

**Employer Branding for Successful Recruitment and Retention
of Talented Academic Staff in Thai Universities**

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Abstract

Employer branding may be communicated in a variety of ways, but today it is an organisation's website that is commonly used to convey the desired image. A website is commonly recognised as the first port of call for any potential employee. It should, therefore, be the first channel of communication undertaken by an employer branding strategy. This thesis reports on research investigating the use of websites by Thai universities and examines how a well-designed website can be used to efficiently communicate the employer brand as it is related to attracting and retaining talented academic staff in Thai universities.

This research used mixed-methods approach. Both qualitative and quantitative research methods were applied to achieve the aim of this study. Qualitative research methods were used to assess how well websites of selected Thai universities meet basic good website design standards and how effectively they communicate their employer brand. Quantitative research methods were used to examine the relationship between the quality of university's website design and university image in relation to staff attraction and retention.

This research found that more highly qualified academics may hold greater expectations in relation to website quality. Newly recruited talented academics were found to tend to use university websites as their first resource to search for the information they acquired before applying for a position. The findings revealed that university ranking did influence potential applicants' perceptions. For applying for a job in lower ranked universities, applicants may require more detailed information than when applying to top ranked universities about which much information was commonly already known. In addition, Thai universities needed to note that current use of university websites by potential overseas staff was low. To improve the university brand and create a positive image to attract high quality international staff, therefore, Thai universities had to improve their websites in particular addressing issues that made their websites more accessible and usable by people from other cultures and language bases.

Declaration

“I, Karun Kidrakarn, declare that the DBA thesis entitled “*Employer Branding for Successful Recruitment and Retention of Talented Academic Staff in Thai Universities*” is no more than 65,000 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”

March, 2013

Signature

Date

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Chapter 1

Introduction

1.1 Introduction

Higher education is being impacted by globalisation. As Marginson and van de Wende (2007, p. 307) state ‘any consideration of the future of higher education, the international and global aspects must be taken into account’. Rizvi, Engel, Nandyala, Rutkowski and Sparks (2005) also highlight the increasing demand for international education at the higher education level. The Thai higher education system, like others around the world, is confronting the need to ensure that they can compete in this new global higher education environment. The scope of the study is Thai universities ranked by Webometrics. Webometrics is an organisation with a web presence and visibility that is used as an indicator of global performance of a university on which ranking of universities occurs, and its rankings are highly regarded. Data were gathered from 351 recently recruited academic staff and 12 Human Resource managers to explore the use by Thai universities of their websites to create an employer brand to attract and retain world standard academics.

This chapter provides a brief of overview of the current research which begins with (a) background of the research; (b) aims of the research; (c) research questions; (d) contribution to knowledge; (e) statement of significance; (f) research methodology; (g) outline of thesis; and (h) limitations of this research.

1.2 Background of the research

Although organisations generally direct their branding efforts toward developing product and corporate identity, branding can also be applied in the area of human resource management, so called “employer branding” (Martin, Beaumont, Doig & Pate (Martin et al. 2005). In this context, the term employer branding suggests the differentiation of a firm’s characteristics as an employer from those of its competitors (Backhaus & Tikoo 2004). Employer branding is defined as “a targeted, long-term strategy to manage awareness and perceptions of employees, potential employees, and related stakeholders with regards to a particular firm” (Sullivan 2004, p. 2). Employer branding may be communicated in a variety of ways, but today it is an organisation’s website that is commonly used to convey the desired image (Allen, Mahto & Otondo 2007).

Different approaches are adopted by different organisations to present their image to their audiences. For instance, advertising on billboards, TV and radio has been and still is used by organisations (Cober et al. 2004; Harris 2009a). However, the increased use of the Internet makes incorporating it into an organisation’s marketing plan important now and moving forward. In today’s electronic era, the Internet has fundamentally changed the business environment not only in domestic markets but also in global markets (Rao, Metts & Monge 2003). It has a substantial influence on the business environment by making the world appear smaller (Sparkes & Thomas 2001). The adoption of the website allows many businesses, in particular small firms which have limited-capital and resources, to have the means to compete efficiently and perhaps equitably in the open marketplace (Quelch & Klein 1996; Sparkes & Thomas 2001). Furthermore, using websites to communicate information to a large number of job applicants commonly costs less than traditional media (Cober et al. 2004). The Internet has been used as an essential business tool to communicate organisational messages to customers, suppliers, competitors and staff (Cotter 2002). In addition, Searle (2006) mentions that a website is commonly recognised as the first port of call for any potential employee. It should, therefore, be an increasingly attractive channel of communication undertaken within an employer branding strategy in combination with traditional media sources.

This research examines the use of employer branding on Thai university websites. Universities in Thailand are ranked annually and this ranking can affect attraction of student and staff (see: http://www.webometrics.info/rank_by_country_select.asp). This creates an environment where Thai universities must consider how they can influence potential students and staff to come to their university, and current students and staff to remain with them. This attraction and retention success will also, over time, influence each university's national ranking.

The Thai government is committed to maintaining and improving their education system, (<http://www.inter.mua.go.th/main/list.php?id=pu>), in particular tertiary education. Globalisation has affected all university to recruit academic staff but especially those in Asia (Marginson 2011). Accordingly, Thai universities are attempting to attract quality academic staff from around the world (Pimpa 2011). The Internet has a major role to play in supporting achievement of each individual university's goals. Doing so will ensure that the government's goal of providing quality tertiary education in Thailand is achieved.

1.3 Aims of the research

The aim of this research is to explore how universities in Thailand may better use online branding to recruit high calibre academics. Retention after recruitment is a sub aim of this research. In order to explore better use of online branding, it is first necessary to identify the key characteristics that will support a successful employer brand, such that quality recruits will be attracted to universities. The broad aim of this research is to improve Thai university branding in order to create positive images to attract academic staff from the nationwide and global labour pool, and to retain high-skilled staff by using the university's website. More specifically, the purpose of this research is twofold:

1. It investigates how Universities in Thailand deploy online branding efficiently in order to create their employer brand to attract potential recruits and to retain current skilled academic staff; and

2. It develops guidelines, or sets of criteria that might be applied to suggest how Thai universities might best design their websites to attract and retain quality academic staff.

1.4 Research questions

1. What attributes constitute a well-designed website that communicates the organisation's employer brand?
2. How does a well-designed website effectively and efficiently communicate the employer brand as it is related to attracting and retaining talented-academic staff in Thai university?
 - 2.1 Are Thai university websites used by prospective and current employees?
 - 2.2 For those who used their university's website to influence their application decision, did the website design, the search engine and information provided meet the new recruits' expectations, and if so, to what extent did it meet their expectations?
3. Which factors are most significant in influencing potential applicants' decision to apply?

1.5 Contribution to knowledge

Although corporate image has been examined frequently with regard to the corporate sector, few have studied it in the educational field (Arpan, Raney & Zivnuska 2003; Ivy 2001; Kazoleas, Kim & Moffitt 2001; Palacio, Meneses & Pérez 2002). Moreover, some existing literature about the role of image in the academic field has generally examined it from the viewpoint of the customer, or students (Gray, Fam & Llanes 2003; Martin et al. 2005). Most existing studies on the role of image in higher education institutes or universities examined the relevance of image from the student's viewpoint only (Curtis, Abratt & Minor 2009; Gray, Fam & Llanes 2003; Harris 2009a) and little attention had been given to consideration of academic staff member attraction and retention aspects (Ackers & Gill 2005; Coates et al. 2009). Indeed, to this point in time there have only been a limited number of studies of the use of university websites to attract and retain academic staff thus, apart from this research, the use of and satisfaction with university websites remains largely undiscovered. This remains the

situation, despite globalisation of tertiary education. With previously insufficient evidence on the relevance of website quality to convey the employer's brand in the tertiary education sector in Thailand, the current research findings will fill a knowledge gap by identifying those significant website components required in relation to attraction and retention staff in universities. Moreover, the current findings will be used by subsequent studies as a foundation for further studies to develop further knowledge in this field. For instance, studies in other cultures, within other tertiary education systems, may provide valuable comparative data.

1.6 Statement of significance

The investigation of image criteria used by universities is an important and timely effort. The labour market for universities globally is becoming increasingly competitive in recruiting high quality academics and retaining high performing staff (Arpan, Raney & Zivnuska 2003). Ritson (2002) mentions that firms with strong employer brands can possibly decrease staffing costs, enhance their relationship with employees, increase employee retention and even offer lower salaries for similarly skilled staff than might companies with weaker employer brands (Berthon, Ewing & Hah 2005). Additionally, Ewing, Pitt, Bussy and Berthon's (2002) study asserts that mainstream advertising has the potential to influence both current and future employees. Consequently, it is important that marketers or advertising decision-makers understand the influence that advertising has not only on customers, but also the effect it will have on potential and existing staff.

The university ranking system in Thailand makes researching this concept in Thai universities of particular practical importance as results of this research will provide valuable information for universities on the design of their websites and creation of employer brands which will assist them to maintain or improve their standing in the Thai tertiary education sector. Therefore, the findings of this research will guide universities to improve their employer brand and a website that will communicate it to a global audience in order to attract prospective high quality staff and retain current high-performing staff. Overall, it has advantages for the Thai tertiary education system as it has the potential to assist in achievement of the goal of improving the system's standing against universities in other developing countries and with those in developed countries.

1.7 Research methodology

This research used a mixed-methods approach. Both qualitative and quantitative research methods were applied to achieve the aim of this study. Qualitative research methods were used to assess how well websites of selected Thai universities meet basic good website design standards and how effectively they communicate their employer brand. Quantitative research methods were used to examine the relationship between the quality of a university's website design and the university's image in relation to staff attraction and retention. Information gathered through the literature review was employed to adapt existing website and employer branding checklists. The checklist developed is based on previously recommended general website design principles (Cober et al. 2003; Cyr & Trevor-Smith 2004; Gehrke & Turban 1999; Kent, Taylor & White 2003; Tan & Wei 2006; Thelwall & Harries 2004; Turban, 2001; Turban, & Gehrke 2000; Vate-U-Lan 2007) to use to assess the quality of Thai university websites.

The research began with the literature review that investigated issues related to the areas of employer branding and the design of effective websites. From the literature, web standard-design checklists (Cober et al. 2003; Cyr & Trevor-Smith 2004; Gehrke & Turban 1999; Kent, Taylor & White 2003; Tan & Wei 2006; Thelwall & Harries 2004; Turban, Daniel B 2001; Turban, E & Gehrke 2000; Vate-U-Lan 2007) and specific variables relating to effective employer branding (Ewing et al. 2002; Wilden, Gudergan & Lings 2010) were adapted and combined. These supported the investigation of criteria for effective website design. In addition, this information from the literature review was also utilised to identify appropriate factors for creating and developing the questionnaire to gather information from recent recruits and a semi structured interview format for interviews with HR managers.

1.7.1 Population and Sample

According to higher education data and information in 2005, reported by the Commission of Higher Education Thailand (CHET), there were about 14,000 academic staff members who had graduated from a Bachelor degree or higher level qualification and who were teaching at or held the position of lecturer in a Thai university. Thai universities were selected for participation in this research using the university rankings

from www.webometrics.info website. Participants in this research were chosen from three groups of Thai universities ranked according to Thai university ranking system by www.webometrics.info from rankings provided for the year 2009. Universities were selected from 15 public universities, with five universities chosen from each of the top, middle, and lower ranked groups of universities. The researcher, who is employed by a Thai university, also has contacts within several other universities in Thailand.

Four hundred and fifty academic staff members and 15 HR managers at Thai universities were selected as the sample size for this study. Five Thai higher institutions were selected from each ranked group; five from each of the top, middle and lower level universities, according to the Thai university ranking by Webometrics, were sought. This representative sample was sought to allow meaningful statistical comparisons to be made. The numbers fit the table of sample size for specified confidence limits and precision of Yamane calculation with an error margin of 5%.

1.7.2 Questionnaire survey

The questionnaire was developed to examine the relationship between well-designed websites and university image. The quality of the university's website design and of their employer brand and image conveyed by it was tested. Respondents were asked to rate the importance of each of the factors on the checklist developed as described above, on a 5-point Likert scale. In addition, they were asked to rank the critical criteria they consider the most important for effective web design and employer image.

The length of the questionnaire was considered in this research with regard to ensuring a high return rate. Differing arguments are provided regarding the 'ideal' length of a questionnaire. This current research followed Zikmund's (2003) suggestion, but took an even more conservative approach in an attempt to reduce the non-response rate when compared with large questionnaires. The questionnaire used in this research was limited in a single page. The researcher is an academic from the Thai university system. Being aware of the demands placed on academic staff, similar to other parts of the world, it was decided that in order to obtain a high response rate the questionnaire size had to be restricted (See Appendix 3.6).

1.7.3 Interviews

An HR manager from each selected university was sought to participate in this study, to provide responses that would constitute qualitative data to support statistical data gathered; therefore, a total of 15 HR managers were requested to participate and 12 agreed to be interviewed for this study. A semi structured interview format was deployed to collect this qualitative data. The supplementary interview method was designed to extend the findings related to how universities efficiently use their websites in order to attract potential applicants and retain current staff. The impact of a university's website on staff attraction and retention is one of the significant issues being focused on this study; and therefore, these issues formed the basis of main question in the interviews.

The semi-structured interview format used for this research requires the interviewer to design a set of questions, but allows the interview to be conversational. It is generally necessary for the interviewer to develop and use a prepared interview guide. The interview guide is a list of topics and questions that the interviewer can ask in different ways for different participants depending on the context and situation (Lindlof & Taylor 2002).

In the present study, semi-structured interviews were used for several reasons. First of all, using an interview guide helps interviewers to focus on the interview topic (Lindlof & Taylor 2002). It enhances the standardisation and reliability of responses. Furthermore, the semi-structured interview allows new questions to be introduced during the interview for purposes of clarification or further exploration if required. Thus the semi-structured interview is more flexible than the structured interview. The interviewer is able to acquire more useful information from the interview rather than being limited to set questions.

1.8 Outline of the thesis

The research is organised into five chapters. The first chapter provides an introduction to issues that the current research is designed to address. Chapter two is a review of literature relevant to this study. The literature review helps support the development and the discussion of the research methodology in the following chapter.

In chapter three, the research methodology is developed to outline the research instruments applied to gather and analyse data that answer the research question in this study. Chapter four presents the research results including both quantitative and qualitative data analyses. Finally, Chapter five contains an overall of discussion of the issues and findings from both the results of the analysis of questionnaire and interview responses. This final chapter also provides the implications and limitations of this research, and makes recommendations for further research.

1.9 Summary

This chapter has presented an introduction to the thesis and the study it reports on. It began with the research background, aims of the research and provided the research questions. From a theory perspective, the contribution to knowledge of the current research findings will provide an extensive understanding of use of websites to successfully portray an organisation's image specifically in the tertiary education sector and will fill a knowledge gap by identifying those significant website components required in relation to attraction and retention of staff in universities. From practical perspective, universities can use the valuable information from the results of this research to design their websites and create their employer brands for communicating to global audience in order to attract prospective high quality staff and retain current high-performing staff. A brief outline of the research methodology was also provided, and, at the end of this chapter, an outline of the thesis has been provided to present an overview of the research and content of each chapter.

The next chapter, chapter 2, provides a review of the literature relevant to this study. The literature review helps to identify the research gap and to develop the theoretical framework upon which the research questions and the methodology are developed in an attempt to address that gap.

Chapter 2

Literature Review

2.1 Introduction

This chapter aims to critically evaluate the key relevant literature, and to overview previous studies regarding employer branding and effective website design for attraction and retention skilled-staff for application within Thai universities. It concludes by identifying the gaps in the current research literature in relation to specifically addressing the issue of attracting and retaining high quality academic staff at Thai universities.

This chapter begins with Section 2.2, The Thai University System, to provide the background and an understanding of the Thai university system and its characteristics. Section 2.3 provides an overview of university image focusing on those issues relevant to this study. Section 2.4 examines the concept of employer branding, especially as it relates to universities. Following this, use of online recruitment and its advantages and disadvantages are examined in Section 2.5. Then, Section 2.6 discusses using the Internet for successful internal communication to support retention. Section 2.7 examines the components of an effective website by reviewing a range of literature constituted earlier (since 1970s) through to recent studies (2011). Section 2.8 examines website quality, which is divided in to three areas: 1) Appearance, 2) Technical and 3) Information quality. Section 2.9 examines how universities use their websites or other mechanisms for attracting talented staff. Factors affecting recruitment and retention are discussed in the Sections 2.10 and Section 2.11 respectively. Lastly, a summary of the Chapter two is presented in Section 2.12.

2.2 The Thai university system

Schiller (2006) assumed universities in developing countries were in a different position compared with universities in developed countries. In developing countries, universities tend to be under-funded and thus unable to build and equip modern research facilities

for staff use (Archibong, Ogbiji & Anijaobi-Idem 2010). Therefore, their faculty and staff tend to be less well qualified (Archibong, Ogbiji & Anijaobi-Idem 2010). The assumption followed that the universities in non-industrialised countries would be below the academic standards set by universities in industrialised countries. Subsequently, the universities in non-industrialised countries needed to concentrate on undergraduate teaching, which was an essential function in developing countries in order to increase the abilities of their residents. Research activity was not seen as a main activity of many universities in non-industrialised countries. To be able to compete with other countries on the global stage and to achieve their future needs, universities in developing countries had to continually improve their teaching and research quality (Schiller 2006). Globalisation of tertiary education is occurring (Marginson & van der Wende 2007) in line with globalisation of other industry sectors.

According to the Office of Higher Education Commission Thailand (OHEC 2010a), Higher education institutions (HEIs) consisted of public and private universities, institutions, colleges, and community colleges. One hundred and sixty six institutions across the nation were under the supervision of the CHET and these could be categorised as follows (see Table 2.1 for the different categories of Thai HEIs):

- 78 Public higher education institutions
 - 13 autonomous universities
 - 15 traditional universities
 - 40 Rajabhat universities
 - 9 Rajamangala Technology universities
 - 1 Pathumwan Institute of Technology
- 69 Private higher education institutions
 - 41 universities/institutions
 - 29 colleges
- 19 community colleges

Higher Education in Thailand has been developing since the first university, Chulalongkorn University, established in 1916. Other universities, such as Thammasat University, Medical School, Kasetsart University, and Silapakorn University, were established a few years later. The purpose of these original universities was to enhance the capability of people in the civil service. Later, qualified labour from those universities became more important for economic growth and social development nationwide. Therefore, in 1957, universities transformed their role from only providing

education for improving the workforce in the civil service to offering education to the broader public sector.

Table 2.1: Comparison of Thai University Types

	Thai Public University	Rajabhat University	Rajamangala University of Technology	Thai Private University
Operation	Supported by Thai Government	Supported by Thai Government	Supported by Thai Government	Not Operated by Thai Government
Number of Universities	28	40	9	41
Number of schools or faculties	15-20	Less than 15	Less than 10	Less than 15
Degree	Bachelor Degree to Doctoral Degree (various majors)	Bachelor Degree to Doctoral Degree (available in some Universities and have a few majors)	Diplomas to Doctoral Degree (available in 3 Universities and have a few majors)	Bachelor Degree to Doctoral Degree (available in 10 Universities)
Variety of schools	Have broad range of majors	Most Universities have Humanities and Social Science Majors	Most Universities have Science and Engineering Majors	Average
Top 400 of World Ranking	3 Universities	None	None	None
Tuition fees (Bachelor Degree)	Approximately 400-AU\$500 for Humanities and Social Science Majors And AU\$800+for International courses	Approx.AU\$300+ for Humanities and Social Science Majors And AU\$600+ for International courses	Approx.AU\$400 + for Engineering and Science Majors AndAU\$600+ for International courses	Approx.AU\$1160 + for Humanities and Social Science Majors And AU\$1600+ for International courses

Thai Higher Education institutions were mostly located in Bangkok and the central district of Thailand. According to the OHEC report (2010a), 35% of all institutions

were located in Bangkok, and 15.17% were located in the central, 20.69% in the North, 18.62% in the Northern-East and 11.03% in the Southern regions of the country. This demonstrated an imbalance of spread of academic institutions countrywide (see Appendix: 2.1 showing the location breakdown of the institutions with relevant population density). Pinitjitsamut (2009) added that an imbalance of spread of institutions was not only a geographical matter, but it was also about the overall country-wide level of educational standard and capability. Differences in educational standard are related to teaching, research and publication quality. This will reflect on university ranking results (Pinitjitsamut 2009). Rajabhat and Rajamongkala universities appeared to have fewer educational resources and poorer quality teaching and research output than limited-access universities; for example, Chulalongkorn University and Thammasat University. This was believed to lead to different levels of education quality being provided by the two types of universities (Rajabhat and Rajamongkala and limited-access universities located mainly in Bangkok and the central region) and to demonstrate inequity among HEIs in Thailand (Pinitjitsamut 2009).

However, Pinitjitsamut (2009) reported public universities in Thailand were the largest providers of HEIs. Thai HEIs had grown dramatically with enrolments doubling over the decade since 1991. In 2006, the number of HEIs was 144 countrywide, with more than 1.77 million students enrolled. The gross ratio of student enrolment increased from 20.74% in 2004 to 24.03% in 2005, and rose further to reach 27.10% in 2006 (OHEC 2006). This increased number of HEIs and associated student enrolments was a reflection of the change in economic growth and internationalisation occurring in Thailand. The demand for the education offered by HEIs had greatly increased over a ten-year period. Along with this growth, the CHET had been promoting the improvement of HEIs by providing HEIs with guiding principles to increase their service provision in order to supply a greater range of disciplines to better serve student demands.

2.2.1 The relationship between the Thai government and Thai HEIs

The relationship between government and university has had a specific character in Thailand. Schiller (2006, p. 71) stated that “Strong personal and organisational ties between government and universities could hamper a transparent decision-making

process that was based on objective criteria.” In Thailand, the relationship between the Royal family and the public universities seemed to be strongly linked. Thai people greatly respected, and continue to respect, the Royal family as an important part of their culture. They believed that graduation from a public university, where the certification from the Royal family was received, was one of the most self-important and gratifying honours for their family. Thus, most Thai people were likely to select to study at or work for a public university rather than a private university.

In the early period of universities in Thailand, universities had been established as public universities, sometimes called government universities. Thai university management was similar to other Thai government agencies. Personnel, financial and other general administration had to abide by the university’s policies according to the established bureaucratic system (Pinitjitsamut 2009). Although a president of a university had authority to lead the university, the term of a president was limited – normally under 4 years. Operating under the bureaucratic system had the potential to affect public university development. Pinitjitsamut (2009) claimed that under the bureaucratic system, Thai universities had limited flexibility to drive their universities as internationalised universities generally do. This presented a difficulty for Thai public universities to develop academic excellence and provide high-quality education to meet the needs for countrywide development. Consequently, faculty staff and university administrators needed to cooperate in order to develop a new management system for Thai universities that did not come under control of the bureaucratic system. The new management system was designed to enable the development of the “autonomous university”. The new autonomous university system allowed Thai universities to run their overall administrative and managerial matters, including human resources, financing, designing subjects and courses, and others matters, under agreement and authorisation of the Thai university councils. Under the new system, Thai public universities could not run their organisations alone; they still needed some outside support. The government had to provide the autonomous universities with a regular budget, and university employees received the same privileges, as do government officers. In contrast, although Thai private universities had authorisation to provide the same education as public universities, they did not receive any budget from the government. Private universities supported and ran their institutions from their own

income. The government also monitored and evaluated the academic quality and standard of private universities to ensure that they met the national education standards (Pinitjitsamut 2009).

The government of Thailand has played a key role in improving and developing higher education in the country. The Commission on Higher Education, Ministry of Education has responsibility to carry out all public and private higher education in the country by providing policy and guidelines, and also by offering support and services related to international projects. Furthermore, recently the Thai government has provided policy, termed external quality assurance, to control the quality of education standards. This was conducted by the Office for National Education Standards and Quality Assessment (ONESQA), a public organisation set up in late 2000 (Sujatanond 2008).

2.2.2 Globalisation and international standards in Thai HEIs

Generally, the concept of globalisation has been related to increasing levels of international mobility not only of capital, resources, information and ideologies but it also involves the mobility of human resources (Rizvi et al. 2005). The changing global economy and the increased awareness of globalisation has had the impact of creating a global labour market pool and this has resulted in a greater demand for international education, especially at the higher education level (Rizvi et al. 2005). The Thai government had realised the importance of globalisation for HEIs and the opportunities it could provide to develop high quality programs of study and teaching standards. In order to achieve an internationalisation purpose, the CHET, therefore, promoted standards to create an international environment in teaching and learning practices in Thai universities (Sujatanond 2008). The number of international programs offered by both public and private universities had increased to 884 programs in 2008 (see Appendix 2.2 for number of international programs during 2004-2008), and the number of overseas students had risen from 8,500 in 2006 to 11,000 in 2007 (OHEC 2010c). In addition, mobility of students and academic staff was considered as a key factor to support globalisation in Thai universities. Thus, the Thai government has supported a large education budget and entered into a program named “University Mobility in Asia and the Pacific” (UMAP) in order to support 631 Thai students and 395 staff exchanges in the region (Sujatanond 2008).

To raise the educational level to the equivalent of international standards, the CHET set and promoted a Quality Assurance (QA) system in both public and private universities that involved the following:

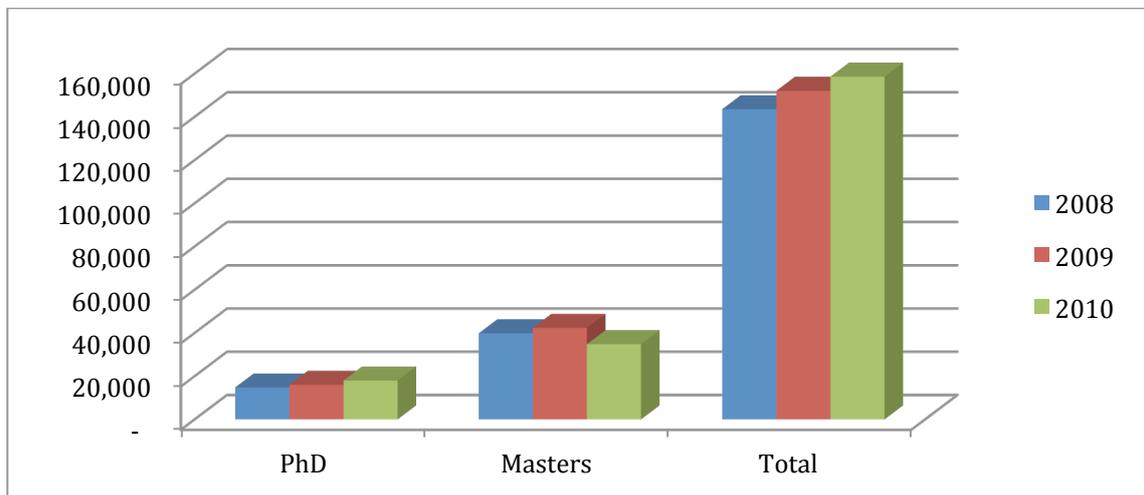
- Use of a QA system and mechanisms as the nationwide standard for HEIs
- Support for HEIs to develop their own internal QA in order to improve their institution's efficiency
- Setting of guideline principles and approaches for the initiation of QA practices
- Offering mechanisms for quality checks and evaluation at the HEIs and at faculty levels (OHEC 2010b)

In addition, the CHET also set standards covering areas such as standard criteria for the higher education curriculum; student affairs; asking permission to offer and manage a degree program in the distance education system; and the higher education qualifications framework. Each standard was related to improving the standard of all HEIs in the country. This met the purposes of developing the national education program and supporting HEIs in promoting the standard and quality of educational management up to the global standard (Sujatanond 2008).

2.2.3 Comparison of PhD-qualified staff in Thai and developed country universities

Skilled academic staff and strong research bases are an important key to push the nation to achieve its purpose of raising the educational standard in Thailand to the international level. For Thai HEIs, the number of PhD qualified staff was insufficient when compared to HEIs in developed countries. Only 11.3% of academic staff in Thai universities had completed a doctorate and only 21.9% had completed a masters degree (OHEC 2010, see Figure I). The Thai academic staff highest qualifications compared poorly to the proportion of academic staff with doctorates and masters as their highest qualification in Australia. In Australia 64% of academic staff had a PhD and 14.8% a masters degree only as their highest qualification, according to the 2011 statistical report by Department of Education, Employment and Workplace Relations (DEEWR 2011). According to Times Higher Education (Morgan 2011), the proportion of academic staff with PhD in UK grew from 48% in 2004-05 to 50.1% in 2009-10. This demonstrates a considerable gap to be filled in Thailand and at the same time indicates that number of

PhD-qualified staff is continuing to increase in developed countries. Not only will Thai universities have to close the gap, they will need to keep up with the increasing rate of PhD qualifications globally, and thus the levels of research active staff in universities throughout the world if they are to achieve the government's objective.



	PhD	Masters	Total	% of PhD	% of Masters
2008	14,765	39,779	143,469	10.29	27.73
2009	16,003	42,342	152,000	10.53	27.86
2010	17,967	34,755	158,537	11.33	21.92

Figure I :Proportion of academic staff in Thai HEIs (OHEC 2010d)

To improve the quality of Thai academic staff, therefore, the CHET have put strategies in place to promote research career paths for academics, initiate research connections, and facilitate universities to empower their research abilities (Pinitjitsamut 2009). It was believed that increasing the number of experienced researchers and research publications was one of the fundamental requirements for developing any country's competitiveness to address the challenges of the globalisation era.

2.3 Brand identity and image

According to Keller and Aaker (1993; 1992), brand identity refers to the intensity of the brand node in memory. It is the sum of the proposition that an organisation makes to audiences or consumers. Concisely, brand identity is everything that the organisation

wants their brand to be seen as by the public. Brand image is the entirety of consumer perceptions about the brand, or how they perceive it, whether or not it concurs with the brand identity (Jevons, Gabbott & Chernatony 2005). Likewise, Barich and Kotler (1991) assert that the brand image defines the way people see a particular brand compared with other brands. An organisation cannot directly control the image that the public has of it; it can control only its brand identity. Indeed, brands may be the most important intangible assets possessed by an organisation (Sääksjärvi & Samiee 2011, p. 169).

Recently, Victoria University developed its brand image via its 'Making VU' program linked to the use of a particular font and colour to distinguish it from other Australian universities in an attempt to establish their brand image in the minds of potential students (<http://www.vu.edu.au>). As Brakus, Schmitt and Zarantonello (2009) note, brand awareness is an essential condition for creating a brand image. When a brand identity is well established in people's minds, it is easier to attach associations to the brand and establish them firmly in memory. Corporate branding and the image create can communicate corporate reputation which is important for universities (Abratt & Kleyn 2012)

2.3.1 University image

According to Kazoleas, Kim and Moffitt (2001), the term "university image" relates to universities having their own specific attributes, such as commitment to providing high quality education and services to students and staff. These attributes were labelled by Kazoleas, Kim and Moffitt (2001) as "separate images" of the university. However, these separate images would each contribute to the overall image of the university as the researchers indicated the finding that "multiple images and image attributes could be held, and even struggle against each other, within each individual and change sometimes even moment to moment based on factors influencing images at that historical moment" (Kazoleas, Kim & Moffitt 2001, p. 215). In addition, Nguyen and LeBlanc (2001, p. 303) asserted that "Institutional image is described as the overall impression made on the minds of the public about an organisation." This was related to the range of physical and behavioural characteristics of the organisation, such as the institute's name; design of its buildings or overall architecture; variety of services and

courses offered; the institute's tradition; its espoused ideology and principles; and to the impression of quality communicated by each individual interacting with the institute's clients (Nguyen & LeBlanc 2001).

According to Nguyen and LeBlanc (2001), institution image was categorised into two principal components: functional and emotional. First, the functional component was associated with physical or tangible characteristics that were simply evaluated such as number of students and employees, number of campuses, and turnover rates. Second, the emotional component was described as psychological characteristics that were represented by feelings and attitudes towards an organisation. These feelings and attitudes might be explained as the personal experiences an individual has with the organisation. The emotional component could be conveyed through the information or attributes used to describe the organisation's image. Nguyen and LeBlanc (2001, p. 304) concluded that "Institutional image is the result of an aggregate process by which the public compares and contrasts the various attributes of organisations". A university, similarly to a business organisation, does not represent a single image. The images conveyed are different according to specific groups - customers, employees, or shareholders, each of whom had different experiences and types of contact with the organisation (Nguyen & LeBlanc 2001).

In another research study by Ivy (2001) supporting the institution image concept, the results emphasised that the image portrayed by a single academy was not fixed, but comparative to the images conveyed by other academies. This involved continually modifying the institution's policies and strategies to create and control their image that is then perceived and judged by their stakeholders. Kotler and Fox (as cited by Ivy, 2001) indicated that normally people set images of universities on limited and even on wrong information, but that these images would influence directly and/or indirectly the possibility of people considering, recommending, contributing to, or applying to universities. Therefore, universities needed to understand the image that they represented, and ensure that the image was providing both a positive and truthful reflection of their university (Ivy 2001).

The university's image might be consistent across the institution or differ considerably according to the particular disciplines offered. For instance, the image a university

wishes to convey of their medical school might differ considerably from that they wish to communicate in relation to their business school (Ivy 2001). The public will inevitably draw different conclusions about an overall image of the university from impressions they experience about the strengths and weaknesses of the various different courses offered by the university to arrive at an impression of the institution's overall image. Ivy (2001) added that these images were created from different sources such as word-of-mouth, past experience, and the university's marketing activities. Using website technology was considered as a comprehensive method to communicate a university's image in order to attract potential applicants and to retain high-quality staff (Braddy et al. 2009; Cober, Brown & Levy 2004). Particularly in the 21st century, using the website seemed to be one of the effective methods to communicate to a global audience (Searle 2006).

2.4 Employer branding

“The concept of employer branding was borrowed from marketing. It assists organisations to focus on how they might locate themselves in their market as an employer of existing employees, and also as a potential employer of new employees” (Tüzüner & Yüksel 2009, p. 42). Although employer branding was a fairly new concept, in practice some organisations had been applying the idea for some time now. Recently, brand image had begun to play a significant role in the recruitment and retention of employees (Berthon, Ewing & Hah 2005; Sullivan 2004). The benefit of brand image was not only in attracting customers; it also assisted in a competitive job market. It had the potential to assist organisations to stand out amongst their competitors as a desirable employer, but only if well targeted (Backhaus & Tikoo 2004; Knox & Bickerton 2003; Martin et al. 2005).

Building and sustaining a brand was likely to be a major concern of organisations in any industry. Perhaps more important for many international organisations, employer branding was able to provide a greater opportunity for the organisations to gain the attention of more potential applicants, especially when they needed to compete more strongly in attracting and appointing talented staff from the global marketplace (Martin et al. 2005). In addition, increasingly non-profit organisations, such as universities, were coming to realise the importance of branding (Arpan, Raney & Zivnuska 2003). In an

environment of increased competition, universities needed high-quality staff who were capable of both teaching and research in order to increase the university's performance and lead an enhanced position for the university (Sung & Yang 2008). To gain a competitive advantage in today's labour market, organisations needed to devise strategies for recruiting the best potential employees (Martin et al. 2005; Ritson 2002). Indeed, firms could not create excellence or produce high performance in other areas if they did not have the highest-calibre staff. It was commonly recognised that intellectual and human capital was the foundation of competitive advantage in the modern economy (Martin et al. 2005). Consequently, competition among employers to attract and retain talented staff took place in a world where advances in technology and globalisation were driving widespread change in employment practices (Berthon, Ewing & Hah 2005).

Sullivan (2004) described the concept of employer branding as the process of creating an image of being a "great place to work". Based on the marketing concept, branding was designed to create a lasting image in customers' perception (Sullivan 2004). The aim of employer branding is to create an image designed to encourage people to want to work for the organisation, supported by developing a workplace that lives up to the positive image conveyed, an employer brand would have the ability to also influence current employees. This would make them feel that they were working for a well-managed firm where they were continually developing and growing in their careers (Sullivan 2004).

A similar and related concept to employer brand is the concept of "employer attractiveness" mentioned by Berthon, Ewing, and Hah (2005). They defined employer attractiveness as "envisioning benefits that a potential employee perceives in working for a specific firm" (Berthon, Ewing & Hah 2005, p. 152). Gatewood, Gowan and Lautenschlager (1993) asserted that employer branding expanded beyond the HR notion of employment advertising. Lloyd (2002) further stated that an employer brand was known as the sum of a firm's endeavour to communicate to future and current staff that it was a good place to work. In addition, Berthon et al. (2005) mentioned that a critical tool in these activities was advertising. It had the potential to assist firms to identify, attract, employ, and keep skilled-staff.

Generally, employers were looking to be successful in their recruitment marketing efforts, but in many cases they did not have a good understanding of prospective employees' needs, aspirations and concerns. Thus, connections were not established with prospects. Those who viewed these marketing efforts, therefore, would not be provided with the means to evaluate whether or not the job available would qualify as their "dream job" (Ewing et al. 2002).

2.4.1 Communicating employer brand image

Since the rise of the digital age in the 1990s, the Internet has provided a new and important marketing option for organisations. Indeed as early as 2003, Buick (2003) encouraged small hotels to consider the Internet for marketing. Elliott and Boshoff (2005) provided evidence of increased bookings in the tourism industry using Internet marketing. Communication of information in general via the Internet continues to grow such that it has become "an important marketing and communication medium" (Cho & Cheon 2005). It had been accepted as an essential business tool compared with other communication technologies such as radio and TV (Cotter 2002). Meanwhile, Welling and White (2006) asserted that the Internet, with its combination of the written word and audio visual content, contained more information than other media and this could be the reason why there have been a high number of Internet users in the recent times. Bodily and Venkataraman (2004) stated that the Internet offered speed, ease of reach, and provided multimedia advantages. The Internet had changed the manner in which businesses communicate with their customers, suppliers, competitors and even employees. Recently, organisations were increasingly investing significant assets in cyber marketing, and at the same time consumer use of the Internet was growing (O'Cass & Fenech 2003).

Organisations adopted a variety of ways of presenting their image to their audiences. For instance, in the past advertising on billboards, TV and radio had been used. However, in today's electronic era, the Internet had fundamentally changed the business environment, not only in domestic markets but also in global markets (Rao, Metts & Monge 2003). Indeed, it is the Internet that has enabled organisations to cheaply and easily reach out to global markets. The Internet has had a substantial influence on the business environment by making the world appear smaller (Sparkes & Thomas 2001).

The adoption of the Internet allowed many businesses, in particular small firms that had limited capital and resources, to have the means to compete efficiently and perhaps equitably in the open marketplace (Quelch & Klein 1996; Sparkes & Thomas 2001).

The findings of marketing research have shown that organisation attractiveness could be influenced by advertising through an organisation's website (Allen, Mahto & Otondo 2007). Advertisements were designed to create a relationship between the organisation and its stakeholders who interacted with and contacted those organisations (Coulter & Punj 1999). Consequently, an organisation's website could provide the ideal platform to advertise organisational jobs.

By using a website effectively, organisations could, if they wished, communicate limitless organisational information and job vacancy details. This information could be imparted via multiple channels such as: general text, images, graphics animation, audio files, and interactive links (Allen, Mahto & Otondo 2007). Using websites to communicate information to a large number of job applicants commonly costs less than traditional media (Cober et al. 2004). The Internet has been used as an essential business tool to communicate organisational messages to customers, suppliers, competitors and staff (Cotter 2002). Allen et al. (2007) underlined the differences between communicating organisational information via websites and traditional channels. They asserted that using websites to communicate organisational information had the potential to provide large amounts of accessible information, enable use of various multimedia to present this information, provide greater reach, and from the viewer's perspective, it allowed job seekers to search for job information more easily and faster.

Searle (2006) mentioned that a website was commonly recognised as the first port of call for any potential employee. It should, therefore, be the first channel of communication undertaken by an employer branding strategy. Organisational websites became a main source of job applications for many firms. Cober, Brown and Levy(2004) suggested that using an organisation's website for recruitment purposes would become a more common method resulting in an increase in the number of suitable applicants. By 2001, more than 90% of large companies in United States of America (USA) were using their websites to convey position vacancies and to provide organisational information to potential job searchers (Cappelli 2001).

To gain a competitive advantage in today's labour market, universities need to understand the meaningfulness of employer branding and its ability to attract potential talented staff from around the world, as well as to retain current staff (Ackers & Gill 2005). The university ranking system in Thailand, combined with the government's commitment to further improving the tertiary education system, requires Thai universities to communicate their image not just nationally but internationally. Today, the Internet provides the ideal means of doing this. Universities with a good image, high reputation, and a website that provided easily accessible wide-ranging information would have more opportunities to recruit talented staff (Moogan, Baron & Bainbridge 2001). Using a website played a significant role in employment practices as a comprehensive method to communicate a university's image (Cober, Brown & Levy 2004). For example, Harvard University used their brand to attract a range of stakeholders both potential students and staff recruits (Curtis, Abratt & Minor 2009).

2.5 Online Recruitment

Online recruitment is defined as the use of an electronic source to recruit potential employees through the Internet technology. With regard to traditional activities of recruitment, the Internet has changed HR activities in terms that improve the speed and save cost with the recruitment process (Gibson & Swift 2011). Over the last two decades a growing number of companies have employed the Internet as an attraction and recruitment tool (Braddy et al. 2009; Cober et al. 2003; Lievens, Filip & Harris, Michael 2003). Online recruitment has commonly been used following the growth of the Internet. For instance, research conducted over 10 years ago found that more than 90% of large firms in the USA were using a Website for recruiting applicants (Cappelli 2001). In the UK, the Chartered Institute of Personnel and Development (CIPD 2006) reported that around 64% of UK companies had used online recruitment and by 2009 this had risen to 75% (CIPD 2009). In addition, online recruitment has become more popular than traditional recruitment methods to convey an organisation's brand image in order to attract quality applicants (Allen, Mahto & Otondo 2007). The link between organisation image, employer brand and recruitment has been established (Parry and Tyson 2009). Indeed, it now extends to social recruitment using LinkedIn and other internet supported social networks (Doherty 2010). Boehle (2000 cited by Parry &

Tyson 2008) revealed that expenditure on newspaper advertising has dropped 20% in the USA following the increased use of the Internet. Galanaki (2002) added that use of the Internet could reach potential applicants across the international stage, whereas, newspaper advertising would reach only a local or national audience. Job seekers have demonstrated a willingness to use the Internet. In September 2010, there were almost 2 billion searches for the term 'jobs' in Google. To follow the digital trend, therefore, organisations have to invest in establishing online recruitment and attraction to reach their potential employees (Gibson & Swift 2011).

Additionally, when compared with other attraction methods, online recruitment may be perceived as a cheaper approach to attract and to process application forms from applicants (Verhoeven & Williams 2008). The use of online recruitment allows job seekers to achieve cost and time effective searches on job vacancies. In the same way, compared with other traditional employment mechanisms - e.g. newspaper advertisements, and especially television advertisements, corporate employment recruitment websites were likely to be less costly to the organisation, more effective, and perhaps attract more viewers (Cober et al. 2004; Cober et al. 2003). In addition, an increase in mobile internet users has influenced organisations to create a mobile-friendly version to show their job vacancies. The organisation's website can be viewed on the mobile phone and applicants are able to apply for a job with a job link from their phone. Candidates can now apply from anywhere using the Internet connection on their mobile. This suggests that the recruitment process might be easier and faster than before (Doherty 2010).

2.5.1 Attraction global talent

The shortage of and difficulty in recruiting talented staff has been a significant issue in the last decade (Parry & Tyson 2008). The Chartered Institute of Personnel and Development (2006) reported that around 80% of United Kingdom (UK) organisations experienced staffing difficulties. To gain competitive advantage on the global stage, therefore, the emphasis is upon the attraction of skilled staff in organisations (Lievens, Dam & Anderson 2002; Parry & Tyson 2008). The broad range of recruitment methods available to organisations for attracting talented staff have been enhanced since the establishment of an Internet (Parry & Tyson 2008).

The Internet is borderless, but there are language obstacles, which can be overcome (Galanaki 2002). Cober et al. (2003) asserted that organisational websites had become a first source of information for candidates and that they have become one of the greatest influences on potential applicants' attraction to an organisation. Many organisations have recently used websites to send organisational messages to potential applicants; and many job seekers also use organisation's websites to acquire essential information (Cober et al. 2004; Cober et al. 2003). The possibility of recruiting overseas staff, thus, has increased in line with the use of organisational websites. Galanaki (2002) claimed that many firms across the world have already employed the Internet to assist in the recruitment process for their operations abroad. Application forms and some testing can now be completed online (Stone, Lukaszewski, Stone-Romero and Johnson 2013) and video conferencing has been used for interviews (Toldi 2011) during the selection process. These advances enable organisations to conduct international recruitment from a distance using the Internet as a tool. Inevitably, applicants will view the organisation's website in the process providing an opportunity to convey their employer brand on their screen.

2.5.2 Disadvantages of using online recruitment

Online recruitment may offer many benefits to organisations as mentioned in the previous section. However, there is some literature that mentions that online recruitment may generate many unqualified applicants increasing hours of work required to screen the appropriate candidates. For instance, Barber (2006) found that organisations could face a high volume of applications from which only a few qualified applicants were found. Murphy (2005) revealed that almost 75% of online applications in the UK were from people who were not suited to working with the companies they had applied to. Furthermore, an increased number of applications can create more hours of work to screen appropriate candidates. Consequently, this results in reducing the cost of recruiting suitably qualified staff (Elkington 2005). Bartram (2000) also described the filtering challenge as 'needing to kiss even more frogs before finding the prince' (cited by Barber 2006 p.11).

The use of online recruitment may become the main method of staffing in many organisations. However, some job seekers might not be able to access the Internet or

they are unfamiliar with using IT (Barber, Linda 2006). Research found that using the Internet to attract new employees might not be appropriate for all job seekers. Some may avoid the online process if they found technical difficulties unsupported. This consequently limits the number of potential applicants (Barber, L et al. 2005). However, those seeking academic positions are likely to be experienced IT users. Indeed Parry and Tyson (2008) stated that there was a common view that web based recruitment was particularly attractive to graduates.

2.6 Using the Internet for successful internal communication

Using technology to support communication, such as an organisation's Intranet, supported internal communication to convey messages to staff members across an organisation speedily and easily (Bilal & Muzahir 2009). This internal communication could be a part of knowledge sharing (Van den Hooff et al. 2003). Using Internet tools within the organisation's intranet, such as a discussion forum, allowed employees to share their interests, technical skills, social abilities, and important information with other employees (Chesbrough 2003). Many forums did not only allow users to "discuss" topics, they also allow users to share available resources by posting links which let other members access useful resources (Madden 2008). Internal communication via the Intranet could support an open working atmosphere. This would assist the organisational innovation process when the staff members collaborate effectively and suitably (Vapola, Tossavainen & Gabrilesson 2008) and successful implementation of innovation this can provide competitive advantage (Seybold 2006).

Dawson (2009) suggested the significant benefits related to using the Internet to communicate within an organisation could include staff engagement and creating organisational reputation. Dawson (2009) claimed that making wise use of the Internet for internal communication can enable organisations to efficiently distributed information to employees and ensure that communication across the organisation is accessible to all members of staff. Furthermore, the Intranet can strongly enhance staff collaboration by providing tools such as a discussion forum to facilitate collaboration flows. These intranet-supported communication methods are easier to access and

provide better connectivity for sharing staff knowledge across an organisation (Dawson 2009). Another benefit of using the Intranet for internal communication and the Internet for external communication could be to convey a positive organisational reputation. Dawson (2009) claimed that utilising Internet tools could create organisation attractiveness by conveying a positive employer image. Recently, younger employees have been found to judge potential employers by considering the organisations' innovation and how open they are. Use of Internet technology, therefore, was often seen as an indicator of the progressive culture of an organisation (Bilal & Muzahir 2009).

2.7 Components of effective websites

The review of a range of literature has established that what constitutes an effective website has been investigated since the 1970s. The effectiveness or quality concept was originally defined as “fitness for use” (Juran & Gryna 1970). Juran and Gryna (1970) stated that the phrase “fitness for use” is the basic meaning of the word “quality”. This means that a customer would expect products or services offered would be good enough for their use. The “fitness for use” concept highlights the importance of a consumer’s perception of the quality of a product or service and how they would judge whether or not the product or service was fit for their use. Likewise, Deming (1986), as cited by Katerattanakul(2002), asserted that *“the consumer is the most important part in determining quality of product or service thus product or service quality should be aimed at the consumer’s perspective.”* In this regard, Juran and Gryna (1970) asserted that the concept of fitness for use could be applied for all products and services, in long-run projects or complex products.

Similarly the concept of fitness for use, in relation to creating an effective website, highlights the need to design a website to suit its specific user group. One of the significant issues which any web-builder is advised to consider is how to create a web page that would encourage everyone who visited once to visit the website again and again. Considerable research has been conducted in order to develop reliable guidelines on how to create an effective website (Gehrke & Turban 1999; Katerattanakul 2002; Welling & White 2006). For instance, Gardyne (in Gehrke & Turban, 1999 p.3) suggested nine recommendations for effective web-design which included: *“brief sentences; bulleted lists; short pages; highlighted keywords; colorful; descriptive*

paragraph headings; one idea per paragraph; ... and half of the word count (or less) of conventional writing.” For effective web-design, Gehrke and Turban (1999) recommend using clear and concise sentences with appropriate spelling and grammar when designing the website, should be indicated on Gardyne’s list.

Website design is an important consideration when relying on the Internet to communicate important messages, such as conveying a university’s brand image. De Goede, van Vianen and Klehe (2011) suggested that a successful website design will not only influence organisational attraction but it could also encourage job seekers to increase their recall of information provided on the website. Until recently, research on web design for effective communication has tended to concentrate on general attributes rather than on communication for specific industries or purposes. Kent, Taylor and White (2003) and Ashbaugh, Johnston and Warfield (1999) researched web design to build investor relationships and Hashim, Murphy and Law (2007) reviewed hospitality website design. A range of frameworks and measurement systems existed for assessing generic website factors, such as ease of use, use of colour and provision of relevant information. These elements usually took the form of a checklist against which any website might be assessed. Schubert and Selz (2001) used a web assessment method to measure the effectiveness of electronic commerce websites. Their assessment tool was designed for electronic delivery and completion and sought responses to a range of attributes using a four-point scale from Strongly Agree to Strongly Disagree to measure user desire for particular features. For instance, Schubert and Selz (2001) asked respondents to indicate their strength of desire for uniqueness and originality of information. This links to Hashim et al.’s (2007) assertion that provision of relevant information was a desired feature of a website. Overall, the instrument used assessed, among other things, the user interface, structure of the content, quantity and quality of information available and usefulness of that information.

Zhang and von Dran (2000) put forward a two-factor model of satisfiers and dissatisfiers for evaluating websites. Raward (2001) developed a checklist for evaluating website design for university libraries. To create the desire in users to search a website, read the information provided and act on it is to motivate viewers thus motivation theory relates to good website design. Zhang and von Dran’s (2000) two component model has similarities to Herzberg’s (Herzberg 1987) two-factor theory of motivation.

In relation to job satisfaction, Herzberg maintained that some factors in the workplace led to satisfaction whereas others, which he termed 'hygiene factors', neither satisfied nor dissatisfied, they simply delayed the development of dissatisfaction. Zhang and von Dran (2000) viewed hygiene factors as they relate to a website as those elements that make the website functional and useable and which, if absent, would lead to dissatisfaction though their presence may not directly motivate a viewer to act. Raward's research was conducted in an academic environment, but evaluated university library website design. Academics whose attention is sought in order to encourage them to apply for lecturing position make considerable use of university library website, the suggestion that came out of Raward's (2001) research may have particular relevance to research questions in this thesis. Raward (2001) found that usability was a major factor. Usability as it relates to websites includes ease of navigating the site as a result of a structure which enables users to find their way around with ease, to remain in control, and to locate the information they desire (Casaló, Flavián & Guinalú 2008). No direct literature on university website design was located, hence the elements discussed here and expanded on in Section 2.8, which were found to be common across all authors, were used to influence the design of the instrument used in this research.

In combination, therefore, the authors reviewed agreed that the quality of the appearance of a website, its structure and technical support to assist ease of navigation when combined with the amount of information available were required for good website design.

2.8 Website quality

Research confirms that quality of presentation and effectiveness of the content of a website will determine whether a potential customer will be attracted to, or abandon, a website. For this current study, website qualities could be categorised into three major groups including: 1) Appearance Quality, 2) Technical Quality, and 3) Information Quality. These combine to attract the viewer, retain their interest, enable easy use of the site and satisfy the user's need for information.

2.8.1 Appearance quality

Applicant intention is influenced by organisational image conveyed via its website. As supported by a study of Allen et al. (2007), an organisation's website and its brand image can relate positively to early job pursuit decisions. Allen et al. study's result was based on 814 student participants and found that more information (e.g. recruitment and organisational information) presented on an organisation's website was related to creating a positive intention in job seekers. Furthermore, "organisation web sites support and extend signalling and brand equity theories by showing that job information (directly) and organization information (indirectly) are related to intentions to pursue employment when a priori perceptions of image are controlled" (Allen, Mahto & Otondo 2007, p. 1696).

Previous studies of online recruitment have found that by applying the concept of vividness, a website could be more attractive to Internet users and thereby influence the users' perceptions (Cober et al. 2004; Zusman & Landis 2002). An aesthetically pleasant website has been found to stimulate trust in the viewer Pelet and Papadopoulou (2013). Colour is a vital element in creating this impression. Pelet and Papadopoulou (2013) quoted a participant in their research who had found pleasing a website that they described as *very...very vivid* and colourful however the way that bright colours were combined was found to be important. The colours must match or appear homogenous to the viewer to invoke a positive response. Overall colour was found to be an important factor in creating trust and in influencing the viewer (Pelet & Papadopoulou 2013). Specifically in relation to website design and recruitment, Zusman and Landis (2002) asserted that website design could aid viewer's impression of the organisation as an employer. Again they referred to elements such as ease of use, structure and technical support aiding navigation, and attractiveness as leading viewers to perceive the website as attractive and to respond positively to its message. Zusman and Landis (2002) asserted that the quality of web appearance can affect attraction toward an employer. However, the research by Zusman and Landis (2002) focused on Internet job board posting but did not relate to employment websites where interested candidates might both learn about the organisation, its activities and culture and submit their application. Strong matching colours; the use of graphics, animation and video; appropriate font size and a technically sound website to that's aids navigation and

reduces time taken to locate desired information have been found to relate to users rating a websites as 'high quality' or 'effective' (Allen, Mahto & Otondo 2007; Bernard et al. 2002; Cober et al. 2004; Coulter & Punj 1999; Edell & Burke 1987; Hedge 2005; Pelet & Papadopoulou 2013; Vate-U-Lan 2007; Zusman & Landis 2002). With regard to designing an effective website, several studies have examined the major components relating to appearance quality, as described under the following five headings:

i. Fonts

Ease of reading is one of the most important attributes web-users require when they surf the Internet. To create a well-designed website, website builders should keep in mind the issue of font size/style/colour and how to produce a screen that was easy to read (Katerattanakul 2002; Nielsen, Jakob 2000; Vate-U-Lan 2007).

Reading text on a computer screen is different to reading from paper. Some Internet users do not like to read large amounts of text on web pages; they basically scan the screen by looking only for only words or phrases. This could mean that they perhaps overlook some essential information (Vate-U-Lan 2007). In addition, reading a computer screen can be slower than reading from paper. Cousin and Vinckenbosch (in Vate-U-Lan, 2007) found that reading a webpage took approximately 25% longer than reading from paper. Related research by Perrin and Rueter (as cited by Vate-U-Lan, 2007) supported the claim that reading speed on the screen for students might be slower than reading from paper by around 50%. For these reasons, it is essential to create a well-designed website in order to increase the speed of reading for the users or to enable them to gain more information in less time. However, Vate-U-Lan (2007) argued that generally users tended to choose web pages that presented more graphics and less text with larger spacing between lines.

Using different font sizes and colour could make the web page easier to read and understand. Hedge (2005) advised that when designing a web page web creators should use no more than four different font sizes on a whole page (screen) and that the page should not use more than three different font styles on a single screen. Offering an adjustable font size was an important attribute. Web designers might build in the ability for users to easily change the text size on a browser (e.g. using a drop down and select menu) rather than use text as a graphic which was inflexible (Vate-U-Lan 2007).

Using a simple font style on an appropriate background can also help web users to read faster. In a study by Bernard, Riley, Hackler and Janzen (2002), the size and types of fonts most appropriate for websites were investigated. Their findings reveal that a 12-point font size is more legible and easier to read than 10-point size, and that using Arial, Courier or Georgia fonts best supports ease of reading of website content. They also suggest that Georgia and Times serif fonts are considered the most attractive font types. The overall score for both legibility and attraction, according to the findings of Bernard et al. (2002), rates Verdana font style as the best choice for a website. More recent research on the topic of attractive fonts conducted by Hedge (2005) led to him suggesting that ‘Sans Serif’ fonts, which include Verdana, Arial, Tahoma and Helvetica are suitable for most languages. This is an especially important issue for Thai websites. Using the appropriate font style could avoid font size error issues when both Thai and English were displayed on the same page. Thai websites, thus, use the ‘MS Sans Serif’ style because it presents in the same size on the web page for both Thai and English.

ii. Colours

Use of appropriate colours is one of the issues that web designers need to consider. This is because more appropriate colours will better attract the attention of viewers. Vate-U-Lan (2007) argued that although colours might make a web page more interesting and attractive, too vivid or too great a use of colours might sidetrack the user. According to Hedge (2005), a single web page or a screen should not contain more than four different colours. Colour is best used to indicate consistency on web pages. Referring to the findings of van der Geest and LooBACK (2005), users would notice, or be drawn to, the colour on the web page first, and then they would try to accumulate a consequential grouping in each similarly coloured item. Thus, colour here can be used to guide the viewer through different topics or sections in a logical manner.

However, the use of colour needs to take into consideration the meaning that colours can convey. Some colours have a specific meaning or convey a particular message. For instance, red is commonly used to indicate emergency messages or other serious representations (e.g. danger or stop). According to Norman, Friedman, Norman and Stevenson (2000), some colour combinations should be avoided. For instance, red-green features might lose the attention of web users when used in combination. Indeed, they

might send confusing messages as in some contexts they have totally opposite meanings, stop (red) and go (green). Whereas there are some cultures where these colours would be acceptable, for instance, Portugal and Bangladesh have national flags using these colours (see http://www.photius.com/flags/alphabetic_list.html), others may not find these colours attractive.

Furthermore, earlier studies had focused on the issue of the colour of the background of web pages. Turban and Gehrke (2000) declared that use of simple background colours and plain textures might make the web page easy to read. A study by Norman et al. (2000) found that most respondents in the research preferred green backgrounds with black letters, and black backgrounds with white lettering were considered the most appropriate for use.

iii. Culture and colour preferences

Links between culture and colour have been of interest to many researchers and have been investigated by several scholars over many years. Komin (1991) claimed that culture can affect people's behaviour and emotional basis. In particular, cultural and environmental differences can lead to people gaining different messages from what they see (Segall et al. 1999). Accordingly, cultural background may influence people's perceptions of and responses to colour, and therefore, cultural differences may impact people's colour preference (Cyr & Trevor-Smith 2004). More recent findings by Cyr, Head and Larios (2010) indicate that website colour appeal is an important factor and that it influences trust and satisfaction, with different colour choices creating feelings of trust and satisfaction across cultures.

Colour can effectively communicate meaning to the Internet user as well as influence the user's awareness of the website and its content. The Internet user's perceptions toward a specific colour scheme are perceived differently by personal experience and culture. To achieve the desired effect in highly competitive online markets, therefore, web creators should understand colour preferences for different target online audiences (Cyr, Head & Larios 2010). For instance, red represents happiness in China but danger in the USA (Cyr, Head & Larios 2010). Yellow means grace and nobility in Japan (Boor & Russo 1993).

In Thailand, a study by Noiwan and Norcio (2006) provided significant evidence that the colour preferences of Thai users has changed from red (as identified by Hoft in 1995) to blue-based schemes. Noiwan and Norcio (2006) revealed that blue is the best colour combination for Thai website banners because it can encourage user interest and provide ease of viewing of the website. Likewise, previous studies have also found evidence that blue colour schemes are the most appropriate for a global audience (Lichtle 2007; Nielsen, & Del Galdo 1996). A yellow-based scheme is likely to be the second most preferred colour for Thai users, but it seems to have less appeal for use on American websites (Noiwan & Norcio 2006) and German websites (Cyr, Head & Larios 2010). Developments in Thailand over recent years may have contributed to a changed view in relation to the colours red and yellow as reference is made to ‘red shirts’ and ‘yellow shirts’ referring to groups with particular views. As such, an appropriate use of colour on a website can positively benefit an organisation, if colours are selected to suit both local and global audiences. Therefore, colours used on a website need to be carefully considered especially when web designers want those colours to attract and then retain the interest of people from different cultures and backgrounds (Cyr, Head & Larios 2010).

When designing websites, or in particular the Positions Available section of a website, universities may need to consider the findings of Chen, Whitfield, Robertson and Chen (2010) who found differences in colour and design preferences between Taiwanese and Australian website users. Level of education was also found to be a factor. When attracting academics, this may need to influence design of high quality websites if academic staff are to be attracted from a broad range of cultures.

Accessing a website to view positions vacant may be the only time some people visit the site. Ensuring that the site conveys a positive image of the organisation is, therefore, important (Doherty 2010). When the organisation’s employer brand image is incorporated even if the position viewed is not applied for, it will have provided the opportunity to create a positive view of the organisation thus perhaps encouraging the viewer to access the website in the future with a view to applying when a suitable position is available (Parry and Tyson 2009).

iv. Graphics and animation

When web builders apply any kind of graphic or animation, they need to consider how long it will take to load those graphics. Downloading time directly influences web users' attraction and commitment. Deutskens, Ruyter, Wetzels and Oosterveld (2004) claimed that users tended to more quickly exit web pages if there were too many graphics which took a long time to download.

However, applying fine background graphics could improve website quality. Vate-U-Lan (2007) argued that attaching fine graphics to decorate the website could magnetise Internet users. Some animations were essential and meaningful to present products (Gehrke & Turban 1999). Research into websites graphics and use of animation directly related to universities was not available. Graphics were imperative to present the used-cars, for instance on a used-car website such as www.carsales.com.au, so that the potential purchaser can see the car they are interested in, not just read about it. The number of users would decline if photos of "the product" were not displayed. Indeed, real estate companies now have considerable success in using not just graphics and animation for by applying the principles of virtual reality to provide the viewer with the impression that they are inside the property viewing it as if walking through it. Tuzovic (2009) found that potential purchasers of property wanted to be able to view plans and videos of those properties and that research participants felt that virtual tours should be routinely provided. It could be expected that similar principles would apply to all websites.

Although employing the use of graphic animations on the website might motivate people's interest, web designers need to balance this against download speed, especially if users are likely to access the Internet via modems (Vate-U-Lan 2007). To avoid long download times, web designers need to reduce the size of the graphics used on the web page. Hedge (as cited by Vate-U-Lan, 2007 p.76) suggested that "*the technique was using small images with interlaced images and also repeated images where possible and using 'IMG SRC' and the 'ALternate text' tag.*" ... "*The 'Alt' tag on a web page is a text description added to the HTML tag that displays an image whenever*" ... "*the cursor is moved over the image.*"

v. Use of attractors

Utilising attractors, such as giving a free content service or providing useful information, could improve the quality of a website because it could raise people's interest or persuade a greater number of web-visitors to act. Wilson (in Gehrke & Turban, 1999) stated that for e-business success any links to useful information located on the website had to relate closely to the products or services being sold on the website. However, sometimes people might look at the website as unprofessional or amateur if it employed too many free content features.

To improve the attractiveness and effectiveness of a website, Gehrke and Turban(1999) suggested that website designers should provide a Frequently Asked Questions (FAQ) section. FAQs assist web users to gain a better understanding of the website, its content and how to locate information sought. FAQ also assisted the web-administrator by decreasing the number of basic requests for information or assistance from the users and thus reduced the need to answer regularly the similar questions.

2.8.2 Technical quality of website

Technical quality of a website could be defined as the constructs of accessibility and usability by Internet users (Cober, et al. 2004). There are a number of variables reflecting technical quality, such as page-loading speed (Gehrke & Turban 1999), valid links, website navigators (Cober, et al. 2004), and language (Cyr & Trevor-Smith 2004). As supported by Tan and Wei (2006), a well-designed website can assist Internet users to easily access information covering all of provided web content.

Page-loading speed

According to a survey conducted by Hamilton (as cited by Gehrke & Turban, 1999), loading time was absolutely imperative to the achievement of a quality website. Around 77% of the respondents from Hamilton's survey mentioned that slow page-loading speed was the most common issue influencing their decision to abandon the website. Most Internet users do not want to spend a long time loading a web page, and it may lead them to leave that page and then search others, possibly that of competitor's websites (Gehrke & Turban 1999). Thus, use of large graphics or animation files needs to be considered carefully when designing a web page. In this regard, Gehrke and

Turban (1999) emphasised that the delay in loading time of a web page might be the main reason for losing business opportunities. In some cases, however, page-loading speed is out of the control of the web-creator. Many factors such as server speed, performance of the users' computer and modem, quality of local lines, and other possible factors influence download speed. The designer, therefore, must build the site with all possible users in mind.

According to Gehrke and Turban (1999), six factors are suggested to avoid slow page-loading speed and there are listed below:

- **Keep graphics simple and meaningful.** This refers to unnecessary graphics as “image irritation” should be dislocated on a web page. Gehrke and Turban (1999) suggested that a single web page should be limited so that the total graphics and text did not exceed 600 KB.
- **Limit the use of animation and/or multimedia plug-in requirements.** Animation can be the main reason for large files that delay page loading. According to Haine (as cited by Gehrke and Turban 1999), most people will allow the web page only ten seconds to loading, if it takes longer they are likely leave the page. Gehrke and Turban (1999) maintain that information content should account for 80% of the entire website. It should be remembered that plug-ins requiring users to download and install the programs might also cause to the users to abandon the page. Gehrke and Turban (1999) advised that web-designers should avoid the need for viewers to download software to view a the contents of a website.
- **Make use of thumbnails.** Thumbnail graphics, which are typically only about 100 KB, are an effective approach to utilising graphics without significantly increasing the page-loading time. Thumbnails offer the user an option of whether or not to wait for a large graphic to download, without forcing it as a default.
- **Offer ‘Text-only’ choice.** Providing an option to users to load text only increases speed and allows the use of a greater variation of browsers.
- **Frequently monitor server hosting and Internet route.** Sometimes delays experienced on websites are not the result of design mistakes, the server and

Internet route might be the cause (Gehrke & Turban 1999). Selecting a host server is one important duty that the web administrator should not overlook. The host server has to be trusted and accredited.

- **Use progressive rendering.** Sklaire (as cited by in Gehrke & Turban, 1999) describes this term as allowing text to load first, followed by graphics. This lets the user read the content while the graphics are loading.

However, the transmission speed of data was seen to be a less important issue due to recent advances in technologies. The Internet speed has dramatically improved and continues to improve. It is now faster than during the last decade when, early the 2000s, Internet connection was commonly via dial-up modem; the speed of which was limited to less than 56 Kb/sec, whereas currently available broadband technologies allow transmission of data at a speed over 20 Mb/sec via ADSL 2+ connection technologies (Horrigan 2009). Despite recent Internet speed improvements, access to new fast technologies is not available in every country, especially in developing countries or remote locations. In Thailand, the Internet speed is typically under 4 Mb/sec and this is provided only in the big cities. A speed of less than 2 Mb/sec are offered in rural areas, and some regions dial-up modem connection is still used (MICT 2009) in Thailand. Kapurubandara and Lawson (2006) reported that Sri Lanka was impeded by insufficient telecommunication services leading to poor Internet access. This meant page-loading speed was still a considerable issue that could not be overlooked when wishing to attract users from Sri Lanka.

Valid links

To develop the successful website, absence of navigation errors may affect the satisfaction of the users (Rababah & Masoud 2010). This was confirmed by Rababah and Masoud (2010, p.1), they claimed that *'The quality of a website is a property difficult to define and capture in an operational way, yet everybody feels it when it is missing. In fact, for a website there can be as many views of its quality as there are usages. Quality may depend on task-related factors affecting end users such as presentation quality and appeal, content and function adequacy, and navigability'*. An invalid link is a link that does not progress the users search. It has been found to be one of the most annoying design faults on a website (Gehrke & Turban 1999). Web-

designers need to ensure that the website uses well-labelled and accurate links and administrators need to check that links remain valid over time.

Berst (in Gehrke & Turban, 1999) asserted that a website should not contain ‘Under Construction’ signs. He stated that he considered this to be one of his “Seven deadly website sins”. However, if web-builders had to display an “under construction” sign, an approximate date of opening should be provided. It should be possible, using current web-design software, to modify a website without shutting it down. Tadjer (in Gehrke & Turban 1999) suggested that a website should be designed for flexibility to amend the website while it was still online. Current web-design software programmes that allow this were, for example, Adobe Dreamweaver CS6, Visual Studio 2xxx, and Web studio 5.0. These programmes allow web-designers to make urgent changes without having to take the site off-line.

Website navigation

Website navigation is aided by the use of a search facility, or individual website search engine. As confirmed by Fan and Tsai’s study (2014, p. 1144), *‘navigation design is the complete and accurate planning of the website structure to enhance convenience for users and allows them to quickly find needed information’*. A well-designed search facility will provide website users with more flexibility to browse the site and to skip to particular pages of interest using the facility (Tan & Wei 2006). Conversely, a poorly designed website can discourage web users and it may also cause them to abandon searching the website if they cannot easily and quickly find what they want. Links and menus may provide similar access, however Spool, Scanlon, Schroeder, Snyder and De Angels (1999, in Hossain & Hossain 2007) found that up to one third of website users used the search facility first and therefore its functionality is an important feature of a website and serve the same purpose on an organisation’s website as do Google, Yahoo and similar search engines on the Internet (Rose, Khoo & Straub 1999 in Inversini & Buhalis). In relation to this current research, this could mean potentially suitable applicants not pursuing a search for information and thus not applying for a position advertised on the website. Additionally, frustration caused by poor search engines will not assist in creating a positive image of the organisation overall.

According to Newman and Landay (2000), a site map is “a diagram showing the structure of a site”. In some cases, site maps were built on the release version of the website, these were often considerably different from the site maps used internally. Gehrke and Turban (1999) claimed that a large website with several subsidiary pages should have a site map or navigational menu to guide users on how to move from page to page easily. The site map ensures that the user can easily gain an overview of the entire website and this enhances user understanding of the information structure of the site (Newman & Landay 2000). In addition, Cober, et al. (2004) added that navigational menus could guide users to specific information. For potential academic job seekers, this might include courses offered and publications by faculty staff, research centres and current research projects, as well as the research interests of the university. Of course, for position seekers, relevant position descriptions and contact details for further information are vital.

Language

Cyr and Trevor-Smith (2004) claimed that language could be a huge obstruction to users gaining information from a website and, to be accessible, websites must be presented in the language of the users. Ensuring that information is available in at least two languages (e.g. English and another) was highly recommended for internationalisation, and quality of translation was also to be considered an important issue (Cyr & Trevor-Smith 2004; Dempsey & Sussman 1996). A study by Robbins and Stylianou (2002) found that 100% of Latin and Asian websites had translation capability, compared to 60% of Nordic cluster websites, which included the countries sharing the influence of Hanseatic language including Norway, Denmark, Germany, Netherlands and Sweden.

It is common that most Thai universities would prefer to use Thai language on their own website than other languages. However, multi-languages (mostly Thai and English) are also provided with English provided on limited pages (Callahan & Herring 2012). Only some university websites provide full English versions on all pages. In fact, web users can choose “English version only” on some main pages but most pages are still presented in the Thai language only, especially in the job vacancies section. This may be a possible obstacle for overseas applicants limiting their ability to search and apply

for a job in Thai universities because all the information they need is not presented in English.

2.8.3 Information quality

Previous studies in relation to staff recruitment have suggested that providing sufficient information about the position and the organisation is positively related to attraction (Allen, Scotter & Otondo 2004; Barber, et al. 2005; Rafaeli 1998) of suitable applicants. According to Barber and Roehling (1993), a study used verbal protocol analysis to examine potential applicant behaviour and information quality. The results showed that the applicants responded positively to the amount of information provided by recruiters. More recently, research has also revealed that the amount and quality of information influenced potential applicants and their satisfaction with the recruitment message. Regarding information provided, thus, job recruiters need to be concerned about the range, type, richness and realism of the information provided (Allen, Mahto & Otondo 2007; Allen, Scotter & Otondo 2004).

Allen et al.(2004) claimed that providing high quality, relevant information invokes a stronger positive perception in potential applicants. Adequate information might reduce hesitation in job seekers and increase positive attitudes toward the organisation resulting efficient recruitment. Basically, potential applicants respond positively to the quality of information shown on the website. A high quality website will facilitate the process of finding information for web users by offering them clear and relevant information which in turn will make it easy for the user to access and obtain the information they require (Tan & Wei 2006). By providing relevant and sufficient information concerns related to the possibility that positions advertised on Internet will attract too many unsuitable applicants is addressed.

A website that presented complete information with accurate content, and which was uncomplicated enabling understanding of the product or service information might lead customers to judge the site to be 'a trusted site'. This is especially so if it provided information considered to be reasonable to base decisions on (Cober et al. 2004). Hence, information quality and its meaningfulness and relevance are an issue related to this current study. Those considering applying for positions will require appropriate information for decision making.

Whereas offering sufficient relevant and reliable information results in a successful website, providing insufficient, ambiguous or erroneous information could lead to a negative perception by users thus rendering the site ineffective and creating a negative image of the organisation. This issue was discussed in a study of information quality. According to Katerattanakul (2002 p. 59), the quality of information referred to '*the consumer information-transaction gratification*'. The researcher asserted that "the website designed to support a consumer information search would facilitate not only consumer information-seeking gratification, but also consumer information-transaction gratification." This meant that if the website was providing unambiguous and implicit information, such as clear statements and was unproblematic to search, it could enhance user satisfaction. Consequently, users were more likely to visit the website regularly.

According to Katerattanakul's framework (2002), information quality can be divided into four major categories, as listed below:

- a) *Intrinsic information quality* implied that information had quality as its basis and that precision of information was the key element of intrinsic information (Pipino, Lee & Wang 2002). Truthfulness and accuracy of information can relate to the reliability of the website and influence user satisfaction and intention to conduct a transaction. Shankar, Smith and Rangaswamy (2003). Where information quality led to a perception of unreliable content, users were unlikely to revisit the website. Furthermore, unsatisfied users were likely to warn other users to keep away from the website.
- b) *Contextual information quality* suggests it is a requirement that information quality relate to providing relevant information. Value is attached to the purpose of the information. In the business-to-customer context, comprehensive information would include price of product or service, availability, expected delivery time, product comparison, and photos of the product (Katerattanakul 2002).
- c) *Representational information quality* was related to the format of information presentation. Information should be concisely presented in a legible and easy manner to aid understanding for all users. Hong and Moriai (in Katerattanakul, 2002) supported that use of a mixture visual elements, such as images, colour, icons, text, or font, which were provided on the web page could influence user's perception and understanding.

d) *Accessibility information quality* emphasised the technical accessibility of the system. Katerattanakul (2002) stated that it was an essential for websites, especially complex websites, to provide sufficient navigation tools to enable users to easily access their preferred information quickly.

One of the critical issues related to information on the website is how web-users might make contact with the web-administrator. Support for this issue is provided by Kent, Taylor and White's (2003) study that found that a website that did not provide contact information could lose business opportunities. Gehrke and Turban (1999) asserted that a professional website normally located a 'contact us' button on every page. This ensured that users were able to directly contact the web master if they needed to; whilst building confidence in the users to trust and thereby desire to purchase from the website.

Presenting total reward information

Previous researchers examining the type of information affecting potential job applicants and the views they formed of the attractiveness of an organisation found that job seekers commonly obtained a range of information when they were searching for a potential job. Previous research into employment-related information indicated that organisations readily presented some information about themselves, such as culture, but there was less information available on benefits and salary (Cober, Brown & Levy 2004).

In general, a website offering more information on employment conditions has been considered as a key predictor of organisational attraction (Cober, Brown & Levy 2004; Cober et al. 2003). Earlier studies revealed that successful recruitment included providing material relating to income and conditions of employment and that this impacted positively on organisational attraction. For instance, studies by Barber and Roehling (1993) and Cable and Judge (1994) found that job seekers generally considered the salary and benefits offered by an organisation as their first priority when making decisions. Moreover, many job seekers looked for employment opportunities that offered them career development and job challenges from a prospective organisation (Rafaeli 1998).

More recent research also reported similar results on related recruitment information. Cober et al. (2004) found that when investigating an employer, many job applicants usually spent an amount of their time considering information relating to salary and benefits which were presented on the organisation's website. The aspect of development opportunities was also viewed as significant information influencing organisational attraction (Cober et al. 2003; Turban 2001) and thus important to provide.

Cober et al. (2003) asserted that locating details of pay and conditions in an easily accessible section on an organisation's website was found to have a positive effect on job seeker perceptions. Furthermore, the findings of Cober et al. (2004) showed that around 75% of respondents claimed that the information found regarding salaries and benefits available on a potential employer's website would have a positive effect on their perceptions.

2.9 Attraction and recruitment

Recruitment has traditionally been defined as 'the process of developing a pool of qualified applicants who are interested in working for the organization' (Greene & Mi 2013, p. 6). In the context of this research, attraction and recruitment success therefore is viewed as an attraction and recruitment strategy which ensures that qualified applicants apply for vacancies, in this instance, academic positions in Thailand universities. Although the number of applicants might be used by some to measure success, it is not volume but quality and suitability of applicants which is important in this research. Supporting this will be an effective internet recruitment system and Lievens and Harris (2003) point out that using the internet demonstrates that recruitment as become a marketing exercise for organisations. Therefore, success will constitute attraction of suitable applicants and use of the university website to support application for the job.

People are now commonly regarded to be an organisation's greatest asset (Balogun & Johnson 2004). As a result, this is a major priority on the HR agenda because all organisations need to attract, recruit and retain key talent if they are to succeed (Frank, Finnegan & Taylor 2004). This was particularly so for universities which now compete to attract students from around the world, thus, the quality of their teaching and research

was of vital importance. To improve the quality of teaching and research, attracting and recruiting highly-skilled academic staff is one of the most essential ways for survival in an environment of global competition (Ackers & Gill 2005).

Attraction efforts include communicating a positive message about the organisation, one that creates an image of a desirable place to work in order to ensure that organisations gain the attention of potential applicants (Dessler, Griffiths & Lloyd-Walker 2007). Successful recruitment was supported by effective attraction efforts and results in attracting people both best able to perform the role and who would fit into the organisational culture (Dessler, Griffiths & Lloyd-Walker 2007). Supporting this will be an effective internet recruitment system and Lievens and Harris (Lievens & Harris, 2003) point out that using the internet demonstrates that recruitment has become a marketing exercise for organisations. Therefore, success will constitute attraction of suitable applicants and use of the university website to support application for the job.

2.9.1 Attraction via employer branding and websites

Previous research relating to using organisational websites for successful recruitment reported that most job seekers claimed a website was the easiest and fastest channel to search information about job vacancies (Cappelli 2001; Chapman & Webster 2003). Using organisational websites to attract job applicants was slightly similar to traditional recruitment practices; however, the use of a website provided some major differences. Websites communicated information to a huge number of job applicants and provided practically unlimited information via a mixture of multimedia such as text, graphic animation, pictures, sound as well as interactive links (Cober et al. 2004; Cober, Brown & Levy 2004). Furthermore, using the organisation's website seemed to be less expensive than traditional recruitment methods (Allen, Mahto & Otondo 2007; Allen, Scotter & Otondo 2004; Cober et al. 2004). For the job applicant, the ability to access the information at any time of the day and any day of the week, from the comfort of their home, was also attractive (Sylva & Mol 2009).

In addition, Allen et al. (2007) summarised the differences between the uses of recruitment websites and other traditional mechanisms as follows:

- Websites differed from traditional passive sources such as newspaper advertisements by offering more information, and communicating in multiple media with greater amounts of accessible information.
- Websites differed from traditional active sources, such as job fairs, by allowing applicants control over the search information for getting different types of information, and having greater reach.
- Websites differed from informal sources such as word-of-mouth in which organisations could take control of webpage contents and design its appearances.

Adopting websites in academia was likely to present a positive result. The university website creates an initial awareness and positive attitude in potential students and staff toward the university (Thelwall & Harries 2004). Consequently, universities would have the opportunity to increase the quantity of potential applicants. Furthermore, the university websites could be used to support the building international connections and of their reputation. This would provide a greater chance for the university to attract and recruit highly-skilled applicants from around the world (Thelwall & Zuccala 2008).

Previous research on organisational websites relating to applicant attraction argued that websites were not the only recruitment method that communicated organisational images effectively. Some other recruitment methods might be more appropriate. For instance, referral sources might provide more realistic and reliable information than website sources (Cober et al. 2003). However, at the earliest stages of the recruitment and selection process, websites were considered most important as an organisation can provide the information by using website elements to affect the applicants' attitudes and perceptions about aspects of the job and organisation (Cober et al. 2003; Collins & Han 2004). The use of the website also allowed job seekers to achieve cost and time effective searches on job vacancies. In the same way, compared with other traditional employment mechanisms - e.g. newspaper advertisements, and especially television advertisements, corporate employment recruitment websites were likely to be less costly, more effective, and perhaps attract more viewers (Cober et al. 2004; Cober et al. 2003). If specific job information is carefully worded and presented, the issues of attracting too many applicants should be avoided.

2.9.2 Attraction via other mechanisms

Successful organisational employment practices enhance corporate attraction by communicating to potential applicants a positive image of the organisation. To create this image, the job applicant might also benefit from exposure to other recruitment mechanisms rather than employing only corporate recruitment websites. According to Van Hoyer and Lievens (2005; 2007), traditional recruitment practices could be divided into two types with regard to information sources: external information sources and internal information sources. External information sources include word-of-mouth and publicity which are uncontrolled by the organisation. Organisations that ensure that their websites convey a positive image and that conduct their recruitment and selection procedures in a manner that is perceived to be equitable and according to procedural justice principles are able to have some influence over external publicity (Posthuma & Campion 2005) whilst at the same time supporting commitment and retention (Giauque, Resenterra & Siggen 2010). Internal information sources refer to recruitment advertising which is created and controlled directly by the organisation whereas external sources are not under the direct control of the organisation. These information sources – word-of-mouth, publicity, and recruitment advertising, involving employment methods are reviewed in the following:

Word-of-mouth

Recently, “word-of-mouth” as a recruitment aid was defined in marketing terms as “ an informal, person-to-person, communication process of information searching between a perceived non-communicator and third parties about consumers’ feelings after services post-consumption” (Chen, C-H 2006, p. 7). Van Hoyer and Lievens (2005) defined word-of-mouth as external information sources, which were basically not under the direct control of the organisation. Word-of-mouth, in a recruitment context, includes interpersonal communication on an organisation’s recruitment activities, and organisation history or specific jobs. Word-of-mouth could be conversations with friends and suggestions from experienced persons, relatives or teachers, for example. It could provide both positive and negative information which would impact an organisational attractiveness (Van Hoyer, Greet & Lievens 2005). Collins and Stevens (2002) studied how word-of-mouth affected attractiveness of an organisation and found

that strong positive word-of-mouth messages could influence organisational attraction. In addition, Van Hoya and Lievens (2005) also found that both positive and negative messages provided by word-of-mouth could affect organisational attractiveness and interfere with the effectiveness of recruitment advertising (e.g., paid advertising). Van Hoya and Lievens (2005) claimed that negative word-of-mouth had more impact than positive word-of-mouth. This would indicate that word-of-mouth and recruitment advertising could improve organisation attractiveness. However, creating a positive image through word-of-mouth was least costly and considered more reliable as an information source (Van Hoya, Greet & Lievens 2005). Van Hoya and Lievens (2005) suggested that organisations could create an image that would lead to positive word-of-mouth messages and thus indirectly control how their organisation was viewed as a potential employer. This could be through, for instance in the university context, supporting campus recruitment activities, or developing a good relationship with core influential people and campus leaders (e.g., career counsellors and student advisors on campus). The manner in which all human resource management activities are conducted in an organisation can also impact on employee satisfaction, commitment and thus their intention to remain (Giauque, et al. 2010) and speak well of the organisation.

In the academic field, word-of-mouth communication has been broadly examined as a significant source for recruitment and retention of students (Van Hoya & Lievens 2005, Chen 2006; Collins & Stevens 2002). There is only limited published research addressing issues relating to the impact of word-of-mouth on the recruitment and retention of talented staff specifically in academia. In formal person-to-person communication this might happen in various situations and places. At conferences, for example, academic staff might regularly have a chance to convey the institution brand promise to outsiders. Schultz and Schultz (2000) stated that employees were the key internal brand promise senders who could deliver the actual performance of an organisation to the external stakeholders. Schiffenbauer (as cited by Judson, Gorchels, and Aurand 2006) underlined that brand messages would be not successful if they were not supported by employees within the organisation. To “live a university’s brand”, the university must have an excellent understanding of their distinctive brand then provide evidence of the brand to their employees as the internal communication recipients, as well as external communication senders (Judson, Gorchels & Aurand 2006). The

interaction of internal and external information was required to support positive message via word-of-mouth, but still acknowledge that the university would not have total control over this message. The university could influence the brand message by attempting to ensure that policies and practices lead the university to live its brand, however how this was experienced by people outside the organisation as a result of their interaction with the university, could not be always not totally controlled by the university. Different people would have different expectation (Judson, Gorchels & Aurand 2006).

Publicity

Collins and Stevens (2002) defined publicity as an information source relating to recruitment within an organisation. This information was about an organisation as an employer delivered by editorial media which normally was unpaid for by the organisation, such as TV news, or newspaper or magazine articles. Van Hoye and Lievens (2005) asserted that publicity was an external recruitment information source, similar to word-of-mouth. It has the potential to convey positive and negative information affecting organisational attractiveness. However, publicity was a non-personal communication form. Universities could not directly control information provided through publicity; they might only manage the content through public relation efforts influencing content in the public press, or at public events (Van Hoye & Lievens 2005). Positive publicity has the potential to positively impact a university's attractiveness and it could support the effectiveness of other recruitment initiatives (Collins & Stevens 2002).

Recruitment advertising

Kotler (2000) defined recruitment advertising as any paid method used to present and promote an organisation as an employer initiated by the organisation itself. Recruitment advertising can be communicated in many forms, such as recruitment brochures, job postings in newspapers, on TV or radio, and on websites. It was normally considered as a promotion cost and it was expensive because advertising space needed to be purchased. Van Hoye and Lievens (2007) claimed that recruitment advertising was an internal recruitment information source. It could be controlled by the organisation to create a positive impression to improve the organisation's attractiveness and increase the

number of potential applicants. Cable and Turban (2001) stated that organisations attracted potential applicants by using well-designed recruitment advertising which could create a greater awareness of the organisation in job seekers. Furthermore, previous research showed that applicants were more likely to be attracted to familiar companies rather than unfamiliar companies (Gatewood, Gowan & Lautenschlager 1993; Turban 2001; Collins & Han 2004).

Collins and Han (2004) found that higher quality applicants were more likely to apply to companies that employed a high level of advertising because the applicants believed that these companies might have an equally high level of job opportunities. In contrast, lower quality applicants were more likely to apply to companies that employed both high and low levels of advertising because they thought by doing so they could enhance their opportunity to get a job. Research by Collins and Han (2004) found that recruitment practice, corporate advertising, and firm reputation had direct effects on applicant pool quality and quantity. Indeed, Collins and Han (2004) found that low-involvement recruitment practices were more successful for organisations with a relatively low level of use of advertising and low reputation, while high-involvement recruitment practices were more successful for organisations with fairly high levels of use of advertising and a good reputation.

Collins and Han (2004) categorised recruitment practices into two groups; low-involvement recruitment practice and high-involvement practice. First, low-involvement practices normally contained a little information about an organisation and required little or no search efforts from applicants. This advertising communicated only general images or messages to create an initial awareness and general positive attitude toward the organisation. Low-involvement practices involved the organisation displaying an advertisement in a newspaper, recruitment posters, or using banner advertisements on websites in order to create an initial awareness and attract potential applicants (Martinez 2000).

Second, high-involvement recruitment practices required greater cognitive efforts than low-involvement practices because they contained more detailed information providing job details, and employment conditions or requirements (Collins & Han 2004). Thus, applicants needed to be motivated and interested to find more information to apply for

the jobs. Collins and Stevens (2002) suggested that presenting employee endorsements considerably influenced application decisions by affecting the applicants' attitudes and perceptions about aspects of the job and organisation. Collins and Han (2004) argued that both detailed recruitment advertising and employee endorsements were likely to positively affect applicants' perceptions of both job and organisation attributes.

In academia, existing research addressed the importance of advertising for recruitment purposes. However, most of the research focused on recruiting students, not staff (Chung 2010; Gray, Fam & Llanes 2003; Harris 2009a, 2009b). Only restricted previous research has been concerned with recruitment advertising for academic staff. Gray, Fam and Llanes (2003) revealed that the use of website and print media as university information sources were perceived to be the most useful sources for attracting potential students in Asian markets (The survey was conducted in Malaysia, Singapore, and Hong Kong.). Website and print media were found to convey both detailed service information and emotional messages, and were likely to provide easy access and reach a wide audience. Therefore, most Asian students in the study responded that these sources were the most helpful for obtaining overseas university information (Gray, Fam & Llanes 2003). Presenting the university web address on all media advertising, such as newspaper and TV advertising, also supported creating an awareness of the university website (Gray, Fam & Llanes 2003). Another example reported by Harris (2009a) claimed that universities in the USA viewed their students as customers who were basically interested in excitement. By employing TV advertisements during American football league games, universities and colleges could raise awareness in potential students and positively enhance their image (Harris 2009a). The research was conducted in 43 US institutions that participated in ball games during season 2006-2007.

These universities were found to use advertising that created differentiation between and among rivals (Harris 2009a). It could improve the awareness of potential students of universities and their courses, and increase brand recognition of the institutions (Harris 2009a). By using other media a mixed marketing approach could include education fairs, sponsorship, and orientation days, where more detailed information could be provided to potential applicants and thus create a positive image of the institution (Chung 2010).

Literature supporting the use of recruitment advertising specifically for academic staff purposes was not available; however, advertising for academic positions might occur via related professional associations. For example, members of the Australia and New Zealand Academy of Management (ANZAM) receive management-related information and share their research and teaching insights. They benefit from learning from the networks. ANZAM communicates with academics in management and other related disciplines worldwide via newsletters and email notices. ANZAM members receive information relating to academic positions available, schedule of academic conferences and seminars, recent research announcements, and other valuable management-related information and research. Furthermore, professional associations are also found in specific disciplines such as the Australia and New Zealand Marketing Academy (ANZMAC) for marketers. The UK also has the British Academy of Management (BAM) and there is the European Academy of Management (EURAM). By contrast, academic associations in Thailand are not as well established as in Europe, North America or Australia. For example, the Thai Society of Higher Education Institutes on Environment (TSHE) was established to support collaboration between HEIs in order to research, develop, and resolve environmental issues for the benefit of the Thai public. The Association of Private Higher Education Institution of Thailand (APHEIT) was established to support cohesion and cooperation among private HEIs, and to lift the status of private HEIs by building public trust.

2.10 Factors affecting recruitment and retention

To increase the number of applicants from research students for academic jobs, Metcalf, Rolfe, Stevens and Weale (2005) suggested offering the opportunity to do research against which students were able to set their research agenda. Metcalf et al. (2005) found that 63% of research students put their emphasis on the importance of “a career offering research” and only 30% were attracted by teaching. Only one-third of research students said offering a high salary was important for choosing their career. Metcalf et al. (2005) claimed that intangible rewards, such as offering a healthy, safe and supportive working environment, providing a variety of work tasks and the freedom to create their own research, enabling employees to see the outcomes of their performance and its impact on their jobs were becoming more important for attracting skilled-

teaching staff in universities. Furthermore, other intangible but highly valued elements related to attraction of job applicants were: autonomy on the job, control of their research, career advancement, teamwork, flexible working hours, and job security (Metcalf et al. 2005).

Recruitment and retention issues for academics are intensifying when locating skilled staff means competing with the private sector (e.g. IT, law and engineering) that generally offer higher pay and benefits (Metcalf et al. 2005). Comparing the academic and private sectors, the University Council for Education Administration (UCEA) (2002) reported that HEIs faced more difficulties in attracting large numbers of applicants than did the private sector, and those that they did attract were regularly below the required quality. Furthermore, UCEA (2002) also reported that recruitment of young talented academic staff was made difficult as a result of the low starting salaries offered.

Successful recruitment and retention are influenced by both financial and non-financial benefits. However, it is possible that providing “pay” details tends to become greater for recruitment than retention because many applicants may have less knowledge and information about the organisation they applied to work for (Ackers et al. 2006; Cable & Judge 1994; Clark, RL & d’Ambrosio 2004; Metcalf et al. 2005). As such, the applicants may have more concern relating to those benefits they could earn from the organisation rather than the organisation’s profile. In academia, the pay of financial benefits may include teaching and researching; and the non-financial benefits may consist of job security, work coordination, job freedom, professional development, family-friendly work practices, and workplace environment (Coates et al. 2009; Locke 2007). To be successful in attracting applicants and retaining current staff, therefore, it is necessary for an organisation to provide an attractive job offer (Metcalf et al. 2005).

Pay and benefits

According to a survey of HR departments and the case studies (from a sample of 14 HEIs) in UCEA (2002), pay levels were the key factor influencing recruitment and retention (as cited by Metcalf 2005). More than 60% of respondents claimed that pay was a main factor behind the success of recruitment and retention, especially for skilled-staff who were valued in the private sector, for instance in the areas of computing and

IT, law and accountancy. These skilled-employees tended to leave the HE sector. In addition, HEIs in London and other major UK cities reported that high rental housing and travel costs were aggravating the low salary issue (Brennan, Locke & Naidoo 2007; Locke 2007).

Clark (2001) found that job satisfaction was the best forecaster of turnover in the economy as a whole; pay was the second best forecaster. A study in the USA by Ehrenberg (1991) revealed that universities that offered higher rates of pay to staff, for instance more competitive pay according to discipline and external demand, were more likely to attract employees. A study by Mallam (1994) in Nigerian colleges found that the most significant factor affecting voluntary turnover was dissatisfaction with pay. As Thailand is also a developing country, this finding may be relevant to Thai universities. Furthermore, in a study in UK, Oshagbemi (1996) found that UK lecturers were generally dissatisfied with pay and that they were willing to leave their faculty for better pay (54% dissatisfied and 30% satisfied). Pay was one of seven factors examined in Oshagbemi's study and it was found that pay had the highest number of academic staff expressing dissatisfaction.

Clark and Oswald (1996) found that workers' job satisfaction levels were negatively related to their wage rates. This finding, when applied in the academic field by Ward and Sloane (2000), revealed that subjective measures of comparative salary levels more significantly impacted on academic job satisfaction than did objective measures. Staff satisfaction with salary was inversely related to perceptions of what staff felt they could earn elsewhere (Coates et al. 2009). Metcalf et al.'s findings (2005) suggested that highlighting other rewards, for instance autonomy and research support, may assist to counterbalance the lower level of pay offered. Certainly, for those committed to research and teaching, it is likely that a small pay gap would be addressed in this manner and thus target high quality, committed academic staff who are likely to remain in academia because it provides them with the type of work they are interested in.

There are few studies of academic salaries available. The main reason for the lack of the studies might come from the difficulties collecting data from HEIs (Metcalf et al. 2005). However, recent literatures have been focused more on the issue of academic salary related to recruitment and retention. For instance, studies by Shoaib, Noor, Tirmizi, and

Bashir (2009), and Selesho and Naile (2014) found that academic staff mobility was influenced by pay progression, and payment inequality could be a serious factor of resignations of academics.

In Thailand, the HEIs are made up of private and public organisations and salaries do vary between public and private HEIs. Based on data provided by the Thai Ministry of Finance (2010), private HEIs are more likely to offer higher salaries than the public HEIs. In addition, Zoghi (2003) stated that salaries at public universities in the UK had risen much slower than at private universities. Zoghi (2003) claimed that this was because of increased financial pressures in public universities. Furthermore, private universities in the UK also were likely to be offering higher levels of non-pecuniary benefits than the public universities. In Thailand, academic staff in public HEIs are generally provided with better levels of non-pecuniary benefits than those at private HEIs. For example, public HEIs staff commonly receive legal entitlement to annual leave, lower home loan interest, reduced rental and medical fees, and other benefits for their children. To avoid the different levels of salaries between public and private HEIs in regard to the privacy policies of private HEIs, thus, for the current study it was decided to collect data from public HEIs only in Thailand.

Reputation

According to Cable and Turban (2001; as cited by Collins and Han 2004 p. 693), reputation with regard to recruitment aspects was defined as *“the public evaluation of overall company appeal as compared to rival company’s appeal, should affect a company’s ability to attract applicants.”* Collins and Han (2004) declared that successful recruitment could relate to organisational reputation. Previous employment research found positive and significant relationships between firm reputation and job seekers’ perceptions (Collins & Stevens 2002).

Turban and Cable (2003) claimed that the quantity of applicants could be positively influenced by organisational reputation. Their study found that a positive firm reputation would enhance job seekers’ perception of attractiveness of the organisation as an employer, leading to larger applicant pools (Turban & Cable 2003). In addition, Collins and Han (2004) argued that a positive reputation could not only affect applicant pool quantity, but it could also impact positively on the quality of applicant pools.

According to expectancy theory (Rynes 1991, as cited by Collins and Han 2004), highly qualified applicants hold high expectations; they accordingly choose to apply to organisations that match their abilities. Thus, highly-skilled candidates were more likely to apply for a job in an organisation which was projecting positive attributes and a high reputation rather than a company with a lower reputation (Collins & Han 2004).

Reputation impacted on all organisational recruitment and retention outcomes, including attraction, recruitment, selection and retention efforts in academic sectors. Faculty and staff reputation were considered an important influence on university recruitment and retention. Reputation affected awareness of job applicants and attracted potential academic staff whose desire was to work as a colleague with renowned faculty researchers and teachers (Metcalf et al. 2005). Conversely, universities might become less attractive to future applicants and to current staff, if they lost “star” staff from their faculties (Metcalf et al. 2005).

In Thailand, public HEIs are seen as having a better reputation than private HEIs. This may be inferred from the Times Higher Education (THE) (2013) publication of the world university rankings. The THE rankings showed of the universities ranked in the top 100 Asian only three Thai universities were listed and all were public universities. (www.timeshighereducation.co.uk/world-university-rankings/2012-13/regional-ranking/region/asia). In addition, the National Research Council of Thailand (2012) rewarded the 10 best Thai researchers all of whom were working for a public university. This may lead people to assume that staff and teaching quality and reputation of the Thai public universities is better than private universities and thus impact on Thai society’s perception.

Cultural differences

People with different cultural backgrounds might have different values leading to different behaviours. Previous research found that cultural differences impacted organisational structure, strategy, and trust (Hofstede & Hofstede 2005; Kirkman & Shapiro 1997 as cited by Ma & Allen 2009). In HR practices, it was reported that cultural values had an effect on selection, rewards and turnover (Johnson & Droege 2004; Posthuma, Joplin & Maertz 2005). In some countries, such as Iran and Egypt, the findings showed that relationships and nepotism considerations were clearly stated in

the companies' recruitment policies (Namazie & Frame 2007). Taiwan's recruitment culture varies in some ways from those in other countries, particularly Western and European countries. Based on strong a tradition of family culture, the entry level of recruitment related to who recommended an employee, such as parents, relatives or friends. This is known as *guanxi* (Hsu & Leat 2000). However, very little literature relating to recruiting talented staff across cultures was available (Chuvetsereporn 2008; Ma & Allen 2009; Ployhart 2006). Ma and Allen (2009) argued that in multinational organisations, cultural values had only a slight impact on recruitment practices and recruitment outcomes. The findings of Ma and Allen (2009) revealed that recruitment practices hat actively pursued job applicants in developing cultures might not positively support organisational attraction because it is not culturally appropriate in that setting. For instance, the issue of gender differences has been examined. Previous research from Thailand (Chuvetsereporn 2008) revealed that gender differences were not a major issue affecting the attitude of Thai people toward organisational culture. Both males and females viewed Thai organisational culture as a high power distance culture and a culture of collectivism (Chuvetsereporn 2008).

In academia, cultural differences were broadly discussed in earlier literature in relation to various issues. For instance, the issue of gender differences was examined and considered as a major factor influencing employment in many countries, such as Australia (Dever et al. 2008), and the United Kingdom (Ackers & Gill 2005; Sandhu, Margerison & Holdcroft 2007; Sidhu et al. 2009). Another issue related to culture is the diversity in HEIs and its impact on recruitment and retention. These topics were broadly discussed by academic research conducted in many places including a study in UK concerning the general academic environment (Deem & Morley 2006), and a study conducted in the USA in a medical faculty (Price et al. 2005). Previous cross-cultural studies presented widely on topics such as an increase of cross-border higher education (Kritz 2006), trends of international student mobility (Chin & Ching 2009), and HEIs' strategies of internationalization (Kondakci, van den Broeck & Devos 2006; Van der Wende 2007). Gray, Fam and Llanes (2003, p. 117) claimed that "The relative lack of cross-cultural concerns is another indicator that a customization strategy is unnecessary." Gray, et al.'s (2003) article concentrates on student attraction, however they acknowledge some factors relevant to this thesis. Universities now operate in a

competitive environment, this lead them to desire to attract students from other cultures, thus cross-cultural values need to be considered. This in turn will support the creation of ‘international education brands’ (Gray, et al. 2003 p. 108) that will convey an image that will attract students from a range of cultures. The competitive environment applies also to the attraction of high performing academic staff making these principles of brand strategy development also relevant to attraction of academic staff from other cultures.

The website is set up to attract both students and staff via the one website from which they will enter a subsection relevant to their research: courses for students and job vacancies for potential staff. Therefore, the techniques that the universities apply to their websites can be used for both groups. Curtis, Abratt and Minor (2009, p. 404) acknowledged that just as there was ‘competition between institutions to attract the best students’, so there was also competition to attract ‘faculty and staff’. Curtis et al. (2009 p 405) acknowledged that reports of empirical research in the area of ‘branding, identity and image’ in higher education were relatively scarce, however they concluded that corporate brand building was required by universities and that their ‘website was an important first visual for’ their stakeholders and could set them apart from their competition ‘not only’ in relation to ‘student recruitment but’ also in ‘attracting faculty and auxiliary staff’ (Curtis et al. 2009 p. 412)

2.11 Retention

Employer branding plays not only a large role in attracting high quality job applicants (Wilden, Gudergan & Lings 2010) but also in making employees aware of the advantages of working for the organisation, and in developing within them pride in working for the firm thus supporting retention of talent (Judson, Gorchels & Aurand 2006).

Brennan, Locke and Naidoo (2007) claimed that UK academic staff are mostly employed as fixed-term contract staff; and therefore, they tend to leave when their contract ends to find a permanent job or to pursue a better job opportunities in academia. Similarly in Thailand, fixed-term contract policies are primarily employed in Thai universities. Based on the Office of the Civil Service Commission (OCSC) regulation, university staff have to sign a contract for at least one academic year (12

months) for Thai citizens and one semester (6 months) for overseas staff due to faculty employment conditions (OCSC 2010).

The findings of Metcalf et al. (2005) suggest that providing reasonable pay and promotion opportunities will reduce staff turnover for universities. Indeed, enhanced pay led to increased recruitment success. However, this could be regarded as an issue as it may be viewed as unfair by existing staff. Performance pay may be used to avoid perceptions of unfairness, however, most staff tended to believe that their performance was above the average and so they believed they deserved extra pay. As a consequence more employees are likely to be dissatisfied than satisfied by performance pay (Metcalf et al. 2005).

Promotion

Promotion was found to highly influence retention of academic staff (Brennan, Locke & Naidoo 2007; Locke 2007; Metcalf et al. 2005). Allocation of teaching and administrative responsibilities within Thai university faculties or departments was becoming more important than in the past. However, academic staff who were overloaded by teaching or administrative work would be less able to conduct research (Coates et al. 2009). Consequently, this might adversely affect promotion success and thus might lead to high levels of dissatisfaction amongst staff. In addition, fairness within the promotion decision process and use of a transparent appraisal system are desired by academic employee (Metcalf et al. 2005).

Although training was also regarded as a significant key for staff retention, the findings of Metcalf et al. (2005) reveal that heads of departments or schools did not always provide training courses to address the needs of staff to develop required skills. Staff had to take responsibility to locate their own training and development opportunities. This suggests that in some cases management training courses for heads of departments or schools might be required to develop their management skills and help them to identify staff development needs.

Turnover

Prior studies indicated that staff turnover rates in universities were not a major issue in relation to academic staff recruitment and retention (Locke 2007). There were two

reasons for this: 1) the turnover rate appeared low (Locke 2007), and 2) some universities planned to decrease staffing levels due to changes in student demand in some areas (Metcalf et al. 2005). However, the universities, especially old universities, were concerned about the loss of skilled researchers to other universities, more so than the loss of junior staff (Ackers & Gill 2005). It was common for staff leaving a university or faculty to take colleagues with them to their new faculty or research centre. This issue was reported as very harmful for universities who were losing experienced staff or research teams and it highlighted the importance of retention of “star” staff (Metcalf 2005).

Turnover rates for junior posts were reported to be higher than for senior staff, especially among junior researchers and lecturers (Ackers & Gill 2005). They left their previous universities for greater opportunities or to join a higher-ranked university, or for opportunities to be promoted to senior positions. Ackers and Gill (2005) added movement was believed essential for junior staff to gain promotion and also to obtain experience which would support advancement of their careers. Some universities located in major cities reported higher turnover rates in the middle and senior levels. The reason for this was suggested to be the high cost of living in a big city (Ackers et al. 2006).

Satisfaction of academic staff

According to Metcalf et al. (as cited by Coates 2009), satisfaction of academic staff was divided into three separate sets of factors including: pecuniary factors – such as their salary and opportunities to earn money from additional work; non-pecuniary factors relating to the qualitative dimensions of the job, and longer-term factors – such as promotion and job security.

Several writers reported that conducting research was of key importance for job satisfaction for many academic staff (Ackers & Gill 2005; Coates et al. 2009; Locke 2007). Many academic staff would prefer to spend their time doing research rather than teaching. However, it was found that most lecturers would prefer a job that includes teaching, and that seeing their students improve was the positive aspect of teaching for them (Coates et al. 2009). Participating in the wider academic community and being supported by colleagues tend to be viewed as elements that lead to job satisfaction for

academic staff. Metcalf et al. (2005) also claimed that most academic staff looked on administrative tasks and organisational change as negative aspects of the job. Staff did not like to have to spend hours on administrative work and having to perform administrative tasks had a negative effect on their job satisfaction. Likewise, fixed-term contracts were found to have a negative effect, reducing job satisfaction (Brennan, Locke & Naidoo 2007).

Gender may be considered as having a moderating effect on academic job satisfaction. However, Metcalf et al. (2005) claimed that there was no difference between job satisfaction levels of men and women in the academic field. Besides, Metcalf et al.'s results (2005) showed that women were more satisfied with salary than were men. This might be due to women having lower salary expectations than men. More recent research related to gender matters reported different results. Sandhu (2007) found that women academics in medical faculties did not receive equal treatment. Sandhu's results showed that women in UK medical schools are working in lower positions than do men. It was possible that women were teaching more than researching, therefore, they did not achieve the same recognition or promotion opportunities as men. Similar findings in the UK provided by Sidhu et al. (2009) reported that a gender imbalance issue was considered as one of a major factors affecting staff performance in academic medical faculties. However, neither research study reported on the relationship between gender and job satisfaction levels.

The literature highlights a number of areas of concern for academics. The opportunity to research with others recognised in the field, and to teach is desired as are processes which ensure equity and transparency in relation to selection and promotion. Rates of pay and conditions of work are also an issue universities need to consider when attracting and retaining quality academic staff. This research can be used to guide web designers in relation to the information that should be provided on the website to attract talented staff.

2.12 Summary

This chapter has provided an overview of the relevant literature and key findings of previous research. The background of Thai university system was reviewed. The

concepts of university image and employer branding have been discussed. The key website components for attracting successful highly skilled staff were discussed. As little research had been conducted on the key website components for creating a well-designed university website specifically in order to attract potential academic applicants, the current study will identify those key components and clarify how university's might use their website effectively to attract potential applicants and retain their current staff. Based on this extensive literature review, the research framework and methodology applied in this study is developed and presented in the next chapter.

Chapter 3

Research Methodology

3.1 Introduction

This chapter describes the methodology adopted and research instruments used to gather and analyse data to answer the research question. The material discussed in previous chapters has implications for the methodology and determination of the appropriate research design and procedures.

Quantitative and qualitative methods were employed (1) to learn whether *well-designed websites efficiently communicate the employer brand related to attracting and retaining talented academic staff*, and (2) to identify significant factors affecting employer branding on university websites. The research procedures, conceptual framework, research design, development of data gathering instruments, ethical considerations, the data gathering process, coding of data, and data analysis methods are discussed in the following sections.

3.2 The research process

The current study has been adapted to develop a research process based on approaches recommended in various business research methods textbooks (Kumar 2005; Sekaran, Uma & Bougie 2010). The approach arrived at for this study is as illustrated in the six steps shown in Figure II. These steps consist of: the literature review; research methodology and research design; identification of participants for the study; data gathering; coding and screening of data; transcribing and translating interviews; using quantitative and qualitative methods to analyse data; and interpretation of results.

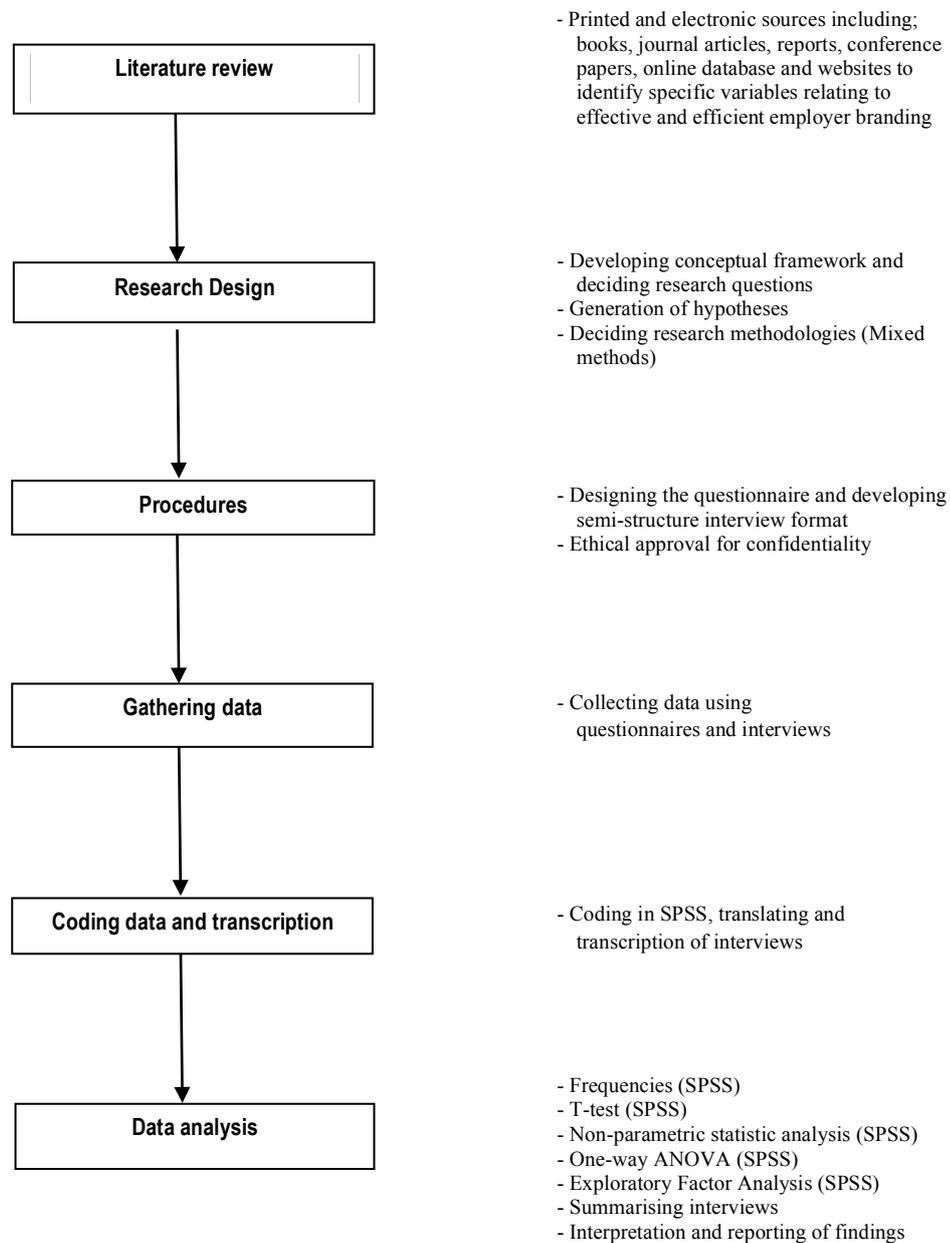


Figure III: The Research Process

Adapted based on (Kumar 2005; Sekaran, Uma & Bougie 2010)

3.3 Literature review

The research began with the literature review that investigated issues related to the areas of employer branding, including its use for attraction, global recruitment and retention, and design of effective websites. A gap in the literature was identified in relation to specific approaches to attracting high quality global academic staff and web design approaches and elements that would support this attraction effort. From the literature, web standard-design checklists and specific variables relating to effective employer branding were adapted and combined. This supported the investigation of criteria for effective website design. Information gathered through the literature review was used to adapt existing website and employer branding checklists for use in assessing Thai university websites and employer brand success. The information from the literature review was used to identify appropriate factors for creating and developing the questionnaire and developing the semi structured interview format for interviews with HR managers.

Journal articles were accessed through Google Scholar that enabled articles from a range of online databases to be retrieved including: Emerald full text; EBSCOhost, Academic Search Premier and Business Source Complete; Blackwell Synergy; AOSIS Open Journals; Elsevier/Science Direct; Sage Journals; Taylor & Francis Online; Springer; Wiley Online Library, the Australian Digital Thesis; Factiva and online documents and reports from the Thai government.

After reviewing of the literature, the conceptual framework was developed to draw a visual map of the study showing the factors related to effective website design and attraction of skilled academic staff in Thai Universities.

3.4 Conceptual framework

The conceptual framework for this study is shown in Figure III. The conceptual framework shows that this research commenced by evaluating website design, then assessed its contribution and that of any employer brand conveyed through the university's website on attraction of academic staff, successful recruitment of quality employees, and retention and satisfaction of employees.

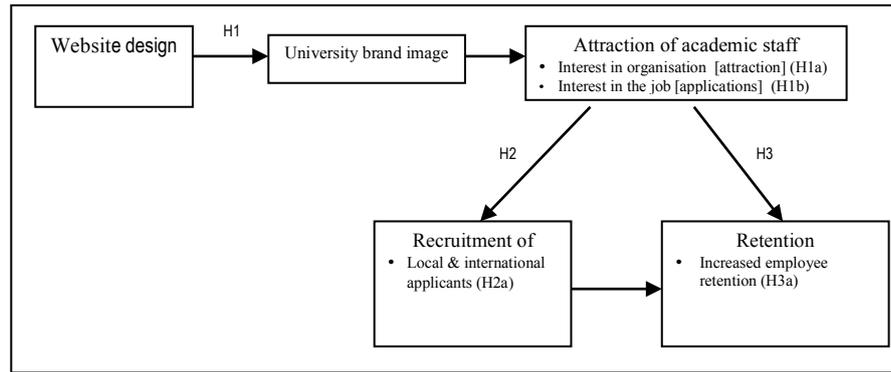


Figure III: Study conceptual framework

Form the conceptual framework the following research questions were developed and investigated:

1. What attributes constitute a well-designed website that communicates the organisation’s employer brand?
2. How does a well-designed website effectively and efficiently communicate the employer brand as it is related to attracting and retaining talented-academic staff in Thai university?
 - 2.1 Are Thai university websites used by prospective and current employees?
 - 2.2 For those who used their university’s website to influence their application decision, did the website design, the search engine and information provided meet the new recruits’ expectations, and if so, to what extent did it meet their expectations?
3. Which factors are most significant in influencing potential applicants’ decision to apply?

Website Design

The concept “well-designed” website could have different meanings to different people. However, considerable research has revealed some common elements of website design which receive positive responses from the greatest number of website visitors (Nielsen, Jakob 2000). The frameworks and models developed from this research will inform the instrument used to assess the extent to which Thai universities’ websites, and those of other universities, could be considered to be “well-designed”. It is accepted within the research conducted by others that cultural background could influence user perceptions

of website design. As attraction of high quality staff from around the world is desired, established website design principles were used in this research. Therefore, the term “well-designed” website as shown in the conceptual framework relates to these principles established and tested through the research of others.

Brand Identity and Image

Brand identity and brand image have been defined in the literature review. The literature review established that via their marketing media – i.e. Web technology, universities now have the control of opportunities to take and promote their brand identity. Web technology may give an organisation the impression that it can control its brand identity. However Chirstodoulides and Jevons (2011) point out websites do not allow an organisation to take total their control of brand identity. This makes brand identity development an even more important task as the developers need to build in elements that will provide some level of control and thus influence viewers.

Website design is an important consideration when relying on the Internet to communicate important messages, such as conveying a university’s brand image. De Goede, Van Vianen and Klehe (2011) suggested that a successful website design will not only influence organisational attraction but it could also encourage job seekers to increase their recall of information provided on the website. The findings of marketing research have shown that organisation attractiveness could be influenced by advertising through an organisation’s website (Allen, Mahto & Otondo 2007). Advertisements were designed to create a relationship between the organisation and its stakeholders who interacted with and contacted those organisations (Coulter & Punj 1999). Consequently, an organisation’s website could provide the ideal platform to advertise organisational job which can be attached organisation’s brand image, thus, it is predicted:

Hypothesis 1: A well-designed website will be effective in creating a positive image of universities in Thailand.

Hypothesis 1a: Having a website assessed as ‘well-designed’ will be positively related to attraction success for the university.

Hypothesis 1b: Having a website assessed as ‘well-designed’ will result in the University attracting high-quality applicants for all academic job vacancies.

Originally a marketing concept, branding for products or services is designed to create a lasting image in the mind of consumers. A university’s employer brand is designed to create an image to encourage people to want to work for the university. Cober et al. (2003) asserted that organisational websites had become a first source of information for candidates and that they have become one of the greatest influences on potential applicants’ attraction to an organisation. Many organisations have recently used websites to send organisational messages to potential applicants; and many job seekers also use organisation’s websites to acquire essential information (Cober et al. 2004; Cober et al. 2003). The possibility of recruiting overseas staff, thus, has increased in line with the use of organisational websites. Galanaki (2002) claimed that many firms across the world have already employed the Internet to assist in the recruitment process for their operations abroad. Application forms and some testing can now be completed online (Stone et al. 2013) and video conferencing has been used for interviews (Toldi 2011) during the selection process. These advances enable organisation to conduct international recruitment from a distance using the Internet as a tool. Therefore, it is predicted:

Hypothesis 2: In terms of academic-staff attraction, university image is a major factor in influencing recruitment of the new staff from around the world.

Hypothesis 2a: Positive image perceptions will lead to increased numbers of high quality local and international applicants applying for positions at the university.

Employer branding plays not only a large role in attracting high quality job applicants (Wilden, Gudergan & Lings 2010) but also in making employees aware of the advantages of working for the organisation, and in developing within them pride in working for the firm thus supporting retention of talent (Judson, Gorchels & Aurand 2006). The universities, especially old universities, were concerned about the loss of skilled researchers to other universities, more than the loss of junior staff (Ackers & Gill 2005). It was common for staff leaving a university or faculty to take colleagues with them to their new faculty or research centre. This issue was reported as very harmful for

universities who were losing experienced staff or research teams and it highlighted the importance of retention of “star” staff (Metcalf 2005). An organisation's website seems to be one of the best channels for internal communication that the organisation can send their messages and create a greater relationship between organisation and employees. Thus, it is predicted:

Hypothesis 3: In terms of academic staff, university image will influence retention of current staff.

Hypothesis 3a: A positive relationship will exist between websites assessed as conveying a positive employer brand (image) and academic staff retention.

3.5 Research design

Research design is a plan to set a strategy to investigate and to test research hypotheses in order to obtain answers to research questions (Kumar 2005). Generally, conducting research in a social science or business area can be divided into two traditional research approaches - quantitative and qualitative approaches. Selecting an appropriate research method requires consideration of the purposes and nature of the study. The quantitative approach is basically based on using statistical analysis procedures to measure variables or test a theory. Business research data is generally collected through research instruments such as questionnaires and its results are normally shown in the form of figures or numbers (Punch 1998). The qualitative approach is more likely a primary instrument. Data collected from qualitative research may be gathered from participants' perceptions (e.g. their thinking or experiences) through research methods such as interview and observation, but may include surveys, a case study, or historical document analysis (Savenye & Robinson 2004). Furthermore, results from qualitative approach can be used to explain the assumptions derived from quantitative results, or to initiate and develop questions before conducting an experiment (Savenye & Robinson 2004).

To take advantage of the two research approaches, combining both approaches has been recommended by several authors (Creswell 2009; Creswell & Clark 2007). Combining research approaches capitalises on the strengths of both approaches and compensates for

- Sequential mixed methods – to further expand on the finding of one method with another method (e.g. starting with an interview for exploratory purposes and following up with questionnaire survey).
- Concurrent mixed methods – merging quantitative and qualitative methods to provide a comprehensive analysis of the research problem
- Transformative mixed methods – using a theory as a framework for topics of interest and designing both quantitative and qualitative approaches to collect the data which they could be a sequential or a concurrent approach

This research followed a concurrent mixed methods strategy. Both quantitative and qualitative methods were employed for data gathering. The researcher collected both data formats (e.g. questionnaire and interview) at the same time and then integrated the information in the interpretation of the overall results. Additionally, different forms of collected data were analysed and used to answer different types of research questions (Creswell 2009).

3.6 Development of Instruments

Quantitative and qualitative methods were used for gathering general and in-depth information concerning in this study. The quantitative data was collected using questionnaires completed by recently appointed members of academic staff in Thai universities. The qualitative data was gathered by interviewing HR managers at Thai universities from which newly appointed members of academic staff had completed questionnaires.

3.6.1 Questionnaire Design

The questionnaire is an important instrument in research when the variables are defined and need to be measured (Bailey 1994). It is an appropriate instrument for obtaining sensitive information relating to the human behaviour, perceptions and the background of participants. This is the purpose for which it was employed in this study. Sekaran (2000, p. 233) stated that ‘a questionnaire is a pre-formulated written set of questions to which respondents record their answers, usually within rather closely defined alternatives.’ Another reason for considering the use of a questionnaire is that this data collection technique is the most appropriate for a large sample. McClelland (1994)

claimed that a questionnaire is one of the most frequently used techniques for collecting data due to its effectiveness in gathering data from large samples.

The length of the questionnaire was considered in this research with regard to ensuring a high return rate. Differing arguments are provided regarding the 'ideal' length of a questionnaire. For instance, Frazer and Lawler (2000) suggest that the appropriate length can be up to twelve pages, whereas Zikmund (2003) argues that a questionnaire should not exceed six pages. This current research followed Zikmund's suggestion, but took an even more conservative approach in an attempt to reduce the non-response rate when compared with large questionnaires. The questionnaire used in this research was limited in a single page. The researcher is an academic from the Thai university system. Being aware of the demands placed on academic staff, similar to other parts of the world, it was decided that in order to obtain a high response rate the questionnaire size had to be restricted.

The survey instrument for this research consisted of 1) a cover letter, 2) 'information for participants' sheet, 3) consent form and 4) questionnaire. The cover letter was designed to introduce the researcher, by providing their name, the title of the research, and the aims of the research. This cover letter was written in two languages – Thai and English (see Appendix 3.1-3.6). The translation was provided by a qualified English/Thai, Thai/English translator. The Thai version was sent to Thai academic staff, while the English version was sent to foreign academic staff at the selected Thai universities. The cover page ends by thanking the participant for taking time to respond the questionnaire. The information sheet provided information explaining the research and requesting participation, the consent form required the participant's signature, indicating agreement to be a participant before the questionnaire could be completed. These documents, required under the ethics approval process of the Faculty of Business and Law at Victoria University (VU), informed potential participants of the identity of the researcher, including the name and contact details of the supervisor and co-supervisor and the Chair of the Ethics Committee at VU, and assured participants of their confidentiality. Lastly, the questionnaire was designed to gather primary data. It was designed to ensure easy and accurate answering of the limited number of questions in order to reduce both the non-response rate and data errors. Additionally, it was designed

in a manner that would make it acceptable to Thai and international participants. All forms had been approved by Victoria University Human Research Ethics Committee prior to commencement of data gathering. A copy of the approval is attached (Appendix 3.7).

In the questionnaire, questions were presented in three sections as follows:

Section 1: Participant's background information

This section contained questions about participant's background including: highest qualification held (Bachelor, Master, and Ph.D.); academic title level (lecturer, Assistant Professor, Associate Professor and Professor), and length of employment at current university. In this section, participants were also asked whether they had used their university's website to seek information related to the job they were now in before they applied for the position. Additionally, they were asked whether they had used the university's website to search for useful information before applying for their current job. They were further asked to indicate whether their university's image as portrayed on the university website influenced their decision to apply for the position they now held.

Section 2: ranking of university website components

This section related to the quality of a university's website components. These components were categorised into three main groups based on previous literatures: 1) appearance quality (Allen, Mahto & Otondo 2007; Bernard et al. 2002; Cober et al. 2004; Coulter & Punj 1999; Edell & Burke 1987; Hedge 2005; Pelet & Papadopoulou 2013; Vate-U-Lan 2007; Zusman & Landis 2002), 2) technical components (Cober et al. 2004; Cyr & Trevor-Smith 2004; Fan & Tsai 2014; Gehrke & Turban 1999; Kapurubandara & Lawson 2006; Newman & Landay 2000; Rababah & Masoud 2010; Robbins & Stylianou 2002; Tan & Wei 2006) and 3) information components (Allen, Scotter & Otondo 2004; Barber, AE & Roehling 1993; Barber, L et al. 2005; Cober, Brown & Levy 2004; Katerattanakul 2002; Tan & Wei 2006) . Respondents were asked to rank each item by using a five-point Likert scale rating the quality of the website's components using a scale ranging from 'not important at all' (1) to 'most important' (5).

Likert scales are generally used in business research in order to that valuable and meaningful conclusions may be drawn from the results (Sekaran 2000). The scales allow respondents to indicate different degrees of agreement or disagreement, from highly agree to highly disagree (this study used the statements ‘most important’ to ‘not important at all’), with responses relating to statements in relation to a certain issue. Therefore, Likert scales ‘enable the rating of a single attribute along a continuum of perceived equi-distant intervals’ (Zikmund 1997 cited by Zeidan 2006, p. 108). The collected data can then be examined to establish differences between responses and in order to identify to most, and least common, responses.

3.6.2 The designing semi-structure interview format

A semi-structured interview was chosen in order to gather data which might enable findings related to how universities efficiently use their websites in order to attract potential applicants and retain current staff to be explained. The impact of a university’s website on staff attraction and retention was one of the significant issues being investigated and therefore the interview questions were designed to focus on related issues (see Appendix 3.8 for semi-structure interview basis questions).

An interview is a conversation conducted where the researcher attempts to access the participant’s perceptions, meaning, definition of situations and constructions of reality (Punch 1998). Interviews might be designed in a structured, semi-structured, or unstructured format depending on how deep the interview is required to go and the level of standardisation required across different participants. For structured interview formats, interview questions are prepared and every interviewee receives the same questions in the same order, and proceeds through the interview in the same standardised approach as all other participants. Participants are not asked any questions beyond the prepared questions (Sekaran 2000).

The semi-structured interview format used for this research requires the interviewer to design a set of questions, but allows the interview to be conversational. It is generally necessary for the interviewer to develop and use a prepared interview guide. The interview guide is a list of topics and questions that the interviewer can ask in different

ways for different participants depending on the context and situation (Lindlof & Taylor 2002).

In the present study, semi-structured interviews were used for several reasons. First of all, using an interview guide helps interviewers to focus on the interview topic (Lindlof & Taylor 2002). It enhances the standardisation and reliability of responses. Furthermore, the semi-structured interview allows new questions to be introduced during the interview for purposes of clarification or further exploration if required. Thus the semi-structured interview is more flexible than the structured interview. The interviewer is able to acquire more useful information from the interview rather than being limited to set questions.

3.6.3 Sample size

According to higher education data and information from 2005, reported by the CHET, there were over 14,000 academic staff members who had graduated with a Bachelor degree or a higher level qualification and who worked at or held the position of lecturer in a Thai university. The possible levels of appointment at universities throughout Thailand, from the lowest (shown at 1 below) to highest level (4 below), are shown below

Table 3.1: Structure of Academic Appointment Levels, Thailand

Level	Title
1	Lecturer
2	Assistant Professor
3	Associate Professor
4	Professor

Participants in this research were chosen from three groups of Thai universities ranked according to Thai university ranking system by www.webometrics.info from rankings provided for the year 2009. Universities were selected from 15 public universities, with five universities chosen from each of the top, middle, and lower ranked groups of universities. In excess of 450 participants were selected as the sample size for this study. Having 450 participants allowed for meaningful statistical comparisons to occur. These numbers fit the table of sample size for specified confidence limits and precision of Yamane calculation with an error margin of 5%. As 100 – 500 academic staff members was a small percentage of the total academic population in Thailand, and given the researcher's understanding of the community, this was considered a conservative estimate of the potential return rate for the survey.

Additionally, an HR manager from each selected university was asked to participate, and 12 agreed, providing qualitative data. In total, therefore, 15 HR managers were requested to participate and 12 agreed to be interviewed for this study. By interviewing HR managers from the same universities as those from which the recent recruits were surveyed, data was able to be compared and contrasted.

3.7 Ethics Approval

Sekaran (2000, p. 17) refers to ethics in business research as 'a code of conduct or expected societal norm of behaviour while conducting research'. The issue of ethics is important in any research involving human subjects (Bodgan & Biklen 1998) as did this research.

The proposal for this research was submitted to the Faculty of Business and Law Human Research Ethics Committee at Victoria University advising how the privacy and confidentiality of the participants would be protected and providing copies of all documents, including the Information Sheet, Consent Form, questionnaire and semi structured interview format. A copy of confirmation of ethics approval is provided in Appendix 3.7. Protecting the privacy of participants was a priority in this research and the documents provided participants with assurances relating to privacy and non-disclosure. This resulted in summary statistics only being presented ensuring confidentiality and anonymity (Neuman 2000). Participation in this study was entirely

voluntary and participants were informed that they could withdraw their participation at any time in the investigation. According to Zikmund (2003), subjects should be informed of their right to abandon or break off their participation at any time. Participants who required further information about the research project were able to contact a Victoria University representative (an ethics officer within the Office for Research) to obtain that information.

As required by Victoria University, the collected data is to be kept in a safe place with access restricted to the principal and associate investigator and the researcher. Lastly, the researcher assured participants that research results would be used only for academic research purposes.

3.8 Data gathering procedures

As mentioned earlier, data gathering was divided into two main collection methods resulting in the use of a mixed methods approach. First, the researcher employed questionnaire survey to collect quantitative data from recently appointed academic staff in Thai universities. The second procedure was to use a qualitative data collection technique, gathering data by interviewing HR managers in Thai universities. All collection procedures were undertaken while the researcher was based in Thailand.

3.8.1 Quantitative data collection procedure

Once the population of the study was confirmed, data gathering proceeded. Thai HR managers were formally contacted to request name and contact details of recent academic staff to request their participation and make an appointment for the process of interview. Requesting participant's home addresses would raise privacy issues, therefore participants were contacted via their work address within the school or faculty in which they worked. The questionnaires were enveloped and delivered via post to the new staff chosen randomly from the list of names provided by the HR managers. The HR managers and no other members of university staff are aware of which staff members received invitations to participate in the research or of who agreed to participate. The envelope contained a covering letter (in Thai language, see Appendix 3.2), a copy of the information sheet and of the consent form (see Appendix 3.3 -3.5),

the questionnaire (see Appendix 3.6), and a postage-paid return envelope addressed directly to the researcher.

Four weeks after posting the questionnaires 351 questionnaires had been returned to the address of the researcher in Thailand. During this four weeks, 15 HR managers were contacted and appointments made for the conduct of the semi structured interviews with 12 HR managers who agreed to participate.

3.8.2 Qualitative data collection procedure

To contact the potential HR manager respondents to participate in the semi structured interview, the researcher used university websites to obtain the name of an HR manager in each selected university. Once a list of HR managers was compiled, a combination of telephone calls and emails was used to contact the HR managers and arrange an appointment for an interview. Furthermore, visits were made to selected universities in an attempt to increase the response rate. Three of the HR manager's originally contacted did decline the invitation to participate due to university privacy policy and confidentiality considerations. There were twelve HR managers interviewed in this study. Interviews were conducted at the participant's office (HR department) during working hours (before 4.30 pm). However, four interviews were conducted via telephone due to location and timeline restrictions. The participants in this study were selected from HR managers who were working in Thai universities from around the country and who were employed at the same universities as those selected for the administration of the questionnaire for new recruits. To complete the data collection procedure within the limited time, the researcher was required to use telephone calls to interview the participants whose universities located outside Bangkok. A copy of the information for participants sheet (see Appendix 3.3), Consent form (see Appendix 3.4 for recent recruit and Appendix 3.5 for HR manager), and a postage-paid return envelope were sent to participants outside Bangkok, with a covering letter, before the interviews were conducted. Interviews via conducted via telephone after ensuring that the participant had read the Information Sheet and after signing of the Consent form. The participant was asked if they had any questions before proceeding with the interview.

In each interview, whether face-to-face or via telephone, the aims of research aims and participant's rights were advised before commencing. They were then asked for signed consent to tape-record the interviews and tape recording only occurred where this consent was obtained. Punch (1998) states that tape recording is useful when an interview is conducted using open-ended question, as was the case in this research. This approach allowed the researcher to fully participate in the conversation without being distracted by having to write and listen at the same time. Moreover, it allowed the researcher to listen again to the tape during the data analysis stage, if required, which supported accurate data analysis tape recording was not a requirement of participation in this study. It could be rejected if participants were not willing to do so. On average, the length of the interview was approximately half an hour.

To allay participant concern in relation to his or her confidentiality, names were not recorded and are not revealed in this thesis or any publication resulting from this research. The researcher is the only person who listened to the recordings and care was taken to ensure that tapes were prepared for transcription in such a manner as to eliminate the risk of participant identification.

3.9 Data analysis methods

In line with the mixed methods approach applied in this current study, data analysis techniques are detailed under two headings below 1) quantitative data analysis techniques and 2) qualitative data analysis techniques.

3.9.1 Quantitative data analysis techniques

Choosing the appropriate data analysis techniques is one of the most important processes when conducting research. The techniques used must be well-matched to the research design and able to provide answers to the research questions. For quantitative data methods, statistical techniques can be classified into three approaches: univariate, bivariate and multivariate, depending on the number of variables available in the data (e.g. one, two, or more variables).

Univariate techniques are used in order to describe the statistical aspects of a single variable. In the current research, these statistical techniques are employed to measure

and present results such as the median, mean, standard deviation, and percentages in relation to the demographic profile of respondents.

To analyse the relationships between two variables, bivariate approaches are the appropriate tools to employ. Pearson's Product Moment Correlation Coefficient was used to indicate the value of correlation between two variables. This value can range from -1.00 to 1.00. When the value is close to 0, it indicates that the variables are statistically significantly different (Pallant 2007).

The selection of statistical instruments depends on several criteria such as the nature of criterion variable (e.g. ordinal or interval), number of comparison groups (e.g. two or more), and the correlation between comparison groups such as relevant or irrelevant (Pallant 2007). Bivariate analysis techniques used for this research related to the statistical analyses employed consisting of T-tests and the Mann-Whitney U-test (Pallant 2007). These were applied to compare the relationship between groups of recent staff members from selected universities and their perceptions of website components in relation to which attributes attracted them to apply for a position in the university.

To analyse data relating to more than two variables, multivariate techniques are required. For the current research, a one-way analysis of variance was conducted to compare the variance across the three groups of ranked universities (e.g. Top, Middle, and Lower ranked groups) in relation to which university website components affect potential candidate perceptions and lead them to apply for a job in the university. In addition, a factor analysis was employed to identify interrelationships among a set of website components. By reviewing related literature, the website components used were selected as having been found to be related to factors found to affect candidate perceptions and influence their decision to apply for a job. Factor analysis was used to measure the correlation between each of the variables and to ensure correct categorisation of selected components.

3.9.2 Qualitative data analysis techniques

A semi-structured interview method was conducted in this study to extend the findings related to how universities efficiently use their websites in order to attract potential applicants and retain current staff. The impact of a university's website on staff attraction and retention is one of the significant issues being focused on this study; therefore, it was the basis of main question in the interviews. All conversations were recorded, as permission to do so was provided by all interview participants. The tape recordings were then transcribed 'word-for-word' and content analysis was then used in this study to identify themes.

Holsti (1962) defined a content analysis technique as the systematic analysis of content to identify specific meaning of messages. By using content analysis, written text can be transformed into highly reliable data for further analysis purposes (Singleton Jr., Straits & Straits 1993). The main objective of employing content analysis in the current research was to identify a set of categories in relation to university websites, their impact on attraction potential academic staff and on retention of current staff in Thai universities.

First the recorded interviews were transcribed to obtain a general understanding of the data. All concepts, themes, and issues were then identified to create broad categories and remove unrelated or repeated information from the raw interview transcripts. Next, the broad categories were combined having regard to the similarity of the concepts and related themes to create more specific categories. Once the specific categories had been produced, the data was again reviewed to ensure the validity of the categorisation process.

3.10 Summary

This chapter has presented the research methodology employed in the current research in order to answer the research questions. It began with a justification of research procedure and overview of the research methodology and research methods used to conduct this research. The conceptual framework was presented from which the research questions and hypotheses were developed. Then, the research design was

presented, instrument development was described, and ethical considerations were discussed. The data gathering process and data analysis techniques were discussed and described. The research results are presented in the following chapter.

Chapter 4

Data Analysis and Research Results

4.1 Introduction

The research methodology applied to gather and analyse data for the current research was described and justified in the previous chapter. This chapter provides the results of both quantitative and qualitative analyses conducted.

This chapter encompasses four main sections. The first section serves as an introduction presenting the demographic profile of respondents. After collecting data from the questionnaires, data needed to be prepared before further analysis. The second section describes the data preparation process. The third section reports the findings in relation to university websites. Data was analysed using the SPSS program version 18.0. The last section presents the results of analysis of qualitative data from the interviews.

SECTION ONE:

4.2 Demographic Profile of Respondents

The questionnaires were posted, along with cover letters, to 450 randomly selected potential participants from recent recruits (commenced with their employing university during the last 5 years) during the 2009-2010 academic year and completed questionnaires were returned by 351 respondents from fifteen public universities in Thailand representing a return rate of approximately 78%. The majority of the respondents were Thai skilled-teaching staff (322 people) and the remaining respondents were foreign skilled-teaching staff (29 people).

Table 4.1: Length of employment in current university

Length of work	Groups of ranked universities							
	Top		Middle		Lower		Total	
	<i>n.</i>	%	<i>n.</i>	%	<i>n.</i>	%	<i>n.</i>	%
1 year	33	9.4	35	10.0	28	8.0	96	27.4
2 years	25	7.1	33	9.4	27	7.7	85	24.2
3 years	28	8.0	29	8.3	24	6.8	81	23.1
4 years	21	6.0	15	4.3	11	3.1	47	13.4
5 years	13	3.7	15	4.3	14	4.0	42	12.0
Total	120	34.2	127	36.2	104	29.6	351	100

Differences in the sample associated with the ranking of the university (top, middle or lower) and length of are shown in, Table 4.1. The largest group of participants (27.4%) was those academic staff who had worked at their current university for less than one year. Participants had worked for their university for five years made up only 12% of the research group. Table 4.1 also shows that a similar number of returns were received from universities within each of the three ranking groups studied with 120 (Top), 127 (Mid) and 104 (Lower) from 150 questionnaires posted to each group.

Table 4.2: Highest academic qualification of recent recruits

	Bachelor			Masters			PhD			Total
	<i>Thai</i>	<i>Foreign</i>	<i>n.</i> (%)	<i>Thai</i>	<i>Foreign</i>	<i>n.</i> (%)	<i>Thai</i>	<i>Foreign</i>	<i>n.</i> (%)	<i>n.</i> (%)
Top Uni	5	8	13 (3.70)	49	5	54 (15.38)	50	3	53 (15.10)	120 (34.19)
Mid Uni	3	3	6 (1.71)	65	5	70 (19.94)	50	1	50 (14.53)	127 (36.18)
Lower Uni	-	3	3 (0.85)	59	1	60 (17.09)	41	-	41 (11.68)	104 (29.63)
Total	8	14	22 (6.27)	173	11	184 (52.42)	141	4	145 (41.31)	351 (100)

As shown in Table 4.2, over 90% of respondents held a postgraduate qualification, with more than half of the respondents (52.42%) holding a Masters Degree. Approximately 40% of the respondents (41.31%) had a Ph.D., 15.38% of whom worked for the top-ranked universities and 19.94% for mid-ranked universities. A minority of participants (6.27%) held only a Bachelor Degree, and again most of these were working for the top-ranked universities. However, it can be seen that the number of foreign staff who held a

Bachelor Degree only was higher than for Thai staff (see Table 4.2). Most foreign staff (16 of 29) worked in the top-ranked universities; while the lowest number (4 of 29) worked in the lower-ranked universities and did not hold Doctoral level qualifications (see Appendix 4.1 for full details). Results indicate that Lower ranked university in general had fewer Ph.D. qualified staff, both Thai national and foreign, than did the other universities.

Table 4.3: Academic level by title of recent recruits

	None (Lecturer)		Assistant Professor		Associate Professor		Professor		Total
	<i>n.</i>	%	<i>n.</i>	%	<i>n.</i>	%	<i>n.</i>	%	
Top Uni	111	31.62	4	1.14	3	0.85	2	0.57	120
Mid Uni	113	32.19	10	2.85	4	1.14	-	-	127
Lower Uni	95	27.07	9	2.56	-	-	-	-	104
Total	319	90.88	23	6.55	7	1.99	2	0.57	351

Table 4.3 (above) shows that nearly all participants (90.88%) were employed at lecturer level. Only two people in the study (0.57%) held the academic title of Professor, and both were working for a top-ranked university. The percentage of respondents who held an Assistant Professor position is similar for the middle-ranked (2.85%) and lower-ranked (2.56%) universities but moderately lower in the top-ranked universities (1.14%). In the lower-ranked universities, no respondent held an academic title above Assistant Professor; the results show that only lecturers (27.07%) and Assistant Professors (2.56%) in lower-ranked universities responded to the questionnaire (see Table 4.5).

4.3 Use of university's website by recently recruited academic staff

The participants were asked how their employing university's website had influenced their decision to apply for their current jobs. The *Pearson Chi-Square* in Table 4.4 shows the results with a statistically significant alpha level of 0.05, p -value = 0.000 (Reject H_0 , Accept H_a). This result determines that there was a significant difference with regard to the data between foreign staff and local staff. The results show that most Thai staff (67.4% of all Thai respondents) used the website before they applied for their

position. In addition, approximately half of the Thai respondents (55.3%) indicated that they obtained the information that they required from their employing university's website and that it had influenced their decision to apply for their current job. However, this was not the case for skilled-teaching foreign staff. Table 4.4 shows that most foreign staff did not use their university's website before they applied for their current jobs; indeed only 31% indicated that they had. Furthermore, only three overseas staff (10.3%) responded that they had found the information they needed from the website and that this information may have attracted them to apply for the position in a Thai university. Ninety per cent of foreign staff claimed that they did not gain any information from the websites of the universities they applied to work for (see Table 4.4).

Table 4.4: Comparing use of University's website by local & foreign staff

	Nationality					Total		Pearson chi-square (X^2)
	Foreign (<i>n.</i> = 29)		Thai (<i>n.</i> = 322)			<i>n.</i> = 351		
		% within Count	% within Nationality	Count	% within Nationality	% within Count	% within Nationality	
Used University's website before applying for the position	no	20	69.0%	105	32.6%	125	35.6%	Sig. =.000
	yes	9	31.0%	217	67.4%	226	64.4%	
Acquired required infor- mation from University's website influencing decision to apply for the position	no	26	89.7%	144	44.7%	170	48.4%	Sig. =.000
	yes	3	10.3%	178	55.3%	181	51.6%	

Results of the *Pearson's Chi-Square* test in Table 4.5 show results statistically significant at the alpha level of 0.05, *p*-value = 0.003 and 0.014 (Reject H_0 , Accept H_a). This result determines that there was a significant difference with regard to the data across groups of ranked universities.

Table 4.5 indicates that 64.4% of respondents had visited their University's website before they applied for a job. More than half of them (51.6%) obtained the information that might have improved their awareness of the university and encouraged them to apply for the position. The percentage of academic staff in the middle (76.9%) and lower (63.0%) ranked who had used their University's website to information relating to

available academic position were a bit higher than the top-ranked universities (55.0%). The lower-ranked universities had the highest percentage of respondents (63.5%) who claimed that they had acquired the information they were looking for and that the information could have affected their decision to apply for a position. Likewise, 52.0% of participants in the middle group indicated that they had also gained information which affected their decision to submit an application. In contrast, the results showed that the Top ranked universities had the lowest percentage of applicants (45.0%) acquiring information from the University’s website (Table 4.5).

Table 4.5: Comparison of University website use across ranked university groups

	Ranked University Groups							Total		Pearson chi- square (X ²)
	Top (n. = 120)		Middle (n. = 127)		Lower (n. = 104)		n. = 351			
	Count	% within group	Count	% within group	Count	% within group	Count	% of total		
Used University website before applying	No	54	45.0	47	37.0	24	23.1	125	35.6	Sig.= .003
	Yes	66	55.0	80	63.0	80	76.9	226	64.4	
Acquired information from Uni. website to influence application decision	No	66	55.0	66	52.0	38	36.5	170	48.4	Sig.= .014
	Yes	54	45.0	61	48.0	66	63.5	181	51.6	

Table 4.6 indicates *Pearson’s Chi-Square* test significant results, showing those with a statistically significant alpha level of 0.05, p-value = 0.021 and 0.016 (Reject *H0*, Accept *Ha*). This result verifies that there was a significant difference in level of use of their university’s website according to length of employment between staff who had worked for their current university for less than 2.5 years and those who had been employed from 2.5 to 5 years. This shows that of the more recent recruits 64.4% had used the university’s website to search for at least some useful information before they decided to submit their application. Staff who had worked for their university for less than two and half years (43.0% of the total) were twice as likely to have used the university’s website as were staff who had worked for over two and half years (21.4%

of the total) with their current university (see Table 4.6). Furthermore, the results indicate that around half the recent recruits (51.6%) acquired the information they required. This indicates that the new recruits (working at current university less than 5 years) are more likely to have used a university's website as a main source of information (64.4%) and around half of them obtained the information about the university's profile and job vacancies that they required for decision making (51.6%).

Table 4.6: Comparing use of University's website between length of employment

		Length of employment						Pearson chi-square (X^2)
		Less than 2.5 years (<i>n.</i> =219)		From 2.5 to 5 years (<i>n.</i> = 132)		Total		
		Count	% of total	Count	% of total	<i>n.</i> = 351		
Used University website before applying for the position	No	68	19.4	57	16.2	125	35.6%	Sig.= .021
	Yes	151	43.0	75	21.4	226	64.4%	
Acquired required information form University website influencing decision to apply for the position	No	111	31.6	59	16.8	170	48.4%	Sig. =.016
	Yes	108	30.8	73	20.8	181	51.6%	

The *Pearson's Chi-Square* test results in Table 4.7 show results with a statistically significant alpha level of 0.05, p-value = 0.003 and 0.005 (Reject H_0 , Accept H_a). This result indicates that there were significant differences with regard to the data according to level of qualification of new academic staff.

This outcome shows that more than half of the respondents (64.4%) used the university's website to find useful information before they applied for the position and these staff members held both a Masters degree (36.2%) and Ph.D. (26.2%), whereas only 2.0% of recent staff who held only a Bachelor degree used the university's website (see Table 4.7). In addition, around half of the new recruits (51.6%) obtained the information they needed when they used their university's website. The majority of new academic staff, who acquired information from the website, had a Masters degree and a Ph.D. (27.6% and 22.8% respectively of those who obtained the information from the website). However, nearly half of new academic staff (48.4%) found that the university's website could not provide them with all the information they required.

Eighteen of 22 recent staff (or around 80%) who had a Bachelor degree only reported that they could not locate the information they needed from the university's website (see Table 4.7).

Table 4.7: Comparing use of University's website across qualification groups

		Qualification						Total		Pearson chi-square (X ²)
		Bachelor (n. = 22)		Masters (n. = 184)		PhD (n. = 145)		n. = 351		
		Count	% of total	Count	% of total	Count	% of total	Count	% of total	
Used University website before applying for position	No	15	4.3%	57	16.2%	53	15.1%	125	35.6%	Sig = .003
	Yes	7	2.0%	127	36.2%	92	26.2%	226	64.4%	
Acquired required information form University website influencing decision to apply for position	No	18	5.1%	87	24.8%	65	18.5%	170	48.4%	Sig = .005
	Yes	4	1.1%	97	27.6%	80	22.8%	181	51.6%	

SECTION TWO:

4.4 Data preparation

After collecting the questionnaires, the data needed to be prepared for further stages of the analysis process. The process of data preparation consisted of: coding the data, data screening, and normality and scale reliability testing. To this end, all data were initially analysed through the SPSS programme version 18.0 for Windows. The preparation processes are described in the following section.

4.4.1 Coding data

Coding was used as a basic process to assign numbers to each answer from the questionnaire and to key them manually into SPSS programme (Malhotra et al. 1996). The coding procedure can be set either before or after receipt of completed questionnaire; so-called pre-coding and post-coding respectively (De Vaus 1995). The current research applied the pre-coding procedure to represent the various items. An

alphanumeric identity code was used based on the order of presentation in the questionnaire. For example, the website component 1 was coded as q1 and so on. In addition, a 5-point Likert scale was applied to rate the importance of each website component in the following manner: 1 (not important at all) to 5 (most important). For the demographic items, the variable was transferred to a number. For example, qualification was identified with 1 representing 'Bachelor degree', 2 representing 'Masters degree', and 3 representing 'PhD'.

4.4.2 Data screening

Before analysing the data, the researcher should examine the raw data and complete descriptive statistics in order to check if data have been entered into the SPSS correctly, check for missing data, and check for normality. Then, the researcher has to decide how to deal with any erroneous data identified (Sekaran, Uma & Bougie 2010). Moreover, this data screening can enhance one's understanding of the results of exploratory factor analysis (Sethi & King 1991). The approach taken for this research, based on this advice, is detailed below.

4.4.3 Missing data

Missing data may occur in research without being a matter for concern, but in some cases it will affect all variables (Graham & Schafer 1996). Generally, missing data will occur when a respondent misunderstands the survey instruction or the questions are unclear, which leads to a failure to complete one or more items in the questionnaire (Burns & Bush 2003). Missing responses may become an important issue if the rate is over 10% for any single item (Malhotra et al. 2002). For the current research, one of the items was removed from the analysis because about 90% of responses were missing. The missing values were coded as a number "99" to ensure that the data were accurate and not compromised. All other items fell well under Malhatra et al's (2002) suggested 10% level that may compromise reliability of results.

4.4.4 Normality test

The current research employed factor analysis modelling, which required the researcher to check the normal distribution of variables. Tabachnick and Fidell (1996) stated that

skewness and kurtosis values were used to check variables for normality distribution. By generating data through the SPSS programme, assessing the skewness and kurtosis values of the current research found absolute values not exceeding 3 and 10 respectively, therefore indicating that factor analysis could be used in this current research (Kline 2005) (see Appendix 4.2). If the absolute values of kurtosis are greater than 10.0, this might indicate some problem with the data and methods of analysis may need to be reconsidered. If values are higher than 20.0, it might be a major issue, perhaps suggesting unacceptable data (Kline 2005, p. 50).

4.4.5 Scale Reliability test

Testing reliability is one of the research requirements to identify the degree of stability and consistency of the method used in the research (Sekaran, U 2003). The degree of reliability ensures that the research instrument that is used in the research is without bias and is a reliable measurement.

Cronbach's alpha statistics were applied in the present research to examine the reliability of three main items including: Appearance component (Allen, Mahto & Otondo 2007; Bernard et al. 2002; Cober et al. 2004; Coulter & Punj 1999; Edell & Burke 1987; Hedge 2005; Pelet & Papadopoulou 2013; Vate-U-Lan 2007; Zusman & Landis 2002), Technical components (Cober et al. 2004; Cyr & Trevor-Smith 2004; Fan & Tsai 2014; Gehrke & Turban 1999; Kapurubandara & Lawson 2006; Newman & Landay 2000; Rababah & Masoud 2010; Robbins & Stylianou 2002; Tan & Wei 2006) and Information components (Allen, Scotter & Otondo 2004; Barber, AE & Roehling 1993; Barber, L et al. 2005; Cober, Brown & Levy 2004; Katerattanakul 2002; Tan & Wei 2006). The three scales were conducted by reviewing the previous literatures presented in Chapter Two. This test was used to measure the internal consistency. Table 4.8 presents the Cronbach's alpha reliability coefficients and indicates that all scales used in the current research have a strong reliability, exceeding an alpha of 0.88. This means that the instrument can be used across the various items as a group in the current research.

Table 4.8: Reliability results

Scale	Number of items	Cronbach's alpha
Appearance components	7	0.880
Technical components	5	0.909
Informational components	6	0.907

SECTION THREE:

4.5 Website components of well-designed university's website

This section reports the results of questionnaire data analysed in order to explore the website components of well-designed university websites. The Mann-Whitney U test, T-tests, and one-way ANOVA tests were employed to compare the responses of different groups of recent recruits and their perceptions of website components in relation to which attributes attracted them to apply for a position. The data was classified into six criteria: (1) level of qualification, (2) academic title level, (3) nationality, (4) length of employment, (4) use of website, (6) information gained, and (7) ranked university groups. Different statistical tools were used to analyse different criteria depending on sample size (Sekaran 2000). Factor analysis was also employed to identify interrelationships between the set of website components measured using the Likert Scale.

4.5.1 Website components and level of qualification

To identify the users' satisfaction with significant website components according to level of qualification held, the Mann-Whitney U test was conducted to compare the differences in responses between participants groups according to qualification level. This analysis was performed for three sets of two groups: Bachelors/Masters; Bachelors/PhD; Masters/PhD. As universities seek to use their websites to attract highly-qualified academic staff, understanding any subtle differences in preferences will assist in guiding website design and overall conveying of the employer brand.

Due to the small number of respondents who held a Bachelor degree (only 22 responses), this current study thus applied the non-parametric technique, Mann-Whitney U test, to investigate differences between two independent groups; Bachelor and Master degrees (see Table 4.9), Bachelor degree and Ph.D. (see Table 4.10), and Master degrees and Ph.D. (see Table 4.11). Pallant (2007, p. 210) stated that Non-parametric statistics are employed when the data are considered to consist of very small samples and when the data do not meet the stringent assumptions of the parametric techniques.

Table 4.9 shows significant differences were found between responses from new academic staff who hold a Bachelor degree and those who hold a Masters degree in relation to the following: Use of attractive fonts, easy to read ($z = -2.377$, $p = 0.017$); use of attractive colours that aid understanding ($z = -3.012$, $p = 0.003$); Use of graphics and animation to create interest ($z = -2.606$, $p = 0.009$); Use of attractors e.g. showing University activities, hot news, internal and external links ($z = -2.985$, $p = 0.003$); Statement from management e.g. vision and goals ($z = -3.029$, $p = 0.002$); Presenting motto and logo of the university ($z = -3.043$, $p = 0.002$); Speed of page loading ($z = -2.561$, $p = 0.010$); Valid links e.g. there are no broken links ($z = -2.207$, $p = 0.027$); Showing site map ($z = -2.804$, $p = 0.005$); Search facilities ($z = -3.262$, $p = 0.001$); Up-to-date information ($z = -1.755$, $p = 0.079$); and locating Job Search links ($z = -1.785$, $p = 0.074$).

The results (Table 4.9) indicate that there were significant differences in the points of view held in relation to website components between newly recruited staff who hold a Bachelor degree only and those who hold a Masters degree. Staff with a Masters degree considered each component to be more important than did those with a Bachelors degree.

The results in Table 4.10 (next page) also show that there were statistically significant differences between newly recruited staff who held a Bachelor degree and those who had a Ph.D. The components were: Use attractive fonts, easy to read; Use of attractive colours that aid understanding; Use of graphics and animation to create interest; Use of attractors e.g. showing University activities, hot news, internal and external links; Statement from management e.g. vision and goals; Presenting motto and logo of the university; Speed of page loading; Valid links e.g. there are no broken links; Providing a

site map; Search facilities; Up-to-date information; and Easily located job search links (see Table 4.10). This indicates that the new staff who hold a Bachelors degree held different views on the university's website components compared to staff who had a Ph.D.

Table 4.9: Comparing user perceptions of website: Bachelor & Masters qualified

	Recent staff qualification	N = 206		Asymp. Sig. (2-tailed)	Z
			Mean Rank		
Use attractive fonts, easy to read	Bachelor	22	76.02	.017*	-2.377
	Masters	184	106.79		
Use of attractive colours to aid understanding	Bachelor	22	68.68	.003*	-3.012
	Masters	184	107.66		
Use of graphics and animations	Bachelor	22	73.23	.009*	-2.606
	Masters	184	107.12		
Use of attractors e.g. showing University activities, hot news	Bachelor	22	69.27	.003*	-2.985
	Masters	184	107.59		
Statement from management e.g. vision and goals	Bachelor	22	68.48	.002*	-3.029
	Masters	184	107.69		
Presenting motto and logo of the university	Bachelor	22	68.16	.002*	-3.043
	Masters	184	107.73		
Page loading speed	Bachelor	22	74.64	.010*	-2.561
	Masters	184	106.95		
Valid links e.g. there are no broken links	Bachelor	22	78.61	.027*	-2.207
	Masters	184	106.48		
Showing site map	Bachelor	22	71.59	.005*	-2.804
	Masters	184	107.32		
Search facilities	Bachelor	22	66.36	.001*	-3.262
	Masters	184	107.94		
Up-to-date information e.g. how long since website was updated?	Bachelor	22	83.61	.079**	-1.755
	Masters	184	105.88		
Locating job search links	Bachelor	22	83.20	.074**	-1.785
	Masters	184	105.93		

Note* Correlation is significant at the 0.05 level (2-tailed, $p < 0.05$), ** Correlation is significant at the 0.10 level (2-tailed, $p < 0.10$)

The results in Table 4.10 also show that the mean score for each component for staff with a Ph.D. was significantly higher than for staff with a Bachelor degree only. This indicates that staff with a Ph.D. may have had greater expectations in relation to each website component than did staff with a Bachelor degree only.

Table 4.10: Comparing user perceptions of website: Bachelor & PhD qualified staff

	Recent staff qualification	N=	Mean Rank	Asymp. Sig. (2-tailed)	Z
Use of attractive fonts, easy to read	Bachelor	22	60.70	.011*	-2.548
	PhD	145	87.53		
Use of attractive colours to aid understanding	Bachelor	22	46.89	.000*	-4.073
	PhD	145	89.63		
Use of graphics and animations to create interest	Bachelor	22	58.14	.005*	-2.800
	PhD	145	87.92		
Use of attractors e.g. showing University activities, hot news	Bachelor	22	55.86	.002*	-3.053
	PhD	145	88.27		
Statement from management e.g. vision and goals	Bachelor	22	53.18	.001*	-3.361
	PhD	145	88.68		
Presenting motto and logo of the university	Bachelor	22	49.77	.000*	-3.717
	PhD	145	89.19		
Page loading speed	Bachelor	22	56.95	.002*	-3.032
	PhD	145	88.10		
Valid links e.g. there are no broken links	Bachelor	22	61.70	.013*	-2.495
	PhD	145	87.38		
Showing site map	Bachelor	22	58.61	.006*	-2.774
	PhD	145	87.85		
Search facilities	Bachelor	22	48.61	.000*	-3.907
	PhD	145	89.37		
Up-to-date information e.g. how long since website was updated?	Bachelor	22	65.84	.044*	-2.015
	PhD	145	86.76		
Locating job search links	Bachelor	22	68.16	.081**	-1.742
	PhD	145	86.40		

Note: *Correlation is significant at the 0.05 level (2-tailed, $p < 0.05$), **Correlation is significant at the 0.10 level (2-tailed, $p < 0.10$)

The Z values shown in Table 4.11 indicate significant differences in perception in relation to website components between staff who hold a Masters degree and the staff who hold a Ph.D. The items were: Use of attractive colours that help understanding ($z = -1.933$, $p = 0.053$); Search facilities ($z = -1.965$, $p = 0.049$); Showing total rewards e.g. salary and benefits ($z = -1.856$, $p = 0.064$). This indicates that newly recruited staff who held a Masters degree had statistically significantly different viewpoints on the quality

of the university's website components. Table 4.11 shows that staff with a Masters degree had a lower mean score than did staff with a Ph.D. This could imply that staff who hold a Masters degree were less concerned about each website component than were those with a Ph.D.

Table 4.11: Comparing user perceptions of website: Masters & PhD qualified staff

	Recent staff qualification	N = 329		Asymp. Sig. (2-tailed)	Z
			Mean Rank		
Use of attractive colours to aid understanding	Master	184	156.42	.053**	-1.933
	PhD	145	175.89		
Search facilities	Master	184	156.39	.049*	-1.965
	PhD	145	175.92		
Showing total rewards e.g. salary and benefits	Master	184	173.35	.064**	-1.856
	PhD	145	154.40		

Note: *Correlation is significant at the 0.05 level (2-tailed, $p < 0.05$), **Correlation is significant at the 0.10 level (2-tailed, $p < 0.10$)

In brief, the Mann-Whitney U test results, reported in Tables 4.9 – 4.11, report on the differences in perceptions related to website components according to highest qualification held. The results reveal that the higher the qualification held the greater the expectations of the respondent in relation to website quality.

4.5.2 Website components and academic title levels

The results in Table 4.12 were derived from analysis using T-tests. The data was gathered from the recent academic staff and divided into four groups according to academic title indicating level of appointment: Lecturer (319 people), Assistant Professor (23 people), Associate Professor (7 people), and Professor (2 people). The sample size for assistant, associate professor and professor was too small and unacceptable for calculation using T-tests. Hair et al. (1995) suggested that the acceptable sample size should be more than 30 to use T-tests. Thus, the researcher combined these four groups into two groups named junior lecturer (lecturer = 319) and

senior lecturer (Assistant, Associate professor and professor = 32). In this study, therefore, junior lecturer was defined as an academic staff member who had no academic title or was a lecturer; and senior lecturer was defined as an academic staff member who held the title of Assistant Professor, or above.

Table 4.12: Differences between junior lecturer and senior lecturer

	Academic title	Mean	Std. Deviation	Std. Error Mean	t-value	Sig. (2-tailed)
Showing site map	Junior lecturer	3.83	1.047	.059	-2.205	.049*
	Senior lecturer	4.16	.847	.150		
Locating job descriptions/details	Junior lecturer	4.09	1.019	.057	1.785	.075**
	Senior lecturer	3.75	1.136	.201		

Note: N. of Junior lecturer = 319, N. of Senior lecturer = 32

*Correlation is significant at the 0.05 level (2-tailed, $p < 0.05$), ** Correlation is significant at the 0.10 level (2-tailed, $p < 0.10$)

The results indicate significant correlation at the 0.05 level for Providing site map (t-value of -2.205, p-value of .049), and significant correlation at the .10 level for Locating job descriptions (t-value of 1.785, p-value of .075). These findings indicate that senior lecturers were more likely to want a site map shown on the home page than were junior lecturers (see Table 4.12). In contrast, more junior lecturers wanted the website to enable ease of locating and accessing job descriptions/details than did senior lecturers.

4.5.3 Website components and nationality

To compare the mean scores of perceptions of the website components between two different groups, a T-test was conducted in the current study. Table 4.13 shows that significant differences were found according to nationality when calculating separately for Foreign and Thai respondents. Eight items presented t-values with statistically significant differences. These items include: Use of attractive colours to aid understanding ($t = -2.216$, $p = .027$); Use of attractors e.g. showing University activities ($t = -3.881$, $p = .000$); Statement from management e.g. vision and goals ($t = -2.380$, $p = .018$); Presenting image and logo of the university ($t = -3.257$, $p = .001$); Providing site map ($t = -2.254$, $p = .025$); Search facility ($t = -3.141$, $p = .002$); Up-to-date

information ($t = -2.069$, $p = .039$); and ease of Locating job search links ($t = -4.744$, $p = .000$).

Table 4.13: Comparing user perceptions: Foreign & Thai staff

	Nationality	Mean	Std. Deviation	Std. Error Mean	t-value	Sig. (2-tailed)
Use of attractive colours to aid understanding	Foreign	3.24	1.091	.203	-2.216	.027*
	Thai	3.72	1.117	.062		
Use of attractors e.g. showing University activities	Foreign	3.03	1.210	.225	-3.881	.000**
	Thai	3.84	1.055	.059		
Statement from management e.g. vision and goals	Foreign	3.17	1.284	.238	-2.380	.018*
	Thai	3.68	1.090	.061		
Presenting motto and logo of the university	Foreign	2.86	1.093	.203	-3.257	.001**
	Thai	3.57	1.120	.062		
Showing site map	Foreign	3.45	1.121	.208	-2.254	.025*
	Thai	3.90	1.019	.057		
Searching facilities	Foreign	3.45	1.088	.202	-3.141	.002**
	Thai	4.06	.995	.055		
Up-to-date information	Foreign	3.69	1.257	.233	-2.069	.039*
	Thai	4.10	1.007	.056		
Locating job search links	Foreign	3.17	1.256	.233	-4.744	.000**
	Thai	4.10	.980	.055		

Note: Foreign N. = 29, Thai N. = 322

*Correlation is significant at the 0.05 level (2-tailed, $p < 0.05$), ** Correlation is significant at the 0.01 level (2-tailed, $p < 0.01$)

These results indicate that Thai staff were more concerned about these website components (see Table 4.13) than were foreign staff. In other words, these website components more greatly influenced Thai staff to decide to apply to work in the university than they did foreign staff.

4.5.4 Website components and length of employment

The results presented in Table 4.14 were assessed according to differences in length of employment, separating those who had worked for their university for less than 30 months from staff who had been employed from 31 to 60 months. The results indicate that t-values show statistically significant differences in relation to three website components. These components were: Use of graphics and animation to create interest ($t = -2.623$, $p = .009$); Use of attractors e.g. showing University activities ($t = -2.276$, $p = .025$); and ease of Locating job search links ($t = -4.744$, $p = .000$).

= .024); and Page loading speed ($t = -2.818$, $p = .005$). This indicates that the academic staff members who worked for the university from 31 to 60 months were the group most likely to agree that use of graphics and animation, use of attractors, and speed of page loading would influence their decision making to apply for a position.

Table 4.14: Different perceptions between lengths of employment

	Length of employment	Mean	Std. Deviation	Std. Error Mean	t-value	Sig. (2-tailed)
Use of graphics and animations to create interest	< 30 months	3.10	1.117	.075	-2.623	.009**
	30-60 months	3.42	1.127	.098		
Use of attractors e.g. showing university activities	< 30 months	3.67	1.105	.075	-2.276	.024*
	30-60 months	3.94	1.047	.091		
Page loading speed	< 30 months	4.03	1.096	.074	-2.818	.005**
	30-60 months	4.33	.869	.076		

Note: N . of < 30 months = 219, N . of 30-60 months = 132

*Correlation is significant at the 0.05 level (2-tailed, $p < 0.05$), ** Correlation is significant at the 0.01 level (2-tailed, $p < 0.01$)

4.5.5 Website components and use of website before applying for a position

Recent recruits were asked whether they viewed the university's website before they applied for their job. For this analysis, the recruits were divided into two groups: 1) staff who viewed the university's website (yes) and 2) staff who did not view the website (no). To compare differences between recent staff who viewed their university's website before applying for a position and those who did not, a T-test was employed.

Results in Table 4.15 show significant differences in views relating to web components between academic staff who used the university's website as the main channel to acquire helpful information before they applied for a job and staff who did not use the university's website. The results show a significant correlation at the 0.05 level for two items: Present image and logo on the web ($t = -3.367$, $p = .001$); and Presenting university's buildings and landscape pictures ($t = -2.381$, $p = .018$). Results reveal a correlation significant at the 0.01 level for three items: Statement from management ($t = -1.816$, $p = .071$); Up-to-date information ($t = -1.680$, $p = .094$); and Locating job search links ($t = -1.782$, $p = .076$).

The results indicate that potential candidates may use the university's website to view the university's buildings and environment, the university's image and logo, and to read the university's philosophy or vision before they decide to apply for a position. Furthermore, the provision of up-to-date information and job search links were both also considered important and thus may encourage potential candidates to use the university's website.

Table 4.15: Staff who viewed university website before applying for their position

	Viewed university website before applying	Mean	Std. Deviation	Std. Error Mean	t-value	Sig. (2- tailed)
Statement from management e.g. vision and goals	no	3.49	1.248	.112	-1.816	.071**
	yes	3.73	1.026	.068		
Presenting motto and logo of the university	no	3.24	1.187	.106	-3.367	.001*
	yes	3.66	1.077	.072		
Presenting university's building and landscape pictures	no	3.39	1.099	.098	-2.381	.018*
	yes	3.67	1.007	.067		
Up-to-date information	no	3.94	1.131	.101	-1.680	.094**
	yes	4.14	.972	.065		
Locating job search links	no	3.89	1.179	.105	-1.782	.076**
	yes	4.09	.941	.063		

Note: N Of staff who did not look at the university's website = 125, N Of staff who looked at the university's website = 226

*Correlation is significant at the 0.05 level (2-tailed), ** Correlation is significant at the 0.10 level (2 – tailed, p <0.10)

4.5.6 Website components and information gained from university's website

In the questionnaire, recent academic staff members were asked whether or not they were able to acquire helpful information from their university's website that might influence their decision to apply for a job. Then, the recent recruits were classified into two groups: 1) staff who acquired helpful information on the website (yes), and 2) staff who did not acquire helpful information (no) (see Table 4.16).

A T-test was conducted to compare the mean scores of perceptions in relation to the website components between staff who gained helpful information from the university's website and staff who did not gain information they found helpful. The results in Table 4.16 show the t-values for ALL website components indicated statistically significant differences, t-values of -3.046 to -5.986; and p-values of .000 to .001.

Table 4.16: Perception of staff of quality of information on university website

	Acquired helpful information	Mean	Std. Deviation	Std. Error Mean	t-value	Sig. (2-tailed)
Use attractive fonts, easy to read	no	3.31	1.183	.091	-3.927	.000
	yes	3.78	1.036	.077		
Use of attractive colours to aid understanding	no	3.41	1.190	.091	-4.449	.000
	yes	3.93	.992	.074		
Use of graphics/animations	no	2.91	1.137	.087	-5.276	.000
	yes	3.52	1.041	.077		
Use of attractors e.g. University activities	no	3.43	1.211	.093	-5.986	.000
	yes	4.09	.848	.063		
Statement from management e.g. vision and goals	no	3.34	1.216	.093	-5.160	.000
	yes	3.93	.925	.069		
Presenting motto and logo of the university	no	3.18	1.168	.090	-5.540	.000
	yes	3.82	1.006	.075		
Pictures of university's buildings/landscape	no	3.34	1.088	.083	-4.049	.000
	yes	3.78	.962	.072		
Page loading speed	no	3.90	1.160	.089	-4.304	.000
	yes	4.36	.823	.061		
Valid links e.g. there are no broken links	no	3.84	1.234	.095	-4.490	.000
	yes	4.35	.860	.064		
Showing site map	no	3.63	1.145	.088	-4.114	.000
	yes	4.08	.866	.064		
Searching facilities	no	3.77	1.104	.085	-4.331	.000
	yes	4.23	.870	.065		
Showing both Thai and English version	no	3.84	1.234	.095	-3.968	.000
	yes	4.30	.919	.068		
Showing total rewards e.g. salary and benefits	no	3.42	1.322	.101	-3.046	.003
	yes	3.82	1.123	.083		
Locating contact information	no	3.91	1.114	.085	-3.808	.000
	yes	4.32	.874	.065		
Locating job descriptions/details	no	3.87	1.128	.087	-3.351	.001
	yes	4.24	.903	.067		
Locating staff/employee hiring policies	no	3.74	1.188	.091	-3.979	.000
	yes	4.19	.914	.068		
Up-to-date information	no	3.84	1.127	.086	-4.047	.000
	yes	4.28	.890	.066		
Locating job search links	no	3.79	1.135	.087	-4.017	.000
	yes	4.23	.883	.066		

Note Table 4.16: *N*. Of the staff who did not acquire helpful info from the university's website = 170, *N*. Of the staff who acquired helpful info from the university's website = 181, Correlation is significant at the 0.01 level (2 – tailed, $p < 0.01$)

The results shown Table 4.16 (above) indicate that all website components assessed by the staff who acquired useful information from their university's website were statistically significant and influenced their decision to apply for a job than assessed by the staff who found the university's website did not provide the information they required.

4.5.7 Website components and ranked university groups

A one-way analysis of variance was conducted to compare the variance between the responses from new recruits at different groups of universities: consisting of Top, Middle, and Lower ranked Universities, on the perception of their university's website components (see Table 4.17). The results establish that there were statistically significant differences at the .05 level for 'Providing both Thai and English versions' (F- value = 3.322, p-value = .037) and 'Locating contact information' (F-value = 3.190, p-value = .042). A large F ratio indicated that there was more variability between groups than there was within each group (Pallant 2007). These findings indicate that there were significant differences between each group of ranked universities in relation to two components: 'Providing both Thai and English versions' and 'Locating contact information'.

Table 4.17: Perception of information quality & ranked university group (ANOVA)

Ranked University Grouping		Std.			Sum of Squares		F	Sig.
					Mean	Deviation		
Providing both Thai and English versions	Top	4.28	.989	.090	8.019	420.05	3.322	.037
	Middle	3.98	1.130	.100				
	Lower	3.95	1.177	.115				
	Total	4.07	1.106	.059				
Locating contact information	Top	4.29	.782	.071	6.512	355.22	3.190	.042
	Middle	4.10	1.083	.096				
	Lower	3.95	1.144	.112				
	Total	4.12	1.017	.054				

A Post Hoc test was conducted to compare the mean score of specific groups (see Table 4.17a). In terms of 'Providing both Thai and English versions', responses from Top

ranked universities were significantly different to those from Middle ranked universities (Mean difference = .307, p-value = .073) and Lower ranked universities (Mean difference = .331, p-value = .064) at the .10 level. ‘Locating contact information’ shows significant differences at the .05 level for the three groups of ranked universities. Table 4.17a also reveals that responses from Top ranked universities were significantly different from those from Lower ranked universities (Mean difference = .340, p-value = .033). These results indicate that academic staff in Top ranked universities were more likely to agree that ‘Providing both Thai and English versions’ on the university’s website would influence their decision making in relation to applying for a position, compared with the staff in Middle and Lower ranked universities. Staff in Top ranked universities tended to place more emphasis on the website component ‘Locating contact information’ than did staff from the Lower ranked universities.

Table 4.17a: Post Hoc test

Ranked groups of University			Mean Difference	Std. Error	Sig.
Both Thai and English versions shown	Top	Middle	.307	.140	.073**
		Lower	.331	.147	.064**
	Middle	Top	-.307	.140	.073**
		Lower	.024	.145	.985
	Lower	Top	-.331	.147	.064**
		Middle	-.024	.145	.985
Locating contact information	Top	Middle	.189	.129	.306
		Lower	.340*	.135	.033*
	Middle	Top	-.189	.129	.306
		Lower	.150	.134	.499
	Lower	Top	-.340*	.135	.033*
		Middle	-.150	.134	.499

*Correlation is significant at the 0.05 level (2-tailed, $p < 0.05$), ** Correlation is significant at the 0.10 level (2-tailed, $p < 0.10$)

4.6 Factor analysis results

Factor analysis was employed to identify the interrelationships among a set of items in a scale. Additionally, exploratory factor analysis was used to examine the underlying influences on the set of observed variables (Hair, Anderson, Tatham & Black 1995). All 18 items were manipulated in a factor analysis, using principal components analysis

(PCA) with orthogonal Varimax rotation. The results of this analysis are presented in Table 4.19. In this research, PCA was the exploratory factor analysis (EFA) method employed using the SPSS software version 18.0 for exploratory purposes. Two main reasons for conducting the PCA were: (1) to categorise variables in order to originate the principal factors for comparison, and (2) to measure the relationship between each variable and its associated factor.

According to Pallant (2007), assessing the appropriateness of the use of a factor analysis method requires the researcher to check three conditions: (1) the correlation matrix and ensure that the correlation of a least $r = 0.3$ (Tabachnick & Fidell 1996); (2) Kaiser-Meyer-Olkin (KMO) over measure of sampling adequacy; and (3) Bartlett's test of Sphericity to test reliability of the data whether it can be used for factor analysis method or not.

Table 4.18: KMO and Bartlett's Test of Sphericity for components of university websites

All items		
<hr/>		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.929
Bartlett's Test of Sphericity	Approx. Chi-Square	3908.248
	Df	136
	Sig.	.000

Kaiser (1974) used every day words to clearly communicate the strength of results obtained. He offered guidelines as follows: 0.90 marvellous, 0.80 meritorious, 0.70 middling, 0.60 mediocre, 0.50 miserable, and less than 0.50 unacceptable. Table 4.18 shows the Kaiser-Meyer-Olkin (KMO) test verified a 0.929 KMO measure of sampling adequacy, which is 'marvellous'. Tabachnick and Fidell (1996) suggested that the KMO value is excellent when the KMO value is greater than 0.60. Table 4.18 shows that the Bartlett's Test of Sphericity value is significant ($p = .000$), then factorability is assumed. These outcomes, therefore, ensure the appropriateness and the reliability of data for using exploratory factor analysis (EFA) on all items in the present study.

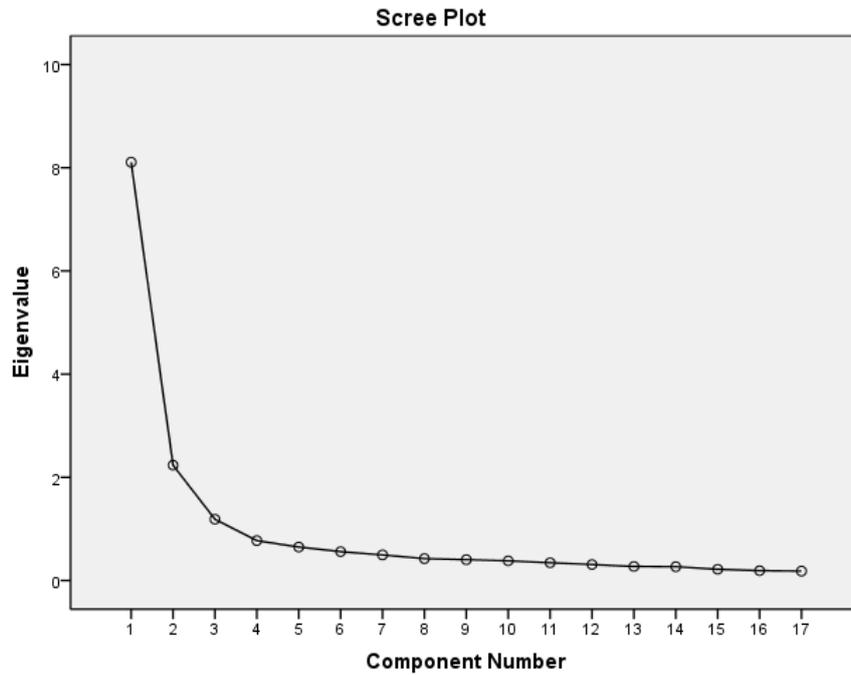


Figure V: Scree plot of Initial Factor Solution for university’s website components

Figure V shows Cattell’s scree plot that supports a three-factor solution as a slope turns to a horizontal line at the fourth factor. Furthermore, the three factors had given values greater than one. This suggests that the first three factors could be extracted. The communality of each variable was quite high, ranging from 0.480 to 0.721. This indicates that the variance of the original values was acquired fairly well by the three factors.

Factor analysis using the Varimax method of rotation was manipulated in the 18 items representing university website components. While using the factor rotation, an item ‘Use of attractive colours to aid understanding’ was removed due to cross loading on two factors (e.g. Technical factors and Appearance factors).

All 17 items had high loadings of greater than 0.4 that were considered of practical significance (see Table 4.19). The outcome shows the cumulative percentage of variance was 67.825% indicating acceptable results for the exploratory factor analysis. Hair et al. (1998) suggested that the cumulative percentage of variance should be greater than 50%. Most variables loaded heavily on one factor and did not load heavily on

others. This indicated that there was minimal overlap among these factors and that all factors were structured independently.

Cronbach's alpha coefficient is generally used to measure a reliability test in the study of social sciences (Hair et al. 1998). Table 4.19 shows a composite reliability (Cronbach's alpha) for the university website components was manipulated to determine the internal consistency of the three factor indicators. The alpha coefficient for all three factors was 0.880, 0.909, and 0.907 respectively. This was considered reliable and indicating internal consistency of a factor. If a Cronbach's alpha value is greater than 0.5, suggested Hair et al. (1998), it can be considered reliable and it will be a more reliable result if over 0.7, as recommended by Nunnally and Bernstein (1994).

The first factor was labelled 'Information quality'. It included six items and the total variance was 47.693%. This factor refers to the quality of information communicated via a university's website to those considering applying for a position. This includes quality of the presentation of contents and providing sufficient information about a job and the organisation for a viewer to make a decision on whether or not to apply, and thus it is positively related to attraction. The items are: 'Locating job, descriptions/details', 'Locating staff/employee hiring policies', 'Showing rewards e.g. salary and benefits', 'Locating contact information', 'Up-to-date information e.g. how long since the website was updated', and 'Locating job search links'.

Table 4.19: Factor Analysis Results for university website components (Varimax Rotation)

	Factor loadings			
	Informational quality	Technical quality	Appearance quality	Communalities
Locating job descriptions/details	.857			.480
Locating staff/employee hiring policies	.843			.482
Showing total rewards e.g. salary and benefits	.758			.547
Locating contact information	.718			.508
Up-to-date information e.g. how long since website was updated?	.624			.610
Locating job search links	.611			.427
Average value	.735			
Valid links e.g. there are no broken links		.762		.662
Search facilities		.751		.707
Page loading speed		.740		.612
Showing site map		.668		.735
Providing both Thai and English versions		.611		.590
Average value		.706		
Presenting motto and logo of the university			.847	.580
Statement from management e.g. vision and goals			.648	.638
Use of attractors e.g. showing University activities, hot news, internal and external links			.613	.721
Use of graphics and animations to create interest			.608	.699
Presenting university buildings and landscape pictures			.576	.621
Use attractive fonts, easy to read			.525	.532
Average value			.636	
Total scale Reliability	.936			
Eigenvalue	8.108	2.235	1.187	
% of Variance Explained	47.693	13.150	6.983	
Cumulative Variance (%)	47.693	60.842	67.825	
Cronbach's Alpha	0.880	0.909	0.907	
Number of items (total=17)	6	5	6	

The second factor was labelled as 'Technical quality' as it included valid links, search facility, page loading speed, showing site map and provided both Thai and English. It accounted for 13.15% of the total variance. This factor refers to the quality of constructs of usability of the university's website which were designed to engage the potential candidates in order that they may successfully process the information they require for decision making. The items were: 'Valid links e.g. there are no broken links', 'Search facilities', 'Page loading speed', 'Showing site map', and 'Providing both Thai and English versions'.

The third factor was labelled as 'Appearance quality'. It included six items and the total variance was 6.98%. This factor refers to the quality of website appearance which was conveyed by the quality of the website design and how it influenced perceptions of newly recruited staff and thus influenced their decision to apply for the job. The items were: 'Presenting image and logo of the university', 'Statement from management e.g. vision and goals', 'Use of attractors e.g. showing university activities, hot news, internal and external links', 'Use of graphics and animations to create interest', 'Presenting university buildings and landscape pictures', and 'Use attractive fonts, easy to read'.

SECTION FOUR:

4.7 Results of the semi-structured interview

Fifteen HR managers from different Thai universities were requested to be an interviewed for the current study; three rejected citing participant confidentiality concerns. However, the researcher ensured that a balanced population with four HR managers from each of the three levels of ranked universities being interviewed. Twelve HR managers from different universities were asked whether they believed there had been increased success in attracting high quality applicants and retaining staff since establishment of their employer brand on their university's website. The interviews were conducted by employing a semi-structured interview method. Length of the interview was from 20 to 60 minutes - averaging approximately 40 minutes. Interviews were audiotape recorded where participant permission was obtained. Confidentiality of participants was maintained and notes were taken by hand for those not wishing their

interview to be taped. All interviews were then transcribed and then translated into English.

At this stage, concepts, themes, and issues arising from the transcribed interview data were noted in order to create broad categories. Then, similar issues or themes in the broad categories were combined to produce specific categories. Once the specific categories were distinguished, the information provided by the HR managers was then further sorted into more specific categories as they relate to website quality, university image and employer brand and academic staff attraction, selection and retention. The researcher questioned the respondents on whether they believed or had been advised that their university's website influenced potential applicants in their decision to apply/not to apply and any affect they believed the website had on current staff since the employer brand was established on the website. The impact of their website on staff attraction and retention was the significant issue being focus on this current study; and these issues were mentioned in the interviews. Thus, the summarised issues were categorised into two main areas consisting of "Staff attraction" and "Staff retention". First, the results related to attracting staff (4.7.1) are described, followed by the findings related to retaining staff (4.7.2).

Table 4.20 shows the large range of issues related to establishing an employer brand on a university website as raised by interviewed HR managers from Thai universities. To further explain the calculation of percentages, a table breaking results down has been provided in Appendix 4.3.

4.7.1 Staff attraction

One direct question was asked in relation to the level to which HR managers felt that their website influenced potential applicants to apply for a job with their university. HR managers were also asked how they had become aware of the level of use by job applicants.

An HR manager at a middle-ranked (A) university was firm in their statement that their website does influence potential applicants to apply for positions. Professional vacancies are posted on the university's webpage where they believe applicants also

learn about the university's profile when checking for job vacancies. This university had checked with applicants and knew that most candidates had obtained the information they required about the job they had applied for from their university's website. Likewise, an HR manager from a lower ranked university stated firmly that their website does extensively influence potential applicants as they have asked them during their job interview and learned that they had obtained job information and information about the university from the website.

Table 4.20: Summary of data from semi-structured interviews

		Issue	Top (n=4)	Middle (n=4)	Lower (n=4)	Total
Staff attraction	Web appearance	Use of Colours and Graphic animation	2	2	1	41.6%
		International standard design such as providing English version	3	-	2	41.6%
		Emphasising the uniqueness image of university	4	2	-	50.0%
	The content of website	Academic information, research supports	3	2	2	58.3%
		Ease to access job vacancy info.	-	1	2	25.0%
		University's activities	1	-	2	25.0%
Staff retention	Communication	Providing discussion forum	3	3	4	83.3%
		Internal communication	3	3	4	83.3%
		Difficulties of using a forum	3	1	-	33.3%
	Presenting staff achievements	Encouraging current staff	4	4	3	91.6%
		Creating university reputation	3	-	-	25.0%

Note: The dashes (-) in Table 4.20 indicate that none of the HR manager in this study raised this issue in their interviews

At a top-ranked (G) university the HR manager confirmed that they believed their website conveyed a positive image that improved their reputation and led to increased numbers of applications. The job-specific information provided on the website was easy to access and provided in-depth information on the role, according to the HR manager. This information was also available in English supporting the possibility of increased applications from overseas academics (as well as students) however they did not state how they knew this to be the case. It was assumed that if the technique was used by the university, the response from student and staff applicants would be similar (Gray, Fam & Llanes, 2003). Students are usually aged between 18 and 25 and are pursuing a

qualification. Potential academic staff would be qualified and thus 30+ and seeking to earn an income that recognised their qualifications.

The HR manager from another middle ranked university (B) was only able to advise that they believed that their website influenced the number of applicants they received but that they did not have any records to confirm this. Another middle-ranked university's HR Manager (C) felt that their website would not directly affect applicants' decision making because the HR Manager believed that the applications they received were commonly from those who already knew about the university; those who were not dependent on the information contained on their website. The information given by HR managers in middle-ranked universities (B and C) indicated that the applications they received may have come from Thai nationals or from any foreign applicant who is living in Thailand. They did acknowledge that their website could communicate to a wider audience and assist them to increase the number of applications received, however they did not indicate that they were currently using their website to reach out globally to obtain high quality academic staff.

At another middle-ranked (D) university the HR manager felt that as their website was influencing student applications it would also be influencing job applications however they did not offer any information on how they knew this to be so. Similarly the HR manager from a top-ranked (E) university stated that they felt that their website should influence potential applicants in some way but that they did not keep records on this.

From the interviews, staff attraction issues were divided into two sub-issues: (1) Web appearance and (2) Content of the website. There were elements within each sub-issue that are detailed in the following discussions.

(1) *Web appearance*

The issue of Web appearance was raised by all interviewees. Although they did not always mention it directly, they mentioned it in relation to different components. For example, they voiced the need to carefully choose the colours used on their websites, gave reasons why they employed graphic animation on their websites, and explained

how they established the unique image of their university through their website. These issues were summarised from the interview results as follows:

Use of colour and graphic animations

Table 4.20 shows that five of the twelve respondents mentioned using colour, graphic animations and pictures as an essential website component which could add more interest to the university website. One of four HR manager in the Lower ranked university mentioned the importance of selecting suitable colours for use on the website. Half of the HR managers in both Top and Middle ranked universities mentioned using a symbolic colour that linked to their university's coat of arms was one of the effective ways of presenting the university's uniqueness through their website.

"... On our webpage we've selected a specific green colour symbolic of the university colour. The colour has to been used on every web page."

(HR manager from Top ranked university)

"We do design our website using our unique colour ... This might make it easier for people to recognise us when they see our website on the Internet"

(HR manager from Middle ranked university)

Another HR manager, whose university's symbolic colour is pink, explained how they had carefully chosen the shade of pink used to ensure the image they wished to convey was supported by their choice.

"... The symbolic colour of our university is pink. We cautiously selected the website's colour by choosing a light pink rather than vivid pink to avoid misunderstanding."

(HR manager from Top ranked university)

The reason for careful choice of the shade of pink used was in order to ensure that the use of colour supported the image the university wished to convey. A vivid pink may not have created an image of a university which is strong and that maintains traditional values that are desired of well-regarded universities world-wide. Use of graphic animation was also mentioned in the interviews. It was represented as an advance in IT

and as creating a positive image of the university. The presence of graphic animation was an issue raised by half of HR managers in both Top and Middle ranked universities.

“Our website represents our ability to utilise technology effectively for public relations and it also conveys a positive image to our staff, students, and others.”

(HR manager from Top ranked university)

Respondents also reported that choosing appropriate pictures on a website could be an issue affecting their image. Pictures shown on the website could deliver meaning to support the written message; therefore, it was necessary to select the pictures carefully.

“The new web page had been designed using a picture of people of Thai appearance. Most pictures presented on the website represented Asian culture; however, we do introduce some European people into the pictures to make the website more international.”

(HR manager from Top ranked university)

International standardisation

Recently, the growth of Thai universities has expanded from the national stage to an international stage. Needs of international students and academic staff has also increased dramatically and, therefore, a university’s website needs to be improved following the growth of the university to be able to compete with other international institutes. Although providing English as another option had been established on every university’s websites, five of twelve HR managers emphasised that it could not only allow foreign viewers to read the university’s messages, but it could influence their image positively. Locating the English version on the website was mentioned by HR managers in both Top and Lower ranked universities, but no HR manager from the Middle ranked university mentioned it (see Table 4.20).

“... To develop our university to international standard, our chancellor had set many tasks for us to achieve this standard. One of the tasks was renovating and re-designing our website ... our website now has a Thai and an English version and we’ve added more graphic animations to make the website more interesting.”

(HR manager from Lower ranked university)

Three HR managers from the Top and two from the Lower ranked universities reported that providing an English version as a language selection could gain opportunities for overseas potential applicants accessing the university information or messages delivered. It could create a university image as an international institute by locating English on the website.

“... We can create a positive image on the university’s website ...In addition, providing an English version on the website could enhance our efforts to establish image worldwide.”

(HR manager from Lower ranked university)

The HR manager from a top-ranked (L) university highlighted recent changes in their webpage to meet international design standards. They concentrated on providing Thai examples and producing a website presenting ‘Asian aspects,’ however they did introduce graphics containing Europeans to support internationalisation whilst providing information on Thai festivals and other events to support preservation of Thai culture. Information on the culture that a prospective employee would be entering into could be of importance in their decision to apply.

A lower ranked (J) university viewed their website as the best channel available to them to convey their image as a world class university to people worldwide. Accordingly they had redesigned their site to meet international standards.

Emphasising the unique image of the university

Half of the respondents mentioned that a website could convey the university image efficiently to the public, and thus it was necessary to create the proper image on the website in order to suit the nature of the university. All participants in Top ranked universities and half of HR managers in the Middle ranked universities agreed that a well-designed website was very important because it could convey the university’s image and represent the uniqueness of the university, whereas no participant from the Lower ranked universities mentioned creating the university’s uniqueness image on the website.

“We are really focusing on creating a positive image of our university. On our website, we present separately three aspects of our image, those of having: 1) a Green campus, 2) a Wireless campus, and 3) providing Cooperative education. All of these aspects describe and convey our unique image.”

(HR manager from Middle ranked university)

“... introducing our university as a first ranked Thai university and using the university’s motto ‘Pillar of the Kingdom’ on the first page positively affects our image magnificently. We believe this could be another way to build our reputation.”

(HR manager from Top ranked university)

A Middle-ranked university’s HR manager confirmed that conveying their image on the website was important and that they had ‘... *focused on creating a good image ... by presenting academic information and research*’ that would benefit people in general. In particular, this type of information would be of interest to academics. Another HR manager from a middle-ranked university stated that the image of their university included highlighting their strength in engineering and technology and their research. Again, academics from these fields that wish to pursue research in the area would find this information useful and it would create an image of an organisation that offered teaching and research in their area of interest.

A top-ranked university used their website to demonstrate their ability to use IT to support public relations efforts and positive images of staff and students. They used their website to reach out to the community and provide a range of information related to both research and community services, which can be accessed in four languages. Another top-ranked university believed that effective communication of their image had contributed to an increase of 2-3 times the number of students from the previous years. Assuming the same technique used by the university, it could assume that student and staff applications would be similar (Gray, Fam & Llanes, 2003). However, there are differences between student and staff context. One of the age group is about 18-25 and getting qualification and another one group is about 30+ and earning an income linked to qualification. The HR manager believed that their website was an ideal channel for communicating messages to the public and that it had assisted them to attract additional

staff required. They believed that it was the preferred method of providing information to a broad range of people in today's world.

Another top-ranked university used their website to reflect their image through inclusion of the university's vision, details of academic resources and of using not just text and documents but making well-considered use of graphics and animation. They wished to convey an image of a university that was part of 'the cyber world' and had established Facebook and Twitter accounts.

One lower-ranked university used their website to create a positive image of their university by highlighting university activities and information on other activities of public interest to create a good image within the local community. This university had changed their website to improve their appeal worldwide by providing an English-language version and thus communicate their image globally.

All universities were attempting to improve their image through the design and content of their websites. HR managers from universities in all three groups recognised the perceived importance of this medium for local, national and international communication of their university's unique image.

(2) *Content of website*

The content of the website was one issue in this study that stirred comments from HR managers from all participating universities. From the interviews, the website content was described as the information or messages from a university delivered to the public via website technology. The contents were related to: a) Academic information and research support; b) Job vacancy information; and c) information on the university's activities. The results show that universities within each ranking level provided different information and that it had an effect on potential applicants in a range of ways as described next page:

Academic information and research support

Table 4.20 shows that seven of 12 respondents mentioned that providing academic information, or details of research support, was one of the necessary components on their websites. Because they were educational institutions, information related to education and research was an essential component that needed to be established on the university's website. Three of four HR managers from Top universities stated that presenting academic information on the website could represent their image positively.

“The website could reflect on our image in many ways such as: academic resources, university vision, and so on. All of these aspects are blended and represented on our website. We have not just text or documents to convey this message on our web page. These elements of our image are more important than that. They are ‘a part of our university on the cyber world’.” (HR manager from Top ranked university)

Similarly, half of the HR managers in both Middle and Lower ranked universities agreed with the need for academic and research support information to be provided on the website and that this reflected a positive image of the university.

“... We believe that the university's website conveys our image. For example, we provide academic information, such as information on research, and knowledge sources, on our website. These reflect positively the value of the university for both insiders and outsiders.” (HR manager from Middle ranked university)

“... we are also providing educational information, research reports, and details of academic seminars [on the website] which represent our image precisely.” (HR manager from Lower ranked university)

Job vacancy information

Only 25% of the participants raised the issue on providing job vacancy information on the webpage (see Table 4.20). One and two HR managers from Middle and Lower ranked universities respectively valued making job vacancy information available on their website that allowed potential applicants to search for information easily. No HR

manager from a top ranked university reported a need to make available job information on their website.

“... our professional vacancy announcements are mainly posted on the university web page. We believe that applicants will find the university’s profile, and they will be able to find job vacancies on our website. By checking applications, we learned that most local candidates got information about job vacancies via our website.”

(HR manager from Middle ranked university)

Furthermore, there was a view that locating job vacancy information could result in an increase in the number of applications from both local and foreign potential employees.

“Since we established a job vacancy section on our website, the number of applicants has increased by more than 50% compared with earlier years. Also, potential applicants can now be drawn from suitably qualified people nationwide, not only local applicants. Moreover, we can now receive foreign applicants as well.”

(HR manager from Lower ranked university)

Information on university’s activities

The results provided in the Table 4.20 show that 25% of respondents mentioned that presenting information on the university’s activities could interest Internet users and thus encourage them to visit their websites. One of four participants from the Top ranked university group claimed that reporting their university’s activities had positively influenced the university’s image.

“We believe a website can create a positive image of us, so we have ‘Top stories of the week’ presented on our website to report remarkable and important activities of the university. A further example presents our university as a national research university. We proudly present our journal and research publications, and we also make public our students who have brought an honour to the university on our website.”

(HR manager from Top ranked university)

In addition, half of respondents from Lower ranked universities reported that they provided information on their university's activities on their websites. This they believed had an effect on developing a good image of the university within local communities.

“We can create a positive image of our university on our website by providing university activities that will influence our image. Providing information on activities that are of interest to the public could result in a good image being created within local communities.”

(HR manager from Lower ranked university)

4.7.2 Staff retention

Two questions were asked of HR managers as follows: 1) how is the university's website used to retain their staff? *And* 2) how do you believe the website would lead to motivated, loyal and committed staff? The findings show that 'Use of a forum' and 'Presenting staff achievements' were reported as important in relation to staff retention.

(1) Communication

As mentioned in the literature review chapter, universities are utilising the Internet as an effective communication tool to convey messages to staff across the organisation. Using 'a discussion forum' was mentioned by HR managers as being able to be used to communicate easily and speedily with all staff in Thai universities.

This study defines a 'forum' as a communication channel through which staff can discuss of interest within the university through web board technology. The researcher could only access university websites at the Internet, not Intranet, hence forum facilities on university websites could not be accessed due to security and privacy issues.

Internal communication

Table 4.20 shows that ten of twelve HR managers reported that a forum was located on their website allowing staff to discuss matters by this internal communication method. Three of four HR managers in both Top and Middle ranked universities said their universities were using a forum to communicate internally. All participants from Lower

ranked universities claimed that a forum was an important way of facilitating communication with and between staff.

“We have a forum for communicating with our staff. It enables them to share their ideas or suggestions on teaching and research. Having a forum on the institute’s website provides a good opportunity for staff (them) to express their opinions on teaching and even on general issues related to the institute.”

(HR manager from Middle ranked university)

Utilising a forum was also mentioned in relation to the ways it could benefit and improve communication in the university. For instance, sharing information via a forum could enable them to quickly and easily deliver announcements to all staff within the university.

“The main purpose of our web board is to communicate university messages to our staff. We normally post important news or information on our web board, for example research funding received, scholarships available, and university activity invitations.”

(HR manager from Lower ranked university)

“We have got our own communication system, called Internal Communication System (ICS). It is used to communicate to all staff within the university. ICS is also used for sending messages from administrators to subordinate staff. It allows us to work quicker and provides greater mobility.”

(HR manager from Lower ranked university)

In addition, it was reported that staff relationships could be developed using a discussion forum.

“The web board is also the staff’s channel to send messages and share their ideas or comments between staff. This allows all staff to participate which leads to improved staff relations in our university.”

(HR manager from Lower ranked university)

Difficulties of using a discussion forum

Although use of a discussion forum was reported as necessary and of potential benefit for the universities in terms of internal communication, difficulties in ensuring the appropriateness of messages posted on the web board were also reported. Three out of four HR managers from Top ranked and one of four HR managers from Middle ranked universities said that controlling the content and type of messages being made public on the university's forum was a complicated task and it was of concern because it had a potential influence on the university's reputation. No HR manager from a Lower ranked university mentioned the issue of forum difficulties.

"... providing a web board is a double-edged sword. It's quite difficult to control all messages posted on the board. Negative messages may adversely affect our reputation if we don't act on them promptly."

(HR manager from Top ranked university)

"I think we should provide a discussion forum but in a manner that we can control. For example, we do have a forum discussing academic subjects. A lecturer on a subject has a responsibility to control it directly. However, a discussion forum cannot be allowed on every topic due to 'online maturity and information literacy' being an issue. These are the same issues that can commonly be found in many public forums on the Internet (cyber world)."

(HR manager from Top ranked university)

In relation to difficulties in controlling messages on the forum, some universities therefore decided to not locate the forum on their website. An HR manager from a top ranked university and another from middle ranked university mentioned that they decided not to locate a forum on their website. This is because there are some difficulties in controlling messages on a forum.

"I don't think we should have it because we cannot fully control the comments on the web board; some comments may be inappropriate for public viewing on

our website. However, we already providing a link to allow our staff to lodge complaints and unsuitable messages can be screened out before they go public.”

(HR manager from Top ranked university)

“Recently, we don’t provide a web board on our website. We used to have it but it was becoming an advertising channel for some people negative messages were more often posted than positive ones. We found that we couldn’t get any benefit from the forum. Therefore, we decided to remove it from our website.”

(HR manager from Middle ranked university)

Another finding related to efficient use of forums and was that insufficient IT technology and computer skill to access the Internet, and lack of interest by staff on the topics in a forum, were the greatest barriers to effective use of forums. This included limited personal computer access and the need to provide all staff with IT skills, in particular to use the Internet effectively. These issues contributed to a lower number of forum members.

“The number of web board users is quite low which may be due to staff not being interested in the issues on the board ... Besides, some staff may not have a computer or may have limited Internet skills making accessing the web board difficult. Most of our staff are over fifty years old.”

(HR manager from Lower ranked university)

(2) Presenting staff achievements

Presenting staff awards and achievements on their university’s website was considered important by HR managers as it could influence staff satisfaction. Results displayed in Table 4.18 show that eleven of twelve HR managers reported that presenting staff achievements influenced staff’s perception of the university as a desirable place to work and, in particular, encouraged current staff to continue to develop their performance. It was also believed that it possibly motivated staff to increase their performance by following the example of staff who had won the awards.

“We report the activities that our staff are involved in and if they win an award we will proudly present their success on our website. Normally we will put their

stories on a specific page called “Highlight Reports”. We believe that promoting their honours on the university’s website may persuade other staff to follow and improve their skills for successful outcomes like that of staff who have won awards.”

(HR manager from Middle ranked university)

In addition, locating staff’s awards on a university’s website was reported as a factor that improved a university’s reputation. However, this issue was more common in the Top ranked universities. Three of four HR managers from Top ranked universities mentioned that showing staff awards or achievements on the website could positively impact on the university, in particular creating a higher reputation. In contrast, there was no HR manager from a Middle or Lower ranked university that mentioned this matter.

“We have a specific page to present honours and staff achievements which is separated into two parts: external awards and internal awards. External awards refer to awards gained by our staff from other institutes. Internal awards refer to the awards received from within the university. Both awards are presented on the website regularly to demonstrate the effectiveness of the university which is ranked number one in the country.”

(HR manager from Top ranked university)

“Our staff members who achieve any award are presented on our website on a specific page called ‘Highlighting staff achievements’. This page provides our staff members’ award and achievement details. It could persuade other staff to improve their performance. In addition, presenting individual achievements on the website also assists us to improve our reputation as we are seen by the public to have good quality staff working for us.”

(HR manager from Top ranked university)

There was some evidence that presenting staff achievements might not earn only benefits for the university. An inequitable judgment could cause conflicts among the staff that could negatively affect staff satisfaction.

“We have one forum but it doesn’t have much effect on our staff. For instance with winners, they might be the same person who has won an award every year. In this case, the award evaluation may not be viewed as reliable by other staff that would think they couldn’t win the award even they did attempt to increase their performance. Therefore, communicating staff honours in this instance would not convince other staff or people from outside the university.”

(HR manager from Lower ranked university)

“Presenting an individual achievement could have both positive and negative responses from current staff. A positive response may be to encourage our staff to develop their performance. In contrast, it can have a negative impact on staff perception. They might feel jealous of the winner and react with anger when they have to work together. Therefore, presenting individual achievement is important but needs to be presented cautiously.”

(HR manager from Top ranked university)

4.8 Summary

The results of the analysis of both quantitative and qualitative data gathered were presented in this chapter. The analysis of quantitative data was conducted on data gathered using the questionnaires to explore participants’ views of what constitutes effective website components. This was explored in terms of attracting potential applicants by using university websites to attract academic staff. This was followed by presentation of the results of qualitative data gathered via semi-structured interviews conducted with HR managers. Content analysis was employed to analyse the data gathered from the semi-structured interviews. Their meanings and implications will be further discussed in the following chapter.

Chapter 5

Discussion of Research Results

5.1 Introduction

After analysing the data and presenting the results in the previous chapter, this chapter aims to discuss and summarise those findings by comparing them with previous studies and providing assumptions to explain the nature of the findings. This chapter begins with section 5.2, the explanation of major findings of this research. Then, the overview of the research hypotheses is presented in section 5.3. The quality of Thai universities is discussed in section 5.4. Recommendations have been added to suggest, especially for Thai university web creators, ways to improve the quality of their websites to better convey their employer brand. Section 5.5 is the discussion of use of Thai university websites by potential staff and current staff. The use of Thai university websites in supporting improved quality of staff is discussed in section 5.6. Research contributions and a potential guideline are provided to suggest how Thai universities might best design their websites to attract and retain quality academic staff. This is presented in section 5.7. The last section discusses limitations and implications for further research.

5.2 Major findings of this research

According to the aims of the research, findings of this study concentrate on three major areas: 1) quality of Thai university websites, in particular to support their employer brand and the overall image of their university, 2) use of Thai university websites by potential and current employees, and 3) use of Thai university websites in supporting improved quality staff at Thai universities to achieve the government's objective of providing quality tertiary education in Thailand.

In order to answer the research questions set out in Section 1.4, the major findings are summarised in relation to each of the research questions:

1. Which attributes might best attract and retain high-quality academic staff to Thai universities?

Research confirms that quality of presentation and effectiveness of the content of a website will determine whether a potential customer will be attracted to, or abandon, a website. For this current study found that well-designed website could be categorised into three major groups of quality including: 1) Appearance Quality, 2) Technical Quality, and 3) Information Quality (see Section 5.4 for more details). The quality of website appearance, achieved through the use of attractive fonts and colours, graphics and animation, aims to make the website more interesting and appropriate for the target audience. If well designed, use of these attributes can effectively convey the university's image by presenting the university's logo and motto and any statements of vision and the university's philosophy in relation to education and/or research (see Section 5.4.1 for more details).

Technical quality of a website could be defined as the constructs of usability of the Internet where website designers address the need to engage the users in order to assist them to quickly and easily process the information on the site (Cober, Brown & Levy 2004). The current study found that the group of website components relating to technical quality, which had been established through research reported in the literature, were viewed as the most important group of components. With regard to the results from the previous chapter, the website components relating to technical quality of the website are included: speed of page loading, website navigation and providing multiple languages on the website (see Section 5.4.2 for details).

Previous research on employee recruitment has established that providing useful and sufficient information relating to the job and the organisation on the organisation's website can positively affect staff attraction (Allen et al. 2007; Tan & Wei 2006; Allen, Cotter & Otondo 2004; Barber & Roehling 1993). In the current study, the information quality is defined as the information for web users by offering them clear and relevant information which in turn will make it easy for the user to access and obtain the information they require (Tan & Wei 2006). This research found that potential applicants respond positively to the quality of information shown on the university

website which they are included: providing total rewards on the website and job vacancy information (see Section 5.4.3 for more details).

These combine's need for information.

The quality of Thai university website to attract and retain high-quality academic staff is also summarised in the Table 5.2.

2. How does a well designed website effectively and efficiently communicate the employer brand as it is related to attracting and retaining talented-academic staff in Thai university?

According to HR managers participating in this study, a well-designed university website could positively affect staff attraction and website quality could influence potential applicants in their decision to apply for a position in a university. Furthermore, a well-designed university website could convey a positive image that will improve university reputation and lead to increased numbers of applications, and it could also support the possibility of increased applications from overseas qualified staff. This is in line with discussion in the section 5.4: Quality of the website. However, there was an HR manager who argued that the university website could not directly affect applicant decision making because most applicants already knew about the university and they would not dependent on the information contained on the website. This indicates that reputation of the university, possibly directly related to their length of operation, may influence local potential applicants. Responses from new recruits via the questionnaire also highlighted those features of a website that would, for them, constitute a 'well designed website'. These are discussed under later in this chapter.

2.1 Are Thai university websites used by prospective and current employees?

Currently, Thai universities are not effectively communicating their employer brands on their websites to an international audience, as it is predominantly Thai nationals who are viewing their websites to consider applying for a position. The results shown in Table 4.4 show that university websites have most commonly been used by Thai national staff, not international applicants (67.4% of all Thai participants). The results show the percentage of non-Thai national staff that used the website before they applied for a position to be considerably low. For detailed explanation of the use of website by recent recruits, see section 5.4. Overall, recent recruits were more likely to have used the

website than those employed for more than three years. This suggests a trend that university marketers and recruiters will need to consider for the future.

2.2 For those who used their university's website to influence their application decision, did the website design, the search engine and information provided meet the new recruits' expectations, and if so, to what extent did it meet their expectations?

This research found that 64.4% of participants had visited their university's website, and more than half of them were able to obtain the information that might have improved their awareness of the university and thus influenced their decision to apply for a position. Over 90% of highly qualified staff (e.g. Masters and/or Ph.D. degree) used their university's website when seeking information on positions vacant, and these more highly qualified academics may hold greater expectations in relation to website quality. Results also show that more recently appointed academic staff (those who had worked for their university for less than 2.5 years) had tended to use university websites as their first resource to search for information before they applied for a job. Approximately half of these more recent appointments obtained the information they needed. When applying for a position in lower ranked universities, applicants may require more detailed information than when applying to top ranked universities. This is because the top-ranked universities have been established for some time and thus much information is commonly already known. Only 10.3% of non-Thai national academic staff claimed that they acquired the information they required from the university website. Academic applicants in particular are likely to be accustomed to searching websites as this forms part of their research skills.

3. Which factors are most significant in influencing potential applicants' decision to apply?

The results of research into the use of university websites by recently appointed academic staff presented in chapter four revealed that there are several significant factors that influence the use of these websites. Those aspects consist of: online recruitment, ranked group of university, length of employment, and level of qualification (see Section 5.5 for more details).

5.3 Overview of the research hypotheses

To address the research hypotheses set out in chapter 3, this section summarises the findings generated and presents these in Table 5.1.

Table 5.1: Results of the hypothesis testing

Hypothesis	Summary of findings
H1a: Having a website assessed as ‘well-designed’ will be positively related to attraction success for the university.	Results from the interviews revealed that a ‘well-designed’ website could increase applicant interest, and it could be an effective communication channel to contact both local and global potential staff. Moreover, the university’s website could reflect the university’s image.
H1b: Having a website assessed as ‘well-designed’ will result in the University attracting high-quality applicants for all job vacancies.	The research found that over 90% of more highly qualified staff (Masters degree 56.2% and Ph.D. 40.7%) used the university’s website to seek the information they required related to job vacancies. Furthermore, the ANOVA tests showed that the higher the qualification held the greater the viewer’s expectation in relation to website quality.
H2: Positive image perceptions will lead to increased numbers of high quality local and international applicants applying for positions at the university.	Results from the survey indicate that most Thai national academic staff used their university’s website before they applied for their job; however, only 31% of non-Thai staff used the university’s website before applying for their current job. Additionally, around 55% of Thai national staff said they could obtain the information they required from the website. While only 10% of non-Thai nationals could gain the information they required from the website.
H3: A positive relationship will exist between websites assessed to convey positive image perceptions and retention for universities surveyed.	The interview results revealed that universities used a discussion forum to maintain contact with staff as an internal communication tool. Research confirms that such a forum could affect staff retention in either a positive or negative way, depending on the controls the university placed on content.

Therefore, The Table 5.1 shows that Thai universities need to consider the design of the websites to include the high-quality applicants. Attraction of high-quality applicants is demonstrated by responses showing that those with Masters degree or above were most likely to use the website to seek the information they required related to job vacancies. Thus, these enable Thai university to achieve the aim of increasing the number of the high-quality applicants through their website.

5.4 Quality of Thai university website

The current research aimed to investigate what contributed an effective university website particularly in relation to how this supported creating the unique employer brand and favourable image of the university. Importantly, if this is to lead to achieving the Thai government's aim of creating a globally competitive tertiary education system, the website and its content should have global appeal. By reviewing a range of literature to explore the components a well-designed website contained (Welling & White 2006; Katerattanakul 2002; Nielsen 2000; Raward 2001; Schubert & Selz 2001; Turban & Gehrke 2000; Zhand & von Dran 2000; Gehrke & Turban 1999) the website components identified from the literature were categorised into three major groups. To ensure that these three groups of website components had been categorised correctly, factor analysis was employed to identify the interrelationship across a set of items (see Table 4.19). Exploratory factor analysis was used to examine the underlying influences on the set of observed variables (Hair, Anderson, Tatham & Black 1995). The results shown in Table 4.19 confirm that the 17 items used on the questionnaire had minimal overlap among the factors and that all factors were structured independently enabling them to be categorised into three groups of website quality consisting of: 1) Appearance Quality, 2) Technical Quality, and 3) Information Quality.

According to the investigation of differences between perceptions of website components relating to qualification of academic staff, the current research found that higher qualified staff tended to hold the greatest expectations in relation to website quality. The results in Tables 4.9 – 4.11 show that staff who hold a higher qualification, for instance, Ph.D. qualified staff, were more concerned about web components than were those with Masters and a Bachelor degree level qualifications only. This may imply that creating a well-designed website may best attract the interest of higher-qualified staff and thus lead to increased numbers of highly skilled applicants for Thai universities. This would therefore best address the stated aims of the Thai government.

5.4.1 Appearance quality of website

The quality of website appearance, achieved through the use of attractive fonts and colours, graphics and animation, aims to make the website more interesting and

appropriate for the target audience. If well designed, use of these attributes can effectively convey the university's image by presenting the university's logo and motto and any statements of vision and the university's philosophy in relation to education and/or research. As mentioned in the literature review, quality of website appearance has the potential to influence web user's perceptions (Braddy et al. 2009; Cober, Brown & Levy 2004; Hashim, Murphy & Law 2007; Kent, Taylor & White 2003). The findings from the current research reveal that all website components are important and necessary to establish on a university's website because web users will normally judge the website, and the organisation it belongs to, from its appearance the first time they visit the site. All components received a rating in excess of 3.00 indicating that academics do regard these features as important to include. This indicates that to be globally competitive in the tertiary education sector, Thai universities need to continue to include these elements and, perhaps, further improve them. The finding that academic staff viewed all components as important is supported by Tan and Wei (2006). Furthermore, successful website design can also improve a user's perception of the information contained on it, and of the organisation. Well-presented graphics can eliminate the need for large sections of text on the website reducing the time required to obtain the desired information.

With regard to the purpose of the study which was to help Thai universities to successfully create and improve their websites, the current study specifically examined the components relating to appearance quality, as described in the following points:

Use of attractive fonts and colours

It was established in the literature review that use of attractive fonts and colours on the website can help web users to more easily read and understand site content (Hedge 2005).

By interviewing HR managers in Thai universities, the findings from this research were that using a symbolic colour, linked to the university's coat of arms is an effective way to present the university's uniqueness through the its website. It was mentioned by several HR managers, indicating an awareness of the potential for their website, if well designed, to attract both students and staff and create the image the university desires within the public in general.

Use of graphics and animation

The literature advises use of multimedia and interactive technology on a website to increase interest and motivate the user to explore the site (Lovelock 2003; Zucker & Eaton 2006; (Vate-U-Lan 2007). However graphics and animation were not seen to be as important to users of university websites as were other components (see Table 4.16) (also see Appendix 4.2 for more detail), employing *Graphic animations* received the lowest mean value (mean = 3.22) compared with other website components. However this result still supports use, but not perhaps at the expense of reducing the quality of other components that this target group – academics – viewed as important.

This result may imply that the new recruits at all universities involved in the research did not fully agree that employing *Graphic animations* on a university's website would assist them to gain the information they sought. The mean value of employing *Graphic animations* seems to be low when compared with other components in the same set, but the mean value of 3.22 is still over the mid point (3.00 = somewhat important). Therefore, the new recruits from all universities in Thailand considered that employing *Graphic animations* on the university's website could be useful. As regular users of the Internet, though, they are possibly aware of need to use graphics wisely to avoid the additional load time issue.

Use of attractors

Adopting attractors such as providing information on the university activities, events, and useful information relating to education programs could improve the quality of the website because these could attract the attention of viewers leading to an increase in the number of web users. The results of the current research (see Table 4.13) show that recent recruits, especially Thai nationals, do find including details of the university's events, latest news relating to the university, announcements, and information on the university's services on the website (mean score = 3.84) attractive. Furthermore, interviews with HR managers confirmed that they believed that presenting a good image through including the university's activities on their website could have a positive effect on the university's overall image.

Those international viewers did not find this component as important as did Thai viewers, though, could indicate that its value in attracting overseas academics may not be high. Consideration may need to be given to reviewing content to interest a broader audience.

Presenting university's logo and motto

To communicate brand identity effectively, presenting the university's brand name, logo, and motto can be one of the most powerful key elements of a branding strategy. Based on findings from the current study (see Table 4.13), non-Thai nationals seem to be less interested in or attracted by the use of the university's logo and motto than are Thai national staff. Most Thai universities were found to be using only the Thai language in discussions around their logos; they have not yet provided an English version. Accordingly, this may reduce the effectiveness of the use of the university's logo and motto with the desired effect not being achieved with non-Thai visitors to the site. This may be one of the possible explanations for lower rate of use of the university's website by non-Thai national staff. Therefore, providing the university's vision, educational philosophy and other relevant statements in English could enhance brand awareness in potential foreign staff which may then lead to increased numbers of applicants from highly qualified international academics.

5.4.2 Technical quality of website

Technical Quality of a website could be defined as the constructs of usability of the Internet where website designers address the need to engage the users in order to assist them to quickly and easily process the information on the site (Cober, Brown & Levy 2004). The current study found that the group of website components relating to technical quality, which had been established through research reported in the literature, were viewed as the most important group of components. The findings (see Appendix 4.2) show that the mean score for the set of components labelled 'technical quality' was considerably higher than the mean score for the other two sets of components (mean scores from 3.86 to 4.14). With regard to the results from the previous chapter, the website components relating to technical quality of the website are discussed, as the follows:

Speed of page loading

As discussed in the literature review, research has found that loading time was the most important issue influencing a web user's decision to leave or stay and explore the website because users do not want to waste time waiting for items to download and are likely to leave (Gehrke & Turban 1999). However, data transmission speed seems to now be a less important issue due to recent advances in technology (Horrihan 2009).

The results show that staff who had worked for their current university for less than 2.5 years saw loading speed as less important than did staff who had worked from 2.5 to 5 years with their university. In 2009, most major cities in Thailand were provided with high-speed Internet connections of around 4 Mbps, and of up to 2 Mbps in the smaller cities. However there remain some regions in rural areas that are still using dial-up modem connection.

Although the Internet speed is radically improved and therefore may be becoming of less concern for recent web users, the results from the current study show that the speed of loading page is still the website component of greatest concern for recent staff. It has the highest mean score (mean value = 4.14) compared with other components in the same set. With a mean score over 4.0 meaning *quite important* (see Appendix 4.2) to the participants this is a component that users see as important and can affect their interest in using the university's website. Overload of graphic animations on a website can be a main factor affecting the speed of page loading. To avoid the loading speed issue web creators should consider keeping graphics simple and meaningful, carefully using animation, and frequently monitoring server hosting.

Website navigation

It was established in the literature review that a large website with several subsidiary pages should have a site map or navigational menu to guide web users to where they can find the information they need (Gehrke & Turban 1999; Newman & Landay 2000). The findings of current study also indicate that website navigation is viewed as one of the important website components, especially by senior lecturers (see Table 4.12). The results show that senior lecturers, who hold the academic title of Assistant, Associate professor or Professor are more concerned about a site map being shown on the

university's website than are junior lecturers. This may imply that more highly skilled staff have greater expectations of website quality and therefore providing locating website navigation has been viewed as an essential component because it can help them to more quickly locate the information they desire.

Providing multiple languages on the website

English has been established as another language option on the website of every university included in this research, but English was not available on every page of the website. Only some university websites provide full English versions on all pages. In fact, web users can choose "English version only" on some main pages but most pages are still presented in Thai language only, especially in the job vacancies section. This may be a possible obstacle for overseas applicants limiting their ability to apply for a job in Thai universities because they cannot find all the information they need in English to assist decision making.

The literature review established that language differences can be a major obstacle to users gaining information from a website which has led to international companies ensuring that multiple languages are available (Cyr & Trevor-Smith 2004; Lituchy & Barra 2008).

According to the current research findings, HR managers in Thai universities assert that providing an English version on their university's website will not only allow overseas audiences to view and read the university's messages, but it also can also affect the international standing of the university. The findings of this research provide evidence that highly skilled staff prefer that information be available in multiple languages. The results in Table 4.17 show that recent staff from Top ranked universities seem to be more concerned with provision of multi-language options than do staff in Middle and Lower ranked universities. To communicate successfully to global applicants, therefore, on screen available in at least two languages (English and another) is highly recommended for university websites that will communicate with global audiences and to gain opportunities to obtain potential applicants, especially talented foreign staff.

5.4.3 Information quality of website

The literature review revealed that previous research on employee recruitment has established that providing useful and sufficient information relating to the job and the organisation on the organisation's website can positively affect staff attraction (Allen et al. 2007; Tan & Wei 2006; Allen, Cotter & Otondo 2004; Barber & Roehling 1993). As presented in Chapter 4, the website components in relation to information quality are now discussed as follows:

Providing total rewards on the website

Locating details of pay and conditions in an easily accessible link or section on an organisation's website was found to have a positive effect on job seeker's perceptions (Cober, Brown & Levy 2004; Cober et al. 2003). The current study findings reveal that presenting total rewards (e.g. salary and benefits) is considered a key predictor of organisational attraction, especially for magnetising highly qualified applicants. The results in Table 4.11 show that recent staff members who hold a Ph.D. take notice of details of total rewards more than do those with a Masters and a Bachelor degree only. This would indicate that it is one of the items of information that highly skilled staff desire.

Job vacancy information

Ensuring that job vacancy information is easily accessible can influence recruitment outcomes. Today an organisation's website has become an essential source of information relating to job vacancies and the organisation in general for job seekers, with well-designed websites providing sufficient information to allow potential applicants to acquire sufficient information to encourage them apply for a job (Allen et al. 2007). The current research found that the most recently employed staff who had used the university's website before applying for their position were able to gain the information from job search links or sections provided on the university website to support decision making. Additionally, provision of appropriate information, if quickly and easily accessible, could persuade potential applicants to pursue employment with the university (see Table 4.15). This research also found that for professional vacancies, such as those for academic members of staff, the university placed these on their

website specifically because potential applicants would at the same time be able to find the information they required on the organisation, its philosophy in relation to teaching and research to make an information decision on their suitability to working at the university (see chapter 4, section 4.7.1).

Other notable findings were that a well-written position description, detailed employment policies, and up-to-date information on the university can support successful recruitment as this crucial information was required by most recent staff (mean value = 4.06, 3.97, and 4.07 respectively; see Appendix 4.2). As noted by Allen, Mahto and Otondo (2007), in the early stage of recruitment, applicants generally have doubts and are anxious to receive complete information. Thus, offering adequate information (e.g. details of the vacant position within a recently up-dated position description and employee policies) can reduce hesitation in job seekers while developing a positive attitude toward the organisation resulting in a successful recruitment process.

5.4.4 Other essential website components

Results detailed in the previous chapter indicate that not only the website components mentioned above can influence potential applicant attraction; there also are several other components that cannot be overlooked. For instance, the current study found that provision of valid links on the university's website is viewed as an important (mean value = 4.10). A broken link can irritate web users, frustrate further progress and lead to reduced web user interest.

Another essential website component that web creators have to consider is how a potential applicant will make contact with the university (Kent, Taylor & White 2003). Results that locating contact information is considered important as it has the second highest mean score of all website components (see Appendix 4.2). This is in line with previous research that found professional websites normally locate the button 'contact us' on every page (Gehrke & Turban 1999). For universities, this would ensure that potential applicants were able to contact them if further information for decision making was required, and as locating contact information can build within the potential applicants a more positive view of the organisation, it may lead them to pursue

employment with those universities whose websites are most user friendly and provide access to organisational members for information and advice.

In line with findings of others (Tan & Wei 2006), having a search facility on the website was viewed as a necessary component by participants. A mean score of 4.01 (see Appendix 4.2) indicates that a search facility is also viewed to be important by participants of this research, in particular a search facility that enables easy access to the specific information that potential applicants are seek. As reported earlier in this chapter, more highly qualified applicants were most critical of poor website design aspects. These are precisely the group that Thai Universities wish to attract to assist achievement of the government's objectives in relation to tertiary education in Thailand.

Consequently, for a complex website, such as a university's website, with a wide range of information provided on the website design should incorporate all possible components to help web users to quickly search and obtain the information they require. For job seekers, the focus of this research, ensuring that searching for positions vacant information via the website, supported by high quality search facilities, can support improved recruitment success. Efficient search facilities can help the job seekers to reduce the time taken to browse the website. Moreover, effortlessly obtaining information from a university's website can encourage more job seekers, particularly for the person who lives in overseas, to access to the website regularly and thus be aware of vacancies when they occur. Together with consideration of other website components, a well-designed search facility creates more opportunities for the university to obtain high quality staff.

Despite ease of accessing the website, use of university web technology to attract foreign academic staff revealed a lack of interest as shown in the results chapter. The lack of interest by foreign staff may be influenced by cross-cultural factors, which are supported by the study of Fletcher (2005). In relation to the international and multicultural perspective of website design, the study found that "Cultural sensitivity is a critical factor in communication and must be taken into account if the web site is to be an effective vehicle for communication in a cross-cultural context" (Fletcher, 2005 p.

259) Therefore, specific web design content to attract foreign academic staff needs to be explored by further research.

5.5 Use of Thai university websites by potential employees and current employees

The results of research into the use of university websites by recently appointed academic staff presented in chapter four revealed that there are several significant factors that influence the use of these websites. Those aspects consist of: online recruitment, ranked group of university, length of employment, and level of qualification.

5.5.1 Online recruitment

Over recent decades the Internet has been used widely as a recruitment tool by many companies in developed countries (Braddy et al. 2009; Cober et al. 2003; Lievens, Filip & Harris, Michael M. 2003). The now common use of online recruitment has the potential to support Thai universities in their quest to recruit globally recognised academics. Findings of this research suggest that Thai universities might not be utilising the Internet to advantage for online recruitment, especially in their endeavours to attract high quality academic staff from overseas. This is supported by the results presented in Table 4.4. The results show that most foreign staff (69.0% of total foreign staff participants) did not use the website before they applied for their job. Approximately 90% of foreign staff who did view their university's website claimed that they could not gain useful information from it. Online recruitment is infrequently used by Thai organisations, in particular Thai universities. In fact, most Thai universities did not provide facilities for candidates to apply for a job through their websites. The candidates were able only to search information relating to a job vacancy and download an application form through the website. However, they could not process the application directly via the website. The application had to be submitted via postage mail, as an e-mail attachment, or by delivering individually which has been the traditional method of delivering a job application in Thailand. The traditional method would not be possible for the international applicants Thai universities are now attempting to attract.

Recruiting highly skilled staff, such as academic staff in a university, requires a greater emphasis on quality of applicants. This might be a reason for Thai universities to avoid an overload of unsuitable applications creating unnecessary work and cost. This is in line with the possible negative impacts of use of online recruitment outlined in the literature review (Barber 2006; Murphy 2005; Elkingston 2005).

Recommendation

Online recruitment may cause an overload of unsuitable applications if job requirements are not clearly stated and lead to hours of screening applicants. Thai universities will need to develop expertise in wording positions descriptions and notices related to academic vacancies to ensure specific criteria for selection are clear and unambiguous. This will assist in ensuring only suitable applicants apply. Alternatively, or in addition to specific details, online processing tools may be utilised (Barber 2006). Using online recruitment effectively can save time. This research found Thai universities experienced difficulty recruiting highly skilled staff, especially recruiting staff from overseas. Websites are the most suitable source to reach a large number of potential applicants (Galanaki 2002). To increase the number of potential applicants for Thai universities, such websites can reach a global audience and be cost-effective (Allen, Mahto & Otondo 2007; Welling & White 2006), if findings of previous research and this current study are used to guide design. Additionally, providing facilities that enable an application form to be completed online and a CV to be submitted with it could support increased international applications. Using video conferencing could also facilitate the process of international recruitment from a distance (Galanaki 2002).

5.5.2 University ranking and attraction

In Thailand, where universities are ranked each year, the ranking of the university may be viewed the as a university's reputation and a key factor that an applicant may consider when he/she selects a place at which to apply for a job. A trusted academic ranking source, such as Webometric, QS World University Ranking, and The Times Higher Education World University Rankings, mainly use the number of research publications and teaching quality to measure university quality. Findings from the current research (See Table 4.5) indicate that recent staff members from the top ranked

group of universities (29.2%) tended to use the university's website before they applied for a job. This is fewer website users than for the recently recruited staff members from the lower ranked universities (35.4%). There are several possible explanations for these findings. A lower percentage of recent applicants using the top ranked university websites either indicates that the applicants had personal experiences or past actions with the university, or that they had obtained the university information from other sources. This is in line with the findings of Ivy (2001) and these sources may have included advertising and word-of-mouth as found by Van Hoye and Lievens (2005). These possible explanations are also discussed in relation to findings of previous research (for example Yoon et al. 1993 as cited by Nguyen and Leblanc 2001). An institute's reputation is created by its history, which the public may perceive reflects the quality of the institute's products and services. For example, the traditional universities were generally established before other new and lower ranked universities. The public draws conclusions regarding a university's image from their past experiences with the university and if the university's history portrays a positive image then the public will generally likewise hold a positive image of the university (Ivy 2001). This image possibly sets in the potential applicant's mind that the traditional university is a good place to work because of its research and talented staff. Consequently, using university's website at the early stage of the recruitment process may not be essential for a job seeker who has had experience with that university. However, in the case of unfamiliar universities, which tend to be the newer or lower ranked universities, a university's website is required by most job seekers in order to gain knowledge of the organisation and develop a view of it as a potential employer.

The current research reveals that the lower ranked universities had the highest percentage of staff who had used the university's website before they applied for a position and they also had acquired useful information from the website. This may imply that recent staff from the lower ranked universities may have had no experience or lacked information about the organisation when applying for a job, and thus, they would need more information to help them make a decision to apply (Allen, Mahto & Otondo 2007).

The speed of the Internet, its common use today to search for information relating to job vacancies, (Allen, Mahto & Otondo 2007; Cappelli 2001; Chapman & Webster 2003) and its reach (Gibson & Swift 2011; CIPD 2009) make it an ideal tool in today's globalised world. When supported by tools that enable quick and easy processing of applications, online recruitment can prove economical (Verhoeven & Williams 2008). It can lead to an increase in the number of potential applicants from anywhere in the world, process them effectively at a low cost and increase the possibility of recruiting talented staff for universities. This research has found a positive attitude toward online recruitment, especially by Ph.D. qualified staff.

Recommendation

Universities that take action to create a desirable image and reputation and that use their websites effectively to provide relevant information and clear details of positions vacant will increase their opportunities to recruit talented staff (Moogan, Baron & Bainbridge 2001). By conveying organisational messages effectively and understanding the role of employer branding, universities will be able to gain a competitive advantage in the labour market. A well-designed website should ensure this awareness is established at the early stage of recruitment, such as at a job seeking stage. Basically, job seekers have already made a short list of potential employers and start to use a variety of information sources which may influence their decisions to apply for a job. It is recommended that universities use this knowledge to facilitate and maximise information opportunities for job seekers in their quest to locate job-related information from their websites. Therefore, using the university's website will play a significant role in employment practices as it provides a comprehensive means of communicating the university's image (Cober, Brown & Levy 2004). This would constitute a similar approach to that discussed before which was taken at Harvard University (Curtis, Abratt & Minor 2009).

5.5.3 Length of employment

The rise of the digital era in the 1990s has enabled forward thinking organisations to utilise the Internet and what it can offer, strategically (Cotter 2002). Thai universities are also utilising the Internet by creating their websites to communicate with their audiences (e.g. potential students and staff, and current students and staff).

Consequently, organisations employ and utilise the Internet to gain competitive advantage for their businesses. Bodily and Venkataraman (2004) asserted that the Internet offered speed, ease of reach, and offered multimedia advantages which supported business operation. With the globalisation of tertiary education, Thai universities will need to take a similar approach to establish and maintain their position in this world-wide education system.

Recently, the Internet has been used widely in many countries around the world. In Thailand, for instance, the number of Internet users has been increasing every year since it was firmly established in 1990. By the last decade, the number of Internet users in Thailand had grown dramatically from 2.3 million of the 60.6 million country-wide population in 2000 to 18.3 million of the 66.2 million country-wide population in 2009 and has kept growing every year (NECTEC 2009). An increase of the use of Internet has impacted on the number of potential applicants who are seeking a position. The results of the current study show that recent staff who have worked for Thai universities for less than 2.5 years were more likely to use the university's website than were staff who had worked from 2.5 to 5 years (see Table 4.6). This shows that websites had become the first port of call for potential academic job applicants at Thai universities supported Searle's (2006) claim that they had become a main source of job application for many organisations

Recommendation

Globalisation of tertiary education requires universities need to understand the role of an employer brand in attracting potential talented staff and in retaining current staff (Ackers & Gill 2005). It is not suggested that the website is the most necessary or only method for communicating the university's information. Other approaches might be more suitably targeted or might effectively provide important types of information for which the website is unsuitable. For instance, realistic information which is provided by referrals would be more reliable than information from the website (Allen, Mahto & Otondo 2007). However, in the early information-gathering stage, a university's website is considered essential for job seekers to simply explore and narrow down the useful information leading to them applying for a position. By using a website effectively, organisations can communicate endless organisational information and job vacancy

details. Websites are able to effectively communicate information to a large number of job applicants and it commonly costs less than traditional media (Cober et al. 2004).

5.5.4 Attracting talented staff

Because people are regarded as vital component of an organisation and its performance (Balogun & Johnson 2004) and because as Frank, Finnegan and Taylor (2004) maintain, all organisations need to attract, recruit and retain talented staff, it must be a priority on the HR agenda. Efforts to attract talented staff include an organisation's ability convey positive messages and create an image of a desirable place to work. As mentioned in the literature (Dessler et al. 2007), a website is one of an organisation's tools for quickly, easily and cheaply communicating with its full range of stakeholders. This can include using this channel to gain the attention of potential applicants and provide them with the information they require.

Skilled academic staff, especially those with research strengths, are the essential key to drive the Thai nation to achieve its aim of raising its education standard up to international level. The Thai government believes that increasing the number of experienced researchers and research publication is one of the fundamental requirements for developing a country's competitiveness to deal with the globalisation era. The number of Ph.D. qualified staff in Thailand does not compare well with that of these developed countries. This indicates an area of need. In particular, targeting Ph.D. qualified academics from around the world should be a driver of web design in the future for Thai universities. Ensuring that their websites are built and maintained in a manner that enables full advantage to be taken of their potential is vital for Thai universities if they are to achieve the government's objective for the Thai university system. The modified checklist (Table 5.2), which has been based on findings of this research, will assist in this aim.

One of the main purposes of this research was to investigate how Thai universities' websites efficiently communicated their image in order to attract talented staff. To explore whether university's websites influenced the perception of recently appointed staff leading to attraction of talented staff, the highest level of qualification held by

participants was examined. As the results in Table 4.7 show, university websites have been mostly used by recent staff who held a Master degree (56.2%) or a Ph.D. degree (40.7%), while only 3.1% of recent staff who used the university's website held only a Bachelor degree. This implies that a potential applicant, who holds a high level of qualification either a Master or Ph.D. degree, will use a university's website to search for the information they require before they apply for a position. Therefore, a university's website needs to be designed with the attraction of high quality staff in mind; those with Masters and Ph.D. level qualifications. This requires the university to bear in mind the importance of talented staff for their success (Balogun & Johnson 2004; Frank, Finnegan, & Taylor 2004) when designing their website. It creates a need to convey a positive image of the university to attract the attention of potential applicants and the fact that the Internet is now one of the most important channels (Dessler et al. 2007) for doing so should drive efforts to create high standard websites.

Results of this research indicate that Thai universities are attracting high quality staff and these applicants are using their websites to gain the information required to apply for a position. This would indicate that Thai universities do acknowledge the importance of talented staff for their success as suggested by Balogun and Johnson (2004) and Frank et.al. (2004), and of creating a positive image of their universities by using one of the most important channels for attracting staff today, the Internet (Dessler, et al. 2007).

5.5.5 Attracting global talented staff

The percentage of academics from non-Thai national staff participating in this research was greater than the percentage of non-Thai nationals across the total Thai university system. That is, non-Thai nationals comprised 8.26% of the total participant group in the current research while only 1.34% of staff within the Thai university system are non-Thai nationals (OHEC 2008). One of the possible explanations for this is that more recent recruits, those sought for this research, are coming from other countries. This may represent an attempt by Thai universities to address the stated aims of the government and increase the number of highly qualified academic staff in Thai universities if suitably qualified local staff members are not available.

However, results of this research reveal a low percentage of non-Thai national staff using university websites at the early stage of the recruitment process. Most non-Thai staff responded that they did not use the university's website before applying and, if they did, could not obtain helpful information from the website. This may be considered to be a lack of global communication by Thai universities. Thai universities need to improve the effectiveness of their websites for reaching a global audience from which an applicant pool may be developed. Their websites have the potential to provide an ideal opportunity to recruit talented staff from anywhere in the world.

The low percentage of non-Thai national staff across the system (only 1.34%, see Appendix 4.4) (OHEC 2008) demonstrates the need for a concerted effort to attract talented academic staff to Thai universities. To achieve the government's objective of increasing the quality of the higher education system, the number of Ph.D. qualified staff at Thai universities, who are research active and publishing in internationally recognised journals, will need to be increased. Whilst efforts to increase the number of local staff members with Ph.D. qualification must also continue, it is obvious that at least in the short term those involved in human resource planning at Thai universities will need to consider the extent to which employer branding and the Internet can support their improvement efforts. If the recruitment of talented global academic staff is to continue and thus address the government's concerns, achieving the stated goals, the need for websites that non-Thai potential staff will view as helpful for their decision-making must be met.

Recommendation

Developing websites in academia that are viewed helpful by both Thai nationals and international site visitors is more likely to bring positive recruitment results (Thelwall & Harries (2004). According to the results of this research (see Table 4.7), high-quality potential candidates (who hold a Masters degree and higher qualification) tend to use the universities' websites to locate the information they seek. It is suggested that employing a website effectively will increase the number of people world-wide who view employment opportunities, especially highly-qualified potential applications, resulting in greater global recruitment success (Thelwall & Zuccala 2008). To do so will require consideration both of the results of previous research and of this research that

specifically investigated the use of an employer brand conveyed on Thai university websites.

5.6 The role of Thai university websites in retention of quality staff

One of the main purposes of this research was to explore how universities effectively use their website to assist current staff retention. In terms of the impact of university websites on staff retention, the current research found that HR managers in Thai universities believed that two elements of their websites, consisting of 1) having a discussion forum and 2) presenting staff achievements, had the potential to positively impact on retention of high performing staff.

5.6.1 Having a discussion forum

The results show that a discussion forum can be a successful form of internal communication. Universities in this study utilised their websites making them an effective channel to communicate with their current staff. In fact, using a forum to communicate within the organisation was viewed as more effective than general university announcement postings on the webpage because providing a forum allows current staff to participate in discussions related to the topics. Staff can ask questions and also share their comments on those topics and this may contribute to increased staff retention in the university.

Through a successful forum, the university's messages can be efficiently delivered to current staff across the organisation easily and effectively. As the HR manager from a Low ranked university (quoted in Chapter 4) stated, their forum allowed them to provide information on research funding and scholarships. This information can assist staff to see how they can progress their careers within their current university.

Despite discussion forums being found to provide many benefits when used by universities, the current research also found that some universities experienced difficulties in their use. One university decided to remove the forum from their websites. In order to reap the benefits of providing a forum, and to avoid the possible negative consequences, this research reveals that careful planning for the implementation of a forum and continued monitoring of it is required. Controlling the messages that become

public on the university's forum is a complicated task and it can have an influence on the public's view of the university's reputation. For this reason, incorporating ways of managing for the forum in to the initial plans is important.

To gain the benefits of a discussion forum university web administrators may need to frequently monitor their forum and strictly control content to ensure the appropriateness of messages presented on the forum, perhaps by requiring forum members to initially create user accounts (Marett & Joshi 2009).

5.6.2 Presenting staff achievements

According to findings of this research, presenting staff rewards and achievements on a university's website may have a positive influence on staff satisfaction. It can lead staff to feel a great level of pride in their achievements and encourage them to keep improving their performance. It can, therefore, be used to motivate staff.

Furthermore, the findings reveal that providing details of staff rewards may inspire other members of staff to achieve similarly high levels of performance. One HR manager confirmed that at their university they believed this happened. Presenting staff rewards on the university's website can affect staff satisfaction and this may lead to increased staff performance and retention. However, inequitable judgments can cause conflicts among staff members, having a negative effect on staff satisfaction. Again, this research therefore confirms that management of the forum communicating these achievements needs to be carefully planned and maintained.

Recommendation

Providing information on staff successes has the potential to positively impact staff retention, however universities using this retention and motivation approach should consider also providing information on support for and opportunities available for others to work towards gaining similar recognition in the future.

5.7 Research contributions

This study makes numerous contributions to theory and practice. From the theory perspective, this study has provided an extensive understanding of use of websites to successfully portray an organisation's image specifically in the tertiary education sector.

Most existing studies on the role of image in higher education institutes or universities examined the relevance of image from the student viewpoint (Curtis, Abratt & Minor 2009; Gray, Fam & Llanes 2003; Harris 2009a) only and little attention had been given to consideration of academic staff member attraction and retention aspects (Ackers & Gill 2005; Coates et al. 2009). Indeed, to this point in time there have only been a limited number of studies of the use of university websites to attract and retain academic staff thus, apart from this research, the use of and satisfaction with university websites remains largely undiscovered. This remains the situation, despite globalisation of tertiary education. With previously insufficient evidence on the relevance of website quality to convey the employer's brand in the tertiary education sector in Thailand, the current research findings have filled a knowledge gap by identifying those significant website components required in relation to attraction and retention staff in universities. Moreover, the current findings can be used by subsequent studies as a foundation for further studies to develop further knowledge in this field. For instance, studies in other cultures, within other tertiary education systems, may provide valuable comparative data.

From the practical application perspective, the findings of this research can guide universities to improve their employer brand and the website that will communicate it to a global audience in order to attract prospective high quality staff and retain current high-performing staff. The findings suggest that a well designed website may better attract the interest of talented applicants from within Thailand and from other countries.

The study found that higher-qualified academics had tended to use their university's website to search for information on job vacancies leading to their application and subsequent appointment. This confirms the importance of Thai university websites in the pursuit of achieving a globally competitive tertiary education system.

This research found that those with higher-qualifications had higher expectations in relation to website quality than did staff with lower level qualifications only. Furthermore, the current research found that newer academics (e.g. recent recruits who had worked less than 2.5 years) tended to use the university's website more than did staff who had worked for their university for more than 2.5 years. It will require of Thai universities that they ensure the quality of their websites do meet the standard that

highly skilled potential staff expect in order to gain their attention and attract an increased number of quality of applicants.

In addition, the findings indicate that Thai universities need to improve their websites in order to compete globally for talent. Findings also indicate that current use of Thai university websites by potential overseas employees is low. This study has provided potential guidelines, in Table 5.2 on the next page, to assist web creators to design a high quality website which has the potential to support Thai universities' efforts in their attempts to contribute to achieving the government's objectives for the Thai tertiary education sector. However the checklist must be used in conjunction with actions to address the other major issue identified: creating a unique and deliverable employer brand.

5.8 Limitations of this research and implications for further research

This research provides interesting findings, however, there are still many issues that remain unexplored and which need to be addressed. First, the population of non-Thai nationals in this study is relatively small (29 non-Thai recently recruited staff at Thai universities). As already stated, this is to be expected because the non-Thai national staff numbers across the total system Thai university system account only 1.34% OHEC (2008) of the academic workforce in Thailand. As such, further research should replicate the current research specifically targeting non-Thai national academic staff to explore the full range of issues around attraction and retention of this group of academics. In addition, this study found that the current use of Thai university websites by non-Thai nationals is low. This additional research, therefore, could attempt to explore the reasons for lower use by non-Thai academics.

Table 5.2: Guidelines for well-designed Thai university websites

Component/Attribute	Things to do	Things to avoid
Fonts	<ul style="list-style-type: none"> • Use 12-point size or at least 10-point size • Use ‘Sans serif’ font style such as: Verdana, Arial, Tahoma, and Helvetica • Alternatively, use a ‘MS Sans serif’ that is compatible with both Thai and English characters to avoid font error issues. 	<ul style="list-style-type: none"> • Using very long pages
Colours	<ul style="list-style-type: none"> • Use the colours that reflect to university’s uniqueness 	<ul style="list-style-type: none"> • Using more than four colours on one page
Graphic animations	<ul style="list-style-type: none"> • Apply graphic animations to increase meaningful and understanding of the subject 	<ul style="list-style-type: none"> • Use of too many graphic animations that delay speed of page loading • Use of colours that are too vivid and that may negatively impact a university’s image
Use of attractors	<ul style="list-style-type: none"> • Provide FAQs section to assist web users to find answers to common questions • Update university activities and events regularly 	
Logos and Mottos	<ul style="list-style-type: none"> • Visibly present logo and motto on the website • Present the university’s motto and statements in both Thai and English 	
Discussion forum	<ul style="list-style-type: none"> • Strictly control messages posted on the forum • Require forum members to initially register before being able to access the forum 	<ul style="list-style-type: none"> • Allowing a negative message to be conveyed because it can affect university image negatively
Presenting staff achievements	<ul style="list-style-type: none"> • Show staff rewards and advice on how they may achieve similar success to encourage performance improvement 	<ul style="list-style-type: none"> • Inequitable judgments can negatively affect staff satisfaction; carefully consider content placed on discussion boards
Others	<ul style="list-style-type: none"> • Clearly provide job descriptions and total rewards (e.g. salary and benefits) • Frequently monitor server hosting to quickly respond to server errors • Check for valid links and ensure every link remains valid • Present pictures of the university’s buildings and landscape to increase interest of potential applicants • Provide full university contact information • Provide a quick and easy link to job vacancies • Provide quick and easy search facilities • Regularly update information provided on the website 	<ul style="list-style-type: none"> • Out-of-date information presented on the website

Modified based on previously recommended general website design principles (Cober et al. 2003; Cyr & Trevor-Smith 2004; Gehrke & Turban 1999; Kent, Taylor & White 2003; Tan & Wei 2006; Thelwall & Harries 2004; Turban, Daniel B 2001; Turban, E & Gehrke 2000; Vate-U-Lan 2007) using the results of this research to build on previous research to provide a Thai university-specific checklist for high quality website design.

Second, the participants in this study were chosen from only public universities, thus, the findings may be most helpful for public universities. However, there are different characteristics between public and private universities in Thailand. For instance, the findings of Pinitjitsamut (2009) revealed a different level of educational standard in terms of teaching and research quality between public and private higher institutes in Thailand. Therefore, to extend the current results, collecting and examining data from a combination of public and private universities would be useful for addressing issues within the total Thai tertiary education system. It would enable comparisons to be made.

Third, this study mainly focused on how universities use their own website to successfully communicate their employer brand. The current research findings were similar to those of previous studies where websites were found to increasingly be the first place potential applicants go for information (Searle 2006). Additionally, it was also found that use of discussion forums, as an internal communication tool, may easily and speedily enable contact with and between staff in the university. However, an organisation's website is not the only way in which potential applicants are attracted. Other online sources need to be considered as they can be helpful tools for contacting prospective and current staff. For instance, social network sites (e.g. LinkedIn, Facebook or Twitter) should be considered (Jing et al. 2010). Doherty (2010) commented that Twitter is one of the social network websites that allows an organisation to send messages, known as tweets, to candidates. The job vacancies can be posted and promoted on Twitter as a distributor site. Doherty (2010 p. 14) claimed that "Tweets can be an effective way to post vacancies, as senders can" ... "restrict delivery of tweets to their list of followers". This may form a future method of attraction with global reach for Thai universities (Jing et al. 2010). Online social networks allow universities to connect with available candidates whom they otherwise might not have been able to reach. Furthermore, using social networks can create a social community and it may lead employees to transfer and share their knowledge across the organisation (Chow & Chan 2008). Consequently, for further research, it may be useful to examine how universities are utilising social networks for attracting and retaining talented staff.

5.9 Summary

This chapter presented a critical discussion of the research findings and attempted to provide potential explanations to clarify the results emerging from this investigation. It attempted to summarise the findings by comparing the results with the review of previous studies presented in the literature review chapter with regard to the research questions and purpose. Research contributions were discussed to assist practitioners who may apply the findings of this research to improve the quality of Thai university websites leading to improved quality of Thai university staff resulting in an overall improvement in the tertiary education system in Thailand. Limitations and implications for further research are mentioned in the last section.

5.10 Overall thesis summary

This section briefly summaries the overall implications of the current study. In chapter 1, background of the research was discussed as the research introduction. Aims of the research were proposed as the following: 1) to investigate how Universities in Thailand deploy online branding effectively in order to create their employer brand to attract potential recruits and to retain current skilled academic staff; and 2) to develop guidelines, or sets of criteria that might be applied to suggest how Thai universities might best design their websites to communicate their employer brand to attract and retain quality academic staff. The research questions were then stated and answered adopting a mixed-methods approach to achieve the aims of the research.

In conclusion, this research found that more highly qualified academics, those sought by Thai universities, may hold greater expectations of website quality than other potential applicants. Furthermore, talented academics tended to use university websites as their first point of contact in their search for the information they required before applying for their position.

The findings revealed that university rank did have an influence on potential applicants' perceptions. When applying for a job in lower ranked universities, applicants may require more information than when applying in for a position within a top ranked university. This additional information will in some way compensate for the fact that higher ranked universities having usually been in operation longer than

have the lower-ranked universities, will be better known to the Thai public in general. As older, established universities, Thai nationals, especially those who have the qualifications and interest to apply for academic positions, will be aware of the accomplishments of these highly ranked universities. However neither members of the public nor suitably qualified people may have had the opportunity to learn of the unique attributes and activities of the newer and often, therefore, lower ranked universities. Providing appropriate information in an easily accessible and understandable form could convince potential applicants that a lower-ranked university may possess the attributes they desire.

Additionally, Thai universities need to note that current use of university websites by potential overseas staff is low. This could indicate that their in their current form they are not meeting the needs of this group. To improve the university brand and create an image that will attract high quality international staff, Thai universities have to improve their websites. Further research may be required to identify the reasons for lower use by non-Thai academics, but following recommendations for website design as provided in this research (see Table 5.2), will assist universities to improve their university's employer brand. Initially, ensuring that all pages of a website are available in English as well as Thai may begin to address this area of need. The literature would suggest, and findings of this research confirm, that this will support improved recruitment both in the quantity and, of particular importance for Thai universities given the government's stated aim, quality of applicants in the future.

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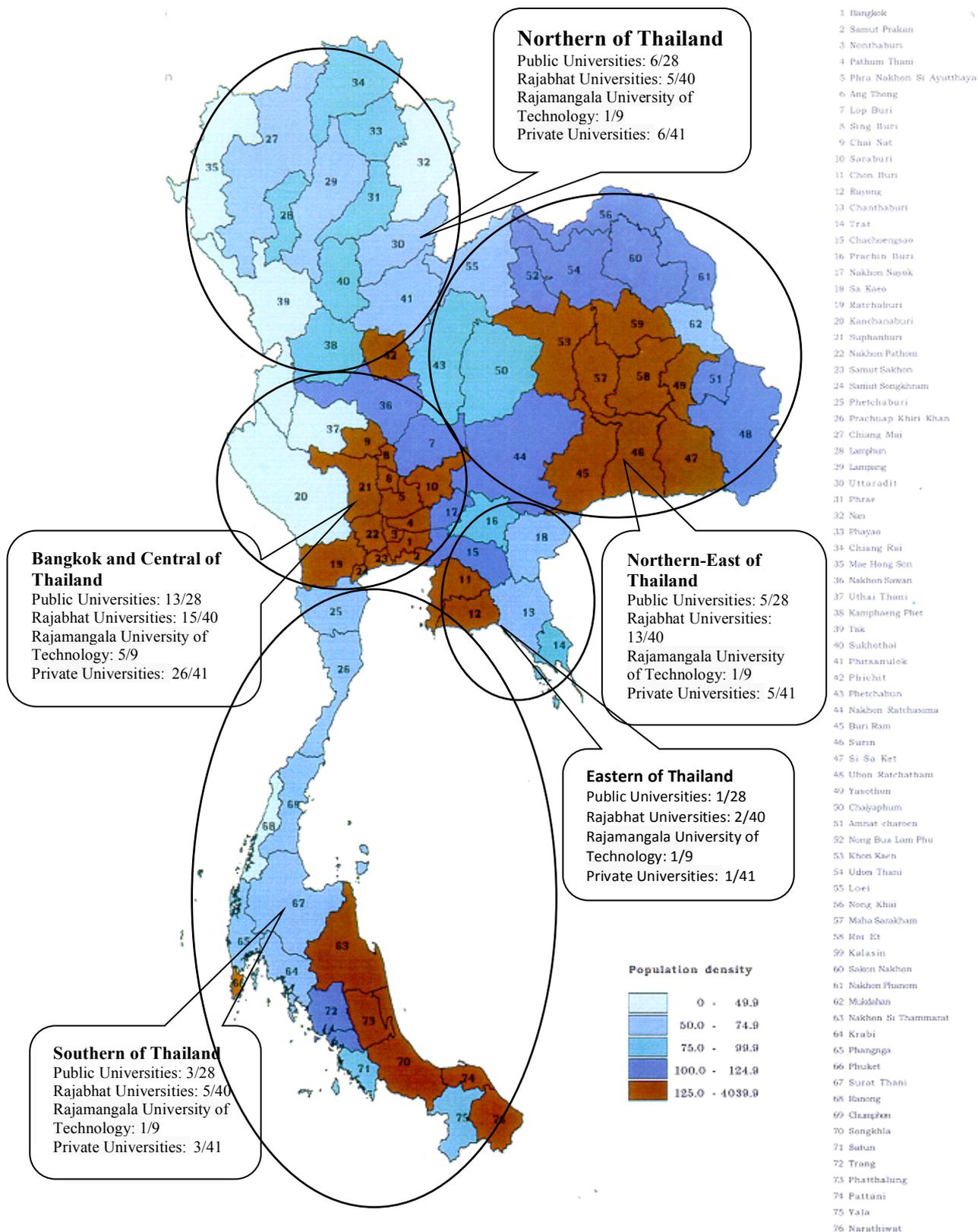
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Appendices

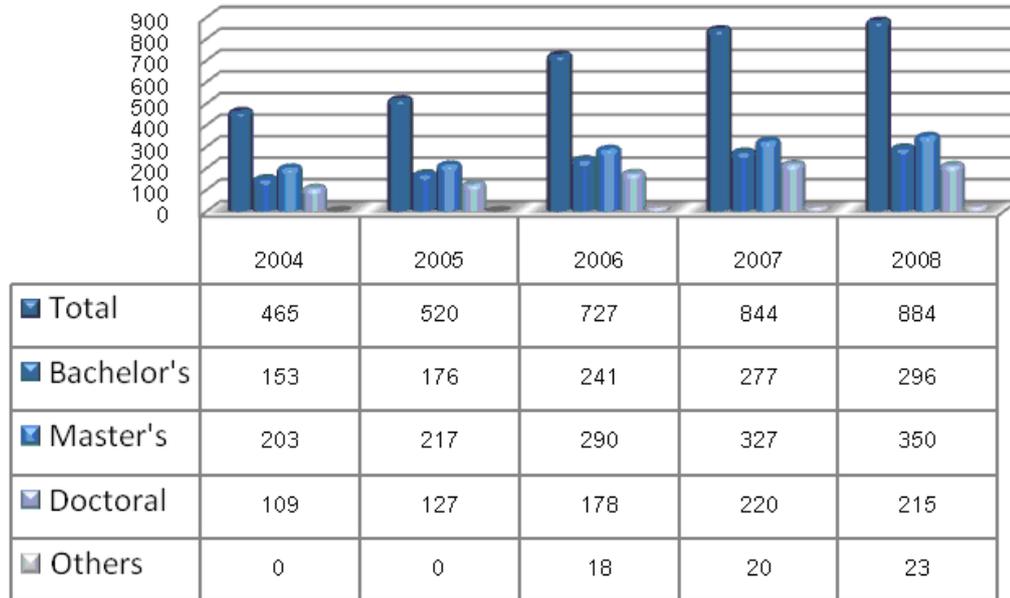
Appendix: 2.1 showing the location breakdown of the institutions with relevant population density

Population density by province, 2000 (per square kilometre)



Source: The 2000 Population and Housing Census, National Statistical office, Office of the Prime Minister

Appendix 2.2: Number of international programs during 2004-2008



Source: Bureau of International Cooperation Strategy, The Office of the Higher Education Commission (2008)

Appendix 3.1: Cover letter

5th January 2010

Dear Respondents,



**VICTORIA
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My name is Karun Kidrakarn. I'm working towards a Doctor of Business Administration degree at the Victoria University, Australia. My doctoral thesis being undertaken seeks to develop in a research project entitled "**Employer branding for successful recruitment and retention of talented academic staff in Thai universities**". The aim of this research is twofold: I) it will investigate how Universities in Thailand deploy online branding efficiently in order to create their employer brand to attract potential recruits and to retain current skilled academic staff; and II) it will develop guidelines, or sets of criteria, that might be applied to suggest how Thai universities might best design their websites to attract and retain quality academic staff.

Your participation in this research is very important as to ensure the success of this study. The result will be used only in an aggregated form and therefore your anonymity and the confidentiality of your responses are assured. The completed data will be securely stored and available only to the supervisors, Dr. Beverley Lloyd-Walker and Assoc. Prof. Arthur Tatnall, and me.

Please give your acceptance letter of my collecting data permission as soon as possible. Therefore, the Victoria University will not grant me to proceed the research without your permission letter. Thereafter, please return your responded questionnaire **before February 15th, 2010**. Your reply can be returned with the prepaid envelope supplied to my collection base in **290 Moo 19 Suksawad rd. Soi 39, Phrapradaeng, Sanutprakarn 10130, Thailand**. For further inquiry please contact me on 084-323-6451 (Mobile), e-mail address; karun.kidrakarn@live.vu.edu.au.

Thank you in anticipation of your cooperation.

Faithfully yours,

Mr. Karun Kidrakarn
DBA candidate, Victoria University, Australia

Appendix 3.2: Cover letter (Thai version)

7 มกราคม 2553



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เรื่อง ขอความอนุเคราะห์ตอบแบบสอบถาม

เรียน ท่านผู้ตอบแบบสอบถาม

ด้วยกระผม นายการ์นต์ กิจระการ นักศึกษาปริญญาเอก สาขา Doctor of Business Administration มหาวิทยาลัย Victoria University ประเทศออสเตรเลีย ขณะนี้กำลังต้องการเก็บข้อมูลเพื่อเป็นงานวิจัยในหัวข้อเรื่อง “การสร้างแบรนด์ของมหาวิทยาลัยในประเทศไทย เพื่อให้เกิดประสิทธิผลสูงสุดในการรับสมัครงานและเพื่อรักษานักวิชาการอาจารย์” (Employer branding for successful recruitment and retention of talented academic staff in Thai universities) โดยงานวิจัยนี้มีวัตถุประสงค์หลัก 2 ประการ คือ เพื่อศึกษาว่าการใช้ระบบตราสินค้าออนไลน์สำหรับมหาวิทยาลัยนั้นจะสามารถดึงดูดอาจารย์และรักษาอาจารย์ที่มีอยู่แล้วได้อย่างมีประสิทธิภาพ และเพื่อสร้างตัวแบบเบื้องต้นสำหรับแนะนำวิธีการออกแบบเว็บไซต์ให้แก่มหาวิทยาลัยในประเทศไทยเพื่อให้สามารถดึงดูดอาจารย์และรักษาอาจารย์ได้อย่างเหมาะสม ข้อมูลที่ได้รับจากท่านจะเป็นประโยชน์อย่างมากสำหรับงานวิจัยในครั้งนี้ ซึ่งข้อมูลต่างๆ ที่ได้จะถูกเก็บรักษาเป็นความลับ และจะนำมาใช้ได้เฉพาะข้าพเจ้า และอาจารย์ที่ปรึกษาของข้าพเจ้าคือ Dr. Beverley Lloyd-Walker และ Assoc. Prof. Arthur Tatnall

ดังนั้น จึงใคร่ขอความร่วมมือจากท่านผู้ตอบแบบสอบถาม 1) กรุณาเซ็นลายมือชื่อในเอกสารยินยอมให้ใช้ข้อมูลนี้เพื่อทำงานวิจัย (CONSENT FORM) และ 2) กรุณาตอบแบบสอบถาม และกรุณาส่งกลับ คุณการ์นต์ กิจระการ 290 หมู่ 19 ซ.สุขสวัสดิ์ 39 ถ. สุขสวัสดิ์ ต.บางพึ่ง อ.พระประแดง จ.สมุทรปราการ 10130 หากท่านต้องการข้อมูลสอบถามเพิ่มเติม กรุณาติดต่อโดยตรงได้ที่หมายเลขโทรศัพท์ 084-323-6451 หรืออีเมล Karun.kidrkakarn@live.vu.edu.au หวังเป็นอย่างยิ่งว่าคงได้รับความอนุเคราะห์จากท่านด้วยดี และขอขอบคุณมา ณ โอกาสนี้

จึงเรียนมาเพื่อทราบ และขอขอบพระคุณที่ให้ความร่วมมือ

ขอแสดงความนับถือ

(นาย การ์นต์ กิจระการ)

DBA candidate, Victoria University, Australia

Appendix 3.3: Information sheet

INFORMATION TO PARTICIPANTS INVOLVED IN RESEARCH



**VICTORIA
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You are invited to participate

You are invited to participate in a research project entitled **Employer branding for successful recruitment and retention of talented academic staff in Thai universities**.

This project is being conducted by a student researcher Mr. Karun Kidrakarn as part of a DBA study at Victoria University under the supervision of Dr. Beverley Lloyd-Walker and Assoc. Professor Arthur Tatnall from the Faculty of Management and Information Systems.

Project explanation

This research will examine the use of employer branding on Thai University websites. Because universities in Thailand are ranked annually and this ranking can affect attraction of students and staff, an environment exists where Thai universities must consider how they can influence potential students and staff to come to their university, and current students and staff to remain with them. This attraction and retention success will also, over time, influence each university's national ranking. This is also supported by the Thai government committed to maintaining and improving their education system, in particular tertiary education. Accordingly, Thai universities are attempting to attract quality academic staff from around the world. The internet has a major role to play, therefore, in supporting achievement of each individual university's goals and, through that, the government's goal of providing quality tertiary education in Thailand. This research will investigate the extent to which Thai universities are using the internet for this purpose and the quality of employer brand these initiatives.

What will I be asked to do?

- Read the information sheet provided, and if in agreement, sign consent form.
- Participate in a semi structured interview which will take approximately 15 minutes and will be taped recording if you are in agreement.
- Rank the potential factors on a checklist of well-designed website for attracting applicant and retaining current staff which will take approximately 15 minutes to complete.

What will I gain from participating?

A survey checklist of well-designed website will be adopted in this project to meet the project goals. Participant will ask for ranking the potential factors from the most important factor to the less one. This information will then be compared with their website and employer branding rating to establish whether a relationship exists between website design and employer brand and attraction/application success. The contribution of knowledge of this research will possibly develop guidelines, or sets of criteria, that might be applied to suggest how Thai universities might best design their websites to attract and retain quality academic staff.

How will the information I give be used?

The information you provide in the interview will be treated confidentially. You and your university will remain anonymous. Data will be aggregated in such a way that you will not be identified.

What are the potential risks of participating in this project?

There are no risks identified from participating in this project. You are free not to reveal any information that you think is too confidential to your organisation. Also, your statements or comments will not be used in a way which will enable you or your university to be identified.

How will this project be conducted?

The respondent of the study will be contacted by the research student as per the following procedures:

- A letter will be sent to notify the participant universities of the research about to be undertaken for this study.
- The letter will request that universities agreeing to participate provide the researcher with contact details for participants.
- The researcher will then contact the participants and arrange time and place for a semi structure interview.
- Consent form will be provided, discussed, signed and collected.
- This form will be securely stored at Victoria University, Melbourne.
- Participants will spend time approximately 15 minutes being interviewed.
- Participants will spent time for ranking the checklist approximately 15 minutes
- The data gathered, whether via tape recording or note taken by researcher, will not contain participant names. It will be securely stored at Victoria University, Melbourne.

Who is conducting the study?

The study is being conducted by Mr. Karun Kidrakarn under the supervision of Dr. Beverley Lloyd-Walker (Phone +61 3 9919 4121 or email Beverley.LloydWalker@vu.edu.au) and Associate Prof. Arthur Tatnall (Email Arthur.Tatnall@vu.edu.au)

Any queries about your participation in this project may be directed to the Principal Researcher listed above.

If you have any queries or complaints about the way you have been treated, you may contact the Secretary, Victoria University Human Research Ethics Committee, Victoria University, PO Box 14428, Melbourne, VIC, 8001 phone (03) 9919 4781.

Appendix 3.4: Consent Form for Recent Recruit

CONSENT FORM FOR PARTICIPANTS INVOLVED IN RESEARCH

INFORMATION TO PARTICIPANTS:



**VICTORIA
UNIVERSITY**

**A NEW
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THOUGHT**

We would like to invite you to be a part of a study into “**Employer branding for successful recruitment and retention of talented academic staff in Thai universities**”, by Mr. Karun Kidrakarn for his DBA study.

The aim of this research is twofold:

- I) it will investigate how Universities in Thailand deploy online branding efficiently in order to create their employer brand to attract potential recruits and to retain current skilled academic staff; and
- II) it will develop guidelines, or sets of criteria, that might be applied to suggest how Thai universities might best design their websites to attract and retain quality academic staff.

CERTIFICATION BY SUBJECT

I,.....of.....

I certify that I am at least 18 years old* and that I am voluntarily giving my consent to participate in the study:

“**Employer branding for successful recruitment and retention of talented academic staff in Thai universities**” being conducted at Victoria University by: Mr. Karun Kidrakarn under the supervision of Dr Beverley Lloyd-Walker and Associate Prof. Arthur Tatnall.

I certify that the objectives of the study, together with any risks and safeguards associated with the procedures listed hereunder to be carried out in the research, have been fully explained to me by Mr. Karun Kidrakarn and that I freely consent to participation involving the below mentioned procedures:

- A survey instrument based on the checklist of well-designed website for attracting applicants and retaining current staff

I certify that I have had the opportunity to have any questions answered and that I understand that I can withdraw from this study at any time and that this withdrawal will not jeopardise me in any way.

I have been informed that the information I provide will be kept confidential.

Signed:.....

Date

Any queries about your participation in this project may be directed to the researcher

Dr Beverley Lloyd-Walker at (03)9919 4121 or email Beverley.LloydWalker@vu.edu.au . If you have any queries or complaints about the way you have been treated, you may contact the Secretary, Victoria University Human Research Ethics Committee, Victoria University, PO Box 14428, Melbourne, VIC, 8001 phone (03) 9919 4781

Appendix 3.5: Consent Form for HR manager

**CONSENT FORM
FOR PARTICIPANTS
INVOLVED IN
RESEARCH**



**VICTORIA
UNIVERSITY**

**A NEW
SCHOOL OF
THOUGHT**

INFORMATION TO PARTICIPANTS:

We would like to invite you to be a part of a study into “**Employer branding for successful recruitment and retention of talented academic staff in Thai universities**”, by Mr. Karun Kidrakarn for his DBA study. The aim of this research is twofold:

- III) it will investigate how Universities in Thailand deploy online branding efficiently in order to create their employer brand to attract potential recruits and to retain current skilled academic staff; and
- IV) it will develop guidelines, or sets of criteria, that might be applied to suggest how Thai universities might best design their websites to attract and retain quality academic staff.

CERTIFICATION BY SUBJECT

I,.....of.....

I certify that I am at least 18 years old* and that I am voluntarily giving my consent to participate in the study:

“**Employer branding for successful recruitment and retention of talented academic staff in Thai universities**” being conducted at Victoria University by: Mr. Karun Kidrakarn under the supervision of Dr Beverley Lloyd-Walker and Associate Prof. Arthur Tatnall.

I certify that the objectives of the study, together with any risks and safeguards associated with the procedures listed hereunder to be carried out in the research, have been fully explained to me by Mr. Karun Kidrakarn and that I freely consent to participation involving the below mentioned procedures:

- A tape recorded* semi structure interview conducted by Karun Kidrakarn (conducted at a time and place agreed by me, please see on Information form)
 *please tick if you do not wish

I certify that I have had the opportunity to have any questions answered and that I understand that I can withdraw from this study at any time and that this withdrawal will not jeopardise me in any way.

I have been informed that the information I provide will be kept confidential.

Signed:.....

Date

Any queries about your participation in this project may be directed to the researcher

Dr Beverley Lloyd-Walker at (03)9919 4121 or email Beverley.LloydWalker@vu.edu.au . If you have any queries or complaints about the way you have been treated, you may contact the Secretary, Victoria University Human Research Ethics Committee, Victoria University, PO Box 14428, Melbourne, VIC, 8001 phone (03) 9919 4781

Appendix 3.6: Questionnaire

- Please answer these questions below.

- What is your highest degree you graduated?
 Bachelor Master PhD
- If you hold an academic level title, what is your level?
 None Assistant Professor Associate Professor Professor
- How long have you worked here? _____
- Did you look at the university website before you applied for your position here? Yes No
- Did you get the information you required from the website to decide to apply your position? Yes No

- This checklist below shows components of your employer's website under three different sets of criteria. **Please rank the components which influence your decision to apply to work for your University.**

Not important at all ← → Most important

Appearance Quality	1	2	3	4	5
• Use attractive fonts, easy to read					
• Use of attractive colours to aid understanding					
• Use of graphics and animations to create interest					
• Use of attractors e.g. showing University activities, hot news, internal and external links					
• Statement from management e.g. visions and goals					
• Presenting motto and logo of the university					
• Presenting university buildings and landscape pictures					

Technical Quality	1	2	3	4	5
• Page loading speed					
• Valid links e.g. there are no broken links					
• Showing site map					
• Search facilities					
• Providing both Thai and English versions					

Information Quality	1	2	3	4	5
• Showing total rewards e.g. salary and benefits					
• Locating contact information					
• Locating job descriptions/details					
• Locating staff/employee hiring policies					
• Up-to-date information e.g. how long since website was updated?					
• Locating job search links					

- In these three sets of criteria, please rank which set was the most important in influencing your decision to apply for your position

Appearance Quality	Technical Quality	Information Quality

Appendix 3.7: A copy of the ethical approval

MEMO



**VICTORIA
UNIVERSITY**

**A NEW
SCHOOL OF
THOUGHT**

TO Dr Beverley Lloyd-Walker
School of Management and Information Systems
Footscray Park Campus

DATE 30/10/2009

FROM Professor Michael Muetzelfeldt
Chair
Faculty of Business & Law Human Research Ethics
Committee

SUBJECT Ethics Application – HRETH 09/87

Dear Dr Lloyd-Walker,

Thank you for submitting your application for ethical approval of the project entitled:

HRETH 09/87 Employer branding for successful recruitment and retention of talented academic staff in Thai universities.

The proposed research project has been accepted and deemed to meet the requirements of the National Health and Medical Research Council (NHMRC) 'National Statement on Ethical Conduct in Human Research (2007)', by the Chair, Faculty of Business & Law Human Research Ethics Committee. Approval has been granted from 30 October 2009 to 24 December 2010.

Continued approval of this research project by the Victoria University Human Research Ethics Committee (VUHREC) is conditional upon the provision of a report within 12 months of the above approval date (by **30 October 2009**) or upon the completion of the project (if earlier). A report proforma may be downloaded from the VUHREC web site at: <http://research.vu.edu.au/hrec.php>

Please note that the Human Research Ethics Committee must be informed of the following: any changes to the approved research protocol, project timelines, any serious events or adverse and/or unforeseen events that may affect continued ethical acceptability of the project. In these unlikely events, researchers must immediately cease all data collection until the Committee has approved the changes. Researchers are also reminded of the need to notify the approving HREC of changes to personnel in research projects via a request for a minor amendment.

If you have any queries, please do not hesitate to contact me at Michael.Muetzelfeldt@vu.edu.au.

On behalf of the Committee, I wish you all the best for the conduct of the project.

Prof. Michael Muetzelfeldt

Chair

Faculty of Business & Law Human Research Ethics Committee

Appendix 3.8: Semi-structure interview basis questions

Name of interviewee:
Position:
Department:
Name of University:
Date: Time:

1. มหาวิทยาลัยของท่านมีเว็บไซต์มาแล้วกี่ปี
How long has your university website been established?
.....
.....

2. ท่านคิดว่าเว็บไซต์ของมหาวิทยาลัยมีอิทธิพลต่อภาพลักษณ์ของมหาวิทยาลัยหรือไม่ อย่างไร โปรดยกตัวอย่างประกอบ?
Does the university website influence to your university image? Please give some example?
.....
.....
.....

3. มหาวิทยาลัยของท่านให้ความสำคัญของการสร้างภาพลักษณ์บนเว็บไซต์ของมหาวิทยาลัย หรือไม่ โปรดยกตัวอย่างประกอบสิ่งที่ท่านคิดว่าเป็นการสร้างภาพลักษณ์ของมหาวิทยาลัย
Does the university pay any attention to create the image on the university website? If yes, please give some example to show how your university creates the image on the website.
.....
.....
.....

4. ท่านคิดว่าการสร้างภาพลักษณ์ผ่านเว็บไซต์ของมหาวิทยาลัยจะส่งผลต่อการสมัครสำหรับพนักงานวิชาการ หรืออาจารย์หรือไม่ และมีการตรวจสอบอย่างไร?
Does the conveying university image on website influence to improve the number of applicants? How do you check it? Are there any records available?
.....
.....
.....

5. ในเว็บไซต์ของมหาวิทยาลัยท่านมีพื้นที่สำหรับกระดานกระทุ้เพื่อให้ผู้เข้าชมเว็บไซต์แสดงความคิดเห็น หรือไม่
Is there any web board or a discussion forum available on your university website?

- ถ้ามี มีเพื่อวัตถุประสงค์อะไรและมีการดำเนินการหรือดูแลรับผิดชอบโดยใคร และมีผลกระทบต่อมหาวิทยาลัยอย่างไร?
- If yes, what are the purposes of the web board or discussion forum? Who are taking the responsibility of this web board? And how does it influence university image?

.....
.....
.....

- ถ้าไม่มี ท่านคิดว่าสมควรมีหรือไม่ เพราะเหตุใด?
- If not, do you think the web board should be available on the university website? And why?

.....
.....
.....

6. ในเว็บไซต์ของมหาวิทยาลัยท่านมีการแสดงข้อมูลเพื่อเชิดชูเกียรติ หรือรางวัลต่างๆ ของบุคลากรภายในมหาวิทยาลัย หรือไม่ และมีผลต่อบุคลากรอื่นๆ อย่างไร
Does your university website provide total rewards of the staff? How does it influence other staff?

.....
.....
.....

Appendix 4.1: Respondents profiles classified by ranked university groups and level of qualifications

		Bachelor				Masters				PhD			
Rank	Uni.	THAI		FORIEGN		THAI		FORIEGN		THAI		FORIEGN	
		n.	%	n.	%	n.	%	n.	%	n.	%	n.	%
TOP	A	0	0.00	1	7.14	10	5.78	0	0.00	8	5.67	1	25.00
	B	4	50.00	0	0.00	13	7.51	1	9.09	9	6.38	1	25.00
	C	0	0.00	6	42.86	9	5.20	3	27.27	10	7.09	0	0.00
	D	0	0.00	0	0.00	8	4.62	1	9.09	16	11.35	1	25.00
	E	1	12.50	1	7.14	10	5.78	0	0.00	7	4.96	0	0.00
Sub total		5	62.50	8	57.14	50	28.90	5	45.45	50	35.46	3	75.00
MIDDLE	F	0	0.00	0	0.00	11	6.36	0	0.00	11	7.80	0	0.00
	G	1	12.50	1	7.14	10	5.78	2	18.18	14	9.93	0	0.00
	H	1	12.50	1	7.14	15	8.67	1	9.09	5	3.55	0	0.00
	I	0	0.00	0	0.00	11	6.36	0	0.00	14	9.93	0	0.00
	J	1	12.50	1	7.14	17	9.83	2	18.18	6	4.26	1	25.00
	Sub total		3	37.50	3	21.43	64	36.99	5	45.45	50	35.46	1
LOWER	K	0	0.00	3	21.43	19	10.98	1	9.09	6	4.26	0	0.00
	L	0	0.00	0	0.00	3	1.73	0	0.00	9	6.38	0	0.00
	M	0	0.00	0	0.00	14	8.09	0	0.00	7	4.96	0	0.00
	N	0	0.00	0	0.00	11	6.36	0	0.00	12	8.51	0	0.00
	O	0	0.00	0	0.00	12	6.94	0	0.00	7	4.96	0	0.00
Sub total		0	0.00	3	21.43	59	34.10	1	9.09	41	29.08	0	0.00
Total		8	100.00	14	100.00	173	100.00	11	100.00	141	100.00	4	100.00

All respondents (n.) = 351

Appendix 4.2: Means, Standard Deviations, Skewness and Kurtosis for all Variables of the current research

	N	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
Use of attractive fonts, easy to read	351	3.55	1.132	-.684	.130	-.126	.260
Use of attractive colours and helps understanding	351	3.68	1.122	-.764	.130	-.049	.260
Use of graphics and animations to create interest	351	3.22	1.130	-.326	.130	-.548	.260
Use of attractors e.g. showing University activities, hot news, internal and external links	351	3.77	1.090	-.802	.130	.059	.260
Statement from management e.g. visions and goals	351	3.64	1.115	-.725	.130	-.050	.260
Presenting slogan and logo of the university	351	3.51	1.134	-.481	.130	-.448	.260
Presenting university's building and landscape pictures	351	3.57	1.048	-.554	.130	-.009	.260
Speed of page loading	351	4.14	1.026	-1.226	.130	1.137	.260
Valid links e.g. there are no broken links	351	4.10	1.087	-1.233	.130	.972	.260
Showing site map	351	3.86	1.034	-.903	.130	.573	.260
Searching facilities	351	4.01	1.016	-1.038	.130	.881	.260
Showing in both Thai and English version	351	4.07	1.106	-1.129	.130	.536	.260
Showing total rewards e.g. salary and benefits	351	3.62	1.238	-.646	.130	-.473	.260
Locating contact information	351	4.12	1.017	-1.265	.130	1.244	.260
Locating job descriptions/details	351	4.06	1.033	-1.120	.130	.864	.260
Locating staff/employee hiring policies	351	3.97	1.078	-.967	.130	.336	.260
Up-to-date information e.g. how long since website was updated?	351	4.07	1.034	-1.119	.130	.854	.260
Locating job search links	351	4.02	1.035	-1.020	.130	.647	.260
Valid N (listwise)	351						

Appendix 4.3: Summarising data from semi-structured interviews

	Issue	Top (n=4)				Middle (n=4)				Lower (n=4)			
		1	2	3	4	1	2	3	4	1	2	3	4
Web appearance	Colours and Graphic animation	-	✓	✓	-	✓	-	✓	-	✓	-	-	-
	International standard design such as providing English version	✓	✓	✓	-	-	-	-	-	-	✓	✓	-
	Emphasizing the uniqueness image of university	✓	✓	✓	✓	✓	-	✓	✓	-	-	-	-
Web content	Academic information, research supports	✓	✓	-	✓	✓	-	✓	✓	✓	-	-	✓
	Ease to access job vacancy info.	-	-	-	-	✓	-	-	-	-	✓	✓	✓
	University's activities	✓	-	-	-	-	-	-	-	✓	✓	-	-
	Providing discussion forum	-	✓	✓	✓	✓	-	✓	✓	✓	✓	✓	✓
Communication	Internal communication	-	✓	✓	✓	✓	-	✓	✓	✓	✓	✓	✓
	Difficulties of using a forum	✓	✓	-	✓	✓	✓	-	-	-	-	-	-
	Encouraging current staff	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Presenting staff achievements	Creating university reputation	✓	✓	✓	-	-	-	-	-	-	-	-	-

Note: The dashes (-) indicate that none of the HR manager in this study raised this issue in their interviews.

Appendix 4.4: Number of academic staff in High Education Institutes in Thailand (2008)

Number of academic non-Thai national staff in High Education Institutes in Thailand											
	Bachelor			Total in group	Masters			Total in group	PhD		Total in group
	Men	Women			Men	Women			Men	Women	
Autonomous universities	120	133		253	50	35		85	62	11	73
Traditional universities	101	72		173	58	40		98	34	11	45
New universities	86	48		134	44	14		58	10	1	11
Private higher education institutions	73	64		137	132	116		248	73	28	101
Total	380	317		697	284	205		489	179	51	230
Overall = 1416											

Number of academic Thai national staff in High Education Institutes in Thailand											
	Bachelor			Total in group	Masters			Total in group	PhD		Total in group
	Men	Women			Men	Women			Men	Women	
Autonomous universities	3,577	11,320		14,897	3,439	5,326		8,765	3,290	3,125	6,415
Traditional universities	6,134	14,775		20,909	4,862	7,959		12,821	2,823	3,016	5,839
New universities	4,218	7,442		11,660	5,871	7,290		13,161	750	652	1,402
Private higher education institutions	1,160	1,932		3,092	1,814	2,729		4,543	505	374	879
Total	15,089	35,469		50,558	15,986	23,304		39,290	7,368	7,167	14,535
Overall = 104,383											

Source: Office of Higher Education Commission Thailand (2008)

166 institutions across the nation were under supervision of the Commission on Higher Education categorised as follows:

- 78 Public higher education institutions
 - 13 Autonomous universities
 - 15 Traditional universities
 - 50 New universities including:
 - 40 Rajabhat universities
 - 9 Rajamangala Technology universities
 - 1 Pathumwan Institute of Technology
- 69 Private higher education institutions
 - 40 universities/institutions
 - 29 colleges

The percentage of **non-Thai national staff** in Thai HEIs is 1.34.
 The percentage of **non-Thai national staff** who held a **Ph.D.** is 1.55.