implying that the three low customer-focused departments differed across these dimensions.

Table 4.56 ANOVA for weighted SERVQUAL within the same customer focus group

Customer focus/orientation			Sum of Squares	df	Mean Square	F	Sig.
High customer focus	Weighted tangibles score	Between Groups	13641.322	2	6820.661	3.835	.022
		Within Groups	794949.809	447	1778.411		
		Total	808591.131	449			
	Weighted reliability score	Between Groups	14561.641	2	7280.821	3.348	.036
		Within Groups	971994.688	447	2174.485		
		Total	986556.329	449			
	Weighted responsiveness	Between Groups	2874.555	2	1437.278	.699	.498
		Within Groups	919509.994	447	2057.069		
		Total	922384.549	449			
	Weighted Assurance score	Between Groups	17235.094	2	8617.547	6.017	.003
		Within Groups	640154.054	447	1432.112		
		Total	657389.147	449			
	Weighted empathy score	Between Groups	4813.838	2	2406.919	2.327	.099
		Within Groups	462332.629	447	1034.301		
		Total	467146.467	449			
Low customer focus	Weighted tangibles score	Between Groups	61987.090	2	30993.545	19.597	.000
		Within Groups	706940.135	447	1581.522		
		Total	768927.226	449			
	Weighted reliability score	Between Groups	16767.486	2	8383.743	3.563	.029
		Within Groups	1051841.394	447	2353.113		
		Total	1068608.880	449			
	Weighted responsiveness	Between Groups	6646.795	2	3323.398	2.051	.130
		Within Groups	724329.024	447	1620.423		
		Total	730975.819	449			
	Weighted Assurance score	Between Groups	17156.101	2	8578.050	7.313	.001
		Within Groups	524315.879	447	1172.966		
		Total	541471.980	449			
	Weighted empathy score	Between Groups	2036.244	2	1018.122	.659	.518
		Within Groups	690858.048	447	1545.544		
		Total	692894.292	449			

Post-hoc independent t-tests were conducted to make comparisons between pairs of high customer focused departments to identify their differences and similarities across the five SERVQUAL dimensions. Results are presented in tables 4.57 to 4.58.

Table 4.57 within customer focus comparison Clinical Services and Public Health

Customer focus/orientation Clinical services/Public Health			Levene's Test for Equality of Variances		t-test for Equality of Means						
			F	Sig.	t	Df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference Lower	Upper
	Weighted tangibles	Equal variances assumed	1.522	.218	-2.094	298	.037	-10.17167	4.85827	-19.73253	-.61080
		Equal variances not assumed			-2.094	295.406	.037	-10.17167	4.85827	-19.73287	-.61046
	Weighted reliability	Equal variances assumed	4.263	.040	2.563	298	.011	13.21067	5.15519	3.06548	23.35585
		Equal variances not assumed			**2.563**	**283.961**	**.011**	**13.21067**	**5.15519**	**3.06344**	**23.35790**
	Weighted responsiveness	Equal variances assumed	.203	.653	1.166	298	.244	6.17500	5.29446	-4.24427	16.59427
		Equal variances not assumed			1.166	297.890	.244	6.17500	5.29446	-4.24429	16.59429
	Weighted Assurance	Equal variances assumed	.019	.892	.974	298	.331	4.61833	4.73936	-4.70853	13.94519
		Equal variances not assumed			.974	297.870	.331	4.61833	4.73936	-4.70854	13.94521
	Weighted empathy	Equal variances assumed	.139	.710	1.913	298	.057	7.58800	3.96753	-.21993	15.39593
		Equal variances not assumed			1.913	297.978	.057	7.58800	3.96753	-.21993	15.39593

Table 4.57 presents results for comparing departments of Clinical Services and Public Health. Levene's test was not significant for tangibles, responsiveness, assurance and empathy. This implies that the assumption for equality of variance was not violated for the four dimensions thereby increasing the validity and robustness of the results. The test was statistically significant for reliability dimension implying that the assumption for equality of variance was violated for that dimension. In that way, the bottom row of the *t* values for reliability dimension was used for making comparisons between the two departments (Clinical Services and Public Health).

Results revealed that the independent t-test was statistically significant for tangibles (t = -2.09, df = 298, *p* = 0.037) and reliability (t = 2.56, df = 283.96, *p* = 0.011). This means that the two departments (Clinical Services and Public Health) differed with respect to tangibles and reliability dimensions. The test was not significant for responsiveness, assurance and empathy implying that customer focus of PBRS had similar effects on customers' perceived service quality across the three dimensions.

Table 4.58 within customer focus comparison Clinical services Vs Independent Electoral Commission

Customer focus/orientation		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	T	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Weighted tangibles	Equal variances assumed	.107	.744	-2.558	298	.011	-12.75500	4.98725	-22.56969	-2.94031
	Equal variances not assumed			-2.558	297.573	.011	-12.75500	4.98725	-22.56975	-2.94025
Weighted reliability	Equal variances assumed	4.406	.037	2.001	298	.046	10.44267	5.21988	.17018	20.71516
	Equal variances not assumed			2.001	281.577	.046	10.44267	5.21988	.16773	20.71760
Weighted responsiveness	Equal variances assumed	.955	.329	.516	298	.606	2.70333	5.23399	-7.59694	13.00361
	Equal variances not assumed			.516	297.453	.606	2.70333	5.23399	-7.59702	13.00368
Weighted Assurance	Equal variances assumed	9.700	.002	-2.460	298	.014	-10.19500	4.14453	-18.35126	-2.03874
	Equal variances not assumed			-2.460	276.284	.015	-10.19500	4.14453	-18.35388	-2.03612
Weighted empathy	Equal variances assumed	2.413	.121	.437	298	.663	1.56800	3.58937	-5.49572	8.63172
	Equal variances not assumed			.437	282.730	.663	1.56800	3.58937	-5.49728	8.63328

Table 4.58 presents the independent t-test results for Clinical Services and Independent Electoral Commission (IEC). Levene's test was statistically significant for reliability and assurance thus violating the equality of variance assumption. In that way, the bottom row of *t* values (equal variances not assumed), were used in comparing the two departments for reliability and

assurance. The test was not significant for tangibles, responsiveness, and empathy, thus the assumption for equality of variance was not violated for the three dimensions. This is likely to enhance the validity of the results pertaining to the three dimensions (tangibles, responsiveness and empathy).

Independent t-tests were statistically significant for tangibles, reliability and assurance dimensions. This means that the departments of Clinical Services and IEC differed significantly with regards to these three dimensions. The test was not significant for responsiveness ($t = 0.516$, $df = 298$, $p = 0.606$) and empathy ($t = 0.437$, $df = 298$, $p = 0.663$) meaning that the two departments performed similarly with regards to these dimensions. On the basis of the results it can be concluded that the two departments were generally different as they differ in three of the five dimensions.

Table 4.59 within customer focus comparison Public Health Vs Independent Electoral Commission

Customer focus/orientation		Levene's Test for Equality of Variances F	Levene's Test Sig.	t-test for Equality of Means t	Df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference Lower	Upper
Weighted tangibles	Equal variances assumed	.856	.356	-.543	298	.588	-2.58333	4.76036	-11.95151	6.78484
	Equal variances not assumed			-.543	297.067	.588	-2.58333	4.76036	-11.95163	6.78496
Weighted reliability	Equal variances assumed	.005	.942	-.481	298	.631	-2.76800	5.75815	-14.09979	8.56379
	Equal variances not assumed			-.481	297.878	.631	-2.76800	5.75815	-14.09981	8.56381
Weighted responsiveness	Equal variances assumed	.277	.599	-.670	298	.503	-3.47167	5.18235	-13.67030	6.72697
	Equal variances not assumed			-.670	297.833	.503	-3.47167	5.18235	-13.67033	6.72699
Weighted Assurance	Equal variances assumed	8.012	.005	-3.526	298	.000	-14.81333	4.20069	-23.08010	-6.54657
	Equal variances not assumed			**-3.526**	**273.474**	**.000**	**-14.81333**	**4.20069**	**-23.08312**	**-6.54354**
Weighted empathy	Equal variances assumed	4.232	.041	-1.686	298	.093	-6.02000	3.57032	-13.04623	1.00623
	Equal variances not assumed			-1.686	283.739	.093	-6.02000	3.57032	-13.04767	1.00767

Table 4.59 presents the independent t-test results for Public Health and IEC. Levene's test was statistically significant for assurance and empathy dimensions implying that the assumption for equality of variance was violated. In view of violating the equality of variance, the bottom row *t* values for the two dimensions were used in making comparisons between Public Health and IEC. The test was not significant for tangibles, reliability and responsiveness. This means the assumption for equality of variance was not violated thus enhancing the results.

Independent t-test was statistically significant for assurance dimension (t= -3.53, df = 273.47, p= 0.00) meaning that the two departments differ significantly for performance on the assurance dimension. The test was not significant for tangibles, reliability, responsiveness and empathy implying that customer focus of PBRS had similar effects on customers' perceived service quality in the two departments across tangibles, reliability, responsiveness and empathy dimensions. These results indicate that the departments of Public Health and IEC generally performed similarly as they only differ in one dimension (assurance).

Table 4.60 comparisons between the three high customer-focused departments (Weighted SERVQUAL)

Department pairs	**Dimensions and statistical significance**				
	Tangibles	***Reliability***	***Responsiveness***	***Assurance***	***Empathy***
Clinical Services/ Public Health	Statistically significant (**different**)	Statistically significant (**different**)	Not statistically significant	Not statistically significant	Not statistically significant
Clinical Services/ IEC	Statistically significant (**different**)	Statistically significant (**different**)	Not statistically significant	Statistically significant (**different**)	Not statistically significant
Public Health /IEC	Not statistically significant	Not statistically significant	Not statistically significant	Statistically significant (**different**)	Not statistically significant

In conclusion, the results for comparing high customer focused departments using weighted SERVQUAL scores were mixed. The first pair of high customer focused PBRS departments (Clinical Services and Public Health) differed in regards to tangibles and reliability. The second pair (Clinical services and IEC) differed in regards to tangibles, reliability and assurance while the performance of the two high customer focused PBRS departments in the third pair (Public Health and IEC) was generally similar as they differed only on assurance dimension.

The performance of high customer oriented PBRS departments for the weighted SERVQUAL scores differs from the performance using unweighted SERVQUAL scores. While the three high customer-focused PBRS departments performed generally similarly when unweighted scores were used, their performance was mixed when weighted scores were used. Given that weighted scores are based on the importance of the dimensions from customers' point of view, they tend to provide a better picture of customers' perceived service quality than the unweighted scores. In that regard, weighted scores were given more preference to unweighted scores. Thus, on the basis of the weighted scores the three high customer oriented PBRS departments performed differently.

Independent t- tests were also conducted for departments in the low customer focus category. The same pairs used for unweighted SERVQUAL were re-run using weighted SERVQUAL scores. Results of the independent t-test for department pairs are presented in Tables 4.61 to 4.63.

Table 4.61 Within customer focus comparison Culture and Youth Vs Wildlife and National Parks

Customer focus/orientation		Levene's Test for Equality of Variances F	Levene's Test Sig.	t-test for Equality of Means T	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference Lower	Upper
Weighted tangibles	Equal variances assumed	2.554	.111	5.839	298	.000	26.09167	4.46885	17.29716	34.88617
	Equal variances not assumed			5.839	287.762	.000	26.09167	4.46885	17.29589	34.88745
Weighted reliability	Equal variances assumed	.001	.981	2.870	298	.004	14.95200	5.20903	4.70086	25.20314
	Equal variances not assumed			2.870	296.951	.004	14.95200	5.20903	4.70071	25.20329
Weighted responsiveness	Equal variances assumed	1.501	.221	2.118	298	.035	8.91500	4.20931	.63126	17.19874
	Equal variances not assumed			2.118	292.513	.035	8.91500	4.20931	.63062	17.19938
Weighted Assurance	Equal variances assumed	3.099	.079	3.952	298	.000	13.75167	3.47963	6.90390	20.59944
	Equal variances not assumed			3.952	279.256	.000	13.75167	3.47963	6.90202	20.60131
Weighted empathy	Equal variances assumed	10.772	.001	.302	298	.763	1.29600	4.28497	-7.13664	9.72864
	Equal variances not assumed			**.302**	**224.175**	**.763**	**1.29600**	**4.28497**	**-7.14798**	**9.73998**

Table 4.61 presents the independent t-test results for comparing departments of Culture & Youth and Wildlife & National Parks. Levene's test was statistically significant for empathy dimension,

thus violating the assumption for equality of variance. Therefore, the bottom row of *t* values for the empathy dimension was used for making comparisons between the two departments. Levene's test was not significant for the other four dimensions, implying that the assumption for equality of variance was not violated.

Independent t-tests were statistically significant for tangibles, reliability, responsiveness and assurance. This means that the two departments (Culture & Youth and Wildlife & National Parks) performed differently across the four dimensions. The test was not significant for empathy dimension (t = 0.302, df = 224.175, *p* = 0.763) implying that customer focus of PBRS had similar effects on customers' perceived service quality between Culture & Youth and Wildlife & National Parks in regards to empathy dimension. These results imply that generally the two departments were different since they were only similar in one dimension.

Table 4.62 within customer focus comparison Culture and Youth Vs Tourism

		Levene's Test for Equality of Variances		t-test for Equality of Means						
Customer focus/orientation		F	Sig.	t	Df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference Lower	Upper
Weighted tangibles	Equal variances assumed	.981	.323	.583	298	.560	2.59167	4.44541	-6.15671	11.34005
	Equal variances not assumed			.583	288.644	.560	2.59167	4.44541	-6.15787	11.34120
Weighted reliability	Equal variances assumed	2.652	.104	1.298	298	.195	7.42000	5.71742	-3.83163	18.67163
	Equal variances not assumed			1.298	284.330	.195	7.42000	5.71742	-3.83384	18.67384
Weighted responsiveness	Equal variances assumed	2.261	.134	1.422	298	.156	7.07667	4.97621	-2.71630	16.86963
	Equal variances not assumed			1.422	287.986	.156	7.07667	4.97621	-2.71769	16.87102
Weighted Assurance	Equal variances assumed	4.190	.042	2.830	298	.005	12.32833	4.35590	3.75612	20.90055
	Equal variances not assumed			**2.830**	**286.917**	**.005**	**12.32833**	**4.35590**	**3.75477**	**20.90190**
Weighted empathy	Equal variances assumed	.008	.927	-.716	298	.474	-3.72267	5.19603	-13.94822	6.50289
	Equal variances not assumed			-.716	296.533	.474	-3.72267	5.19603	-13.94843	6.50310

Table 4.62 presents the independent t-test results for departments of Culture & Youth and Tourism. Levene's test was statistically significant for assurance dimension, meaning that the assumption for equality of variance was violated. The bottom row of t values for assurance was used to make comparisons between the two departments (Culture & Youth and Tourism). Levene's test was not significant in the remaining four dimensions (tangibles, reliability, responsiveness and empathy), therefore the assumption for equality of variance was not violated.

The independent t-test was statistically significant for assurance dimension. This implies that the departments of Culture & Youth and Tourism differ in performance in regards to assurance dimension. The t-test was not significant in tangibles, reliability, responsiveness and empathy. The two departments had similarities under these four dimensions. Thus, customer focused PBRS had a similar impact on customers' perceived service quality between the two departments with regards to tangibles, reliability, responsiveness and empathy. It can therefore be concluded that the two departments performed generally similarly as they differ only in one dimension (assurance).

Table 4.63 within customer focus comparison Wildlife and national Parks Vs Tourism

Customer focus/orientation		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	Df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Weighted tangibles s	Equal variances assumed	.257	.613	-4.845	298	.000	-23.50000	4.85062	-33.04581	-13.95419
	Equal variances not assumed			-4.845	297.977	.000	-23.50000	4.85062	-33.04582	-13.95418
Weighted reliability	Equal variances assumed	2.426	.120	-1.286	298	.199	-7.53200	5.85676	-19.05785	3.99385
	Equal variances not assumed			-1.286	290.384	.199	-7.53200	5.85676	-19.05909	3.99509
Weighted responsiveness	Equal variances assumed	7.061	.008	-.389	298	.698	-1.83833	4.72609	-11.13907	7.46241
	Equal variances not assumed			-.389	271.041	.698	-1.83833	4.72609	-11.14285	7.46618
Weighted Assurance	Equal variances assumed	15.000	.000	-.358	298	.721	-1.42333	3.97957	-9.25495	6.40828
	Equal variances not assumed			-.358	250.851	.721	-1.42333	3.97957	-9.26096	6.41429
Weighted empathy	Equal variances assumed	14.494	.000	-1.237	298	.217	-5.01867	4.05735	-13.00335	2.96601
	Equal variances not assumed			-1.237	233.668	.217	-5.01867	4.05735	-13.01232	2.97499

Table 4.63 presents the independent t-test results for the departments of Wildlife & National Parks and Tourism. Levene's test was statistically significant in three dimensions (responsiveness, assurance and empathy). This implies that the assumption for equality of variance was violated. Given the violation of the equality of variance, the bottom row *t* values for the three dimensions were used in making comparisons between the two departments.

The independent t-test was statistically significant in tangibles dimension (t =, -4.845, df = 298, *p* = 0.000) implying that the departments of Wildlife & National Parks and Tourism performed differently in regards to the tangibles dimension. The test was not significant for the remaining four dimensions (reliability, responsiveness, assurance and empathy). Therefore the two departments shared similarities with regard to reliability, responsiveness, assurance and empathy dimensions. These results imply that the departments of Wildlife & National Parks and Tourism were generally similar in that they only differ on one dimension (tangibles).

Table 4.64 comparisons between the three low customer-focused departments (Weighted SERVQUAL)

Department pairs	**Dimensions and statistical significance**				
	Tangibles	***Reliability***	***Responsiveness***	***Assurance***	***Empathy***
Culture & Youth/Wildlife & National Parks	Statistically significant (**different**)	Statistically significant (**different**)	Statistically significant (**different**)	Statistically significant (**different**)	Not statistically significant
Culture & Youth /Tourism	Not statistically significant	Not statistically significant	Not statistically significant	Statistically significant (**different**)	Not statistically significant
Wildlife & National Parks/ Tourism	Statistically significant (**different**)	Not statistically significant	Not statistically significant	Not statistically significant	Not statistically significant

Table 4.64 presents a summary of the results for comparing the three low customer focused departments using weighted SERVQUAL scores. The results from comparing the three low customer focused PBRS departments were mixed. The first pair of low customer focused PBRS departments (Culture & Youth and Wildlife & National Parks) generally performed differently as the department differed in four of the five dimensions. The second pair (Culture & Youth and Tourism) had a similar performance and only differed on assurance dimension. Lastly, the third pair (Wildlife & National Parks and Tourism) performed generally similarly as their performance differ only on tangibles dimension. The performance of low customer focused PBRS departments for both weighted and unweighted SERVQUAL scores was mixed. In both cases there were instances where departments' performance was generally similar and where differences were statistically significant. In that way it can be concluded that the three low customer focused PBRS departments generally differed in their performance. As earlier

indicated, this might possibly explain the unanticipated better performance of the low customer focused departments when compared to the high customer focused departments.

The MANOVA, ANOVA and post hoc t-tests for both weighted and unweighted SERVQUAL scores have revealed that differences exist between departments within the two categories of PBRS customer focus. High customer focused departments were generally similar when unweighted SERVQUAL scores were used. One pair (Clinical Services and Public Health) were the same across the five dimensions, while the other two pairs differed on just one dimension. The results for the low customer focused departments were mixed. One department pair (Culture and Youth Vs Wildlife and National Parks) differed for four of the five dimensions while the second pair (Culture and Youth Vs Tourism) were the same across the five dimensions. The last pair (Wildlife and National Parks Vs Tourism) differed on two dimensions only.

Results for the weighted SERVQUAL scores for the high customer focused were mixed. One department pair was generally similar (e.g Public Health and IEC). The other pair (Clinical Services and IEC) differed in three of the five dimensions while Clinical Services and Public Health differed in two out of the five SERVQUAL dimensions. Low customer focused departments were generally similar in two of the department pairs (Wildlife & National Parks and Tourism as well as Culture & Youth and Tourism) in which the departments differed in only one dimension. However in the last pair (Culture & Youth and Wildlife & National Parks) departments were different as they only had similarity in one dimension.

Differences between the departments within each customer focus category were not anticipated. Ideally, departments within each customer focus category were expected to be similar. In view of the differences observed from the MANOVA, ANOVA and post-hoc t-tests, there is a high possibility that customers' perceived service quality for departments in the same PBRS customer focus category would not be similar.

Finally, the results for both weighted and unweighted SERVQUAL could potentially be influenced by the methods used to measure customer focus and categorise departments into either high or low customer focus. PBRS as a managerial tool should be used to motivate employees to perform in line with the desired output levels. It is assumed that this will then translate into improved performance, which in turn will result in improved customer satisfaction. While efforts could be made to formulate customer oriented performance objectives, the resulting service output may not be what customers expected from the government departments. In addition, employees may not actually deliver on the targeted behaviours. In other words, as a managerial tool, PBRS may strive to improve performance but that is only achieved if employees act on the stated goals. Furthermore these goals must also relate to customers' expectations in terms of important service features. Lastly, PBRS, customers' perceived service quality and ultimately customer satisfaction are distinct measures and comparing them, as it is done in this thesis may potentially affect the results

The unexpected direction of differences between departments in the same category of customer focus raises some implications, which are discussed in chapter 5.

The next section is a summary of the discussions in chapter 4.

4.7.0 Overall summary of the findings

This section provides a summary of the data analysis chapter. The analysis focused on the objectives of this thesis and was undertaken in two phases, being the examination of the content analysis data and analysis of the survey data. The first objective focussed on examining the customer orientation of PBRS schemes within the public sector. This objective was addressed by undertaking the content analysis of PBRS performance plans for the Botswana government departments selected to participate in this study. Following content analysis, the departments were categorised into high and low customer orientation on the basis of the extent of customer focus of their performance plans. A total of six departments, three from each category of customer focus (i.e. high and low), were targeted for the customer survey. The three departments selected for high customer focus category were Clinical Services, Public Health and Independent Electoral Commission. The low customer focus category comprised Tourism, Culture and Youth, and Wildlife and National Parks.

The second objective was to investigate customers' satisfaction with government services in Botswana. This required measuring customers' perceived service quality of Botswana public sector services. Parasuraman et al. (1988)'s SERVQUAL was used to measure customers' perceived service quality. In the process SERVQUAL scores were produced for each of the six departments. Departments had different SERVQUAL scores indicating the magnitude of the disparity between customers' expectations and the departments' services. All the scores were negative meaning that the six departments did not adequately meet the service expectations of their customers. Table 4.65 presents a summary of SERVQUAL scores for departments within the two categories of customer focused PBRS. Departments are ranked on the basis of the size of their SERVQUAL gap scores with the lowest gap score ranked highest. The Department of Culture and Youth had the lowest SERVQUAL gap score at –1.15 and ranks first while Public Health had the highest gap score at –2.05 and ranks last. Departments in the high customer focused category generally ranked lower than departments in the low customer oriented category. As discussed in Section 4.5, services provided by high customer focused departments involved a lot of interaction with customers and were generally essential services. These services were therefore potentially subjected to high scrutiny by customers than the low customer focused departments. In the process, customers had higher expectations for services from high customer focused departments than the low customer focused departments.

Table 4.65 Summary of Customer focus category and SERVQUAL scores

Department	**Customer focus category**	**SERQUAL scores**		**Rank**
		Unweighted	Weighted	
Clinical Services	High	-1.84	-1.85	5
Public Health	High	-2.04	-2.05	6
IEC	High	-1.73	-1.74	3
Culture and Youth	Low	-1.15	-1.15	1
Wildlife & National Parks	Low	-1.74	-1.77	4
Tourism	Low	-1.36	-1.36	2

Given the negative gap scores, service improvements were required to address customers' expectations. The amount of service improvements required by each department differed depending on the magnitude of SERVQUAL gap. Given that the Department of Public Health had the largest gap score, it faced a bigger challenge of service improvements than the other departments.

The third objective was to determine whether the difference in customer focus (orientation) of PBRS plans affects customers' perceived service quality. In order to answer this objective, two hypotheses were formulated. The first hypothesis focused on determining whether customer focus had an impact on perceived service quality. MANOVA, ANOVA and post-hoc tests comparing the six departments using weighted and unweighted SERVQUAL scores were undertaken. Table 4.66 presents a summary of the MANOVA, ANOVA and post-hoc t-test results for hypotheses1b. The MANOVA tests for both weighted and unweighted scores were statistically significant indicating that customer focused PBRS impacts on customers' perceived service quality. Bonferroni tests revealed that customer focused PBRS affected four (reliability, responsiveness, assurance and empathy) of the five SERVQUAL dimensions. The tangibles dimension was not statistically significant meaning that customers' perceived service quality did not differ significantly across the two categories of customer focus for that dimension. With the exception of the tangibles dimension, which was not significant, the results from the MANOVA tests largely supported the first hypothesis that customer focus of departments' performance plans affected service quality. ANOVA and post-hoc tests also supported the findings from MANOVA that the customer focus of PBRS affected customers' perceived service quality. In that way, the first hypothesis was accepted.

Table 4.66 Comparisons between high and low customer focus categories

Hypotheses	MANOVA	ANOVA	Post –hoc tests
Hypothesis 1	Statistically significant (**different**)	Statistically significant (**different**)	Tangibles dimension not statistically significant (bonferroni test)
Hypothesis 2	Statistically significant (**different**)	Statistically significant (**different**)	High customer focused PBRS departments perform worse than low customer focused departments (independent t-test)

The second hypothesis (still under third objective) proposed that the varying levels of customer focus of departments PBRS plans would impact on customer satisfaction and perceived service quality. In this thesis, departments' levels of customer focus varied as they (departments) were categorised into high and low customer focus (orientation). From the literature, customer orientation would result in satisfied customers (Jaworski and Kohli, 1993; Hartline et al., 2000). It was therefore expected that customers from departments in the high customer focus category would perceive a higher level of service quality as compared to those in the low customer focus category. The results of the second hypothesis are summarised in the last row of Table 4.66. The results obtained revealed the opposite of what was anticipated as departments in the low customer focus category performed better than those in the high customer focus category. In that way, the second hypothesis could not be accepted as it proposed an improvement in perceived service quality with an improvement in PBRS customer focus/orientation.

Finally, comparison of the departments within each customer focus category revealed that there were differences even among departments in the same category. MANOVA and ANOVA tests for both weighted and unweighted SERVQUAL scores showed that there were some differences between the departments across the five dimensions. Post-hoc independent t-tests supported the observations made from the MANOVA and ANOVA tests, showing that there were differences between departments within each category of customer focus. Table 4.67 summarises the results for independent t-tests comparing departments within the two categories of PBRS customer focus. The observed difference between the performance of departments within the same category of customer focus implies that the impact of customer focused PBRS differs between these departments. Additionally, the difference in the performance of departments within the same customer focus category means that the anticipated similarity in the direction of performance was not possible. This could possibly explain the unanticipated poor performance of the high customer oriented PBRS departments compared to the higher performance of the low customer focused departments. More discussion on the implications of the unanticipated results is provided in the next chapter (Chapter 5).

Table 4.67 Comparison within the same category of customer focus

Category of customer focus	**Department pairs**	**Overall similarity/difference**	
High		***Unweighted***	***Weighted***
	Clinical Services/ Public Health	Similar	Different
	Clinical Services/ IEC	Similar	Different
	Public Health/IEC	Similar	Similar
Low	Culture & Youth/Wildlife & National Parks	Different	Different
	Culture& Youth/ Tourism	Similar	Similar
	Wildlife & National Parks/Tourism	Different	Similar

The next chapter is a discussion of the findings. It looks into the possible implications of the findings, limitations of the reserach, and recommendations for further research.

CHAPTER 5
DISCUSSIONS

5.1 Introduction

As was mentioned in chapter 1, the public sector is a major service provider in many countries and provides a wide range of services including education, health services, utilities, rail/road infrastructure, police, army and others, to its citizens, visitors, private and public organisations (Rowley, 1998; Wisniewski and Stewart, 2004). To facilitate the provision of these services, the public sector is entrusted with the responsibility of managing public resources on behalf of its customers. As a custodian of public resources, the public sector is expected to be accountable and demonstrate commitment to its customers through provision of good quality services (Wisniewski and Stewart, 2004; McAdam et al., 2005; Sharma and Wanna, 2005). However, the obligation for accountability and commitment to meet customers' needs could potentially put the public sector under pressure to improve performance. It may prompt a move towards a greater customer focus in the public sector (Caruana, Ramaseshan, and Ewing, 1997). In other words, governments could be pressured to focus more on producing high quality services with a view to satisfy these customers (Myers and Lacey, 1996). In that way, governments may be forced to improve their performance through the use of customer focused approaches aimed at constantly improving service quality (Kelly, 2005; Jamali, 2007).

As discussed in the literature review (section 2.1.1) governments in different parts of the world have been besieged with calls for service improvement from their customers (Skelcher, 1992; Adamolekun and Morgan, 1999; Hope, 1999). Public sector customers have continuously expressed dissatisfaction with the poor services they received from their governments (Skelcher, 1992; Caiden, 1998; Adamolekun and Morgan, 1999; Shah, 2005). Many governments around the world have responded to customers' calls for service improvements by introducing performance improvement initiatives including among others, the performance based reward schemes (Brysland and Curry, 2001; Beer and Cannon, 2004; DPSM, 2004; Jarrar and Schiuma, 2007). It is hoped that these performance enhancement initiatives would improve the quality of public sector services and address customers' complaints for poor quality public sector services.

The purpose of this thesis was to investigate the impact of performance based reward schemes on public sector service quality as perceived by customers. The study was motivated by the implementation of performance based reward system (PBRS) in the Botswana public sector, which was designed to motivate employees to improve departmental performance, which included service quality in some instances. Despite the use of pay for performance schemes in both the public and private sectors, there has been limited research on the impact of these schemes on public sector service quality. In particular, there is no research that links performance based reward system (PBRS) to customers' perception of service quality within the public sector. Most of the previous research in both private and public sectors has focused on the effect of pay for performance schemes on employees' motivation (Marsden and Richardson, 1994; Kellough and Selden, 1997; Mamman, 1998; Marshall, 1998; Chamberlin et al., 2002). There is a need to examine whether PBRS improves public sector service quality as perceived by customers.

It is important to examine the impact of PBRS on customers' perceived service quality because customers are the recipients of the service outcomes and are better placed to evaluate the quality of services they received from government departments. By examining customers' perception of service quality with a view to identifying their satisfaction or dissatisfaction with government services, this research is consistent with the core concepts of marketing which place the customer at the apex of marketing decisions (Turner and Spencer, 1997). A greater understanding of how PBRS affects public sector service quality would assist in determining the value of such schemes in the public sector. It would also help to address the concerns of poor service quality raised by public sector customers, if it (PBRS) were to be able to be used to improve departments' service quality.

In order to operationalise the thesis, three research objectives were developed in chapter 1 (see Section 5.2 below). These objectives focused on examining the efficacy of using PBRS to improve public sector service quality. On the basis of these objectives, two hypotheses were proposed (see Section 5.2 below). These hypotheses were tested in chapter 4 when customer SERVQUAL survey data were analysed (also discussed further in the next section). Chapter 2 covered the literature related to performance based reward schemes, the general nature and scope of services, public sector services and measurement of service quality. Chapter 3 discussed the methodology and methods selected for this thesis. The selection of the methodology was driven by the scope and focus of the study. Qualitative and quantitative approaches were both used in this thesis.

Data were collected in two phases. The first phase entailed collection of qualitative data in the form of Botswana government departments' PBRS performance plans. The performance plans were evaluated using content analysis process to categorise departments on the basis of the extent of customer orientation of their performance plans. Content analysis was undertaken using four expert judges to categorise the departments into high and low customer focus/orientation. Departments were categorised as either high or low customer focused depending on; 1) the extent to which their performance objectives were assessed as being customer focused by the judges; and 2) the percentage of customer focused objectives within departments' performance plans. There were three departments in each category of customer focus, which were; Clinical Services, Public Health and Independent Electoral Commission (high customer orientation), Culture & Youth, Wildlife & National Parks, and Tourism (low customer oriented). These two categories of customer focus were required for the second phase of the analysis, where customers were surveyed in regard to their perception of service quality for six departments (three high and three low customer focused) using SERVQUAL. Customers' perceived service quality was measured in order to explore whether there were differences in perceived service quality between the two sets of departments based on their categorisation of PBRS customer focus. It was also required for determining the impact of varying the levels of customer focus of PBRS on perceived service quality. Knowing departments' SERVQUAL scores will help to determine whether high customer focused departments performed better or worse than the low customer focused departments in regard to customers' perceived service quality.

Chapter 4 discussed the findings obtained from the two phases of data analysis (content analysis and SERVQUAL survey). The summary of findings from this thesis is presented in section 5.3.

Implications of the research findings, limitations and suggestions for future research are also covered in this chapter.

The next section overviews the research objectives and hypotheses proposed in this thesis.

5.2 Overview of the research objectives and hypotheses

As discussed in chapter 1, the main objective of this thesis was to investigate the impact of performance based reward systems (PBRS) on public sector customers' perceptions of service quality. On the basis of this broad objective, three research objectives and two hypotheses were developed. Table 5.1 summarises the research objectives and hypotheses generated.

Table 5.1 research objectives and hypotheses summary

Objectives	**Action taken to address objectives**
iv) To examine the extent to which performance based reward schemes are customer focused (oriented).	Objective was addressed through content analysis (qualitative data).
v) To examine customers' perceived service quality with government services in Botswana	The objective was addressed through SERVQUAL survey.
vi) To determine if customer focus/orientation of departments' PBRS plans has any effect on customers' perceived service quality.	Two hypotheses were proposed to address the objective H1b. Customer focus/orientation of PBRS plans has a statistically significant impact on customers' perceived service quality H2b. The more customer-focused the PBRS the higher the level of customers' perceived service quality and satisfaction.

The first objective focused on examining the extent to which departments' PBRS performance plans were customer focused. The aim was to categorise the departments into high and low customer focus based on the extent of customer focus/orientation of departments' performance plans. As indicated in Section 4.2, performance plans from the ten Botswana government departments that responded to invitations to participate in this study were evaluated to determine their extent of customer focus using content analysis. Following content analysis six departments were identified as being appropriate for inclusion in phase 2 of the research and these were allocated to two categories of PBRS customer focus (high and low) on the basis of the level of customer orientation of their performance plans. Three departments were allocated to each category. Details on content analysis are discussed in Section 4.2, and Section 5.3 summarises the findings and their implications.

The second objective focused on examining the extent to which customers were satisfied with services delivered by government departments within the two categories of customer focus. Parasurman et al.'s (1988; 1991) SERVQUAL instrument was used to assess customers' perceived service quality of the six government departments, three categorised as low and three categorised as high customer focused. The summary of the results from the SERVQUAL survey is presented in section 5.3 (Table 5.2) while a detailed discussion was covered in Section 4.5.

The third objective determined whether customer focus/orientation of PBRS has any effect on customers' perceived service quality. Two hypotheses were proposed for this objective and are presented in Table 5.1. The first hypothesis addresses the question of whether the level of customer focus of PBRS had a statistically significant impact on customers' perceived service quality. The second hypothesis tested whether higher levels of customer focused PBRS positively impacted on customers' perceived service quality. It is important to understand whether increasing customer focus of PBRS performance plans increases customers' perceived service quality. Literature suggests that customer orientation should improve service quality and customer satisfaction (Desphande et al., 1993; Chen et al., 2004). Thus increasing the customer focus of a PBRS should increase customers' perceptions of service quality for the governmental departments. A brief discussion of the findings for the hypotheses tests is provided in the next section (5.3).

5.3 Discussion of findings

This section discusses the findings from the three objectives proposed for this research. The findings and implications for each objective are discussed in separate sections. The next section discusses the findings from evaluating the extent of customer focus of departments' PBRS performance plans (first objective).

5.3.1 Evaluating departments' extent of customer focus

As discussed in Section 5.2, the first objective of the thesis was concerned with evaluating the extent to which departments' PBRS performance plans were customer focused. Performance plans from ten government departments were evaluated to determine their level of customer focus using content analysis. As was discussed in Section 4.3, six departments were identified to be appropriate for categorisation into either high or low customer focused PBRS based on the extent of customer focus of their performance plans.

Four expert judges independently assessed the ten PBRS performance plans using a set of content analysis rules developed for this thesis (see sections 3.6 and 4.2). Categorisation of the departments as being high or low customer focused was based on the percentage of customer-focused objectives for each department, as well as the average score in regards to whether the objectives were customer focused (i.e average 'yes' response) for each department. On the basis of the aggregate assessment from the four expert judges, three departments were categorised as high and the other three as low customer focused. High customer focused departments performed consistently well in both percentage of customer focused objectives and 'yes' responses. PBRS performance plans from the remaining four departments could not be categorised as either high or low customer focused as they only performed well in one of the two criteria set for determining the level of customer focus (see Table 5.2).

Table 5.2 summarises the results of the content analysis and categorisation of the departments. Categorisation was required to facilitate making comparisons between departments in the two categories of customer focus. As will be discussed in Section 5.3.3, the third objective required comparison of departments in the two categories of customer focus to explore for differences in the impact of customer focused PBRS on customers' perceived service quality. Thus, categorisation was a prelude to examining the impact of customer focus of PBRS on customers' perceived service quality.

Table 5.2 content analysis and categorisation of the departments

Department name	Average % of customer focused objectives and rank	Average 'yes' response and rank	Overall ranking	Customer focus category
Trade and Consumer Affairs	34.5 (7)	5.7 (2)	inconsistent	____
Wildlife and National Parks	34 (8)	4.36 (6)	4	Low
Tourism	23 (10)	3.48 (10)	6	Low
IEC	57 (3)	4.92 (5)	3	High
Botswana National Library Services	54 (4)	4.36 (6)	inconsistent	____
Civil and National Registration	33.8 (9)	5.46 (3)	inconsistent	____
Clinical Services	65 (1)	6.31(1)	1	High
Culture and Youth	35 (6)	4.15 (8)	5	Low
Public Health	58(2)	5.42 (4)	2	High
Social Services	50 (5)	3.62 (9)	inconsistent	____

Content analysis results showed that departments that generally provided essential services (for example health) were evaluated as being in the high customer focused category while less essential and leisure services such as tourism, wildlife and national parks, were in the low customer focused category. This has potential implications for the analysis of these departments' performance, as high customer focused departments provided services that involved high interaction with a large number of customers. This could potentially overwhelm departments' service delivery efforts thus making it hard to produce customer focused services, i.e to satisfy these customers. For example, in the case of departments in the health sector, patients may not get adequate attention from their medical doctors as they (doctors), have to spread their time to the large numbers of patients demanding their services. As discussed later (section 5.3.5) customers for the high customer focused departments involuntarily seek services from these departments because they (the departments) provide essential services. Customers cannot defer their consumption because their needs are urgent (i.e health services when a customer is sick). In that regard, when formulating their performance plans, these departments would most likely be influenced by the desire to effectively deliver services to these large numbers of customers. Hence, their performance plans were possibly more likely to be influenced by the large number of customers they serve and the essential nature of their services. On the other hand the low customer focused departments provided less essential services and did not normally have high interaction with their customers. The scope of the performance plans from these departments (low customer focused) would probably be influenced by the less essential nature of their services. This will potentially differ from the high customer focused departments which (as discussed earlier) have to draw their plans taking into consideration the essential nature of their services as well as the high interaction they have with their customers.

In conclusion, categorisation of departments using PBRS plans proved to be harder than anticipated. Some departments could not be clearly allocated to either of the two categories because they performed well on one of the criteria for assessing the extent of customer focus, but not the other. In addition, differences in the nature of services provided by the departments potentially influenced the focus of the performance plans. In that regard departments that frequently dealt with customers appeared to be more customer focused as opposed to those that had less exchanges with customers and the exchanges were generally more voluntary (i.e less likely to deal with essential services). Thus, differences in the nature and scope of services provided by the government departments made it hard to categorise the departments on the basis of customer focus of their PBRS plans.

Following categorisation, a survey was conducted to measure customers' perceived service quality of the six departments in the two categories (three in each group) of customer focus using SERVQUAL. As discussed in sections 5.3.3 and 5.3.4, SERVQUAL scores for the two categories were compared to explore for differences in customers' perceived service quality.

Section 5.3.2 discusses a summary of the findings from the SERVQUAL survey.

5.3.2 Determining departments' perceived service quality using weighted SERVQUAL scores

The second objective required the measurement of consumers' perception of each department' service quality using SERVQUAL. Results from the SERVQUAL survey showed that all departments had negative overall SERVQUAL scores, meaning that they all failed to meet their customers' service expectations (i.e customers were dissatisfied). Departments had varying SERVQUAL scores reflecting their customers' evaluation of service quality. For example, the Department of Culture and Youth had the lowest weighted SERVQUAL score of –1.15 while Public Health had the highest score of -2.05. The results of SERVQUAL analysis are summarised in Table 5.3. Detailed discussion of each department's perceived service quality was covered in Section 4.5.

Table 5.3 weighted SERVQUAL scores and category of customer focus

Customer focus category	Department name	Rank	Weighted SERVQUAL score
High	Clinical Services Public Health Independent Electoral Commission	1 2 3	-1.85 -2.05 -1.74
Low	Wildlife and National Parks Culture and Youth Tourism	4 5 6	-1.77 -1.15 -1.36

Table 5.3 shows that the high customer focused departments generally had larger negative SERVQUAL scores when compared to the low customer focused departments. This seems to imply that the high customer oriented departments were perceived to deliver a lower quality service when compared to the low customer focused departments. These results were unexpected because theory would suggest that high customer focused/oriented departments would be more likely to deliver services that focus on customers' needs and thus ideally should satisfy customers better. Within the literature it has been suggested that customer orientation improves

organisational performance and results in high levels of customer satisfaction (Jaworski and Kohli, 1993; Hartline et al., 2000). On the basis of the literature, it can be generally expected that organisations (both public and private sector) that are high customer focused/oriented should be more likely to satisfy their customers' needs. In that regard, customers' perceived service quality for the high customer focused departments was anticipated to be higher when compared to the low customer focused departments. The implications of these unanticipated results will be discussed in Section 5.5.0.

The next section (5.3.3) provides a brief discussion of the statistical testing of whether there is an impact of PBRS on customers' perceived service quality.

5.3.3 The impact of customer focused PBRS on customers' perceived service quality

This section discusses the results of the test of the first hypothesis (H1b), which explored whether PBRS had a statistically significant impact on public sector customers' perceived service quality (i.e. even though there appears to be a difference, it needs to be empirically tested). The decision by some governments to introduce performance enhancement schemes (e.g PBRS) was driven by the desire to improve the efficiency and effectiveness in the delivery of public sector services (Barrett and Turberville, 2001). By examining if the two groups, based on the department's PBRS, had a statistically significant impact on customers' perceived service quality, this research sought to establish if the use of PBRS influenced public sector service quality. The desired impact of PBRS would result in an improvement in public sector service quality and the increase in customer satisfaction. Theoretically, the use of performance incentives such as PBRS is expected to motivate employees to improve their performance (Barrett and Turberville, 2001; Susseles and Magid, 2005) which in turn is expected to improve service quality. A discussion of the theoretical support for the use of PBRS is provided in the literature review, Section 2.4.0.

To test for the impact of PBRS on customers' perceived service quality, comparisons were undertaken between departments in the two categories of PBRS customer focus using MANOVA, ANOVA and post-hoc tests. Both weighted and unweighted SERVQUAL scores were used in making the comparisons. The results of the hypothesis tests are summarised in Table 5.4.

Table 5.4 Results of the hypotheses tests

Hypothesis	**Summary of findings**
H1. Customer focus/orientation of PBRS has a statistically significant impact on customers' perceived service quality	MANOVA, and ANOVA tests were statistically significant indicating that customer focus of PBRS accounted for differences in customers' perceived service quality between the two categories of customer focus.
H2. The more customer-focused the PBRS the higher the level of customers' perceived service quality and satisfaction.	Post-hoc t-tests revealed that low customer focused departments performed better than high customer focused departments. This direction of differences was not anticipated.

As indicated in Section 4.6.5, the MANOVA results for examining differences in customers' perceived service quality between the two categories of customer focus (using weighted scores) were statistically significant (i.e $F (5,894) = 6.23$, $p <0.0005$; Pillai's Trace = 0.03) . This means that departments within the high and low customer focused PBRS categories differed in regard to their overall performance on the five service quality dimensions (see section 4.6.5 for details). This result supports the first hypothesis (H1b). However the statistically significant result does not indicate the direction and magnitude of the impact of PBRS on customers' perceived service quality. The second hypothesis seeks to determine the magnitude and direction of the impact from customer focused PBRS on perceived service quality.

Having established that customer focused PBRS had a statistically significant impact on customers' perceived service quality, the next step was to explore if a higher level of customer focus of PBRS had a positive impact on customers' perceived service quality (i.e H2b). The assumption was that increasing the levels of customer focus of PBRS would have a positive impact on customers' perceived service quality.

5.3.4 The impact of varying levels of PBRS on perceived service quality

The second hypothesis (H2b) proposed that when the level of customer focus of PBRS is higher, customers' perceived service quality would also increase. Literature suggests that customer orientation/focus improves the quality of services and would thus lead to customer satisfaction (Jaworski and Kohli, 1993; Hartline et al., 2000). As such, an increase in the level of customer orientation of PBRS plans is expected to result in increased perceived service quality and customer satisfaction. Consumer service assessments (i.e SERVQUAL) were used to examine departments in the high and low customer focus PBRS categories. If the level of customer focus/orientation has a positive impact on customers' perceived service quality, then customers for the high customer focused departments would perceive a higher (which could also be less negative) service quality than the low customer focused departments.

In the previous section it was revealed that the MANOVA test comparing the high and low customer focused departments was statistically significant, indicating that overall, there were differences in customers' perceived service quality on at least some of the SERVQUAL dimensions between the two categories. In this section comparisons were undertaken using post-hoc independent *t*-tests to examine the magnitude and direction of the difference in customers' perceived service quality across the five SERVQUAL dimensions between the two categories of customer focus. The results (comparing the two categories) indicated that the two categories of customer focused PBRS were different with regard to all but one dimension of service quality (tangibles). These results are similar to those obtained in H1b, which revealed that the two categories of departments were different in regards to service quality. Table 5.5 summarises the findings for comparing the two categories of customer focus. As indicated, tangibles dimension is not statistically significant in all the tests.

Table 5.5 summary of comparisons between high and low customer focused departments

Dimensions	**MANOVA** ***high/low customer focus***	**AVOVA** ***high/low customer focus***	**Independent t-test** ***high/low customer focus***
Tangibles	Not statistically significant	Not statistically significant	Not statistically significant
Reliability	Statistically significant	Statistically significant	Statistically significant
Responsiveness	Statistically significant	Statistically significant	Statistically significant
Assurance	Statistically significant	Statistically significant	Statistically significant
Empathy	Statistically significant	Statistically significant	Statistically significant

Comparison of the mean customers' perceived service quality values revealed that the low customer focused departments performed better than the high customer focused departments across the five dimensions. The mean scores for the high customer focused departments were lower than the mean scores for the low customer focused departments for both weighted and unweighted SERVQUAL scores. These results did not support the second hypothesis as it was proposed that high customer focused departments would perform better than the low customer focused departments. The direction of the difference between the two categories of customer focus was not anticipated. Ideally, high customer focused departments were expected to perform better than low customer focused departments. The unanticipated direction of differences between the high and low customer focused departments suggested that the departments may need to be further examined to see if high variations between the departments within groups might potentially explain the unanticipated results. The implications of the unanticipated direction of differences in the performance of the high and low customer focused departments are discussed later in sections 5.3.5 and 5.4.

Additional comparisons were undertaken between the three departments within the same category of customer focus using MANOVA, ANOVA and independent t-test to explore for similarities and differences between these departments. Departments were compared to identify differences across the five SERVQUAL dimensions. Differences between departments in the same category of customer focus would imply that customer focused PBRS impacted differently on those departments. If customer focused PBRS impacted differently on departments within the same category then the assumed similarity in the performance of these departments would not be possible. Section 5.5 discusses the implications of the differences between departments in the same category of customer focus.

MANOVA, ANOVA and independent t-test results for both weighted and unweighted SERVQUAL scores revealed that there were some differences among the three departments within each category of customer focus (see Section 4.6.6). Departments within the low customer focused category differed when both weighted and unweighted SERVQUAL scores were used while differences within the high customer focused category were more pronounced for weighted SERVQUAL scores. Departments within the high customer focused category were largely similar when unweighted SERVQUAL scores were used. In this research, weighted SERVQUAL scores are preferred as they take into consideration the importance weights allocated to each dimension by customers. Further details regarding differences between departments within each customer focus category are covered in Section 4.6.6. In view of the unanticipated poor performance of the high customer focused departments when compared to low customer focused departments, and some differences in SERVQUAL dimensions between departments within the same category of customer focus, these findings raised issues that required further discussion.

In the next section possible explanations for the unanticipated direction of differences between the high and low customer focused departments as well as differences between departments in the same customer focus category are explored.

5.3.5 Explanation for the unexpected differences between the low and high customer focused departments

In the previous section (5.3.4), it was identified that the direction of differences in service quality between the low and high customer focused departments was opposite to what was hypothesised. The discussion in this section focuses on some possible reasons for the unexpected direction of differences between the two categories.

One of the possible reasons for the unexpected results may be that this study looked at a snapshot of customers' perceived service quality at the time of data collection and did not assess changes in customers' perceived service quality over time. It may be possible that the high customer focused departments started out worse (i.e with lower levels of service quality) and have in fact improved through the use of PBRS schemes, albeit they are still performing more poorly than the low customer oriented PBRS departments. Thus, while the low customer focused departments performed better, it is possible that the high customer focused departments could have experienced a greater improvement on performance as a result of the introduction of PBRS. If this were the case a positive improvement in performance resulting from PBRS would be hidden because of the poor performance pre-PBRS. In order to measure the amount of improvement in customers' perceived service quality, past data on customers' perceived service quality for the six departments is required. However the researcher did not have access to past data (and it is not clear that this data even exists) thus limiting the discussions to the data collected for this study. It is suggested to measure improvement in customers' perceived service quality over time, i.e additional longitudinal exploration of the issue is required.

The second explanation could be that departments within the two categories of customer focus provided services that were inherently different thereby making comparison by customer focus of PBRS inappropriate. As discussed in Section 2.6.2, services are by their nature unique, and service delivery differs from one service provider to the next due to uniqueness arising from services characteristics of intangibility, inseparability, perishability and heterogeneity. For example, two of the high customer focused departments provided health services, which are generally considered essential. People are usually critical about the quality of health services within the public sector especially in developing countries where such services are considered to be poor (Ondimu, 2000). Poor quality services may be less acceptable for essential services than it is for less essential services. For example, Bhandari et al. (2007) suggest that in some services a minimal failure to deliver services in accordance with customers' expectations could be viewed as unacceptable (as might be anticipated in essential services). However, in other less essential services it may take high levels of poor service quality for consumers to assess the service as unacceptable. This may explain why departments in the high customer focus category, especially the Departments of Clinical Services and Public Health, had the largest negative SERVQUAL scores when compared to the low customer focused departments. While services from low customer focused departments could be important to consumers, they were not as critical as services provided by the high customer focused departments therefore customers had lower service quality expectations than customers for the high customer focused departments. The higher performance for the low customer focused departments could be attributed to the low expectations from customers in the low customer focused category. Since customers had low expectations, ineffective implementation of PBRS and poor performance by the low customer focused departments would potentially be less dissatisfying than poor performance by the high customer focused departments whose customers had high expectations.

Thirdly, while it was found that high customer focused departments had formulated more customer oriented PBRS performance plans, the departments might have failed to implement those plans effectively. Poor implementation of performance objectives has often been blamed for the failure of PBRS schemes in the public sector (Wood 1995). Winstanley and Stuart-Smith (1996) observed that public sector organisations sometimes set good performance goals but have difficulties in implementing those objectives. Poor implementation of performance plans would have a negative effect on customers' perceptions of service quality for both high customer focused and low customer focused departments. It could be possible that the ineffective implementation of PBRS performance plans could have contributed to the poor performance of high customer focused departments while effective implementation of the PBRS plans by the low customer focused departments contributed to the higher performance and better customers' perceptions of service quality.

The problem of disparity between performance objectives and actual performance is a traditional service quality issue in both public and private sector organisations (Winstanley and Stuart-Smith, 1996; Barrett and Turberville, 2001). The SERVQUAL model by Parasuraman et al. (1988; 1991) identifies five service quality gaps that have been used to explain the discrepancy between performance objectives and actual performance. In discussing these five SERVQUAL gaps, links will be made to the performance of high and low customer focused departments to help explain differences in the performance of the two categories of customer focus. The gap model is also used to explain why there were unanticipated differences between the high and low customer focused departments. Figure 8 shows the SERVQUAL model and the five gaps (also discussed in section 2.9).

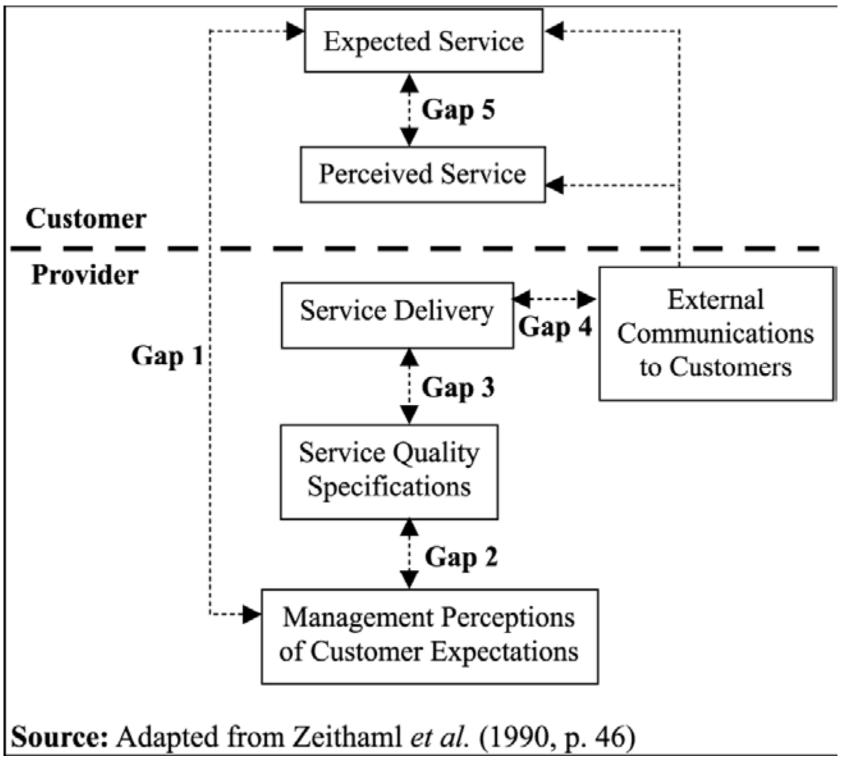


Figure 8. The SERVQUAL model and the service quality gaps

The first gap represents the discrepancy between management's perceptions of customers' expectations and customers' expected service. This gap occurs where service providers assume that they understand customers' service expectations when setting performance objectives. It is possible that what they (service providers) think are customers' expectations would not actually match customers' expectations (Parasuraman et al., 1985). This gap may lead to service providers mistakenly providing what they believe to be adequate service while customers are dissatisfied with the services they get. Within the literature (section 2.7), it has been noted that the design and production of services in the public sector is usually the responsibility of the service providers often with limited or no input from customers (Skelcher, 1992). Services are often allocated to consumers on the basis what the government departments perceive to be the need of the customers as opposed to the customers identifying their needs (Needham, 2006). As a result, public sector organisations have significantly more power than their customers with regard to service design (Butler and Collins, 1995). The limited input from customers in service design (e.g formulating PBRS objectives) would potentially affect the quality of services delivered to customers for both high and low customer focused departments. As discussed later in this section, customers may be less tolerant of poor services in regards to essential service dimensions than less essential services (Walker and Baker, 2000). In that regard, customers would have high expectations for services from high customer focused departments as compared to low expectations from low customer focused departments. Thus, departments in the high customer focused category were perceived to deliver poor quality of services.

With regard to this research, it is possible that the Botswana government departments may have developed their performance goals without incorporating customers' views. According to the PBRS guidelines from the Botswana government, each department develops its performance plan and employees would then develop their PBRS objectives guided by the department's performance plan (DPSM, 2004). This links back to the first gap identified in the SERVQUAL model where service providers design performance plans based on what they believe to be customers' expectations. Ideally customers' expectations should not be assumed, but service providers should incorporate customers' views when designing their performance plans. However, incorporating customers' views when developing PBRS performance plans could prove difficult in the public sector because public sector organisations have multiple customers with varied needs and it could be hard to formulate plans that incorporate the needs of all customers (Kinnell and MacDougall, 1997; Brysland and Curry, 2001).

The second gap in Figure 8 represents the gap between management's (service providers) perception of consumers' expectations and the translation of those perceptions into the firm's service quality specifications. While governments may understand their customers' needs, they may encounter difficulties trying to meet these needs due to resource constraints. As discussed in the literature review (section 2.7) delivery of good quality public sector services is often constrained by multiple stakeholders that governments have to serve (Brysland and Curry, 2001). In addition public sector service delivery may be inhibited by resource constraints (Doyle and Kleiner, 1994). Unlike the private sector, which may focus its attention on profitable customer segments who bring more revenue to the firm, it is generally uncommon to focus on profitable segments within the public sector (Donnelly, 1999). The public sector is more concerned about the welfare, equity and fairness in the delivery of services to its customers (Denhardt and Denhardt, 2000). Owing to little or no profitability in the public sector, governments often face constrained resources in their delivery of services (Doyle and Kleiner, 1994; Robinson, 2003). In that way, when public sector organisations develop their performance plans, they are usually influenced by the desire to generally address the well being of their customers' service needs within the resource constraints. Resource constraints are more likely to affect high customer focused departments especially departments in the health services which are often overwhelmed by large numbers of customers they have to serve (Harber, Ashkanasy, and Callan, 1997). Demand for essential services (e.g health) is not by choice. For example, customers queuing for health services cannot postpone their utilisation to a later date, especially when their need for the service is urgent. On the other hand, low customer focused departments provided less essential services, thus in the event of reduced service production resulting from resource constraints, their customers can afford to postpone consumption. Thus, inefficiency in performance resulting from resource constraints would be likely to affect customers for high customer focused departments whose consumption of services is less flexible and more frequent as compared to low customer focused departments whose consumption of services is optional. In that regard, customers for the high customer focused departments are more likely to experience the poor quality of services while customers for low customer focused departments would be less dissatisfied.

The third gap is the difference between service quality specifications/ standards and the actual service delivered. As services are intangible and heterogeneous, service delivery is difficult to standardise especially in person-to-person service encounters (Schneider and Bowen, 1993; Burke et al., 2005). Service delivery in both private and public sector varies from one individual to the next, thus, while specifications or PBRS performance plans are adequate, employees may fail to provide the services efficiently and effectively due to the unique characteristics of services (Czepiel et al., 1985). The unique characteristics of services are discussed in section 2.6.2. Lack of standardisation of services (both public and private sector) may lead to uncertainty of service output (Czepiel et al., 1985), which could potentially affect customers' perceived service quality. As discussed earlier in this section, public sector organisations often have more power when it comes to decisions regarding the design of services (Butler and Collins, 1995) and the limited input from customers may increase the uncertainty of service output (Skelcher, 1992). Lack of standardisation of services potentially affected the quality of services for both high and low customer focused departments. Both low and high customer focused departments had negative SERVQUAL scores indicating that there was a discrepancy between customers' expectations and service outcomes delivered. However, since customers for the low customer focused departments had lower expectations, the discrepancy between their expected service and actual performance outcome was expected to be less, when compared to customers of high customer focused departments who perceived a poor quality of services. Service specifications are possibly very important for high customer focused departments especially health services. For instance, a wrong diagnosis by a General Practitioner could result in serious health problems for the patient, thus consumers of health service would be more concerned about the ability of the service provider to stick to specifications and standards when delivering services.

The fourth gap occurs between what the service providers' external communications portray as the service quality and the actual service delivered. For example, if the media unreasonably raise customers' expectations, it could lead to a difference between the promised service and what is actually delivered (Parasuraman et al., 1985). With regards to this research, this gap possibly occurred when the Botswana government introduced PBRS in 2003. As discussed in the literature review, customers complained about the decline in service quality and lack of productivity from the Botswana public sector (Adamolekun and Morgan, 1999; Hope, 1999). With a general decline in public sector service quality in Botswana, introduction of performance management system and PBRS possibly brought high hopes to the customers. In addition the government of Botswana has been vocal about the desired service improvement in the public service. The government promised to improve service delivery by setting generic performance standards which were availed to the public and these possibly raised customers' expectations (DPSM, 2008). The mismatch between the promised service and service outcomes would affect both high and low customer focused departments, but is expected to have a larger impact for high customer focused departments where service expectations are already high. As indicated earlier in this section customers'expectations for services from high customer focused departments are higher because of the essential services provided by these departments. By raising customers' expectations for government services, the gap between expected and actual service delivered has the potential of widening, hence increasing the negative SERVQUAL score for these departments.

The last gap (five) occurs where there is a discrepancy between customers' perceptions and their expectations of service quality. Service quality stems from a comparison of customers' desired level of service outcome with the actual performance they received from the service provider (Wisniewski and Donnelly, 1996). Parasuraman et al.'s (1988) SERVQUAL instrument allows for measuring customers' perceived service quality by subtracting customers' expectations from perceptions. Details regarding the process of calculating customers' perceived service quality are covered in Section 4.5. SERVQUAL scores for the six Botswana government departments in the high and low customer focused categories are also provided in Section 4.5. All departments had negative SERVQUAL scores, an indication that departments' performance did not match customers' expected service levels. However, high customer focused departments had larger negative SERVQUAL scores when compared to the low customer focused departments.

As was discussed earlier in this section, high customer focused departments provided essential services for which customers had less choice to consume as compared to low customer focused departments where customers had the flexibility of postponing the service consumption. Given the essential nature of services from the high customer focused departments, their customers are more likely to have high expectations than customers for the low customer focused departments. As discussed in Section 5.5, customers tend to be less tolerant of poor performance in regard to essential services than the less essential services (Walker and Baker, 2000). Researchers suggest that when evaluating services, customers often subconsciously set the minimum level of acceptable service performance as well as the desired or expected level of service performance. The range between the minimum acceptable level of performance and desired or expected performance is commonly known as the zone of tolerance (Johnston, 1995; Walker and Baker, 2000; Bhandari et al., 2007). The zone of tolerance is usually smaller for essential service dimensions than it is for less essential service dimensions (Walker and Baker, 2000; Bhandari et al., 2007). Thus, for the same level of performance, customers are more likely to perceive poor service quality for essential services than are the same customers for departments providing less essential services. In addition, it was indicated in section 4.5 that customers of the low customer focused departments mostly had low expectations. These low expectations mean that in the event of poor performance by both high and low customer focused departments, customers of the low customer focused departments are would perceive a less dissatisfying service as opposed to poor quality services by customers of high customer focused departments.

Lastly, failure of the PBRS process in the public sector may result from poor implementation and lack of support from employees (Marshall, 1998). Previous research on the impact of performance based incentive schemes in the public sector has revealed that lack of support often inhibits the success of PBRS schemes (Marshall, 1998; Chamberlin et al., 2002). For example, teachers at Montessori schools in Cincinnati (USA) did not support a new performance-related pay scheme because they believed it was based on goals they did not necessarily share (Chamberlin et al., 2002). Marshall's (1998) study of pay-for-performance systems in the Australian Public Service also revealed that some public sector employees simply rejected pay-for-performance schemes as being inappropriate for performance improvement. Lack of support for PBRS would affect performance of departments in both the low and high customer focus categories. Researchers suggest that organisations (both private and public sector) should solicit support from their employees when implementing changes that affect organisational performance because employees' attitudes and reactions to change within the organisation is associated with departmental performance (Tornow and Wiley, 1991; Adsit et al., 1996). Employees' support for organisational success is positively related to organisational performance (Tornow and Wiley, 1991). This implies that employees' negative attitudes toward organisational change could negatively affect organisational performance. While this affects departments in both categories, the impact would possibly be felt more by the high customer focused departments because their customers have high expectations because of the importance of the services being received, as opposed to the low expectations from low customer focused departments. While low customer focused departments could perform poorly as a result of lack of support for the PBRS, the effect of the poor performance would be cushioned by customers' low expectations and would thus not be as high as that felt by the high customer focused departments whose expectations are high and less flexible.

5.4 Conclusions derived from research results

Statistical significance of the MANOVA tests comparing departments in the two categories of customer focus was observed, implying that differences in customers' perceived service quality existed between departments in the two categories of customer focus. Given that the results show that customer focused PBRS impacts on customers' perceived service quality, it is important to examine the magnitude and direction of the impact.

While the level of customer focus of the PBRS had an impact on perceived service quality, the impact of varying levels of customer focus was in the opposite direction to that hypothesised. Comparisons between departments in the two categories of customer focus revealed that low customer focused departments performed better in terms of perceived service quality than the high customer focused departments.

Comparisons of departments within each category of customer focus also revealed that some differences existed between departments in the same category of customer focus, which possibly meant that the departments, even those with high or low customer focused PBRS plans were inherently different. In that way, despite departments belonging to the same category of customer focus (based on PBRS), customers evaluated these services differently. The difference in customers' perceptions of service quality between departments within the same category of customer focus could be attributed to the unique nature of services (discussed in section 2.6). This implies that individual departments provided services that were unique from other departments, even for those that were categorised as the same in regards to customer focus of PBRS. Therefore, the uniqueness of the service rather than the category of customer focus possibly determined customers' perception of service quality. For example in the high customer focus category two of the departments (Clinical Service and Public Health) were from the health sector. While customers for the high customer focused departments generally had high SERVQUAL scores, Clinical Services and Public Health had even higher SERVQUAL scores of –1.85 and –2.05 respectively as compared to IEC's –1.74 (see sections 4.5.2, 4.5.3 and 4.5.4). Thus, the evaluation of these services (Clinical Services and Public Health) was likely to differ from the evaluation of services from the IEC, even though they were all in the high customer focused category. This emphasises the fact that services provided by each department, were perceived as being different by consumers, owing to the uniqueness of each department's services.

The next section discusses the implications of the findings of this study to theory and practice.

5.5.0 Implications of research findings

This section discusses the implications of the findings of this study. The discussions are divided into three sections. The first section looks at the implications for theory, while the second discusses implications for practice, and the third looks into policy implications.

5.5.1 Theoretical implications of the findings

The findings from this study have shown that departments' customer oriented PBRS schemes did not improve customer service outcomes. As discussed in section 5.3.4, results indicated that the three departments within the high customer focused PBRS category performed worse than the low customer oriented departments. The inverse relationship between customer focus of PBRS and customers' perceived service quality means being more customer oriented does not appear to increase customer satisfaction in public services.

It appears that services from departments with less consumer interaction were viewed more positively than those where interaction was high. For instance, departments in the high customer focused PBRS category whose services mostly involved high interaction with consumers (e.g Public Health and Clinical Services) performed worse than the low customer focused departments (e.g Culture and Youth) whose activities did not involve high interaction with customers. According to Cho, Lee, Kim, Lee, and Choi (2004), customers for services that involve high interaction and frequent visits incorporate a wide range of factors in their evaluation of the overall service quality. Customers become more knowledgeable about the service and engage in a more comprehensive processing of the quality of that service (Cho et al., 2004). In that way services of departments having high customer interaction are more likely to be subjected to stringent evaluation than departments with less customer interaction. Customers for departments with low customer interaction are likely to have less information about the service and therefore would not develop high expectations about the service quality.

It is possible that high customer focused departments may also have a low volume of exchanges with their customers. For example, in this thesis IEC, which is high customer focused, had a low volume of customer interactions, i.e it does not deal with a large number of customers on a daily basis. On the other hand Clinical Services and Public Health usually have a high volume of customer interactions as they provide essential services (health). Customers are more critical about the quality of essential services than less essential services. In that way both Clinical Services and Public Health were possibly subjected to more scrutiny than IEC. Thus, while high customer oriented departments were generally expected to have high service quality, some ended up performing poorly because the essential nature of their services coupled with large number of customer they interact with negatively impacted service quality. These differences between departments within the same category of customer focus could possibly explain the differences observed in the results

Comparison of the three departments within the same customer focus category has revealed that there were also some differences between departments within each of the two categories. Table 5.6 presents a summary of the comparison of departments in the high customer focused category using weighted SERVQUAL scores. Departments dimension scores were compared for all pairs of departments. As presented in Table 5.6, departments within the high customer focused category differed in at least one dimension across the three department pairs. Departments of Clinical Services and Public Health differed in regard to tangibles and reliability while their performance in the other three dimensions (responsiveness, assurance and empathy) was similar. Thus the two departments were generally similar in their performance. Clinical Services and IEC differed in three out of the five dimensions, implying that the two departments were generally different. Public Health and IEC differed in only one dimension (assurance) which indicates a high level of similarity between the departments. These findings suggest that customer focus of PBRS had differing impacts on some SERVQUAL dimensions for departments within the high customer focus category.

Table 5.6 Comparing high customer focused departments using weighted scores

Department pairs	Dimensions and statistical significance				
	Tangibles	***Reliability***	***Responsiveness***	***Assurance***	***Empathy***
Clinical Services/ Public Health	Statistically significant (**different**)	Statistically significant (**different**)	Not statistically significant	Not statistically significant	Not statistically significant
Clinical Services/ IEC	Statistically significant (**different**)	Statistically significant (**different**)	Not statistically significant	Statistically significant (**different**)	Not statistically significant
Public Health /IEC	Not statistically significant	Not statistically significant	Not statistically significant	Statistically significant (**different**)	Not statistically significant

Table 5.7 presents a summary of comparisons for departments in the low customer focused category using weighted SERVQUAL scores. As observed with the high customer focused departments, the three low customer focused departments differed in at least one dimension across the three pairs. In one of the pairs (Culture & Youth/ Wildlife & National Parks) departments differed in four of the five dimensions indicating a high level of differences between the two departments. On the other hand departments in the last two pairs (Culture and Youth/ Tourism; Wildlife & National Parks/ Tourism) were generally similar as they differ in only one dimension.

Table 5.7 comparing low customer focused departments using weighted scores

Department pairs	Dimensions and statistical significance				
	Tangibles	***Reliability***	***Responsivenes s***	***Assurance***	***Empathy***
Culture & Youth/ Wildlife & National Parks	Statistically significant (**different**)	Statistically significant (**different**)	Statistically significant (**different**)	Statistically significant (**different**)	Not statistically significant
Culture & Youth / Tourism	Not statistically significant	Not statistically significant	Not statistically significant	Statistically significant (**different**)	Not statistically significant
Wildlife & National Parks / Tourism	Statistically significant (**different**)	Not statistically significant	Not statistically significant	Not statistically significant	Not statistically significant

Overall, departments within each category differed on at least one dimension. Generally tangibles and assurance appear to be most different in both high and low customer focused categories (see tables 5.6 and 5.7). Empathy was least different within each of the two categories as there were no statistically significant paired differences and responsiveness was only different for one pair of comparisons within the high customer focused departments. This implies that empathy and responsiveness were generally seen more similar across the six government departments. Reliability appears to be more different in high customer focused departments as it differs in two department pairs as compared to one pair in low customer focused departments.

In view of differences in the SERVQUAL dimensions between departments within each category, it means that while departments could technically be assessed as being similar in terms of customer orientation of PBRS plans, customers' perception of service quality would differ. This suggests that departments vary in terms of activities to the extent that comparing them on aggregate PBRS customer orientation is more difficult in regard to customer service outcomes. This highlights the service provider specific nature of services which was discussed in section 5.4.

Service delivery in the public sector is more complex than it is in the private sector. In looking at government services there is a wide scope of activities under each department/unit. Some departments provide essential services or activities 'needed by consumers' (e.g health) while others provide regulatory and enforcement services such as police, which may not be of direct benefit to the consumer of such service (Skelcher, 1992; Davis, 2006). In some departments customers may receive their service freely even though most governmental services are provided collectively to benefit the whole community (Skelcher, 1992). For example services such as health and education are provided for the collective benefit of a wider community. While the desire is to reach as many recipients as possible, resource constraints may mean that these services are shared between the consumers and may not be adequate to fully satisfy every member of the community (Needham, 2006). While governments exist to provide services and welfare to their citizens equitably and fairly (Denhardt and Denhardt, 2000), they often face constrained resources and are challenged to determine how to effectively allocate limited resources to their customers (Andreassen, 1994; Donnelly et al., 1995; Needham, 2006). Service delivery within the public sector is made even more difficult by the overwhelming numbers of variable consumers segments, who often have conflicting service needs (Fountain, 2001). In Botswana the government is the principal service provider as it provides the bulk of the services required by consumers, therefore most people rely on the government for their service needs (Sebusang and Moeti, 2005). This potentially puts the Botswana government under pressure to meet the diverse needs of this large number of customers.

Whereas in the private sector customers generally voluntarily engage in the purchase of services, there are some services within the public sector where consumers have to engage unwillingly in services that may not directly benefit them (Chapin and Denhardt, 1995; Davis, 2006; Donnelly et al., 2006). These are mostly enforcement or regulatory services where customers do not require the service but have to participate in the service because of requirements of the law (Skelcher, 1992). Such services include, among others, payment of tax, speed tickets, prosecutions and others where the customer does not initiate the service process. The mandatory participation of customers in such services makes the service experience less satisfying (Donnelly et al., 2006). While government units performing such tasks (e.,g tax office, police e.t.c) could be doing an excellent job, the nature of their services may make it difficult for their 'unwilling customers' to provide unbiased feedback on the quality of services (Davis, 2006; Donnelly et al., 2006). Since customers unwillingly participate and do not get direct benefits in these services, they may be critical with the service outcome. Thus, it may be inherently difficult to determine that such departments have met service expectations and PBRS goals because these services are provided in citizen-adverse situations where recipients are less likely to fairly criticise the service process (Davis, 2006).

In conclusion the unexpected poor performance of high customer focused departments when compared to low customer focused departments possibly resulted from differences in customers' assessment of essential and less essential service dimensions. As indicated in section 5.3.5 the range of performance that customers consider acceptable differs between essential and less essential services (Walker and Baker, 2000; Bhandari et al., 2007). The zone of tolerance is narrower for service dimensions that are essential than the less essential service dimensions (Walker and Baker, 2000). Given the less essential services for low customer focused departments, the range of acceptable performance for the low customer focused departments was possibly larger and more flexible as compared to the narrow zone of tolerance for essential services in the high customer focused departments. Differences between departments within the same category of customer focus could be explained by the service provider specific nature of services which makes comparison of departments on aggregate PBRS customer orientation more difficult and less appropriate. However, without a baseline study pre PBRS, it is not possible to suggest that PBRS did not improve service outcomes. Therefore, as identified later in section 5.7.0, it is suggested that future longitudinal study be undertaken to examine trends in customer satisfaction/dissatisfaction resulting from PBRS.

The next section discusses the implications of the findings for practice. It looks at what the findings mean to managers in the public sector.

5.5.2 Implications for managers of government departments

Findings from this study also have some implications for practice (management). Results from the SERVQUAL survey (section 4.5) revealed that all six departments had negative SERVQUAL scores. SERVQUAL scores differed across the six departments with high customer focused departments generally having larger negative SERVQUAL scores. For example, the highest weighted SERVQUAL score of -2.05 was for the Department of Public Health within the high customer focused category while the lowest score of -1.15 was for the Department of Culture and Youth (within the low customer focused category). The large negative SERVQUAL scores for the high customer focused departments indicate that customers were largely dissatisfied with the quality of services from these departments. In view of the large negative SERVQUAL scores for the high customer focused departments, management is advised to reduce the negative SERVQUAL gap by redesigning their PBRS plans such that they become more customer focused, targeting issues of importance to consumers. Government policy makers are advised to identify dimensions with the largest service quality gaps in each department and formulate PBRS plans that are more relevant to service improvements in those departments. In section 4.5, it has been identified that some dimensions consistently had large negative gap scores across the six departments thereby implying high levels of customer dissatisfaction. Results showed that reliability had the largest dimension gap scores in most of the departments implying that departments' services were less reliable. Table 5.8 (also in table 4.56) presents the dimension scores and dimension rankings for the six departments.

Table 5.8 Departmental dimension scores and rankings

Department	**Dimensions**				
	Tangibles	Reliability	Responsiveness	Assurance	Empathy
Clinical Services	-1.81 (2)	-2.05 (1)	-1.80 (3)	-1.76 (5)	-1.77(4)
Public Health	-1.72 (5)	-2.40 (1)	-2.16 (2)	-2.03 (3)	-1.87 (4)
Independent Electoral Commission	-1.67 (3)	-2.19 (1)	-1.91 (2)	-1.28 (5)	-158 (4)
Culture and Youth	-1.14 (4)	-1.22(1)	-1.19(2)	-1.01(5)	-1.17 (3)
Tourism	-1.35(4)	-1.51(2)	-1.54 (1)	-1.39(3)	-1.02(5)
Wildlife and National Parks	-2.01 (1)	-1.73 (3)	-1.67 (4)	-1.78 (2)	-1.52 (5)

The three high customer focused departments had the largest reliability gap scores implying that they did not perform well in regard to this dimension. Performance with regard to other dimensions was mixed as their rankings varied across the six departments. The higher dimension gap scores for reliability imply that service improvements should target reliability as a priority area. Departments should review their service delivery processes in order to enhance the reliability of their services. With a view to addressing the reliability of service delivery, departments should consider improvement in areas including among others the extent to which the plans enable departments to deliver services at the promised time, departments' sincerity in solving customers' problems, departments' ability to perform services right first time, promptness in service delivery and insistence on error free customer records (components of the reliability dimension). Improvements in the reliability of services should pay particular attention to departments in the high customer focused category as they had the largest gap scores in that dimension. Ultimately, given the overall negative scores across the five SERVQUAL dimensions, performance in all dimensions would require to be reviewed to make service delivery more responsive to customers' expectations. This would potentially enhance the focus and responsiveness of departments' services and possibly improve customers' perceived service quality.

In addition, results in Table 8 indicate that customers are generally dissatisfied with services from all the six departments as shown by the negative SERVQUAL scores across departments. Customer dissatisfaction normally arises when performance (service output) does not match their expectation (Johnston 1995). Johnston (1995) suggested that if customers' perceptions were matched by their expectations then they would be satisfied. On the other hand, if the service performance was higher than expected, then the customer would be delighted. However, a service output that is below expectations would result in dissatisfaction. Therefore customers' expectations play a major role in determining their satisfaction with the service output (Ojasalo, 2001; Coye, 2004). This calls for departments to have strategies in place to understand and then attempt to manage customers' expectations.

In order to manage customers' expectations, individual departments can either seek to change their performance or change consumers' expectations, which Johnston (1995) suggests is a way of managing customers' expectations and thus keep customers' expectations within the zone of tolerance. It is also possible that by changing expectations organisations in fact change customers' zone of tolerance. In that way most of the organisations' services will be perceived as satisfying new sets of expectations.

Secondly, for departments that aim to delight their customers, it is important that such departments provide services that consistently meet or even exceed their customers' expectations. The aim here is to provide services that are above the upper level of the zone of tolerance. This can be achieved through ensuring that customers do not have negative experiences (disconfirmation) and focusing on delivering services that exceed customers' expectations (Johnston 1995). However, this strategy could be more challenging because government departments would be expected to maintain a constant good performance that exceeds customers' expectations to produce a highly satisfactory outcome. As such, this strategy potentially further raises consumers' expectations, making it even harder for the departments to continually delight consumers.

Ojasalo (2001) suggested that customers' expectations may be fuzzy or less precise. When dealing with such expectations organisations should strive to turn the expectations into more focused or precise, by making customers aware of what they should expect from the organisation. More focused expectations would then be clearly communicated to both the organisations and customers (Ojasalo 2001). This would in turn assist organisations to address clearer expectations and develop more customer focused service delivery mechanisms. Thus government departments should strive to turn their customers' unclear expectations into more focused and precise expectations to assist in providing more customer oriented services.

Customers may sometimes have unrealistic service expectations which cannot be met by organisations (Ojasalo, 2001). Generally, when such expectations are not met customers would be dissatisfied. Managing unrealistic expectations would require organisations to modify customers' expectations and turn them into more realistic expectations that closely fit what organisations can deliver (Coye 2004). For example, organisations should inform their customers if they expect a delay or a short fall in their normal service. This would prepare customers for the possible short fall in their expected service. Thus, it is suggested that government departments should provide more information on what the service experience would entail in order to modify possible unrealistic expectations from their customers. By providing information on performance targets, consumers would hopefully use this information to realign their expectations. If the organisation can then deliver on what they 'promised' then consumers would hopefully be satisfied. This does highlight the need for organisations to set realistic targets, which can be met.

Managers and policy makers are also advised to undertake comprehensive reviews of the performance of their departments, including a SERVQUAL survey, before developing PBRS schemes. This would assist in identifying specific departmental performance deficiencies and customer needs which could then be incorporated in the design of the PBRS schemes. Such PBRS schemes are expected to be more customer-focused as they are based on findings from the comprehensive review and feedback from the consumer survey (i.e SERVQUAL). This would potentially enhance the performance of government departments and increase customer satisfaction with public sector services.

While the desire is to close the negative SERVQUAL gap, it may be practically difficult because of issues relating to high customer focused departments raised in sections 5.4 and 5.5.1. As identified in Section 5.5.1, high levels of customer orientation are difficult to achieve in the public sector due to resource constraints and competing consumers' needs. Due to resource constraints services are usually rationed for the benefit of the larger community as opposed to individual customers (Needham, 2006). This could potentially affect departments' customer orientation efforts, particularly departments in the high customer focused category, whose limited resources are often overwhelmed by the large numbers of customers they have to serve (Harber et al., 1997), resulting in delivery of low quality services to the customers. The competing and often conflicting needs of these customers make it difficult to provide services that can satisfy all (Orwig et al., 1997; Kelly, 2005). Thus, management should be aware of these challenges and formulate strategies that would enable them to effectively reduce the negative service quality gap.

Research findings suggest that departments in different customer focus PBRS categories experienced service quality differently. Contrary to expectations, results revealed that increasing customer focus of PBRS did not increase customers' perceived service quality. The magnitude and direction of differences between the categories was inverse, that is, high customer focused departments performed worse than low customer focused PBRS departments. Given the poor performance of high customer focused departments, the role of PBRS as a tool for increasing customers' perceived service quality in the public sector should be approached with caution. The specific nature of services also makes service delivery less predictable and thus makes it hard for departments to develop PBRS schemes that are adequately customer focused. This makes PBRS a less appropriate approach for developing customer focus in public sector departments.

Lastly, since this study did not examine the cause and effect relationships between PBRS and customers' perceived service quality, it would be inappropriate to suggest that PBRS does not improve customers' perceived service quality. Additionally, it has to be acknowledged that PBRS could still be useful in improving other forms of efficiency in public sector performance, which are not covered in this study. For example PBRS could improve areas in employee performance such as commitment to achieving performance goals, increased efficiency, etc. Therefore, PBRS could not be discontinued on the basis of the findings of this thesis.

The next section discusses the policy implications of this study.

5.5.3 Policy implications

In addition to the managerial implications discussed in section 5.5.2, this study has a number of policy implications which are discussed in this section. While this study focuses on customers' perceptions of service quality, it is important to link that to employees' performance. In other words policy makers should consider measuring whether employees are doing what is expected from them. The success of PBRS schemes would depend on proper implementation of targeted activities by employees. As discussed in section 5.3.5, failure of some PBRS schemes to improve customer satisfaction could be as a result of poor implementation of PBRS objectives by employees (Marshall, 1998). Thus, in measuring the impact of customer orientation of PBRS, departments should also measure individual employees' performance to determine if it met expected levels or whether it could be attributed to the poor customers' perceptions. Therefore employees should not be separated from the PBRS evaluation as they are part of the overall service delivery process.

Individual departments are also encouraged to ensure that employees have the resources and authority to perform as expected (and set out in PBRS) in order to improve customer service quality. It is expected that if employees had the resources and authority to make changes identified as necessary to improve the service quality, then incentive programs such as PBRS could result in improved performance and ensure customers satisfied.

However, for employees to perform effectively the incentives provided have to sufficiently motivate them to work harder in the targeted area. As discussed in section 2.4.1, expectancy theory supports the view that rewards are likely to motivate employees (Lowery, et al. 1995)., if employees believe that by working harder they can improve their performance, and that improved performance will be highly rewarded (Hong et al., 1995; Chamberlin et al., 2002). This study did not examine whether employees felt that the PBRS incentives were adequate enough to motivate them to work harder in the targeted ways. Given the importance of rewards in motivating employees to improve their performance, it is suggested that departments should review their PBRS incentives to determine if they are adequate enough to motivate desired employee behaviour.

In conclusion, it is not clear if government departments have linked their PBRS programs to customers' expectations. It is important to link these because it would ensure that the services delivered would be more relevant to customers' expectations and would thus potentially satisfy the customers. Linking PBRS objectives to customers' expectations can be achieved through undertaking a SERVQUAL survey to identify service dimensions that are a source of complaints by customers. Departments can then use these results to design PBRS plans that address areas of deficiencies. It is anticipated that performance plans crafted on the bases of customers' assessments of services would be more customer focused as they address customer identified deficiencies. In addition, departments are advised to undertake a customer survey to assist in identifying service characteristics that are of major importance to their customers. Once identified, quality standards on these service characteristics should also be incorporated into the PBRS scheme. This would facilitate in developing PBRS schemes that address customers' identified service characteristics, thus improving the level of customer orientation of PBRS. Organisations could also communicate their standards to consumers; ensuring expectations would then be more consistent with these established performance standards, as this might assist in shaping expectations and/or consumers zones of tolerance.

The next section discusses the contributions of this study.

5.6 Study contributions

This research makes a number of contributions to theory and practice. Theoretically this thesis provided a more in-depth understanding of the link between PBRS and customers' perceived service quality. As indicated in the introduction section 1.3, previous research on the impact of performance reward schemes mainly focused on employees' attitudes to schemes (Schwab, 1974; Marsden and Richardson, 1994; Kellough, and Selden, 1997; Mamman, 1998). The research, therefore, extends our understanding of the link between PBRS and customers' perceived service quality. It also found that while studying employees' attitudes to PBRS is important, it is not enough on its own. There was a need to understand how PBRS ultimately affects service quality from customers' point of view. Thus, this research contributes to existing knowledge by providing a conceptual link between PBRS and customers' perceived service quality in the public sector. Findings indicated that the service provider specific nature of services (and not PBRS) was attributed to differences in customers' perceived service quality between departments within the two categories of customer focus.

Most of the previous studies on the impact of PBRS were done in the private sector and very little attention was given to PBRS in the public sector (Marsden and Richardson, 1994). This study contributes by exploring the impact of PBRS on perceived service quality within the context of the public sector. Chen et al. (2004) suggest that some differences exist between the private and public sectors and therefore methods successfully implemented in the private sector may not be compatible with the public sector. In that regard, it was appropriate to examine the impact of PBRS within the public sector context.

Undertaking the study in Botswana, which is a developing country in Africa, could potentially add to the existing literature concerning the impact of performance based reward schemes on customers' perceived service quality. A study by Malhotra et al. (2005) revealed that there were statistically significant differences in customers' perceived service quality between developed and developing countries attributed to economic, cultural, and social factors. Thus, it is expected that the findings from this study would provide insights into customers' perceptions of public sector service quality in Botswana where a study of this nature had not been undertaken. The results could then be used to develop service improvement initiatives relevant to public sector services in Botswana to address deficiencies identified, which may or may not be tied to PBRS schemes.

Comparison of departments within the same category of PBRS customer focus revealed that differences existed among those departments. This lead to the conclusion that services were service provider (department) specific, thus while departments could be categorised on the basis of customer focus of PBRS, customers' perceptions of the quality of those services would likely differ. As was identified in Section 2.6, all services are unique and the quality of service outcomes is not easy to predict, as they (services) cannot be standardised. Therefore government services, like all services, have to be consumed before customers can make conclusions about the service quality (Walker and Baker, 2000). Thus, the uniqueness of services means that though departments could belong to the same PBRS customer focus category, customers' perceptions of their service quality is likely to differ. In that regard, similarity in PBRS customer focus category is not necessarily predictive of the quality of services government departments could provide.

Lastly, this research also made methodological contributions to the study of customer orientation of government departments' PBRS schemes. As discussed in Chapter 3 (Section 3.4), a combined research methodology was adopted in this research. In order to examine the extent to which the PBRS plans were customer focused, content analysis was undertaken. The process of content analysing the performance plans was suggested as it enabled the use of experts to independently assess the performance plans to determine their extent of customer focus. This process involved the development of content analysis rules/criteria which were applied in evaluating the plans. The content analysis criteria had to be developed from scratch. No known documented studies had used content analysis to examine customer orientation of performance plans. In that way, this thesis contributed methodologically by suggesting content analysis rules that could be used to evaluate customer focus of PBRS plans. It has to be acknowledged that this process was not a simple task given the diversity of PBRS in terms of departmental performance plans and whether the plans were indeed customer focused. Findings indicated that content analysis could facilitate in determining departments' customer focus/orientation and could also be used to categorise departments on the basis of the extent to which their PBRS plans were customer focused.

However, findings have also indicated that though content analysis assists in categorising departments on the basis of the extent of customer orientation, departments sharing the same category of customer focus do not necessarily have similarities in their level of performance. The service provider specific nature of services, mean that each departments' performance is unique and difficult to predict. Thus, customer focus categories could only indicate similarity in the level of customer focus of PBRS plans and not the predicted level of departmental performance. This implies that the design of PBRS plans should be influenced by services relevant to individual departments to cater for the uniqueness and service provider specific nature of services. As indicated earlier in Section 5.5.2, departments should undertake research before establishing PBRS schemes, and then design them (PBRS schemes) to deal specifically with deficiencies relevant to departments.

The next section discusses the research limitations and suggestions for future research.

5.7.0 Study limitations and future research

This study had some limitations which could possibly affect the generalisability of the results obtained. Firstly, the respondents were located mainly in urban areas and were generally well educated. The findings from the study could possibly be different if people in rural communities were included in the survey because their service experience could potentially differ from respondents in urban localities who have better access to most services. It is suggested that future research covers different parts of the country including rural communities to get a comprehensive coverage of consumers. Secondly, only the departments that had responded by sending their performance plans were potentially included in the study. Therefore this study was confined to the ten departments that agreed to participate. Thus, future research should include a broad range of government departments to obtain a comprehensive picture of the impact of PBRS on public sector customers' perceived service quality.

Following content analysis, the inter-judge reliability coefficients for the four experts evaluating the level of customer focus of the departments' PBRS plans were measured. In most departments, alpha coefficients were below the 0.70 threshold suggested by Nunnally (1978). Only one department had a reliability score of 0.72 alpha (Trade and Consumer Affairs) while most of the departments had reliability scores around 0.5 alpha range. As discussed in Section 4.2.1, a decision was made to set the acceptable level of reliability at 0.5 alpha, although this had the potential of negatively affecting the internal consistency of the findings of this study. Hence the low level of reliability is identified as one of the limitations of this study. It is suggested that future research adopt the acceptable reliability level of 0.7 alpha or higher in accordance with Nunnally (1978) to improve the internal consistency of research results.

Another limitation of this study was that it was undertaken within three years following the introduction of PBRS in the Botswana public sector. It has to be acknowledged that at the time of data collection, some departments had not finalised the implementation and those that had, possibly had not had time to see the results of changes in employee performance behaviour. Thus, it is suggested that another study be undertaken to provide for possible implementation problems experienced by departments when PBRS was introduced.

In this research, departments' customer orientation was defined on the basis of the extent of customer focus of PBRS plans possibly without relating to SERVQUAL dimensions. It is however important that PBRS plans are linked to the SERVQUAL dimensions to improve service quality as perceived by customers. PBRS plans need to be refocused to incorporate SERVQUAL dimensions in order to improve their (PBRS plans) customer orientation. As discussed earlier in this section, departments are advised to run SERVQUAL prior to designing PBRS schemes to address deficiencies specific to each department's performance. This will potentially improve the quality of services as perceived by customers.

This study was a cross sectional survey, therefore the results obtained reflect customers' perceived service quality at one point in time. However the researcher did not have access to data on customers' perceived service quality prior to PBRS in Botswana. Lack of data on customers' perceived service quality prior to PBRS made it hard to measure improvement in customers' perceived service quality resulting from the use of PBRS in the public sector. It is suggested that longitudinal research should be undertaken in the future in order to chart improvements in service quality over a period of time. This would enable researchers to determine whether PBRS improves customers' perceived service quality and thus could be recommended as a tool for improving public sector service quality.

While this study measured the impact of PBRS on customers' perceived service quality it did not examine employees' attitudes to PBRS in Botswana. Within the literature it is suggested that PBRS motivates employees to improve their performance (Gomez-Mejia and Balkin, 1992; Allen and Kilmann, 2001) and it was just assumed that it would motivate public sector employees in Botswana. On the basis of equity theory, employees are motivated to improve their performance provided they perceive that their rewards are equivalent to or worth the effort they put into their work (Gomez-Mejia and Balkin, 1992; Lowery et al., 1995; Heneman and Werner, 2005). In that regard, it is possible that employees' poor performance could be as a result of their (employees) discontent with the rewards they get from the PBRS scheme. Employees are an important link in the delivery of services as their input determines the quality of service delivered. Thus future research should incorporate employees' attitudes to PBRS when evaluating the impact of PBRS on perceived service quality.

This study did not investigate whether customers were dissatisfied with all or some of the public sector services. From a managerial perspective it would possibly be valuable to understand the issue of complaints within each specific public service examined. However, the objective of the thesis was to use departments as cases in which to explore the relationship between customer focused PBRS and service delivery. In that way, each service was not explored in depth, thus the specific issues regarding individual departments were not included. In order to prioritise service improvements and make them more focused on customer service needs, it is suggested that future research cover a broad range of public sector services to reveal if customers are dissatisfied with some or all public sector services. In addition, individual services can also be examined to identify dimensions that have been a source of customer complaints.

While this study identified that resource constraints and overwhelming demand for some public sector services (e.g essential services) could affect customers' assessment of service quality, it did not look at other outcome variables such as costs which could also affect the efficiency and effectiveness of the PBRS schemes. The effectiveness of PBRS schemes should take operational costs into consideration. Large operational costs may make PBRS less sustainable especially given that it could increase the pressure on public resources which are already constrained.

Finally, since this research was based on the Botswana public sector, its findings might not be directly applicable to other countries with different cultures and or level of economic development. It is therefore suggested that further research be considered before generalisation of the findings could be made to other countries' public sector.

The next section summarises the discussions covered in this chapter.

5.8.0 Chapter summary

This section summarises the discussions covered in Chapter 5. This chapter discussed the research findings and implications from these findings. Findings were discussed along the three research objectives outlined in Chapter 1. Findings indicated that all of the six departments in the two categories of PBRS customer focus had negative SERVQUAL scores, implying that their performance did not adequately meet customers' expectations of service quality. Given the negative SERVQUAL scores, departments had to undertake service improvements to close the negative dimension gap scores. Service improvements should focus on reviewing the SERVQUAL scores with a view to identifying dimensions with the largest negative scores to make them more responsive and relevant to customers' needs. However, as discussed later in this section, it is difficult to deliver services that adequately close the negative SERVQUAL gap because of resource constraints and the service provider specific nature of services.

Comparison of departments within the two customer focus categories indicated that they were statistically significantly different in customers' perceived service quality. Further comparisons revealed that departments within the high customer focused category performed worse than departments in the low customer focused category. Section 5.3.5 discusses the possible reasons for the unexpected poor performance of departments in the high customer focused category. The unexpected poor performance of departments in the high customer focused category was attributed mainly to the fact that they provided essential services. Customers usually have high expectations for essential services and are less tolerant to poor service quality for essential service dimensions (Walker and Baker, 2000). In addition, resource constraints in the public sector coupled with overwhelming demand for some services, potentially made it hard to deliver services that adequately satisfied all the customers. As discussed in section 5.5.1, resource constraints mean that public sector services are often rationed to cover the majority of consumers. As these services are rationed, customers may not get quantity and quality of services they desire, thus may be less satisfied with the service outcomes (Denhardt and Denhardt, 2000).

Findings indicated that differences also existed between departments within the same category of customer focus. This means that while departments could be categorised as similar in terms of customer focus of their PBRS plans, the quality of their services would differ. Differences in customers' perceptions of service quality possibly emanated from the service provider specific service output. As discussed in the literature review (Section 2.6.2), services have unique characteristics that make them difficult to understand. The heterogeneity and intangibility of services implies that service outcomes cannot be standardised, thus departments, even those in the same customer focus category, would produce services of different perceived quality. In view of these findings, it is less appropriate to predict departmental performance on the basis of PBRS customer focus category.

In conclusion, resource constraints and multiple customer service needs imply that delivery of high customer focused services is very difficult. In addition, the uniqueness of service output makes it difficult to predict the quality of service output. This implies that adequately closing the negative service quality gap in the public sector using customer focused PBRS plans remains challenging. Despite these challenges, PBRS could still be applicable in improving public sector performance as it may enhance other aspects of service delivery not covered in this study.

The next section discusses the overall summary of the thesis.

5.9.0 Overall thesis Summary

This section summarises the discussions covering the whole thesis. It briefly covers the overall implications of the study. As identified in chapter 1, a total of three objectives were proposed for this research as follows: 1) to examine the extent to which performance based reward schemes are customer focused/oriented; 2) to examine customers' perception of service quality and satisfaction with government services in Botswana; and 3) to determine if the level of customer focus/orientation of departments' performance plans has any effect on customers' perceived service quality. Two hypotheses were proposed to address the third objective that, 1) H1 customer focus of PBRS has a statistically significant impact on customers' perceived service quality, and 2) H2. The more customer-focused the PBRS the higher the level of customers' perceived service quality and satisfaction.

Data collection was undertaken in two phases; 1) a content analysis of departments' performance plans (qualitative); and 2) a survey of customers' perceived service quality of six departments using SERVQUAL (quantitative). On the basis of the findings from content analysis, six of the ten Botswana government departments that responded to this research were categorised, three as high and three as low customer focused. Data was then collected using the SERVQUAL survey for each of the departments (involving 150 different consumers for each service) to measure customers' perceived service quality of services from the six departments within the two categories of customer focus. Comparisons were then undertaken using MANOVA, ANOVA and post hoc independent t-tests to explore for differences in customers' perceived service quality between departments in the two categories of customer focus. Comparisons were also undertaken for departments within the same category of customer focus to identify differences (if any) between departments within the same category.

Findings from comparing departments in the two categories of customer focus showed that high customer focused departments performed worse than low customer focused departments in terms of mean scores. These results were not anticipated as it was expected that high customer focused departments would perform better. For example, within the literature it is suggested that customer orientation leads to improved performance and high levels of customer satisfaction (Desphande et al., 1993; Chen et al., 2004), thus high customer focused departments were expected to produce 'better' services (i.e. more positive assessments) than low customer focused departments. Comparisons of departments within the same category of customer focus also showed that there were some differences in service quality dimensions between these departments. Differences observed between departments within the two categories of customer focus implied that while departments can be categorised using customer orientation, their performance in terms of service quality would be different. This implies that the quality of services delivered by each department was perceived differently by customers. Thus, the use of customer focus of PBRS to anticipate customers' perceived service quality within the public sector would be less relevant as departments are inherently different. This emphasises the uniqueness of services and the service provider specific nature of services attributed to the intangibility and variability of services from different departments.

In conclusion, this research found that customer oriented PBRS has not appeared to help in improving the quality of services as perceived by public sector customers. There could be a number of factors explaining this scenario, and these need to be further explored in future research.

6. References

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7. APPENDICES

Appendix 1 Summary of judges' responses

1.A Worksheet for department of culture and youth

Objective	Is the objective focussed on final consumers?	Criteria for assessing the objectives									
	Y/ N	**C1**	**C2**	**C3**	**C4**	**C5**	**C6**	**C7**	**C8**	**C9**	**C10**
C1. Provide an equitable distribution of services to youth, artists and culture practitioners timeously	W A B1 B2	W A B1 B2				A B1 B2	W A B2	W A B1 B2	B1	B1	W B1 B2
C2. Improve legislation & policies to address youth and cultural issues	A B1	B1	B1	B1		B1	B1	B1	B1	B1	B1
C3. Empower the community through consultation & collaboration	W A B1 B2	W B	B1	B1		B1		W B1 B2	B1	B1	W B1 B2
C4. Improve our environment	A				A						
C5. Promote participation of Youth in National Development	W A B1 B2	W B1 B2	B1	B1	A	A B1 B2	W A B2	W A B1 B2	A B1	B1	W B1 B2
C6. Promote and preserve national culture and heritage	W B1 B2	W B1 B2	B1	B1	B1	B1	W B1	W B1 B2	B1	B1	W B1 B2
C7. Ensure the impartial, transparent, accountable delivery of services	B1	B1	B1	B1		B1	B1	B1		B1	B1
C8. Ensure open, honest & complete communication with us	B1	B1	B1	B1	B1	B1	B1	B1	B1	B1	B1
P1.Strengthen & streamline guidelines and key processes											
P3. Actively advocate through government for ready acceptance of change	A		A								
P4.Promote public education and awareness of 'beneficial' change	W A B1 B2	W B1	B1		W		W	W B2	B1	B1	B1 B2 W
P5. Ensure compliance with guidelines											
P6. Improve timely dissemination of complete & accurate information	B1	B1	B1	B1	B1	B1	B1	B1	B1	B1	B1

L1. Build skills and capabilities	W B2	W						W B2			W B2
L2. Instil a culture of trust, commitment & collaboration that embraces change	B1	B1	B1	B 1		B1		B1	B 1	B 1	B1
L3. Improve resource availability											
L 4. Ensure visionary leadership											
L5. Stimulate a creative & motivating environment											
F1. Prudent financial management											
F2. Optimise budget											

1.B Worksheet for the Department of Trade and Consumer Affairs

Objective	Is the objective focussed on final consumers?	Criteria for assessing the objectives									
	Y/ N	**C1**	**C2**	**C3**	**C4**	**C5**	**C6**	**C7**	**C8**	**C9**	**C10**
C1. Improve customer satisfaction	A B1 B2 W	B1 B2 W	B2 W	B1 B2 W	AB1 B2 W	B2	AB1 B2 W	A B1 B2 W	B1 B2 W		
C2. Provide conducive environment for trade	A										
C3. Provide effective consumer protection.	B1 B2 W	B1 B2 W	B2	B1 B2 W	B1 B2 W	B2	B1 B2 W	B1 B2 W	B1 B2 W		
P1. Improve information dissemination	A B1 B2 W	B1 B2 W	A B1 B2	B1 B2 W	B1 B2 W	B2	B1 B2 W	B1 B2 W	B1 B2 W		
P2. Improve information management system	B2	B2		B2	B2	B2	B2	B2	B2		
P3. Reduce turnaround time for service delivery	A B1 B2 W	A B1 B2 W	A B1 B2	A B1 B2 W	A B1 B2 W	AB2	B1 B2 W	B1 B2 W	B1 B2 W		
L1. Improve Human Resource Management											
L2. Improve positive reinforcement											
L3. Provide conducive work environment											
L 4. Improve capacity building											
F1. Secure adequate funds											
F2. Improve financial management											
F3. Improve cost recovery											

1.C Worksheet for the Department of Wildlife and National Parks

Objective	Is the objective focussed on final consumers?	Criteria for assessing the objectives									
	Y/ N	**C1**	**C2**	**C3**	**C4**	**C5**	**C6**	**C7**	**C8**	**C9**	**C10**
C1. Promote environmental awareness	B1 B2 W	B1 B2 W	B2	B1 B2 W	B1 B2 W	B2	B1 B2 W	B2	B1 B2 W	B2	B2
C2. Reduce human wildlife conflict	A B1 B2 W	B1 B2 W	B1B2	B1 B2 W	B2 W	B2	B1 B2 W	B2	B2	B2	B2
C3.Achieve viable wildlife and fish population											
C4. Provide excellent customer service	A B1 B2 W	B1 B2 W	B1B2 W	B1 B2 W	B1 B2 W	B2	B1 B2 W	B2	B1 B2	B2	B2
C5. Strengthen partnerships with key stakeholders	B1 B2	B1 B2	B1	B2	B1	B2	B2	B1 B2	B2	B2	B2
P1. Improve legislation and policies	B1 B2	B2	B2	B2	B2	B2	B2		B2	B2	B2
P2. Promote sustainable derivation of economic value from the wildlife & its products											
P3. Improve communication	A B1 B2 W	B1 B2 W	W	B1 B2 W	B1 B2 W	B	B1 B2 W		B1 B2 W	B2	B2
P4. Improve information capture and retrieval mechanisms											
L1. Enhance staff skills and capabilities											
L2. Build and empowered & motivated workforce											
F1. Utilise resources effectively											
F2. Save/recover costs											
F3. Secure financial assistance											

1.D Worksheet for the Botswana National Library Service

Objective	Is the objective focussed on final consumers?	Criteria for assessing the objectives									
	Y/ N	**C1**	**C2**	**C3**	**C4**	**C5**	**C6**	**C7**	**C8**	**C9**	**C10**
1. To promote life long learning, research and recreation nationwide through the provision of multimedia information resources	A B1 B2 W	B2 W	B2	B2	W	A B2	B2	B1 B2 W	B1 B2 W		
2. To promote employee growth and development through implementation of appropriate recruitment, training and staff retention policies											
3. To satisfy customer needs by providing relevant information resources	A B1 B2 W	A B2 W	B1 B2	B2	A B1 B2 W	B1 B2	B2	B1 B2 W	B1 B2 W	B1	
4. To ensure a cost-effective service through prudent resources management											
5. To achieve organisational efficiency and effectiveness by ensuring a high level of participation, accountability, responsibility and transparency.	B2	B2	B2	B2	B2	B2	B2	B2	B2		
6. To improve the quality of service to the nation (public) through sustained collaboration with stakeholders.	A B1 B2 W	B1 B2 W	B1 B2	B2	B1 B2 W	B2	B1 B2	B1 B2 W	B1 B2 W		

1.E Worksheet for the Independent Electoral Commission

Objective	Is the objective focussed on final consumers?	**Criteria for assessing the objectives**									
	Y/ N	**C1**	**C2**	**C3**	**C4**	**C5**	**C6**	**C7**	**C8**	**C9**	**C10**
C1. Provide timely and accurate information to relevant stakeholders	A B1 B2 W	B1 B2 W	B2 W	B1 B2 W	B1 B2 W	B2	B1 B2 W	B2	B1 B2 W	B2	B1 B2 W
C2. Provide transparency into IEC operations	B1 B2 W	B1 B2 W	B1 B2 W	B1 B2 W	B1 B2 W	B2	B1 B2 W		B1 B2 W	B2	B1 B2 W
C4. Provide excellent consultation, education and facilitation to key stakeholders	A B1 B2 W	B1 B2 W	B1 B2 W	B1 B2 W	B1 W	B2	B1 B2 W	B1 B2 W	B1 B2 W	B2	B1 B2 W
C5. Provide better assistance, support and access for people with special needs	A B1 B2 W	B1 B2 W	B2 W	B1 B2		B2			B1 B2 W	B2	B1 B2 W
P1. Improve public perceptions	B1 B2 W	B1 B2 W	B1 B2 W	B1 B2 W	B1 W	B2	B1 B2 W		B2 W	B2	B1 B2 W
P2. Provide current, relevant appropriate materials for education and facilitation	B2 W	B2 W	B2	B2 W	B2 W	B2	B2 W		B2 W	B2	B2 W
P3. Update/streamline key processes	W	W		W	W		W		W		W
P4. Establish communications and working linkages with key stakeholders	W	W	W	W	W		W	W	W		W
L1. Allocate staff according to customer priorities	A B1 B2 W	AB1 B2 W	B1 B2 W	B2		B2	B2	B2	B1 B2 W	B2	B1 B2 W
L2. Engage personnel to address multiple languages and associated negative perceptions	A B1 B2	B1 B2	B2	B2		B2				B2	B1 B2
L3. Build a motivated and customer focussed team based culture	B2	B2	B2	B2		B2			B2	B2	B2
F1. Allocate budget according to customer needs	B2	B2	B2	B2		B2			B2	B2	B2
Reduce and recover costs											

1.F Worksheet for the Department of Civil and National Registration

Objective	Is the objective focussed on final consumers?	**Criteria for assessing the objectives**									
	Y/ N	**C1**	**C2**	**C3**	**C4**	**C5**	**C6**	**C7**	**C8**	**C9**	**C10**
C1. To reduce service delays	A B1 B2 W	A B1 B2 W		A B1 B2 W	B1 B2 W	B2	B1 B2 W	B1 B2	A B1 B2	B2	B1 B2 W
C2. To improve customer satisfaction	A B1 B2 W	B1 B2 W	B W	B1 B2 W	B1 B2 W	B2	B1 B2 W	B1 B2 W	B1 B2	B2	B1 B2 W
C3. To increase registration of vital events	B2 W	B W	B	B W		B		B W	B	B W	B W
C4. To facilitate implementation of development projects	W	W		W				W			W
P1. To enhance information dissemination	B1 B2 W	B1 B2 W	B1 B2	B1 B2 W	B1 B2	B2	B1	B1 B2 W	B1 B2	B2	B1 B2 W
P2. To create conducive policy and legislative environment											
P3. To enhance utilization of information technology											
L1. To improve employee performance											
L2. To mitigate the impact of HIV/AIDS at the workplace											
L3. To improve leadership effectiveness											
L4. To build skills and capabilities											
L5. To instil a service culture that promotes trust, commitment and excellence	B2	B2	B2	B2		B2				B2	B2
F1.To strengthen resource accountability											

1.G Worksheet for the department of Tourism

Objective	Is the objective focussed on final consumers?	Criteria for assessing the objectives									
	Y/ N	**C1**	**C2**	**C3**	**C4**	**C5**	**C6**	**C7**	**C8**	**C9**	**C10**
1. Increase customer satisfaction	A B1 B2 W	B1 B2 W	B2	B2	B1 W	B2	B1 B2 W	B1 B2 W	B2		
2. Reduce response rate	B1 B2 W	B1 B2 W	B2	B2	B1 W	B2	B1 B2 W	B2 W	B2		
3. Increase tourism investment											
4. Increase marketing efforts											
5. Increase tourism awareness	A B1 B2	B2	B2	B2	B1 B2	B2	B2	B2	B2		
6. Reduce cycle time											
7. Improve ICT infrastructure	B2	B2	B2	B2		B2	B2	B2	B2		
8. Improve skills											
9.Optimal utilisation of resources											
10. Increase sources of funding											
11. Increase revenue											
12. Reduce tourism revenue leakages											

1.H Worksheet for the Department of Clinical services

Objective	Is the objective focussed on final consumers?	Criteria for assessing the objectives									
	Y/ N	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10
1. Develop a draft strategy to address top four (4) conditions by 31/03/2007	B1	B1	B1	B1	B1		B1	B1	B1		B1
2. To provide cervical cancer screening services for 25% of women aged 20- 65 attending IDCC and hospital based MCH at 26 hospitals by 31/03/2007	A B1 B2 W	B1 B2 W	B1	B1 B2 W	B1 B2 W	B2	B1 B2 W	B1 B2 W	B1 B2 W	B2 W	B1 B2 W
3. To establish trauma management system at two referral hospitals by 31/03/2007	B1 B2	B1 B2	B1	B1 B2	B1 B2	B2	B1 B2	B1 B2	B1 B2	B2	B1 B2
4. To achieve 80% of essential medicines at Central Medical Supplies by 31/03/2007	B1 B2	B1 B2		B1 B2	B1 B2	B2	B1 B2	B1 B2	B1 B2	B1 B2	B1 B2
5. To reduce waiting time for selected services	A B1 B2 W	B1 B2 W	B1 B2	B1 B2 W	B1 B2 W	B1 B2	B1 B2 W	B1 B2 W	B1 B2 W	B1 B2 W	B1 B2 W

1.I Worksheet for the Department of Social Services

Objective	Is the objective focussed on final consumers?	Criteria for assessing the objectives									
	Y/ N	**C1**	**C2**	**C3**	**C4**	**C5**	**C6**	**C7**	**C8**	**C9**	**C10**
1. To have all projects delivered on time, within budget and according to specification by march 2009.	B1 B2	B2		B2	B1 B2	B2	B2	B1 B2			
2. Increase welfare support coverage	B1 B2 W	B2 W	B2	B1 B2 W	B2 W	B2	B2 W		B2 W		
3. Timely delivery of welfare support to beneficiaries	AB1 B2 W	B1 B2 W	B2	B2 W	B2 W	B2	B2 W		B2 W		
4. Improve networking with all relevant stakeholders	B1 W	B1 W	B1 W	W	W		W		B1 W		
5. Provide professional guidance and monitoring											
6. Improve the level of social functioning of targeted groups through rehabilitation	AB1 B2 W	B1 B2 W	B1 B2	B2 W	B1 B2 W	B2	B1 B2 W		B1 B2 W		
7. Increase utilisation of community owned infrastructure for economic empowerment initiatives	B1 B2 W	B2 W		B2 W	W		B1 B2 W		B1 B2 W		
8. Strengthen child protection	AB1 B2 W	B1 B2 W	B1 B2	B2 W	B2 W	B2	B1 B2 W		B1 B2 W		
9.Strengthen care for all vulnerable groups	AB1 B2 W	B1 B2 W	B2	B1 B2 W	B W	B	B W		B W		
10. To provide quality welfare and social security benefits by March 2009	AB1 B2 W	B1 B2 W	B2	B1 B2 W	B1 B2 W	B2	B1 B2 W	B2	B1 B2 W		
11.To promote socio-economic empowerment	A B1 W	B1 W		B1 W	W		B1 W		W		
12. Promote a customer focused quality service culture among the department's employees.	B1 B2 W	B1 B2 W	B1 B2 W	B2 W	B2 W	B2	B1 B2 W		B2 W		
13. Improve monitoring and evaluation process for all programmes											
14. Improve accountability for resources											
15. Improve employee											

performance and productivity											
16. Mainstream employee wellness to strengthen psychological support and care											
17. Improve communication and transparency within department											
18. To improve social services information management											

1.J Worksheet for the Department of Public Health

Objective	Is the objective focussed on final consumers?	**Criteria for assessing the objectives**									
	Y/ N	**C1**	**C2**	**C3**	**C4**	**C5**	**C6**	**C7**	**C8**	**C9**	**C10**
1. Reduce infant mortality from 57 per 1000 live births to 51 per 1000 live births by 2009	AB1 B2 W	A B1 B2 W	A B2	B1 B2 W	AB1 B2 W	AB1 B2	AB1 B2 W	AB1 B2 W	B1 B2		
2. To reduce under five mortality from 74 per 1000 to 63 per 1000 live births by March 2009	A B1 B2 W	AB1 B2 W	B2	AB1 B2 W	AB1 B2 W	AB1 B2	B1 B2 W	B1 B2 W	B1 B2		
3. To contribute in reduction of facility based maternal mortality from 175 to 130 per 100 000 live births by March 2009.	AB1 B2 W	AB1 B2 W	B2	AB1 B2 W	AB1 B2 W	AB1 B2	B1 B2 W	B1 B2 W	B		
4. To reduce morbidity and mortality related to non-communicable diseases	AB1 B2 W	AB1 B2 W	B2	B1 B2 W	B1 B2 W	B2	B1 B2 W	B1 B2 W	B1 B2		
5. To reduce morbidity and mortality related to communicable diseases by 10% by 2009	B1 B2 W	B1B2W	B2	B1 B2 W	B1 B2 W	B2	B1 B2 W	B1 B2 W	B1 B2		
6.To develop and implement a national disability strategic plan by March 2009	AB1 B2 W	B1 B2 W	B2	B1 B2 W	B1 B2 W	B2	B1 B2 W	B1 B2 W	B2		
7. To provide customer focused services by march 2009	AB1 B2 W	B2 W	B1 B2	B2 W	B1 B2 W	B2	B1 B2	B1 B2 W	B2		
8.To provide infrastructure for health services by March 2009	B2	B2	B2	B2		B2		B2	B2		
9. To improve management of finances in all Primary Health Department facilities by March 2009.											
10. To support the implementation of performance improvement initiatives by March 2009											
11. To develop and implement four health policies by March 2009											
12. To recruit and retain competent personnel by March 2009.											

Appendix II. Interjudge reliability

2 A. Inter-judge reliability Trade and Consumer Affairs

Objectives	**Inter judge agreement per criteria for assessing the objectives.**											
	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	Agreements	Total expected agreement
1.Improve customer satisfaction *Judges (A, B1, B2, W)*	B1 B2 W (3)	B1 B2 W (3)	B1 B2 W (3)	A B1 B2 W (6)	B2 (3)	A B1 B2 W (6)	A B1 B2 W (6)	B1 B2 W (3)	(6)	(6)	45	60
2.Provide effective consumer protection *Judges (B1, B2, W)*	B1 B2 W (3)	B2 (1)	B1 B2 W (3)	B1 B2 W (3)	B2 (1)	B1 B2 W (3)	B1 B2 W (3)	B1 B2 W (3)	(3)	(3)	26	30
3. Improve info dissemination *Judges (A, B1, B2, W)*	B1 B2 W (3)	A B1 B2 (3)	B1 B2 W (3)	B1 B2 W (3)	B2 (3)	B1 B2 W (3)	B1 B2 W (3)	B1 B2 W (3)	(6)	(6)	36	60
4. Reduce turnaround time for service delivery *Judges (A, B1, B2, W)*	A B1 B2 W (6)	A B1 B2 (3)	A B1 B2 W (6)	A B1 B2 W (6)	A B2 (2)	B1 B2 W (3)	B1 B2 W (3)	B1 B2 W (3)	(6)	(6)	44	60
Total											**151**	**210**

Proportion of inter-judge agreement (A); 151/210 = **72%**

2 B. Inter-judge reliability Wildlife and National Parks

Objectives	**Inter judge agreement per criteria for assessing the objectives.**											
	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	Agreements	Total expected agreement
C1. Promote environmental awareness *Judges (B1, B2, W)*	B1 B2 W (3)	B2 (1)	B1 B2 W (3)	B1 B2 W (3)	B2 (1)	B1 B2 W (3)	B2 (1)	B1 B2 W (3)	B2 (1)	B2 (1)	20	30
C2. Reduce human wildlife conflict *Judges (A, B1, B2, W)*	B1 B2 W (3)	B1 B2 (2)	B1 B2 W (3)	B2 W (2)	B2 (3)	B1 B2 W (3)	B2 (3)	B2 (3)	B2 (3)	B2 (3)	28	60
C4. Provide excellent customer service *Judges (A, B1 ,B2, W)*	B1 B2 W (3)	B1 B2 W (3)	B1 B2 W (3)	B1 B2 W (3)	B2 (3)	B1 B2 W (3)	B2 (3)	B1 B2 (2)	B2 (3)	B2 (3)	29	60
C5. Strengthen partnerships with key stakeholders *Judges (B1, B2)*	B1 B2 (1)	B1	B2	B1	B2	B1 B2 (1)	B2	B2	B2	B2	2	10
P1. Improve legislation and policies *Judges (B1, B2)*	B2	B2	B2	B2	B2	B2	(1)	B2	B2	B2	1	10
P3. Improve communication *Judges (A, B1, B2, W)*	B1 B2 W (3)	W (3)	B1 B2 W (3)	B1 B2 W (3)	B2 (3)	B1 B2 W (3)	(6)	B1 B2 W (3)	B2 (3)	B2 (3)	33	60
Total											**113**	**230**

Proportion of inter-judge agreement; 113/230 = **49%**

2 C. Inter-judge reliability for Botswana National Library Service

Objectives	**Inter judge agreement per criteria for assessing the objectives.**											
	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	Agreements	Total expected agreement
To promote life long learning, research and recreation nationwide through the provision of multimedia information resources *Judges (A, B1, B2, W)*	B2 W (2)	B2 (3)	B2 (3)	W (3)	A B2 (2)	B2 (3)	B1 B2 W (3)	B1 B2 W (3)	(6)	(6)	34	60
To satisfy customer needs by providing relevant information resources *Judges (A, B1, B2, W)*	A B2 W (3)	B1 B2 (2)	B2 (3)	A B1 B2 W (6)	B1 B2 (2)	B2 (3)	B1 B2 W (3)	B1 B2 W (3)	B1 (3)	(6)	34	60
To improve the quality of service to the nation (public) through sustained collaboration with stakeholders *Judges (A, B1, B2, W)*	B1 B2 W (3)	B1 B2 (2)	B2 (3)	B1 B2 W (3)	B2 (3)	B1 B2 (2)	B1 B2 W (3)	B1 B2 W (3)	(6)	(6)	34	60
Total											102	180

Proportion of inter-judge agreement; 102/180= **57%**

2D. Inter-judge reliability for Independent Electoral Commission

Objectives	Inter judge agreement per criteria for assessing the objectives.											
	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	Agreements	Total expected agreement
Provide timely and accurate information to relevant stakeholders Judges (A, B1, B2, W)	B1 B2 W (3)	B2 W (2)	B1 B2 W (3)	B1 B2 W (3)	B2 (3)	B1 B2 W (3)	B2 (3)	B1 B2 W (3)	B2 (3)	B1 B2 W (3)	29	60
Provide transparency into IEC operations Judges (B1, B2, W)	B1 B2 W (3)	B1 B2 W (3)	B1 B2 W (3)	B1 B2 W (3)	B2 (1)	B1 B2 W (3)	(3)	B1 B2 W (3)	B2 (1)	B1 B2 W (3)	26	30
Provide excellent consultation, education and facilitation to key stakeholders Judges (A, B1, B2, W)	B1 B2 W (3)	B1 B2 W (3)	B1 B2 W (3)	B1 W (2)	B2 (3)	B1 B2 W (3)	B1 B2 W (3)	B1 B2 W (3)	B2 (3)	B1 B2 W (3)	29	60
Provide better assistance, support and access for people with special needs Judges (A, B1, B2, W)	B1 B2 W (3)	B2 W (2)	B1 B2 (2)	(6)	B2 (3)	(6)	(6)	B1 B2 W (3)	B2 (3)	B1 B2 W (3)	37	60
Improve public perceptions Judges (B1, B2, W)	B1 B2 W (3)	B1 B2 W (3)	B1 B2 W (3)	B1 W (1)	B2 (1)	B1 B2 W (3)	(3)	B2 W (1)	B2 (1)	B1 B2 W (3)	22	30
Provide current, relevant appropriate materials for education and facilitation Judges (B2, W)	B2 W (1)	B2	B2 W (1)	B2 W (1)	B2	B2 W (1)	(1)	B2 W (1)	B2	B2 W (1)	7	10
Allocate staff according to customer priorities Judges (A, B1, B2, W)	A B1 B2 W (6)	B1 B2 W (3)	B2 (3)	(6)	B2 (3)	B2 (3)	B2 (3)	B1 B2 W (3)	B2 (3)	B1 B2 W (3)	36	60
Engage personnel to address multiple languages and associated negative perceptions Judges (A, B1, B2)	B1 B2 (1)	B2 (1)	B2 (1)	(3)	B2 (1)	(3)	(3)	(3)	B2 (1)	B1 B2 (1)	18	30
Total											**204**	**340**

Proportion of inter-judge agreement; 204/340 **= 60%**

2E. Inter-judge reliability Civil and National registration

Objectives	**Inter judge agreement per criteria for assessing the objectives.**											
	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	Agreements	Total expected agreement
C1. To reduce service delays *Judges (A, B1, B2, W)*	A B1 B2 W (6)	(6)	A B1 B2 W (6)	B1 B2 W (3)	B2 (3)	B1 B2 W (3)	B1 B2 (2)	A B1 B2 (3)	B2 (3)	B1 B2 W (3)	38	60
C2. To improve customer satisfaction *Judges (A, B1, B2, W)*	B1 B2 W (3)	B2 W (2)	B1 B2 W (3)	B1 B2 W (3)	B2 (3)	B1 B2 W (3)	B1 B2 W (3)	B1 B2 (2)	B2 (3)	B1 B2 W (3)	28	60
C3. To increase registration of vital events *Judges (B2, W)*	B2 W (1)	B2	B2 W (1)	(1)	B2	(1)	B2 W (1)	B2	B2 W (1)	B2 W (1)	7	10
P1. To enhance information dissemination *Judges (B1, B2, W)*	B1 B2 W (3)	B1 B2 (1)	B1 B2 W (3)	B1 B2 (1)	B2 (1)	B1 (1)	B1 B2 W (3)	B1 B2 (1)	B2 (1)	B1 B2 W (3)	18	30
Total											**91**	**160**

Proportion of inter-judge agreement; 91/140 = **57%**

2F. Inter-judge reliability department of Tourism

Objectives	**Inter judge agreement per criteria for assessing the objectives.**											
	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	Agreements	Total expected agreement
Increase customer satisfaction *Judges (A, B1, B2, W)*	B1 B2 W (3)	B2 (3)	B2 (3)	B1 W (2)	B2 (3)	B1 B2 W (3)	B1 B2 W (3)	B2 (3)	(6)	(6)	35	60
Reduce response rate *Judges B1, B2, W*	B1 B2 W (3)	B2 (1)	B2 (1)	B1 W (1)	B2 (1)	B1 B2 W (3)	B2 W (1)	B2 (1)	B2 W (1)	B2 (1)	14	30
Increase tourism awareness *Judges, A, B1, B2*	B2 (1)	B2 (1)	B2 (1)	B1 B2 (1)	B2 (1)	B2 (1)	B2 (1)	B2 (1)	(3)	(3)	14	30
Total											**63**	**120**

Proportion of inter-judge agreement; 63/120= **53%**

2G. Inter-judge reliability department of Clinical Services

Objectives	**Inter judge agreement per criteria for assessing the objectives.**											
	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	Agreements	Total expected agreement
To provide cervical cancer screening services for 25% of women aged 20- 65 attending IDCC and hospital based MCH at 26 hospitals by 31/03/2007 *Judges, A, B1, B2, W*	B1 B2 W (3)	B1 (3)	B1 B2 W (3)	B1 B2 W (3)	B2 (3)	B1 B2 W (3)	B1 B2 W (3)	B1 B2 W (3)	B2 W (2)	B1 B2 W (3)	29	60
To establish trauma management system at two referral hospitals by 31/03/07 *Judges B1 B2*	B1 B2 (1)	B1	B1 B2 (1)	B1 B2 (1)	B2	B1 B2 (1)	B1 B2 (1)	B1 B2 (1)	B2	B1 B2 (1)	7	10
To achieve 80% of essential medicines at Central Medical Supplies *JudgesB1, B2*	B1 B2 (1)	(1)	B1 B2 (1)	B1 B2 (1)	B2	B1 B2 (1)	B1 B2 (1)	B1 B2 (1)	(1)	B1 B2 (1)	9	10
To reduce waiting time for selected services *Judges A, B1, B2, W*	B1 B2 W (3)	B1 B2 (2)	B1 B2 W (3)	B1 B2 W (3)	B1 B2 (2)	B1 B2 W (3)	B1 B2 W (3)	B1 B2 W (3)	B2 W (2)	B1 B2 W (3)	27	60
Total											**72**	**140**

Proportion of inter-judge reliability; 72/140=**51%**

2 H. Inter-judge reliability Department of Social Services

Objectives	Inter judge agreement per criteria for assessing the objectives.										
	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	Agreements	Total expected agreement
To have all projects delivered on time, within budget and according to specification by March 2009. *Judges B1, B2*	B2	(1)	B2	B1 B2 (1)	B2	B2	B1 B2 (1)	(1)	(1)	(1)	6	10
Increase welfare support coverage *Judges B1, B2, W*	B2 W (1)	B2 (1)	B1 B2 W (3)	B2 W (1)	B2 (1)	B2 W (1)	(3)	B2 W (1)	(3)	(3)	18	30
Timely delivery of welfare support to beneficiaries *Judges A, B1, B2, W*	B1 B2 W (3)	B2 (3)	B2 W (2)	B2 W (2)	B2 (3)	B2 W (2)	(6)	B2 W (2)	(6)	(6)	35	60
Improve networking with all relevant stakeholders *Judges B1, W*	B1 W (1)	B1 W (1)	W	W	(1)	W	(1)	B1 W (1)	(1)	(1)	7	10
Improve the level of social functioning of targeted groups through rehabilitation *Judges A, B1, B2, W*	B1 B2 W (3)	B1 B2 (2)	B2 W (2)	B1 B2 W (3)	B2 (3)	B1 B2 W (3)	(6)	B1 B2 W (3)	(6)	(6)	37	60
Increase utilisation of community owned infrastructure for economic empowerment initiatives *Judges B1, B2, W*	B2 W (1)	(3)	B2 W (1)	W (1)	(3)	B1 B2 W (3)	(3)	B1 B2 W (3)	(3)	(3)	24	30
Strengthen child protection *Judges A, B1, B2, W*	B1 B2 W (3)	B1 B2 (2)	B2 W (2)	B2 W (2)	B2 (3)	B1 B2 W (3)	(6)	B1 B2 W (3)	(6)	(6)	36	60
9.Strengthen care for all vulnerable groups *Judges A, B1, B2, W*	B1 B2 W (3)	B2 (3)	B1 B2 W (3)	B2 W (2)	B2 (3)	B2 W (2)	(6)	B2 W (2)	(6)	(6)	36	60
10. To provide quality welfare and social security benefits by March	B1 B2 W (3)	B2 (3)	B1 B2 W (3)	B1 B2 W (3)	B2 (3)	B1 B2 W (3)	B2 (3)	B1 B2 W (3)	B2 (3)	B2 (3)	30	60

2009 *Judges A, B1, B2, W*												
11.To promote socio-economic empowerment *Judges A, B1, W*	B1 W (1)	(3)	B1 W (1)	W (1)	(3)	B1 W (1)	(3)	W (1)	W (1)	(3)	18	30
12. Promote a customer focused quality service culture among the department's employees. *Judges B1, B2, W*	B1 B2 W (3)	B1 B2 W (3)	B2 W (1)	B2 W (1)	B2 (1)	B1 B2 W (3)	(3)	B2 W (1)	B2 W (1)	B2 W (1)	18	30
Total											**265**	**440**

Proportion of inter-judge agreement; 265/440= **60%**

2I. Inter-judge reliability Department of Public Health

Objectives	**Inter judge agreement per criteria for assessing the objectives.**											
	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	Agree ments	Total expected agreeme nt
1.Reduce infant mortality from 57 per 1000 live births to 51 per 1000 live births by 2009 *Judges A, B1, B2, W*	A B1 B2 W (6)	A B2 (2)	B1 B2 W (3)	A B1 B2 W (6)	A B1 B2 (3)	A B1 B2 W (6)	A B1 B2 W (6)	B1 B2 (2)	(6)	(6)	46	60
2. To reduce under five mortality from 74 per 1000 to 63 per 1000 live births by March 2009 *Judges A, B1, B2, W*	A B1 B2 W (6)	B2 (3)	A B1 B2 W (6)	A B1 B2 W (6)	A B1 B2 (3)	B1 B2 W (3)	B1 B2 W (3)	B1 B2 (2)	(6)	(6)	44	60
3. To contribute in reduction of facility based maternal mortality from 175 to 130 per 100 000 live births by March 2009. *Judges a, B1, B2, W*	A B1 B2 W (6)	B2 (3)	A B1 B2 W (6)	A B1 B2 W (6)	A B1 B2 (3)	B1 B2 W (3)	B1 B2 W (3)	B2 (3)	(6)	(6)	45	60
4. To reduce morbidity and mortality related to non-communicable diseases *Judges A,B1, B2, W*	A B1 B2 W (6)	B2 (3)	B1 B2 W (3)	B1 B2 W (3)	B2 (3)	B1 B2 W (3)	B1 B2 W (3)	B1 B2 (2)	(6)	(6)	38	60
5. To reduce morbidity and mortality related to communicable diseases by 10% by 2009 *Judges B1, B2 W*	B1 B2 W (3)	B2 (1)	B1 B2 W (3)	B1 B2 W (3)	B2 (1)	B1 B2 W (3)	B1 B2 W (3)	B1 B2 (1)	(3)	(3)	24	30
6.To develop and implement a national disability strategic plan by March 2009 *Judges A, B1, B2, W*	B1 B2 W (3)	B2 (3)	B1 B2 W (3)	B2 W (2)	B2 (3)	B1 B2 W (3)	B1 B2 W (3)	B2 (3)	(6)	(6)	35	60
7. To provide customer focused services by march 2009 *Judges A, B1, B2, W*	B2 W (2)	B1 B2 (2)	B2 W (2)	B1 B2 W (3)	B2 (3)	B1 B2 (2)	B1 B2 W (3)	B2 (3)	(6)	(6)	32	60

Total											**264**	**390**

Proportion of inter-judge agreement; 264/390= **68%**

2J. Inter-judge reliability department of Culture and Youth

Objectives	**Inter judge agreement per criteria for assessing the objectives.**											
	C1	C2	C3	C4	C5	C6	C7	C8	C9	C 10	Agree ments	Total expected agreement
C1. Provide an equitable distribution of services to youth, artists and culture practitioners timeously	W A B1 B2 (6)	(6)	(6)	(6)	A B1 B2 (3)	W A B2 (3)	W A B1 B2 (6)	B1 (3)	B1 (3)	W B1 B2 (3)	45	60
C2. Improve legislation & policies to address youth and cultural issues	B1 (1)	B1 (1)	B1 (1)	(3)	B1 (1)	B1 (1)	B1 (1)	B1 (1)	B1 (1)	B1 (1)	12	30
C3. Empower the community through consultation & collaboration	W B1 (1)	B1 (1)	B1 (1)	(3)	B1 (1)	B2 (1)	W B1 (1)	B1 (1)	B1 (1)	W B1 B2 (3)	17	30
C5. Promote participation of Youth in National Development	W B1 B2 (3)	B1 (3)	B1 (3)	A (3)	A B1 B2 (3)	W A B2 (3)	W A B1 B2 (6)	A B1 (2)	B1 (3)	W B1 B2 (3)	30	60
C6. Promote and preserve national culture and heritage	W B1 B2 (3)	B1 (1)	B1 (1)	B1 (1)	B1 (1)	W B1 (1)	W B1 B2 (3)	B1 (1)	B1 (1)	W B1 B2 (3)	16	30
P4.Promote public education and awareness of ‘beneficial’ change	W B1 (1)	B1 (1)	(3)	W (1)	(3)	W (1)	W B2 (1)	B1 (1)	B1 (1)	B 1 B2 W (3)	16	30
Total											**136**	**240**

Proportion of inter-judge agreement; 136/**240=56.7%**

Appendix III A. Request for pre-testing questionnaire on staff at the Department of Marketing, University of Botswana

VICTORIA UNIVERSITY | A NEW SCHOOL OF THOUGHT

Victoria University

PO Box 14428

MELBOURNE CITY MC VIC 8001 (03) 9688 4430

Australia Facsimile:

Botshabelo Kealesitse, PhD student

School of Hospitality, Tourism and Marketing

Footscray Park Campus Telephone: 9919 4430

Ballarat Road Facsimile: 9919 4931

Footscray

DATE

The Head

Marketing department

University of Botswana

Investigating the impact of Performance Based Reward system (PBRS) on public sector customers' perceived service outcomes.

I am currently undertaking research aimed at examining the impact of using PBRS to motivate employees, on ultimate consumers' perceived service outcomes. I intend to investigate whether customer satisfaction with public sector services differs for departments with a high level of customer focussed Performance Based Reward System (PBRS) as compared to public sector departments or units with low level of customer focussed PBRS. The research is based on services delivery in the Botswana public sector. Four departments have been selected for the purpose of the research. The survey is expected to take about 25 minutes to complete.

Prior to undertaking this study I would like to have views regarding the relevance of the proposed SERVQUAL questionnaire to the Botswana context. In that regard, I request for your approval to use some members of staff from your department to participate in pre testing the questionnaire. Staff members are not expected to fill in the questionnaire as respondents but are just required to review the questionnaire with a view to examine its applicability to Botswana context. No personal information about staff will be used in this research and their participation will be kept anonymous at all times. Participation of staff in this review is voluntary, and they are free to withdraw their participation at any point if they are not happy. We also request that you be the local contact person if there is any complaint about the project.

All the information is being collected as part of a doctoral (PhD) dissertation. Research permit has been obtained from the Botswana government. The research is expected to assist the Botswana government and other public sectors to realign their services with their customers' expectations. The research results will be passed to different Botswana government agencies, as well as academic institutions here and abroad. Should you have any questions about the project please feel free to contact me <botshabelo.kealesitse@research.vu.edu.au> or my PhD supervisors Professor Michael Polonsky Michael.Polonsky@vu.edu.au and Beverley Lloyd-Walker Beverley.lloydwalker@vu.edu.au.

I look forward to your valuable participation and contribution to this study.

Thank you for your assistance in advance,

____

Botshabelo Kealesitse, PhD student

Appendix III B. Letter to staff of Department of Marketing

Staff Members
Department of Marketing
University of Botswana
Gaborone.

Dear Sir/

I am preparing to collect data for my PhD research at Victoria University. My research is examining the application of performance-based reward systems (PBRS) within the public service. I intend to use SERVQUAL to collect data on customers' perceptions of service quality in four departments selected from the Botswana public sector. Prior to data collection, I would like to test the applicability of the questionnaire to the Botswana context. I am seeking the assistance of staff in the department of Marketing to assess the applicability of the questionnaire. You are not being requested to participate in the survey, and therefore, are not expected to fill in the questionnaire. Your participation is voluntary and you may withdraw at any point if you so wish. Staff participating in this exercise should be 18 years and older.

Your input will in this questionnaire will be treated with the highest level of confidentiality. In the thesis and all associate work I will not be using the names of any staff who participated in developing the questionnaire. Should you have any questions about the project please feel free to contact me <botshabelo.kealesitse@research.vu.edu.au> or my PhD supervisors Professor Michael Polonsky Michael.Polonsky@vu.edu.au and Beverley Lloyd-Walker Beverley.lloydwalker@vu.edu.au. You can also contact the head of Marketing Department at the University of Botswana, Dr Mbaki Chamme chammema@mopipi.ub.bw +267 355 224.

As you might be aware, I am a member of the staff at the University of Botswana under the Department of Marketing. I am currently enrolled for PhD at Victoria University in Melbourne, Australia.

Thank you for your assistance in advance,

____

Botshabelo Kealesitse, PhD student

If you have any queries or complaints about the way you have been treated, you may contact the Secretary, University Human Research Ethics Committee, Victoria University of Technology, PO Box 14428 MCMC, Melbourne, 8001 (anthony.benka@vu.edu.au or telephone no: 61-3-9688 4710).

Appendix III C. Letter to respondents

Botshabelo Kealesitse, PhD student

School of Hospitality, Tourism and Marketing

Footscray Park Campus Telephone: 9919 4430

Ballarat Road Facsimile: 9919 4931

Footscray

The impact of Performance Based Reward system (PBRS) on public sector customers' perceived service outcomes.

Information to participants

To Whom It May Concern:

I am currently undertaking research aimed at examining the impact of using PBRS to motivate employees, on ultimate consumers' perceived service outcomes. I intend to investigate whether customer satisfaction with public sector services differs for departments with a high level of customer focussed Performance Based Reward System (PBRS) as compared to public sector departments or units with low level of customer focussed PBRS. The research is based on services delivery in the Botswana public sector. Four departments have been selected for the purpose of the research.

I would like to have your views regarding the performance of the participating departments. You views will be recorded using the SERVQUAL survey questionnaire. The survey covers an evaluation of service quality of each department and is expected to take about 25 minutes to complete. We request that you complete the survey on the basis of your experience with the services provided by the department. Thus, for you to participate in this survey you must have received services from the selected department within the period of one year. In addition you must be an adult, 18 years or older to participate in this survey.

Your completion of the survey an indication of your consent to participate. However, your participation in this research is completely voluntary. The responses that you provide will be treated with utmost confidentiality. No personal information about you will be used in this research. Your responses will not affect how you interact with service providers. The survey will be anonymous and the researcher is not affiliated with the various departments being explored. Thus, no one will be able to know whether you participated in the research. We seek your consent in participating in this research, and you are free to withdraw your participation at any point if you are not happy.

All the information is being collected as part of a doctoral (PhD) dissertation. Research permit has been obtained from the Botswana government. The research is expected to assist the Botswana government and other public sectors to realign their services with their customers' expectations. The research results will be passed to different

Botswana government agencies, as well as academic institutions here and abroad. Should you have any questions about the project please feel free to contact me <botshabelo.kealesitse@research.vu.edu.au> or my PhD supervisors Professor Michael Polonsky Michael.Polonsky@vu.edu.au and Beverley Lloyd-Walker Beverley.lloydwalker@vu.edu.au. You can also contact the head of Marketing Department at the University of Botswana, Dr Mbaki Chamme chammema@mopipi.ub.bw +267 355 224.

We look forward to your valuable participation and contribution to this study.

Thank you for your assistance in advance,

____

Botshabelo Kealesitse, PhD student

If you have any queries or complaints about the way you have been treated, you may contact the Secretary, University Human Research Ethics Committee, Victoria University of Technology, PO Box 14428 MCMC, Melbourne, 8001 (anthony.benka@vu.edu.au or telephone no: 61-3-9688 4710).

Appendix IV. Brief description of departments' services

A. Independent Electoral Commission (IEC)

The IEC is responsible for conducting elections and government referenda. Its services include registration of voters, issuing election material during the time of elections, monitoring elections, and ensuring easy access to polling stations by all voters. E.g helping the visually, and physically handicapped to cast their votes. The IEC keeps the voters roll, and updates it with new entries when new people register. It also assists people who want to change their registration from one constituency to another.

IEC is responsible for educating the general public on matters relating to elections, such as how to cast their votes, names of political parties participating in the elections, the importance of voting e.t.c. In view of the declining participation of people in general elections, the IEC is also responsible for addressing the problem of voter apathy.

B. Department of Culture and Youth

This department covers two divisions being **Culture** and **Youth.** The Youth Division mainly covers issues relating to promotion of the status of the youth of Botswana through the creation of a conducive environment to youth participation in the economic, social and political life of the country.

Services provided under this unit include among others, the ***Youth Grant***, which is a soft loan provided to out-of-school youth (18-25 years) to start profit making business ventures. This service is aimed at encouraging youth mainly in rural areas to participate in employment creation rather depend on government for employment. The Youth division is also responsible for provision of **youth centres** and recreational facilities. Youth centres are to be managed by youth, and are meant to address social issues affecting the youth.

Culture division is mainly responsible for preservation and promotion of national culture as necessary for nation building. The division generally serves as the focal point for policy, operational direction and coordination of national, district, and local cultural programmes. It strives to create an enabling environment for youth and the general public to participate in cultural development. It aims to instill a sense of pride in different cultural groupings within Botswana. The division organises cultural activities aimed at showcasing the country's culture both locally and internationally.

C. Department of Public Health

The department of Public Health is responsible for ensuring that the people of Botswana become and remain a healthy nation through public education on prevention, controlling and eradication of diseases such as TB, diarrhea, polio, leprosy, HIV/AIDS, and others. The department also provides public education on issues such as safe sexual practices and reproductive health, child health, food and nutrition, and good health practices. It organises among others public forums such as kgotla meetings, workshops, where health related issues are discussed. Members of the public are encouraged to participate in these activities. To enhance its campaign, the department provides health promotion in print and electronic media. Advertisements encouraging people to avoid HIV/AIDS commonly seen on Botswana Television are part of this department's campaign against the spread of the disease.

D. Department of Clinical Services

This department manages all the government health facilities including hospitals. Its responsibilities include among others the general medical care, by ensuring adherence to policy and set standards. It ensures that all government health facilities provide good services to both in and out-patients. The department oversees the performance of all staff in government health facilities such as laboratories, xray, pharmacy, hospital wards, treatment rooms e.t.c. Patients have the right to proper medical care and thus, this department emphasizes on proper patient care to ensure that patients receive the best service from all staff.

E. Department of Tourism

This department is responsible for legislation governing the operation of tourist facilities in Botswana. It issues licenses to hotels, lodges, safari camps and other tourism related businesses. It also monitors the tourism industry to ensure compliance with the statutes. It works along side the Botswana Tourism Board to increase tourism awareness in the country through promotion of Botswana tourism both locally and internationally. The Botswana government has identified tourism as a possible source of income and foreign direct investment. Thus this department is responsible for increasing investment in tourism. In order to bring more tourists into the country this department aims to increase customer satisfaction with its services. It aims to reduce the response rate to customers' service requirements and attend to their queries promptly.

F. Department of Wildlife and National Parks

The department of Wildlife and National Parks is responsible for taking care of wild animals within the country to ensure proper care and sustainable use of these natural resources. This department takes care of wild animals mainly in game reserves and national parks set aside by the Botswana government for purposes of tourism. This department is also responsible for anti-poaching, and issuing game hunting permits to both local and international hunters. The department strives to reduce human and wildlife conflict by ensuring that wild animals do not stray into villages, towns, cities, farms and people's property. The department assists the public in creation of community-based revenue generating activities through sustainable utilization of wildlife within their communities.

Appendix V. Departments' SERVQUAL Questionnaires

Appendix V. A SERVQUAL Questionnaire for the Department of Clinical Services

Note: To be completed **ONLY** by respondents who obtained services from the Department of **Clinical Services** in the last 12 months.

1. Demographics

Sex: **1**. Male ☐ **2**. Female ☐

Age: **1**. 18 – 25 ☐ **2**. 26 – 35 ☐
3. 36- 45 ☐ **4**. 46- 55 ☐
5. > 55 ☐

Education
1. Primary school certificate ☐ **2**. High School ☐
3. University diploma/Degree ☐ **4**. Postgraduate ☐
5. Other (specify)_________ ☐

Employment status
1. Unemployed ☐ **2**. Self-employed ☐
3. Employed technical field ☐ **4**. Employed Administrative ☐
5. Employed Academic ☐ **6**. Other (specify) _________ ☐

Monthly Income

1. Less than P500.00 ☐ **2**. P501.00 - P1500.00 ☐
3. P1501.00 - P3000.00 ☐ **4**. P3001.00 - P4500.00 ☐
5. P4501.00 - P6000.00 ☐ **6**. P6001.00 - P7500.00 ☐
7. P7501.00 - P10000.00 ☐ **8**. >P10000.00 ☐

2. Expectations

The following statements relate to your opinions about government departments offering clinical services. Please show the extent to which you think government departments offering these services should possess the features described by each statement. Do this by selecting and ticking one of the seven options provided under each statement. If you strongly agree that these departments should possess a feature, tick 7. If you strongly disagree that these departments should possess a feature, tick 1. Depending on the strength of your feelings choose any of the numbers in the middle. There are no right or wrong answers- select the number that best shows your expectations about government departments offering clinical services.

Strongly Disagree (SD) **Strongly Agree SA)**

1. 2. 3. 4. 5. 6. 7.

		SD						SA
		1	**2**	**3**	**4**	**5**	**6**	**7**
E 1	Excellent departments offering clinical services will have up to date modern looking office equipment.							
E 2	Physical facilities of clinical services departments will be visually appealing							
E 3	Employees of departments of clinical services will be well dressed and neat							
E 4	Materials associated with services provided by departments of clinical services (e.g patient records, information booklets) will be visually appealing.							
E 5	When departments of clinical services promise to do something by a certain time, they will do so							
E 6	When customers/patients have problems, departments of clinical services will show sincere interest in solving it.							
E 7	Departments of clinical services will perform the service right the first time							
E 8	Excellent clinical services departments will provide their service at the time they promise to do so.							
E 9	Departments of clinical services would insist on error-free patient records							
E 10	Excellent clinical services departments will tell their customers/patients exactly when services will be performed.							
E 11	Employees of departments of clinical services will provide prompt service to customers/patients.							
E 12	Employees of departments of clinical services will always be willing to help customers/patients.							

E 13	Employees of clinical services departments are never too busy to respond to patients' requests.							
E 14	The behaviour of employees of departments of clinical services will instil confidence and trust in customers/patients.							
E 15	Customers and patients of clinical services departments should feel safe in their transactions with employees.							
E 16	Employees of clinical services departments will be consistently courteous with patients.							
E 17	Employees of clinical services departments will have adequate knowledge to answer patients' questions							
E 18	Excellent clinical services departments will give customers/patients individual attention.							
E 19	Operating hours of clinical services departments will be convenient to all customers/patients.							
E 20	Employees of the departments of clinical services will give customers/patients personal attention							
E 21	Excellent clinical services departments will have their customers and patients' best interests at heart.							
E 22	Employees of clinical services departments should understand specific needs of their patients							

3. Perceptions

The following statements relate to your feelings (experiences) about services from the Department of Clinical Services. For each statement, please show the extent to which you believe the Department of Clinical Services has the feature described by the statement. Once again, if you tick 7 it means you **strongly agree** that the Department of Clinical Services has that feature, while ticking 1 means you **strongly disagree**. You may tick any of the numbers in the middle depending on how strong your feelings are. There are no right or wrong answers- all you need to do is tick the number that best shows your perceptions (feelings) about the Department of Clinical Services.

Strongly Disagree (SD) **Strongly agree (SA)**
1. 2. 3. 4. 5. 6. 7.

		SD						**SA**
		1	**2**	**3**	**4**	**5**	**6**	**7**
P1	The Department of Clinical Services has up-to-date office equipment							
P2	The physical facilities used by the Department of Clinical Services are visually appealing							
P3	Employees of the Department of Clinical Services are well dressed and appear neat.							

P4	Materials associated with services provided by the Department of Clinical Services (e.g Patient health cards, information booklets, other educational materials) are visually appealing.							
P5	When the Department of Clinical Services promises to do something by a certain time, it does so.							
P6	When patients have problems, the Department of Clinical Services shows sincere interest in solving the problem.							
P7	The Department of Clinical Services performs the service right the first time.							
P8	The Department of Clinical Services provides its services at the time it promises to do so.							
P9	The Department of Clinical Services insists on error-free patient records							
P10	Employees of the Department of Clinical Services tell you exactly when the service will be performed.							
P11	Employees of the Department of Clinical Services give you prompt service.							
P12	Employees of the Department of Clinical Services are always willing to help you.							
P13	Employees of the Department of Clinical Services are never too busy to respond to your requests.							
P14	The behaviour of employees of the Department of Clinical Services instils confidence in customers/patients.							
P15	You feel safe in your transactions with the Department of Clinical Services.							
P16	Employees of the Department of Clinical Services are consistently courteous with you.							
P17	Employees of the Department of Clinical Services have the knowledge to answer your questions.							
P18	The Department of Clinical Services gives you individual attention.							
P19	The Department of Clinical Services has operating hours convenient to you.							
P20	Employees of the Department of Clinical Services give you personal attention.							
P21	The Department of Clinical Services has your best interest at heart.							
P22	Employees of the Department of Clinical Services understand your specific needs.							

4. Point allocation question

Listed in the table below are five features pertaining to clinical services (in general). We would like to know how **important** each feature is to you when you evaluate the quality of services from departments providing clinical services. Please allocate a total of 100 points among the five features according to how important each feature is to you- the more important a feature is to you, the more points you should allocate to it. Please ensure that the points you allocate to the five features <u>add up to 100</u>.

Feature	**Points**
The appearance of clinical services departments' physical facilities, equipment, personnel, and communications materials.[**TANGIBLES]**	
The willingness of the clinical services departments to help customers/patients and provide prompt service. [**RELIABIITY**	
The ability of the clinical services departments to perform the promised service dependably and accurately. [**RESPONSIVENESS]**	
The knowledge and courtesy of departments of clinical services employees and their ability to convey trust and confidence. [**ASSURANCE**]	
The caring, individualized attention clinical services departments provide their customers/patients. **[EMPATHY**	
Total points	**100 points**

END

Thanks for taking part in this survey

Appendix V B. SERVQUAL questionnaire for the Department of Culture and Youth

Note: To be completed **ONLY** by respondents who obtained services from the Department of **Culture and Youth** in the last 12 months.

1. Demographics

Sex: **1.** Male ☐ **2**. Female ☐

Age: **1.**18 – 25 ☐ **2**. 26 – 35 ☐
3. 36- 45 ☐ **4.** 46- 55 ☐
5. > 55 ☐

Education
1. Primary school certificate ☐ **2**. High School ☐
3. University diploma/Degree ☐ **4.** Postgraduate ☐
5. Other (specify)____________ ☐

Employment status
1. Unemployed ☐ **2.** Self-employed ☐
3. Employed technical field ☐ **4**. Employed Administrative ☐
5. Employed Academic ☐ **6.** Other (specify) _________ ☐

Monthly Income

1. < P500.00 ☐ **2**. P501.00 - P1500.00 ☐
3. P1501.00 - P3000.00 ☐ **4.** P3001.00 - P4500.00 ☐
5. P4501.00 - P6000.00 ☐ **6**. P6001.00 - P7500.00 ☐
7. P7501.00 - P10000.00 ☐ **8**. >P10000.00 ☐

2. Expectations

The following statements relate to your opinions about government departments offering culture and youth services. Please show the extent to which you think government departments offering these services should possess the features described by each statement. Do this by selecting and ticking one of the seven options provided under each statement. If you strongly agree that these departments should possess a feature, tick 7. If you strongly disagree that these departments should possess a feature, tick 1. Depending on the strength of your feelings choose any of the numbers in the middle. There are no right or wrong answers- select the number that best shows your expectations about government departments offering culture and youth services.

Strongly Disagree (SD) **Strongly Agree SA)**
1. 2. 3. 4. 5. 6. 7.

		SD						**SA**
		1	**2**	**3**	**4**	**5**	**6**	**7**
E1	Excellent departments offering culture and youth services will have up to date modern looking office equipment.							
E2	Physical facilities of departments of culture and youth will be visually appealing							
E3	Employees of culture and youth departments will be well dressed and neat							
E4	Materials associated with services provided by departments of culture and youth (e.g pamphlets, information booklets) will be visually appealing.							
E5	When departments of culture and youth promise to do something by a certain time, they will do so							
E6	When customers have problems, departments of culture and youth will show sincere interest in solving it.							
E7	Departments of culture and youth will perform the service right the first time							
E8	Excellent culture and youth departments will provide their service at the time they promise to do so.							
E9	Departments of culture and youth would insist on error-free records							
E10	Excellent culture and youth departments will tell customers exactly when services will be performed.							
E11	Employees of departments of culture and youth will provide prompt service to customers.							
E12	Employees of departments of culture and youth will always be willing to help customers.							
E13	Employees of culture and youth departments are never too busy to respond to customer							

	requests.							
E14	The behaviour of employees of departments of culture and youth will instil confidence and trust in customers.							
E15	Customers of culture and youth departments should feel safe in their transactions with employees.							
E16	Employees of culture and youth departments will be consistently courteous with customers.							
E17	Employees of culture and youth departments will have adequate knowledge to answer customers' questions							
E18	Excellent culture and youth departments will give customers individual attention.							
E19	Operating hours of culture and youth departments will be convenient to all customers.							
E20	Employees of the departments of culture and youth will give customers personal attention							
E21	Excellent culture and youth departments will have their customers' best interests at heart.							
E22	Employees of culture and youth departments should understand specific needs of their customers							

3. Perceptions

The following statements relate to your feelings (experiences) about services from the Department of Culture and Youth. For each statement, please show the extent to which you believe the Department of Culture and Youth has the feature described by the statement. Once again, if you tick 7 it means you **strongly agree** that the Department of Culture and Youth has that feature, while ticking 1 means you **strongly disagree**. You may tick any of the numbers in the middle depending on how strong your feelings are. There are no right or wrong answers- all you need to do is tick the number that best shows your perceptions (feelings) about the Department of Culture and Youth.

Strongly Disagree (SD) **Strongly agree (SA)**
1. 2. 3. 4. 5. 6. 7.

		SD						**SA**
		1	**2**	**3**	**4**	**5**	**6**	**7**
P1	The Department of Culture and Youth has up-to-date office equipment							
P2	The physical facilities used by the Department of Culture and Youth are visually appealing							
P3	Employees of the department of Culture and Youth are well dressed and appear neat.							
P4	Materials associated with services provided by the Department of Culture and Youth (e.g information booklets, forms) are visually appealing.							

P5	When the Department of Culture and Youth promises to do something by a certain time, it does so.							
P6	When customers have problems, the Department of Culture and Youth shows sincere interest in solving it							
P7	The Department of Culture and Youth performs the service right the first time.							
P8	The Department of Culture and Youth provides its services at the time it promises to do so.							
P9	The Department of Culture and Youth insists on error-free records							
P10	Employees of the Department of Culture and Youth tell you exactly when the service will be performed.							
P11	Employees of the Department of Culture and Youth give you prompt service							
P12	Employees of the Department of Culture and Youth are always willing to help you.							
P13	Employees of the Department of Culture and Youth are never too busy to respond to your requests.							
P14	The behaviour of employees of the Department of Culture and Youth instils confidence in customers.							
P15	You feel safe in your transactions with the Department of Culture and Youth.							
P16	Employees of the Department of Culture and Youth are consistently courteous with you.							
P17	Employees of the Department of Culture and Youth have the knowledge to answer your questions.							
P18	The Department of Culture and Youth gives you individual attention.							
P19	The Department of Culture and Youth has operating hours convenient to you.							
P20	Employees of the Department of Culture and Youth give you personal attention.							
P21	The Department of Culture and Youth has your best interest at heart.							
P22	Employees of the Department of Culture and Youth understand your specific needs.							

4. Point allocation question

Listed in the table below are five features pertaining to culture and youth services (in general). We would like to know how important each feature is to you when you evaluate the quality of services from departments providing Culture and Youth services. Please allocate a total of 100 points among the five features according to how important each feature is to you- the more important a feature is to you, the more points you should allocate to it. Please ensure that the points you allocate to the five features add up to 100.

Feature	**Points**
The appearance of culture and youth departments' physical facilities, equipment, personnel, and communications materials [**TANGIBLES]**	
The willingness of the culture and youth departments to help customers and provide prompt service [**RELIABIITY**]	
The ability of the culture and youth departments to perform the promised service dependably and accurately [**RESPONSIVENESS]**	
The knowledge and courtesy of departments of culture and youth's employees and their ability to convey trust and confidence [**ASSURANCE**]	
The caring, individualized attention culture and youth departments provide their customers **[EMPATHY**]	
Total points	**100 points**

END

Thanks for taking part in this survey

Appendix V C. SERVQUAL questionnaire for the Department of Tourism

Note: To be completed **ONLY** by respondents who obtained services from the Department of **Tourism** in the last 12 months.

Demographics

Sex: **1.** Male ☐ **2**. Female ☐

Age: **1.**18 – 25 ☐ **2**. 26 – 35 ☐
3. 36- 45 ☐ **4.** 46- 55 ☐
5. > 55 ☐

Education
1. Primary school certificate ☐ **2**. High School ☐
3. University diploma/Degree ☐ **4.** Postgraduate ☐
5. Other (specify)____________ ☐

Employment status
1. Unemployed ☐ **2.** Self-employed ☐
3. Employed technical field ☐ **4**. Employed Administrative ☐
5. Employed Academic ☐ **6.** Other (specify) _________ ☐

Monthly Income

1. < P500.00	☐	**2**. P501.00 - P1500.00	☐
3. P1501.00 - P3000.00	☐	**4.** P3001.00 - P4500.00	☐
5. P4501.00 - P6000.00	☐	**6**. P6001.00 - P7500.00	☐
7. P7501.00 - P10000.00	☐	**8**. >P10000.00	☐

2. Expectations

The following statements relate to your opinions about government departments offering tourism services. Please show the extent to which you think government departments offering these services should possess the features described by each statement. Do this by selecting and ticking one of the seven options provided under each statement. If you strongly agree that these departments should possess a feature, tick 7. If you strongly disagree that these departments should possess a feature, tick 1. Depending on the strength of your feelings choose any of the numbers in the middle. There are no right or wrong answers- select the number that best shows your expectations about government departments offering tourism services.

Strongly Disagree (SD) **Strongly Agree SA)**
1. 2. 3. 4. 5. 6. 7.

		SD						SA
		1	**2**	**3**	**4**	**5**	**6**	**7**
E1	Excellent departments offering tourism services will have up to date modern looking office equipment.							
E2	Physical facilities of departments of tourism will be visually appealing							
E3	Employees of tourism departments will be well dressed and neat							
E4	Materials associated with services provided by departments of tourism (e.g pamphlets, information booklets) will be visually appealing.							
E5	When departments of tourism promise to do something by a certain time, they will do so.							
E6	When customers have problems, departments of tourism will show sincere interest in solving it.							
E7	Departments of tourism will perform the service right the first time							
E8	Excellent tourism departments will provide their service at the time they promise to do so.							
E9	Departments of tourism would insist on error-free records							
E10	Excellent tourism departments will tell customers exactly when services will be performed.							
E11	Employees of departments of tourism will provide prompt service to customers.							
E12	Employees of departments of tourism will always be willing to help customers.							
E13	Employees of tourism departments are never too busy to respond to customer requests.							
E14	The behaviour of employees of departments of tourism will instil confidence and trust in customers.							
E15	Customers of tourism departments should feel safe in their transactions with employees.							
E16	Employees of tourism departments will be							

	consistently courteous with customers.							
E17	Employees of tourism departments will have adequate knowledge to answer customers' questions							
E18	Excellent tourism departments will give customers individual attention.							
E19	Operating hours of tourism departments will be convenient to all customers.							
E20	Employees of the departments of tourism will give customers personal attention							
E21	Excellent tourism departments will have their customers' best interests at heart.							
E22	Employees of tourism departments should understand specific needs of their customers							

3. Perceptions

The following statements relate to your feelings (experiences) about services from the Department of Tourism. For each statement, please show the extent to which you believe the Department of Tourism has the feature described by the statement. Once again, if you tick 7 it means you **strongly agree** that the Department of Tourism has that feature, while ticking 1 means you **strongly disagree**. You may tick any of the numbers in the middle depending on how strong your feelings are. There are no right or wrong answers- all you need to do is tick the number that best shows your perceptions (feelings) about the Department of Tourism.

Strongly Disagree (SD) **Strongly agree (SA)**

1. 2. 3. 4. 5. 6. 7.

		SD						**SA**
		1	**2**	**3**	**4**	**5**	**6**	**7**
P1	The Department of Tourism has up-to-date office equipment							
P2	The physical facilities used by the Department of Tourism are visually appealing							
P3	Employees of the Department of Tourism are well dressed and appear neat.							
P4	Materials associated with services provided by the Department of Tourism (e.g information booklets, forms) are visually appealing.							
P5	When the Department of Tourism promises to do something by a certain time, it does so.							
P6	When customers have problems, the Department of Tourism shows sincere interest in solving it							
P7	The Department of Tourism performs the service right the first time.							
P8	The Department of Tourism provides its services at the time it promises to do so.							
P9	The Department of Tourism insists on error-free records							
P10	Employees of the Department of Tourism tell you exactly when the service will be performed.							

P11	Employees of the Department of Tourism give you prompt service							
P12	Employees of the Department of Tourism are always willing to help you.							
P13	Employees of the Department of Tourism are never too busy to respond to your requests.							
P14	The behaviour of employees of the Department of Tourism instils confidence in customers.							
P15	You feel safe in your transactions with the Department of Tourism.							
P16	Employees of the Department of Tourism are consistently courteous with you.							
P17	Employees of the Department of Tourism have the knowledge to answer your questions.							
P18	The Department of Tourism gives you individual attention.							
P19	The Department of Tourism has operating hours convenient to you.							
P20	Employees of the Department of Tourism give you personal attention.							
P21	The Department of Tourism has your best interest at heart.							
P22	Employees of the Department of Tourism understand your specific needs.							

4. Point allocation question

Listed in the table below are five features pertaining to tourism services (in general). We would like to know how important each feature is to you when you evaluate the quality of services from departments providing tourism services. Please allocate a total of 100 points among the five features according to how important each feature is to you- the more important a feature is to you, the more points you should allocate to it. Please ensure that the points you allocate to the five features add up to 100.

Feature	**Points**
The appearance of tourism departments' physical facilities, equipment, personnel, and communications materials [**TANGIBLES]**	
The willingness of the tourism departments to help customers and provide prompt service [**RELIABIITY**]	
The ability of the tourism departments to perform the promised service dependably and accurately [**RESPONSIVENESS]**	
The knowledge and courtesy of departments of tourism's employees and their ability to convey trust and confidence [**ASSURANCE**]	
The caring, individualized attention tourism departments provide their customers **[EMPATHY**]	
Total points	**100 points**

END ***Thanks for taking part in this survey***

Appendix V D. SERVQUAL questionnaire for the Department of Wildlife and National Parks

Note: To be completed **ONLY** by respondents who obtained services from the Department of **Wildlife and National Parks** in the last 12 months.

1. Demographics

Sex: **1.** Male ☐ **2**. Female ☐

Age: **1.**18 – 25 ☐ **2**. 26 – 35 ☐
3. 36- 45 ☐ **4.** 46- 55 ☐
5. > 55 ☐

Education
1. Primary school certificate ☐ **2**. High School ☐
3. University diploma/Degree ☐ **4.** Postgraduate ☐
5. Other (specify)___________ ☐

Employment status
1. Unemployed ☐ **2.** Self-employed ☐
3. Employed technical field ☐ **4**. Employed Administrative ☐
5. Employed Academic ☐ **6.** Other (specify) _________ ☐

Monthly Income

1. < P500.00 ☐ **2**. P501.00 - P1500.00 ☐
3. P1501.00 - P3000.00 ☐ **4.** P3001.00 - P4500.00 ☐
5. P4501.00 - P6000.00 ☐ **6**. P6001.00 - P7500.00 ☐
7. P7501.00 - P10000.00 ☐ **8**. >P10000.00 ☐

2. Expectations

The following statements relate to your opinions about government departments offering wildlife and national parks services. Please show the extent to which you think government departments offering these services should possess the features described by each statement. Do this by selecting and ticking one of the seven options provided under each statement. If you strongly agree that these departments should possess a feature, tick 7. If you strongly disagree that these departments should possess a feature, tick 1. Depending on the strength of your feelings choose any of the numbers in the middle. There are no right or wrong answers- select the number that best shows your expectations about government departments offering wildlife and national parks services.

Strongly Disagree (SD) **Strongly Agree SA)**

1. 2. 3. 4. 5. 6. 7.

		SD						**SA**
		1	**2**	**3**	**4**	**5**	**6**	**7**
E1	Excellent departments offering wildlife and national parks services will have up to date modern looking office equipment.							
E2	Physical facilities of departments of wildlife and national parks will be visually appealing							
E3	Employees of wildlife and national parks departments will be well dressed and neat							
E4	Materials associated with services provided by departments of wildlife and national parks (e.g pamphlets, information booklets) will be visually appealing.							
E5	When departments of wildlife and national parks promise to do something by a certain time, they will do so							
E6	When customers have problems, departments of wildlife and national parks will show sincere interest in solving it.							
E7	Departments of wildlife and national parks will perform the service right the first time							
E8	Excellent wildlife and national parks departments will provide their service at the time they promise to do so.							
E9	Departments of wildlife and national parks would insist on error-free records							
E10	Excellent wildlife and national parks departments will tell customers exactly when services will be performed.							
E11	Employees of departments of wildlife and national parks will provide prompt service to customers.							
E12	Employees of departments of wildlife and national parks will always be willing to help customers.							
E13	Employees of wildlife and national parks departments are never too busy to respond to customer requests.							
E14	The behaviour of employees of departments of							

	wildlife and national parks will instil confidence and trust in customers.							
E15	Customers of wildlife and national parks departments should feel safe in their transactions with employees.							
E16	Employees of wildlife and national parks departments will be consistently courteous with customers.							
E17	Employees of wildlife and national parks departments will have adequate knowledge to answer customers' questions							
E18	Excellent wildlife and national parks departments will give customers individual attention.							
E19	Operating hours of wildlife and national parks departments will be convenient to all customers.							
E20	Employees of the departments of wildlife and national parks will give customers personal attention							
E21	Excellent wildlife and national parks departments will have their customers' best interests at heart.							
E22	Employees of wildlife and national parks departments should understand specific needs of their customers							

3. Perceptions

The following statements relate to your feelings (experiences) about services from the Department of Wildlife and National Parks. For each statement, please show the extent to which you believe the Department of Wildlife and National Parks has the feature described by the statement. Once again, if you tick 7 it means you **strongly agree** that the Department of Wildlife and National Parks has that feature, while ticking 1 means you **strongly disagree**. You may tick any of the numbers in the middle depending on how strong your feelings are. There are no right or wrong answers- all you need to do is tick the number that best shows your perceptions (feelings) about the Department of Wildlife and National Parks.

Strongly Disagree (SD) **Strongly agree (SA)**

1. 2. 3. 4. 5. 6. 7.

		SD						**SA**
		1	**2**	**3**	**4**	**5**	**6**	**7**
P1	The Department of Wildlife and National Parks has up-to-date office equipment							
P2	The physical facilities used by the Department of Wildlife and National Parks are visually appealing							
P3	Employees of the Department of Wildlife and National Parks are well dressed and appear neat.							
P4	Materials associated with services provided by the Department of Wildlife and National Parks (e.g information booklets, forms) are visually appealing.							
P5	When the Department of Wildlife and National Parks promises to do something by a certain time, it does so.							
P6	When customers have problems, the Department of Wildlife and National Parks shows sincere interest in solving it							

P7	The Department of Wildlife and National Parks performs the service right the first time.							
P8	The Department of Wildlife and National Parks provides its services at the time it promises to do so.							
P9	The Department of Wildlife and National Parks insists on error-free records							
P10	Employees of the Department of Wildlife and National Parks tell you exactly when the service will be performed.							
P11	Employees of the Department of Wildlife and National Parks give you prompt service							
P12	Employees of the Department of Wildlife and National Parks are always willing to help you.							
P13	Employees of the Department of Wildlife and National Parks are never too busy to respond to your requests.							
P14	The behaviour of employees of the Department of Wildlife and National Parks instils confidence in customers.							
P15	You feel safe in your transactions with the Department of Wildlife and National Parks.							
P16	Employees of the Department of Wildlife and National Parks are consistently courteous with you.							
P17	Employees of the Department of Wildlife and National Parks have the knowledge to answer your questions.							
P18	The Department of Wildlife and National Parks gives you individual attention.							
P19	The Department of Wildlife and National Parks has operating hours convenient to you.							
P20	Employees of the Department of Wildlife and National Parks give you personal attention.							
P21	The Department of Wildlife and National Parks has your best interest at heart.							
P22	Employees of the Department of Wildlife and National Parks understand your specific needs.							

4. Point allocation question

Listed in the table below are five features pertaining to wildlife and national parks services (in general). We would like to know how important each feature is to you when you evaluate the quality of services from departments providing wildlife and national parks services. Please allocate a total of 100 points among the five features according to how important each feature is to you- the more important a feature is to you, the more points you should allocate to it. Please ensure that the points you allocate to the five features add up to 100.

Feature	Points
The appearance of wildlife and national parks departments' physical facilities, equipment, personnel, and communications materials [**TANGIBLES]**	
The willingness of the wildlife and national parks departments to help customers and provide prompt service [**RELIABIITY**]	
The ability of the wildlife and national parks departments to perform the promised service dependably and accurately [**RESPONSIVENESS]**	
The knowledge and courtesy of departments of wildlife and national parks's employees and their ability to convey trust and confidence [**ASSURANCE**]	
The caring, individualized attention wildlife and national parks departments provide their customers **[EMPATHY**]	
Total points	**100 points**

END

Thanks for taking part in this survey

Appendix V E. SERVQUAL questionnaire for the IEC

Note: To be completed **ONLY** by respondents who obtained services from the **Independent Electoral Commission** in the last 12 months.

1. Demographics

Sex: **1**. Male ☐ **2**. Female ☐

Age:

1. 18 – 25	☐	**2**. 26 – 35	☐
3. 36- 45	☐	**4**. 46- 55	☐
5. > 55	☐		

Education

1. Primary school certificate	☐	**2**. High School	☐
3. University diploma/Degree	☐	**4**. Postgraduate	☐
5. Other (specify)__________	☐		

Employment status

1. Unemployed	☐	**2**. Self-employed	☐
3. Employed technical field	☐	**4**. Employed Administrative	☐
5. Employed Academic	☐	**6**. Other (specify) __________	☐

Monthly Income

1. Less than P500.00	☐	**2**. P501.00 - P1500.00	☐
3. P1501.00 - P3000.00	☐	**4**. P3001.00 - P4500.00	☐
5. P4501.00 - P6000.00	☐	**6**. P6001.00 - P7500.00	☐
7. P7501.00 - P10000.00	☐	**8**. >P10000.00	☐

2. Expectations

The following statements relate to your opinions about government departments offering independent electoral commission services. Please show the extent to which you think government departments offering these services should possess the features described by each statement. Do this by selecting and ticking one of the seven options provided under each statement. If you strongly agree that these departments should possess a feature, tick 7. If you strongly disagree that these departments should possess a feature, tick 1. Depending on the strength of your feelings choose any of the numbers in the middle. There are no right or wrong answers- select the number that best shows your expectations about government departments offering independent electoral commission services.

Strongly Disagree (SD) **Strongly Agree SA)**
1. 2. 3. 4. 5. 6. 7.

		SD						**SA**
		1	**2**	**3**	**4**	**5**	**6**	**7**
E1	Excellent independent electoral commission departments will have up to date modern looking office equipment.							
E2	Physical facilities of independent electoral commission departments will be visually appealing							
E3	Employees of independent electoral commission departments will be well dressed and neat							
E4	Materials associated with services provided by independent electoral commission departments (e.g voter records, information booklets) will be visually appealing.							
E5	When independent electoral commission departments promise to do something by a certain time, they will do so.							
E6	When customers/voters have problems, independent electoral commission departments will show sincere interest in solving it.							
E7	Independent electoral commission departments will perform the service right the first time							
E8	Excellent independent electoral commission departments will provide their service at the time they promise to do so.							
E9	Independent electoral commission departments would insist on error-free voter records							
E10	Excellent independent electoral commission departments will tell their customers exactly when services will be performed.							
E11	Employees of independent electoral commission departments will provide prompt service to customers/voters.							
E12	Employees of independent electoral commission departments will always be willing to help							

	customers/voters.							
E13	Employees of independent electoral commission departments are never too busy to respond to voters' requests.							
E14	The behaviour of employees of independent electoral commission will instil confidence and trust in customers/voters.							
E15	Customers of independent electoral commission departments should feel safe in their transactions with employees.							
E16	Employees of independent electoral commission departments will be consistently courteous with voters.							
E17	Employees of independent electoral commission departments will have adequate knowledge to answer voters/customers' questions							
E18	Excellent independent electoral commission departments will give customers/voters individual attention.							
E19	Operating hours of independent electoral commission departments will be convenient to all customers.							
E20	Employees of the departments of independent electoral commission will give customers/voters personal attention							
E21	Excellent independent electoral commission departments will have their customers' best interests at heart.							
E22	Employees of independent electoral commission departments should understand specific needs of their customers							

3. Perceptions

The following statements relate to your feelings (experiences) about services from the Independent Electoral Commission (IEC). For each statement, please show the extent to which you believe the IEC has the feature described by the statement. Once again, if you tick 7 it means you **strongly agree** that the IEC has that feature, while ticking 1 means you **strongly disagree**. You may tick any of the numbers in the middle depending on how strong your feelings are. There are no right or wrong answers- all you need to do is tick the number that best shows your perceptions (feelings) about the IEC.

Strongly Disagree (SD) **Strongly agree (SA)**

1. 2. 3. 4. 5. 6. 7.

		SD						**SA**
		1	**2**	**3**	**4**	**5**	**6**	**7**
P1	The IEC has up-to-date office equipment							
P2	The physical facilities used by the IEC are visually appealing							

P3	Employees of the IEC are well dressed and appear neat.							
P4	Materials associated with services provided by the IEC (e.g Voters' cards, information booklets, other educational materials) are visually appealing.							
P5	When the IEC promises to do something by a certain time, it does so.							
P6	When voters have problems, the IEC shows sincere interest in solving the problem.							
P7	The IEC performs the service right the first time.							
P8	The IEC provides its services at the time it promises to do so.							
P9	The IEC insists on error-free voters records							
P10	Employees of the IEC tell you exactly when the service will be performed.							
P11	Employees of the IEC give you prompt service.							
P12	Employees of the IEC are always willing to help you.							
P13	Employees of the IEC are never too busy to respond to your requests.							
P14	The behaviour of employees of the IEC instils confidence in customers/voters.							
P15	You feel safe in your transactions with the IEC							
P16	Employees of the IEC are consistently courteous with you.							
P17	Employees of the IEC have the knowledge to answer your questions.							
P18	The IEC gives you individual attention.							
P19	The IEC has operating hours convenient to you.							
P20	Employees of the IEC give you personal attention.							
P21	The IEC has your best interest at heart.							
P22	Employees of the IEC understand your specific needs.							

4. Point allocation question

Listed in the table below are five features pertaining to independent electoral commission (in general). We would like to know how **important** each feature is to you when you evaluate the quality of services from independent electoral commission departments. Please allocate a total of 100 points among the five features according to how important each feature is to you- the more important a feature is to you, the more points you should allocate to it. Please ensure that the points you allocate to the five features <u>add up to 100</u>.

Feature	**Points**
The appearance of IEC departments' physical facilities, equipment, personnel, and communications materials. [**TANGIBLES**	
The willingness of the IEC departments to help customers/voters and provide prompt service. [**RELIABIITY**	
The ability of the IEC departments to perform the promised service dependably and accurately. [**RESPONSIVENESS**	
The knowledge and courtesy of IEC employees and their ability to convey trust and confidence. [**ASSURANCE]**	
The caring, individualized attention IEC departments provide their customers/voters. **[EMPATHY**	
Total points	**100 points**

END

Thanks for taking part in this survey

Appendix V F. SERVQUAL questionnaire for the Department of Public Health

Note: To be completed **ONLY** by respondents who obtained services from the Department of **Public Health** in the last 12 months.

1. Demographics

Sex: **1**.Male ☐ **2**. Female ☐

Age: **1**. 18 – 25 ☐ **2**. 26 – 35 ☐
3. 36- 45 ☐ **4**. 46- 55 ☐
5. > 55 ☐

Education

1. Primary school certificate ☐ **2**. High School ☐
3. University diploma/Degree ☐ **4**. Postgraduate ☐
5. Other (specify)_________ ☐

Employment status

1. Unemployed ☐ **2**. Self-employed ☐
3. Employed technical field ☐ **4**. Employed Administrative ☐
5. Employed Academic ☐ **6**. Other (specify) _________ ☐

Monthly Income

1. Less than P500.00 ☐ **2**. P501.00 - P1500.00 ☐
3. P1501.00 - P3000.00 ☐ **4**. P3001.00 - P4500.00 ☐
5. P4501.00 - P6000.00 ☐ **6**. P6001.00 - P7500.00 ☐
7. P7501.00 - P10000.00 ☐ **8**. >P10000.00 ☐

2. Expectations

The following statements relate to your opinions about government departments offering public health services. Please show the extent to which you think government departments offering these services should possess the features described by each statement. Do this by selecting and ticking one of the seven options provided under each statement. If you strongly agree that these departments should possess a feature, tick 7. If you strongly disagree that these departments should possess a feature, tick 1. Depending on the strength of your feelings choose any of the numbers in the middle. There are no right or wrong answers- select the number that best shows your expectations about government departments offering public health services.

Strongly Disagree (SD) **Strongly Agree SA)**

1. 2. 3. 4. 5. 6. 7.

		SD						**SA**
		1	**2**	**3**	**4**	**5**	**6**	**7**
E1	Excellent departments offering public health services will have up to date modern looking office equipment.							
E2	Physical facilities of public health departments will be visually appealing							
E3	Employees of public health departments will be well dressed and neat							
E4	Materials associated with services provided by departments of public health (e.g educational posters, forms, information booklets) will be visually appealing.							
E5	When departments of public health promise to do something by a certain time, they will do so							
E6	When customers/patients have problems, departments of public health will show sincere interest in solving it.							
E7	Departments of public health will perform the service right the first time							
E8	Excellent public health departments will provide their service at the time they promise to do so.							
E9	Departments of public health would insist on error-free customer/patient records							
E10	Excellent public health departments will tell their customers/patients exactly when services will be performed.							
E11	Employees of departments of public health will provide prompt service to customers/patients.							
E12	Employees of departments of public health will always be willing to help customers/patients.							
E13	Employees of public health departments are never too busy to respond to customer/patients requests.							
E14	The behaviour of employees of departments of public health will instil confidence and trust in							

	customers/patients.							
E15	Customers and patients of public health departments should feel safe in their transactions with employees.							
E16	Employees of public health departments will be consistently courteous with customers/patients.							
E17	Employees of public health departments will have adequate knowledge to answer customers/patients' questions							
E18	Excellent public health departments will give customers/patients individual attention.							
E19	Operating hours of public health departments will be convenient to all customers/patients.							
E20	Employees of the departments of public health will give customers/patients personal attention							
E21	Excellent public health departments will have their customers and patients' best interests at heart.							
E22	Employees of public health departments should understand specific needs of their customers/patients							

3. Perceptions

The following statements relate to your feelings (experiences) about services from the Department of Public Health. For each statement, please show the extent to which you believe the Department of Public Health has the feature described by the statement. Once again, if you tick 7 it means you **strongly agree** that the Department of Public Health has that feature, while ticking 1 means you **strongly disagree**. You may tick any of the numbers in the middle depending on how strong your feelings are. There are no right or wrong answers- all you need to do is tick the number that best shows your perceptions (feelings) about the Department of Public Health.

Strongly Disagree (SD) **Strongly agree (SA)**
1. 2. 3. 4. 5. 6. 7.

		SD						**SA**
		1	**2**	**3**	**4**	**5**	**6**	**7**
P1	The Department of Public Health has up-to-date office equipment							
P2	The physical facilities used by the Department of Public Health are visually appealing							
P3	Employees of the Department of Public Health are well dressed and appear neat.							
P4	Materials associated with services provided by the Department of Public Health (e.g Billboard posters, information booklets, other educational materials) are visually appealing.							
P5	When the Department of Public Health promises to do something by a certain time, it does so.							
P6	When customers/patients have problems, the Department of Public Health shows sincere interest in solving the problem.							
P7	The Department of Public Health performs the service							

	right the first time.							
P8	The Department of Public Health provides its services at the time it promises to do so.							
P9	The Department of Public Health insists on error-free records							
P10	Employees of the Department of Public Health tell you exactly when the service will be performed.							
P11	Employees of the Department of Public Health give you prompt service							
P12	Employees of the Department of Public Health are always willing to help you.							
P13	Employees of the Department of Public Health are never too busy to respond to your requests.							
P14	The behaviour of employees of the Department of Public Health instils confidence in customers/patients.							
P15	You feel safe in your transactions with the Department of Public Health.							
P16	Employees of the Department of Public Health are consistently courteous with you.							
P17	Employees of the Department of Public Health have the knowledge to answer your questions.							
P18	The Department of Public Health gives you individual attention.							
P19	The Department of Public Health has operating hours convenient to you.							
P20	Employees of the Department of Public Health give you personal attention.							
P21	The Department of Public Health has your best interest at heart.							
P22	Employees of the Department of Public Health understand your specific needs.							

4. Point allocation question

Listed in the table below are five features pertaining to public health services (in general). We would like to know how **important** each feature is to you when you evaluate the quality of services from departments providing public health services. Please allocate a total of 100 points among the five features according to how important each feature is to you- the more important a feature is to you, the more points you should allocate to it. Please ensure that the points you allocate to the five features add up to 100.

Feature	Points
The appearance of public health departments' physical facilities, equipment, personnel, and communications materials. [**TANGIBLES**	
The willingness of the public health departments to help customers/patients and provide prompt service. [**RELIABIITY**	
The ability of the public health departments to perform the promised service dependably and accurately. [**RESPONSIVENESS**	
The knowledge and courtesy of departments of public health's employees and their ability to convey trust and confidence. [**ASSURANCE]**	
The caring, individualized attention public health departments provide their customers/patients. **[EMPATHY**	
Total points	**100 points**

END

Thanks for taking part in this survey