

The Organisational and Global Environments Relationship: An Investigation of the Key Factors

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Diploma Art and Design
Graduate Diploma Business Computing

A THESIS SUBMITTED TO THE
SCHOOL OF INFORMATION SYSTEMS
FACULTY OF BUSINESS AND LAW

VICTORIA UNIVERSITY



IN FULFILMENT OF THE REQUIREMENTS

FOR THE DEGREE OF

Master of Business by Research

WRITTEN UNDER THE DIRECTION OF

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MELBOURNE, VICTORIA, AUSTRALIA**

SEPTEMBER, 2004

Declaration

I certify that this Thesis is my own work and contains no material that has been submitted previously, in whole or in part, in respect of any other academic award or any other degree at any institute, college or university. To the best of my knowledge, it contains no material that has been previously published or written by another person except where due reference is made in the text of the Thesis.

Robyn Leslie Watters

Date:_____

Acknowledgements

I would like to express my thanks to the staff of the Victoria University library, and to Hilary Luxford for their support during the research process, and to the case study participants for their commitment. In particular I thank Andrew Wenn and Dr Geoffrey Sandy for their guidance, Stephen Paull who nurtured me during the graduate diploma and to Con Nikakis for steering me down the research path. Thank you to my family and friends for their patience and understanding, with special thanks to Edna Pierce.

I owe much of this to my partner Steven Brown who has been my rock and despite the obligatory nature of the research process is still my best friend.

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Abstract

This thesis identifies a number of key factors of importance to business in making the transition to global activity. The findings show that these factors can be categorised in terms of enablers or inhibitors of global activity. These conclusions are drawn from a case study of a large securities company in the process of making the transition from a national to a global organisation. The research included an analysis of the subject matter expert views on issues relating to e-commerce, management, and global business.

There was minimum research concerned explicitly with the combined factors e-commerce, management of information technology, the organisational structure and culture. Australian-based research had generally targeted Small-Medium Enterprises (SMEs) use of e-commerce, rather than that of large organisations. The focus of this study was to investigate how the case study, being a large organisation, managed its information technology requirements within a multi-market environment. It sought first, to establish the practices and conduct commensurate with global business activity and second, to determine their influence on the organisation and the implementation of a global business solution. These findings will inform other organisations as to the how and why of implementing successful and robust organisational and global business relationships. It will provide an insight into a range of issues some of which might be conducive to their own organisational and global business requirements.

This study comprised three stages. The first was an initial appraisal of the subject matter experts' views on issues covering global business solutions.

The outcomes from this formed the basis of the interview guide used in the second stage, which was a series of open-ended interviews with the high-end decision makers from the participant company. The third stage was a subsequent review of the subject matter experts' views on issues that emerged from the interview data and documents provided by the participant company. Data derived from each of the investigations was categorised into themes using the recurring issues approach. A comparative analysis of this data (sourced from the literature, documents provided by the participant company and the interviews) provided a degree of triangulation by which the author could validate and justify the emergent issues. These issues form the 'Composite Enablers and Inhibitors Model'.

What is revealed are the key enabling and inhibiting factors commensurate with, and impediments of, a global business solution for the securities industry. These findings make known the dynamism of the case study's organisational and global relationship. It demonstrates that the securities industry is devoid of a set of common business processes or a business culture that will allow the implementation of a comprehensive global solution. It brings to light the ramifications of the securities industry regulatory framework and its negative impact on the company's global objective.

This suggests that there are notable barriers to global business, which have existed for some time. Companies moving into global markets should expect to undergo change and these changes will more than likely involve complex internal and external business relationships. Organisations should be prepared to restructure their operations in order to accommodate local and

global business solutions. The diverse range of enabling and inhibiting factors that have emerged from this study suggests that the depth of global market change is very much dependent on an industry's regulatory framework and the jurisdictions of each country of operation. This raises the question about the obtainability of a truly global business solution.

Chapter 1: Introduction

It is generally accepted that e-commerce is the catalyst responsible for creating global competitive markets, changing the business process interface, challenging the organisation's structure, culture, and management and business strategies. The literature appears to support the prediction that businesses will need to readily adapt to these changes if they are to remain competitive in what is considered to be a technology driven, global economy. However, from this study a diverse range of enabling and inhibiting factors have emerged, which suggests that the depth of global market change is very much dependent on an industry's regulatory framework and the jurisdictions of each country of operation. Some of these factors are considered to be barriers to global business and impediments to the promulgation of global technologies. Indeed these findings suggest that globalisation exists in concept only, but not in practice.

This thesis considers the influences of the enablers and inhibitors, and the industry type on the organisational operational and global environments, and explores those relationships. It aims to identify key areas of importance to business making the transition to global activity or seeking to maintain the organisational operational and global environments relationship. In all, this study reveals the key factors required to support national, local and global activity within a multi-market environment. The research involved three core investigations.

The first stage of the investigation was a literature review of the writings and views of subject matter experts on global business activity and the wider area

of e-commerce and/or e-business. The purpose of the review was to identify those issues associated with global business activity and to determine the level of influence those issues had on large organisations. It captured the broader views of information technology management and management practices generally, including the historical and contemporary practices of each. Many issues emerged from that review and those investigated were:

- organisation structure;
- organisation culture;
- change management;
- decision making processes;
- business processes;
- business and management strategies;
- organisational internal and external business relationships/alliances;
- client service strategies;
- technology and its management practices; and
- the role of marketing and marketing strategies.

The second stage of the investigation comprised open-ended interviews with employees of a large securities organisation with a strong technology base that was involved in global business activities. The objective was to determine their views and experiences in implementing a global business solution, and included their past and present experiences. It also investigated what the company believed to be the organisational operational and global environments' key enabling or inhibiting factors. Although not exhaustive these included:

- industry type;
- regulatory framework;
- jurisdictions;
- global markets;
- organisational structure;
- culture (business and national);
- marketing;
- strategic alliances;
- business processes;
- decision making processes;
- technology; and
- management and business strategies.

The third stage involved a subsequent literature review based on the issues (highlighted above) that emerged from stage two. This review led to a comprehensive analysis and comparison of the company's shared experiences (derived from the interview data and company documents), and subject matter experts' views. This approach provided a degree of triangulation by which the author could validate the enabling and/or inhibiting factors.

It is recognised that the case study participant functions wholly and solely within the securities industry; however, there is evidence to suggest that global market activity in general creates many challenges for an organisation regardless of its industry type. An example of this can be seen in the experiences shared by Driza-bone (CIBRE 2003a) and Fosters Brewing

Group (CIBRE 2003b), discussed in detail in Chapter 4 of this study. The extent and nature of these challenges is not a new phenomenon as shown by Martin et al. (1994) who bring to light a plethora of issues confronting multinational companies during the 1980s and 1990s. Some of these issues were overcome through technology, and management and business strategies. This study shows that the single, biggest liability an organisation might face today are the numerous regulatory frameworks in play within various jurisdictions. These jurisdictions can be local, national and/or global by nature (Steinberg 1999). Oxely (1998) reports on similar challenges within the global trade markets.

It is fair to comment that the global environment is heavily controlled by the industry regulatory framework, and the jurisdictional layers present within each country of operation. Lane (1999) states that technology is the driver of change and the backbone of a global business solution. Some claim that organisations need a mix of business, technology, and marketing skills to successfully implement a global solution given the complexities of the present current economic climate (Kalakota & Whinston 1997; Siragher 1999; Keen 1999).

There is a lack of conclusive research that focused on the global business requirements of an industry fraught with tradition and regulations. Edberg et al. (2001) raise some issues faced by businesses operating in multiple markets that are related to this study, namely the impediments brought about by globalisation versus localisation. There is an obligation for business to release multiple versions of products and services in accordance with each

respective country of operation. Businesses are also required to negotiate, on a case by case basis, the numerous legal and accounting issues that emerge as a consequence of operating in multiple markets. However, Edberg et al. (2001) did not consider the need for businesses to adopt appropriate management strategies, nor did they discuss the influence of industry culture. This study addresses all of these issues and others.

This research will contribute to a better understanding of the organisational operational and global environments relationship through the identification of the key factor relationship inhibitors and enablers. These findings will assist business to make informed decisions as to appropriate global solutions. They will know what to expect, and how best to implement and manage global activity. In addition, educational institutions will be better informed to make curriculum change to prepare graduates with the mix of skills required to manage the global business environment.

1.1 Overview of Chapters

The chapters will present the research design and findings as follows.

Chapter 2 is the detailed literature review of the current and historical findings on various issues relating to management and business strategies, culture, global business activity and the broader views of e-commerce and/or e-business. Chapter 3 discusses alternative research methodologies and defines the research design concept used in this study, justifying its applicability. Chapter 4 is the case study and provides an analysis of the textual and interview materials collected as described in Chapter 3. It identifies the core issues arising from this investigation. These are discussed

in conjunction with the relevant literature. The chapter also incorporates the findings of the second literature review. Chapter 5 discusses the issues raised in Chapter 2 and Chapter 4. It presents the research findings and based on those findings provides a model of the organisational and global enablers and inhibitors. Chapter 6 is the concluding chapter and provides a summary of the overall study and includes a discussion of further research areas.

Chapter 2: Literature Review

2.0 Introduction

The literature review is divided into two parts. Part one, the preliminary review, which is the focus of this chapter, comprises a summary of the detailed initial appraisal of the literature relating to the subject matter experts' views. The broad area of investigation was e-commerce and commenced in August 1999. Many issues emerged from that review. These ultimately formed the basis of the key areas to be explored. They included:

- levels of e-commerce activity;
- organisational structure and culture;
- management of information technology principles and practices; and
- the interrelations of e-commerce, the organisation and the global environment.

Part two of the literature review, which can be found interleaved within Chapter 4, explored the themes that emerged from both the initial review and the case study interview materials, including the public documents provided by the participant organisation. Similar to that of the preliminary review, the views of a range of subject matter experts were captured but on this occasion the information gleaned from this second review was discussed in the light of the emergent themes. The second review commenced in late 2000 and continued throughout the life of the study. Both reviews were undertaken with the intent of investigating the literatures of a given point in time. This approach provided a detailed account of the issues of that time and was

believed to be more appropriate than having to rely on retrospective abstracts of the same issues. As a result, there is a mix of dated and current references that better characterises the issues discussed in this thesis.

2.1 Overview

The initial review found no previous research concerned explicitly with the interrelations of e-commerce, management of information technology and the organisational structure and culture. Some research had analysed changes in the key issues of the management of information systems, indicating that management principles had indeed changed. The reported change was largely attributable to the uptake of e-commerce activity. At the time of the initial review Australian-based research had generally targeted Small-Medium Enterprises (SMEs) use of e-commerce, rather than that of large organisations. Therefore, the purpose of the initial review was to explore these interrelations from the perspective of a large organisation.

The research problem was categorised into four objectives. The first task was to establish the terms of reference of e-commerce. Kalakota & Whinston (1997) acknowledged some difficulty when attempting to define electronic commerce stating that its terms of reference were underpinned by any number of the participating intermediaries. This objective clarified the seemingly elusive term electronic commerce and provided a benchmark from which to select an appropriate case study participant. This was achieved by defining technology, accepted e-commerce practices and associated business relationships. These definitions ultimately formed the basis of this study.

The second objective sought to identify any contributing factors that might pre-determine specific management and/or information technology management practices and/or business strategies. This was achieved by first describing the management practice principles and business strategies from both an historical and present-day perspective. From here the management of information technology principles were investigated, providing an insight into the evolution of technology and its perceived role within the organisation.

The third objective aimed to explore the origins of the organisational structure and culture, beginning with the Industrial Revolution. This approach provided both a retrospective view of the mechanics underpinning the organisation, and an insight as to their applicability in the 21st century. The fourth objective was to investigate the interrelations of e-commerce, the organisational structure, culture, and management of information technology principles. This approach provided an insight as to the required intra- and inter-organisational relationships as well as a glimpse of the overall organisational configuration.

What follows is a summary of the subject experts' views of the study's preliminary areas of investigation.

2.2 E-commerce Principles and Practices

At the time of the preliminary review there was much debate surrounding the interpretation of e-commerce. What activities and technology did it encompass? According to Kalakota & Whinston (1997) e-commerce was broadly defined as doing business online through a mix of technology and business strategies. The authors claimed that these business strategies

comprised the core business areas of information technology, marketing and finance (Kalakota & Whinston 1997). At the time the initial review was conducted many e-commerce relationship types and levels of activity had been identified (Kalakota & Whinston 1997; O'Brien 1999; Locopo 1998; KMPG 1998; Esprit 1996). A recent description is that of Rodgers et al. (2002, p. 184) who made the distinction between e-business and e-commerce defining e-business as:

‘...allowing the extended organisation to be connected. This means all employees, customers/clients suppliers, and other stakeholders, regardless of geographic region, are interconnected’.

For the purpose of this study e-commerce and e-business were considered in the broader context of including all electronic activity and relationship types. Henceforth, e-commerce and e-business will be used as interchangeable terms within this paper.

The literature also provided a mechanism by which an organisation's level of e-commerce activity could be measured and this approach was adopted as a means of selecting the case study participant. The activity criteria identified varying degrees of e-commerce complexity, which were mapped to specific technologies (Esprit 1996). For instance fax and email activity was grouped at the lower end of e-commerce complexity with the presence of integrated transactional systems operating at the higher level of activity (Esprit 1996). These activities ranged from basic Internet or network presence at the lower end of the spectrum, to promotional pre-sales and post-sales support,

through to complex inter-networked global arrangements at the higher end (Esprit 1996).

The degree of e-commerce complexity could also be measured by an organisation's ability to resolve the interoperability of international regulatory factors which Esprit (1996) referred to as:

- taxation and contract laws;
- customs payments; and
- banking practices.

This suggested that an industry's regulatory framework or policy would play a major part in developing a global e-commerce solution, specifically where such transactions would need to be accommodated through application interoperability (Kalakota & Whinston 1996). The research objective in this instance was to determine whether the industry type, and related regulatory framework, determined an organisation's level of e-commerce activity. The definitions and issues discussed thus far have been further reviewed within the context of the research findings the outcome of which is presented in Chapter 5.

Esprit (1996) stated that large organisations were more inclined to implement complex e-commerce solutions compared to Small-Medium Enterprises (SMEs) because high level e-commerce activity required custom built solutions to accommodate the degree of transactional integration required. This option tended to be labour and cost intensive, and consequentially,

SMEs leaned more toward affordable 'off-the-shelf' technologies to support their less complex transactional activities (Esprit 1996).

Apart from the factors already mentioned complex, electronic transactions were also said to be dependent on interactive communication and collaboration both within the organisation and between its strategic alliances (O'Brien 1999). According to O'Brien (1999, p. 511) strategic alliances are about:

'....establishing new business linkages and alliances with customers, suppliers, competitors, consultants, and other companies. These linkages may include mergers, acquisitions, joint ventures, forming of "virtual companies", or other marketing, manufacturing, or distribution agreements between a business and its trade partners'.

This suggests that e-commerce activity relied on the combination and balance of interrelated factors, and not on technology alone. The issues discussed herein were instrumental in determining the prospective case study participant.

2.3 Management Practices

A review of the management practices provided a better understanding of the underlying processes, and enabled an exploration of its origins, development, and its relationship with the organisation. Both Morden (1996) and Crainer (1996) attributed the origins of modern management practices to Henri Fayol's (1916) classic approach. This approach promulgated the activities of 'planning and forecasting', 'organising', 'commanding', 'coordinating', and 'controlling' an organisation (Morden 1996, p. 9). Early management

practices traced from 1880s to 1950s evolved through the classical and scientific schools and the human relations school of management (Morden 1996). According to Hope & Hope (1997) these practices were driven by the manufacturing industries of the Industrial Revolution (1850 – 1960).

The main contributors of the classical and scientific schools and the human relations school of management were Frederick Taylor, Henri Fayol, Max Weber, Lyndall Urwick (Crainer 1996; Morden 1996), Henry Gantt, Frank & Lillian Gilbreth, and E. F. L. Brech (Morden 1996). They were instrumental in delivering a range of core management principles and processes still in force today including; the organisational hierarchical model, the operational strategic model, and structured work practices (Morden 1996; Crainer 1996). In 1951 the Tavistock Institute was credited for furthering management practices by analysing the organisation's interaction with the external operating environment (Morden 1996). They identified the technological and cultural interface and believed this relationship would determine an organisation's management and operational processes (Morden 1996). The relationship was described as the principle of 'equifinality' – 'that there is no single best way to achieve operational or organisational objectives' as each is dependent on the other and requires a balance of all the elements (Morden 1996, p. 13). The author states that the prominence of these relationships continued into the 1990s, with organisations increasingly focusing on access to international markets, globalisation, and interfacing related technologies.

The initial review identified the principles of management practices and demonstrated its role in supporting the evolving organisation through various

environmental and relationship challenges. The core issues arising from this section, the organisation structure and culture, and its operational environment, were in need of further investigation. These issues and how they interrelate are discussed in Section 2.4.

2.4 Organisational Structure and Culture and the External Environment

According to Morden (1996), organisational structure underpins the framework and context around which management practices and processes are formulated and executed. He also states that the characteristics of an organisational structure will determine the effectiveness of any management choices.

At this stage of the preliminary literature review it became evident that the organisational structure had evolved as a consequence of the very management practices that were developed over time to control and increase productivity and profit. Boudreau et al. (1998) acknowledged four organisational structures and corresponding management practices they believed best described today's world market players, they included:

- Transnational: a flexible, efficient and responsive approach to market environments where resources are readily scaled and deployed globally as required. This strategy relies on the cross-pollination of expert knowledge where the geographical location is generally determined by the presence of 'centres of excellence'.

- Global: an integrated, centralised strategic approach involving the export of generic products and services to other world markets.
- Multinational: comprised of 'national' or 'regional' subsidiaries supporting an overall 'autonomous' and 'decentralised' operational structure. Deemed to be sensitive and responsive to local markets.
- International: relies on a 'horizontal' structure where 'strategic links' are formed between each country of operation ensuring the transfer of enterprise knowledge.

The organisational structures and strategies described above were distinguishable by their competitive agenda with some strategies considered more complex because of the intricacies of the operational environment they supported (Boudreau et al. 1998). The virtual organisation also emerged as an accepted organisational structure and management and strategic practice, and was adopted by many businesses as a best-fit design to increase global competitiveness (Boudreau et al. 1998). The virtual organisation is a seamless network of partners or alliances sharing each other's core competencies with the view to maximising business opportunities (Morden 1996; O'Brien 1999).

Other organisation structures and management strategies that emerged were business partnerships and/or strategic alliances (Boudreau et al. 1998). Hope & Hope (1997) viewed strategic alliances as a means by which companies could maximise business opportunities by adding value to products and/or services. Adding value is essentially the customer focused practice of

enhancing core business and/or support functions while strategic alliances are largely used by multinational companies as a means of increasing global competitiveness (Martin et al. 1994).

The literature also highlighted the need to investigate the relationship between the organisation and culture. According to Morden (1996, p. 134), organisation culture:

‘...can be defined in terms of “the collective mental programming of the enterprise and its members”. It is apparent in “the way we do things around here”’.

An organisation’s culture is said to comprise five core components; ‘value judgements’, ‘vision’, ‘value systems’, ‘behavioural standards and norms’, ‘perceptions of necessity’, ‘priority’, and ‘desirability’ (Morden 1996, p. 135).

The term culture became prominent when management theorists of the human relations school identified an organisation and/or business culture, which they believed were characteristics attributable to the management practices of a particular ideology (Morden 1996). For example, the human relations school promoted alternative management practices that embraced a humanistic culture as opposed to the classic and scientific school, which was based on a culture of profit, productivity and machinery (Morden 1996).

The review findings, as discussed at sections 2.2, 2.3 and 2.4, infer an interrelationship between an organisation’s management practices, its structure, culture, technology and its external environment. The findings also suggest that these elements combined form the organisational operational

environment. Other studies undertaken during mid 1950s to early 1990s indicated that there was also a relationship between management practices and industry types (Morden 1996). These relationships have been interpreted by the researcher and are presented in *Figure 1* (below).

Figure 1: Organisational Operational Environment Interrelations

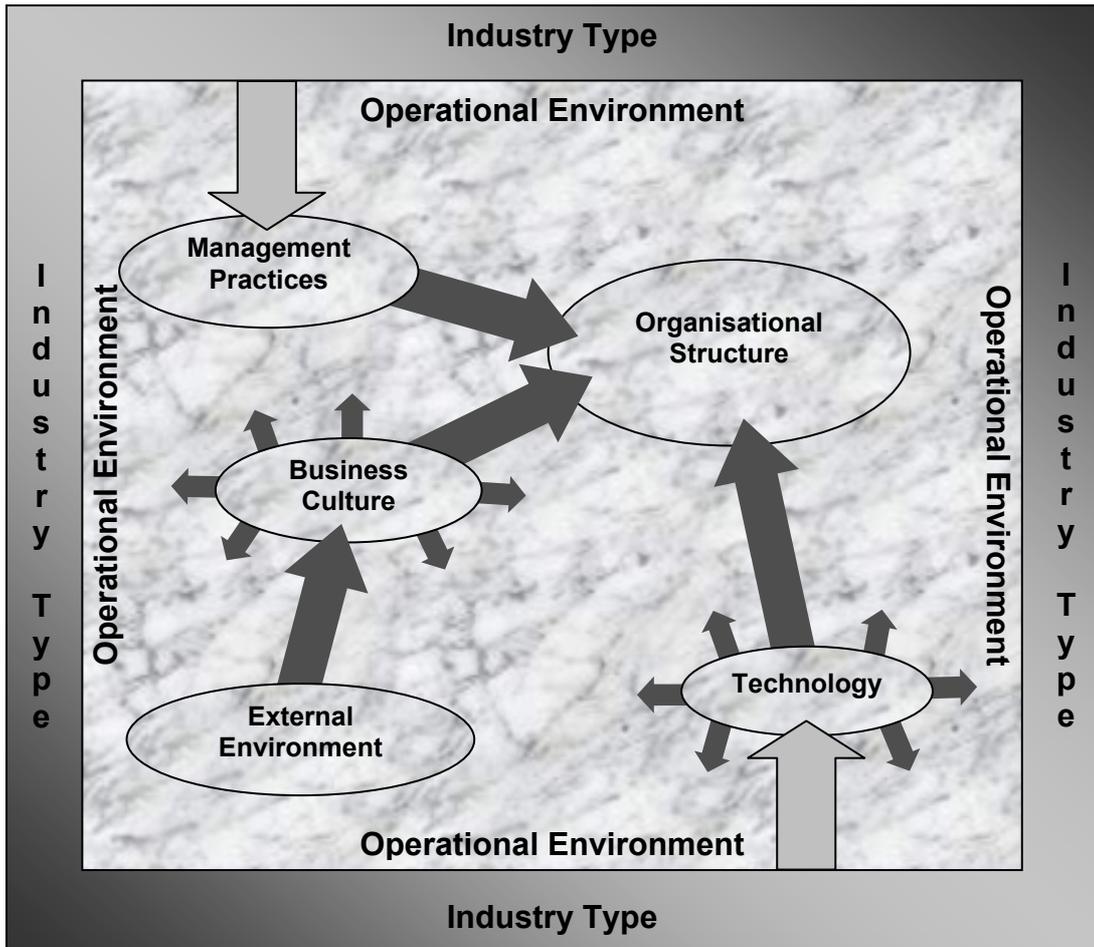


Figure 1 shows industry type influencing an organisation's management practices, and its technology. Management practices influence an organisation's structure, which is fashioned on a specific business culture. The external environment influences the organisation's business culture and its technology, which in turn influences the organisation's operational environment. The organisation's operational environment comprises its

management practices, structure, culture and its external environment. However, at this stage of the review there was no evidence to suggest that these relationships were dependent upon or varied according to industry type.

2.5 Management and Business Strategies

The literature revealed that as organisations became more focused on international markets, there was a growing trend to redesign business with a strategic, management and operational focus (Daniels 1994). Morden (1996, p. 411) defines strategy as:

‘The means or “rules of the game” by which the enterprise attempts to achieve its objectives. And they provide the focus by which it will attempt to manage the impact of the various external forces that are likely to impinge upon it ‘

Crainer (1996) states that prior to the 1980s strategies had a limited role within the organisation, which he suggested was due their unsuitability in the changing business environment. Porter (cited in Hope & Hope 1997, p. 28) is renowned for the generic corporate management strategies of the 1980s that focused on maximising a company’s market competitiveness. Porter’s strategies essentially relied on capturing the changing market environments of that time (Hope & Hope 1997).

Management strategies from the 1990s onward have had an increasing international focus, which Crainer (1996) attributed to the rise of the global organisation. The global organisation presented a challenge to traditional

organisational management strategies, and organisations needed to restructure if they were to be competitive in the global marketplace (Boudreau et al. 1998; Morden 1996). Decentralised management structures, and marketing and client service strategies emerged, emphasising a new business and customer focused approach (Morden 1996). Daniels (1994) highlighted five main issues that would influence management practices in the global operational environment:

- increased competition;
- volatile economic markets;
- globalisation;
- customer demand for quality; and
- advances in information technology.

Competitive advantage was now high on the company agenda and these new strategies were market and opportunity driven with a client focus (Morden 1996). This focus remains prominent today and its applicability is discussed in detail in Chapter 4 of this study.

Technology was a major player in the global environment and organisations needed to establish internal policies and strategies to avoid the threat of technological obsolescence (Morden 1996). This prompted a need for organisations to conduct ongoing appraisals of their business rules and mission statements (Morden 1996). In advocating this approach the author believed that organisations could achieve a sustainable level of environmental stability. In essence it was about achieving equilibrium within the organisational operational environment. Similar strategies cited included

business process re-engineering, which Morden (1996) described as the re-engineering of core business processes to cut across the organisation thus promoting an operational rather than a departmental focus.

Overall there seemed to be a transition from traditional management practices to strategies focused on, and supportive of, competitive and successful global activity. In short the preliminary review identified the following elements as components of an organisation's operational environment and enablers of the emerging global environment:

- organisation structure;
- marketing;
- client services;
- management and business strategies;
- global technologies;
- information technology management;
- business processes;
- business process re-engineering;
- change management; and
- intra organisational policy.

These issues, among others already discussed herein, formed in part, the base line of the study's interview schedule.

2.6 Management of Information Technology

This section clarifies the components of information technology and puts into perspective the principles of information technology management. The

literature revealed a variety of ways from which to define information technology. O'Brien (1999, p. G10) viewed information technology as comprising:

'The hardware, software, telecommunications, database management, and other information processing technologies used in computer-based information systems'.

From a business perspective Kennedy (1999, p. 1) defined information technology as:

'... the common thread that serves to tie together the advantages of better material, more efficient processes, the availability of vast market data, and the ideas of creative people'.

In a similar vein, Alter (1992) defined information technology management as a framework outlining one functional component of an organisation's business plan, with other components to reflect an organisation's present and future goals. Frenzel's (1992) assessment was similar to that of O'Brien (1999) where management of information technology was the holistic approach of overseeing all information technology components.

Managing information technology is not a new concept but it can be considered a relatively new corporate discipline with its origins captured in Alvin Toffler's 'The Third Wave' (Hope & Hope 1997, p. 2). Here Toffler defined three periods of the economic revolution: agricultural; industrial wave; and the information wave (Hope & Hope 1997). According to the authors the information wave – considered as the present economic wave - evolved in

the 1960s following the Industrial Revolution. It was driven by information technology and knowledge workers (Hope & Hope 1997). Whilst the Industrial Revolution was about harnessing energy the information revolution was concerned with the capture, transformation and dissemination of information as knowledge (Sanders 1974).

Management of information technology evolved because of the increasing information needs of the organisation (Sanders 1974). When early Management Information Systems (MIS) failed to deliver the required information traditional management practices were applied in an attempt to better manage computer usage (Sanders 1974). Supportive of this are Sprague & McNurlin (1986) who reported that during the 1960s and 1970s there was a lack of conformity between departments regarding the implementation of information technology products and services, standards, and related management practices. It was during this period that management of information technology evolved to embrace new responsibilities, for example:

- management of the IT department;
- relationship between departments;
- role in the enterprise;
- relationship with Customers and Suppliers; and
- role within the industry (Sprague & McNurlin 1986).

They also identified the following issues as core components of information systems management during 1960s and 1970s:

- hardware;
- software;
- data; and
- communications.

Other management functions raised by Sanders considered crucial during that time, and still the focus of attention today included financial investment in IT and dealing with change management (Sanders 1974).

By the early 1980s businesses had recognised the need to integrate their systems and services (Sprague & McNurlin 1986); however, this proved difficult because these systems were effectively legacy systems, non-compatible, localised transactional systems (Inmon et al. 1997). This situation evolved because of the lack of conformity in the information technology products and services within the organisation, and variances in related management practices (Sprague & McNurlin 1986).

During the 1980s there was a growing understanding of the information systems strategic role within an organisation, whereby information systems were used as 'competitive tools' and generators of innovation and structural change (Sprague & McNurlin 1986). Frameworks were developed to better manage and integrate information systems, particularly in the face of rising global markets (Martin et al. 1994; Sprague & McNurlin 1986). Some of the corporate issues considered integral during the 1980s and not already mentioned herein included:

- the measurement of strategic value;

- systems planning and human factor considerations;
- best-fit information technology infrastructures and architectures;
- security and standards;
- system development and/or 'application packages'; and
- system re-engineering (Sprague & McNurlin 1986).

A significant move was that during the mid 1980s information technology was represented for the first time at the corporate boardroom level (Martin 1992). The author states that this appointment was in recognition of the strategic importance of information technology within the organisation. Integrating the information technology and the business culture had become a vital issue for the organisation (Martin, B. 1992). These issues remain prominent today.

The 1990s heralded market transformations that had evolved through a combination of the Internet and interactive technologies (Australian Government 1998a) and it was said that comprehensive and new management approaches were needed in order to maximise opportunities (Kalakota & Whinston 1997). Specifically, these approaches had to focus on managing business strategies and relationships, information technology investment, corporate structure and culture, and should develop a competitive framework that was customer service driven (Kalakota & Whinston 1997; Caruso 1999).

Managing a company's information technology had evolved from an internal organisational environment to an all encompassing external or global environment. Edberg et al. (2001) assessment of global IT management as it

stands today presents the following core issues as the most problematic and those in need of resolve:

- language;
- systems development and support;
- legal regulations and enforcement;
- cultural and geographic; and
- level of technology.

Interestingly Edberg et al. (2001, p. 46) state that 'information systems for global business present IT managers with a host of thorny issues', notwithstanding the diversity and accessibility of the solutions for global web-based activity, 'many global IT issues that have a legal or social basis will remain intractable indefinitely'. There appears to be a new breed of global information system management issues not previously experienced by multinational companies. 'Post WW2' multinational IT management practices comprised decentralised information systems with 'manual consolidation of financial information' (Edberg et al. 2001, p. 44). Further, the authors state that today the emphasis is on global activity through the interoperability of system platforms with the view to information exchange.

This review raised a plethora of important issues relevant to the management of information technology in the current climate and included:

- change management;
- legacy systems;
- technology as a strategic tool;

- IT investment;
- systems reengineering;
- the role of technology within the organisation and the global environment; and
- legal and cultural barriers.

All of these issues demanded further investigation, indeed the data gleaned from this exercise, and others discussed herein, were used to shape the interview schedule – a key element of the data collection activity. This activity is explained in detail in the methodology section within Chapter 3 of this study.

2.7 E-commerce, the Organisation and the Global Environment

This section provided an insight to the interrelations of e-commerce, the organisation and the global environment. It was acknowledged that sweeping changes throughout most industries had challenged traditional organisational and management strategies (Boudreau et al. 1998). It was stated that these changes were attributable to customer demands, industry regulations, and technological innovations, which as a result had created global competitive markets. There was a general consensus that organisations had to restructure accordingly, if they were to be competitive in the global marketplace (Boudreau et al. 1998).

The literature established that these challenges could best be met through the implementation of strategic alliances and advanced information technology frameworks that were capable of transcending the tradition

geographical business boundaries (Boudreau et al. 1998). The authors also stated that an arrangement of this kind would not succeed under the auspices of the traditional organisational structure. Indeed, integrating an organisation's business components was a divergence from the traditional hierarchical organisational structure toward a more horizontal or flat organisational arrangement (Kalakota & Whinston 1996).

The Australian Government (1998a) took the view that e-commerce had altered the structure of the global and local markets by extending the trade environment beyond the traditional geographical boundaries. There was evidence to suggest that the principal factors governing traditional economic activity were no longer appropriate in the evolving economic climate (Australian Government 1998b). Further, these new trade relationships had facilitated the need for more flexible and streamlined business processes, which was achieved through a combination of Internet and interactive technologies (Australian Government 1998a). Business processes can be described as:

‘A logically inter-related and integrated group of competences, skills, tasks, workflows and transactions that have a clear interface with other processes; and which, taken together, produce a result of value to a customer or add value to something else. The business process has a set of inputs which it processes so as to add value, and create identifiable sets of outputs’ (Morden 1996, p. 403).

There was a requirement for comprehensive and new management approaches that maximised e-commerce opportunities (Kalakota & Whinston

1997). The authors also advocated the need for organisations to focus more on managing and initiating business strategies, information technology investment, corporate structure and business culture, and customer driven services. There was also a push for technology to be seen more as a strategic tool by value-adding to an organisation's business processes (Kalakota & Whinston 1997; Siragher 1999). Dalton (1999, p. 76) argued that best practice e-commerce solutions should first integrate financial management systems because it was the 'backbone of all e-business processes'.

According to Keen (1999) managing information technology in a global environment had become a huge issue; one that demanded revision of traditional approaches. The author argued that the dynamism of the e-commerce environment required management approaches drawn from the centre of the business rather than from the top. This approach required investment in knowledge management and intellectual capital and collaboration between the organisation's key business representatives (Keen 1999). Intellectual Property (IP) is used interchangeably with Intellectual Capital and/or Intellectual Assets and in an IT environment reference is generally made to infer ownership of software code (Hope & Hope 1997; Daniels 1994; Allen 2002). Put succinctly, e-commerce solutions required marrying information technologies with business strategies, and business processes, which could be achieved through the integration of back-end and front-end core strategic systems (Caruso 1999).

Of the many issues drawn from this particular review perhaps the most important was the organisational changes required when companies moved into a global environment. For instance, when Driza-bone (CIBRE 2003a) entered the international markets it was confronted with a plethora of issues ranging from costume and fabric design preferences to logistics and monetary policies. The approach taken by the company was to reappraise its entire operational structure in order to ensure its survival in the differing markets (CIBRE 2003a). A similar story was told of the Fosters Brewing Group (CIBRE 2003b) entry into the Chinese market where the creation and promotion of a national brand has been impeded because of dissimilarities and difficulties associated with cultural, distribution and other logistical issues.

There are a number of critical issues that emerge when international companies move into different market environments with the intent of implementing their own business ethos. In retrospect, multinational companies of the 1980s and 1990s were confronted with similar barriers in the course of developing their international interests (Martin, B. 1992). Martin et al. (1994, p. 631) list monetary policy, 'language', operational time zones, 'regulations and tariffs', various industry standards [including technology], and the 'cultural and professional practices of different countries' as the key impediments to global operations.

These findings identified a series of enablers and inhibitors interacting with the organisation and the global environment the extent of which warranted further investigation. These relationships complete with the enablers and

inhibitors identified can perhaps be better defined as displayed in *Figure 2* (page 31).

What the literature has shown is that there is a relationship between the organisation's operational environment and the global environment, which appears to be dependent upon a number of factors. Based on the literature findings these factors can be interpreted and grouped into relationship enablers and inhibitors that are bound by the industry environment within which the organisation operates. There are also grounds to suggest that certain conditions should be present in order to facilitate the relationship.

First, the literature states that the global environment exists when the global environment enablers listed at the top right bubble of *Figure 2* (page 31) are present. Second, an organisation is required to facilitate at least some or all of the organisational operational environment enablers listed at the top left bubble in order to effect a relationship. Exactly how many enablers need to be triggered will be discussed in Chapter 5 within the context of the case study.

The literature also cited a number of key factors as inhibitors to the organisational operational and global environments relationship. These are listed in the bottom right bubble. These inhibitors were considered as possible barriers to an organisation's attempt to integrate its operations with the global environment. Likewise, the organisation was also susceptible to its internal global relations inhibitors and these factors are listed at the bottom left bubble. Interestingly, the literature suggests that some enablers and inhibitors have interchangeable roles. For example, what some referred to as

a relationship enabler might be considered by another as an inhibitor. Where appropriate, this anomaly is demonstrated by listing the factor in both the enabler and inhibitor bubbles. For example, a geographic boundary is considered an enabler and inhibitor, likewise business and national culture. These items are listed in both the enablers and inhibitors bubble respectively.

Figure 2: The Organisational Operational Environment and The Global Environment Enablers and Inhibitors



The applicability, or otherwise, of these factors to the case study findings are discussed in detail in Chapter 4 and 5 of this study.

2.8 Literature Summary

The literature review revealed that the composition of an organisation's interrelations had progressively, over time, become more complex and globally focused. *Figure 1* (page 17) displays the components of the organisation's operational environment, said to comprise its management practices, structure, business culture, technology, and its external environment. These components either directly or indirectly interacted with each other and/or the operational environment. These series of events could be considered simplistic because of the limited number of components that comprise the operational environment and the absence of any stated relationship enablers or inhibitors. These events more than likely reflected the relationships at that point in time, which by their nature were not globally focused but rather fashioned on a limited networked arrangement. The focus was about linking an organisation's international offices rather than seeking interoperability of diverse transactional systems, cultures and legal frameworks.

In contrast *Figure 2* (page 31) represents a global arrangement of various components, which the literature has defined as enabling or inhibiting the organisation's operational and global environment relationship. The literature also defines three core elements: industry type, the organisational operational environment, and the global environment. Industry type has a similar role to that described in *Figure 1* (page 17), where it is seen as the influencing factor on the operational environment; however in this instance, *Figure 2* (page 31) depicts industry type as influencing both the organisational operational environment and the global environment. In

addition, the relationships in *Figure 2* (page 31) are decidedly more complex than those shown at *Figure 1* (page 17). There are more components that contribute to the relationship and these components are said to have interchangeable states. However, the literature does not clearly define those relationship states.

2.9 Summary

Apart from the teasing out of issues already discussed the initial review also provided a retrospective of the role of information technology within the organisation and inevitably highlighted the development of that relationship and the interplay between technology, the organisation and the external environment. It became clear that these elements needed to be better integrated and controlled in order to achieve the business objectives. Accordingly, new management practices were applied to efficiently manage the interrelations. The general consensus was that e-commerce and the global environment were further altering organisational management principles and strategies.

The study elected to describe e-commerce as encompassing almost any electronic transaction disseminated via various technological means through an array of market relationship types. The study also accepted the categorisation of these transactions in accordance with the level of its technological complexity.

The challenges propounded by global e-commerce solutions have been well documented herein and as far as this research is concerned the most important challenge was investigating and describing the interrelations and

dynamics of e-commerce, the organisation and the external environment.

This review formed the basis of the research investigation, which drew on the issues raised within each of the key areas. Those issues included in part:

- A successful global, complex e-commerce solution relies on the integration of enterprise systems, business strategies, an organisation's core business areas, and resolve of the international regulatory factors.
- Management practices needed to be flexible in order to support an organisation's changing internal and external environment. The key elements appeared to be the organisation structure and culture and the external environment.
- Managing the organisation's interrelations; its management practices, structure and culture and its operational environment.
- The emergence of management/business strategies i.e. marketing, client service, information technology management policies and business process re-engineering were adopted in order to balance the organisation's external and internal environment.
- The need to manage changes both from an organisational and technology perspective to ensure against obsolescence. Ensure that the role of technology remains strategic and supportive of the organisation's internal and external environments. Implement information technology management framework. Key elements

include; systems re-engineering, technology architectures and infrastructures.

- Organisations needed to adopt appropriate structures, management/business strategies and technology frameworks in order to compete in external markets. Key elements are: horizontal/flat structures, strategic alliances, Internet technologies, flexible business processes, value add, organisational integration.

An aggregation of these core issues appeared to spell the need for organisations to restructure and rethink their management practices and technology solutions in order to accommodate their external/global environment. With these issues in mind, this study embarked on the exploration of their applicability, profile and manageability within a large, global organisation. As an adjunct to that, the study undertook to investigate the dynamism of the e-commerce, the organisational operational environment, and its global environment with the view of identifying any inhibiting or enabling factors. The findings of this investigation are discussed in Chapters 4 and 5 of this study.

Chapter 3: Research Methodology

3.0 Introduction

This chapter will present the methodology adopted to explore the application of technology, and other business elements, in a global market environment. The focus of the study was to investigate how one organisation managed its information technology requirements within multiple national markets whilst being cognisant of any enabling or inhibiting factors. It sought to establish a view of the practices and conduct commensurate with global business activity and to identify any areas considered as impediments to a global solution.

The study explored in detail the current operational environment of the organisation and to a lesser degree investigated its development beginning with its inception. It sought to share the experiences and perceptions of the participants in their role of managing the company's rapid development from a small local business to a large global organisation. Through their perceptions the study investigated the organisation's application of technology solutions in terms of level of complexity and its application. The study also detailed critical issues encountered during the company's global transition and how the effect of these issues was mitigated. Finally, it defines the research methodology used in this study and provides justification as to their appropriateness to this particular research problem.

The following sections analyses the effectiveness of the chosen research method concentrating on its applicability to this study in the context of alternative methods.

3.1 Research Methods

Leedy (1997) views the methodology as the key element of all research. He sees its primary role as presenting an operational framework of the research process, and ultimately, adding credibility and value to the research outcomes. The general consensus is that there are two popular research methods, qualitative and quantitative, with each comprising a different research approach. Some also accept the application of both qualitative and quantitative methods within the same study (Creswell 2003; Leedy 1997; Myers 1999). A combination of methods is referred to as the mixed method approach (Mingers 2001; Creswell 2003). Although all of these methods are concerned with collecting and analysing data their applicability appears dependent upon the nature of the research problem.

3.1.1 Quantitative Method

Quantitative research is the identification and analysis of measurable objects and their relationship within an environment (Leedy 1997). This approach is also known as traditional, post-positivist, experimental, or empiricist and is mostly associated with experimental and/or survey research approaches (Leedy 1997; Creswell 2003). Similarly, Stock (1985) defines the critical and empirical investigation of data as scientific or applied research. He cites observation, definition, hypothesis, test, and, theory as the underlying criteria of scientific research (Stock 1985). Berg & Latin (1994) make the distinction between field and laboratory research declaring field research as observational and non-laboratory by its nature, and one that is generally undertaken in an uncontrolled environment.

3.1.2 Qualitative Method

Qualitative research is said to be the discovery or description of the phenomena or objects that typify an event the application of which is often referred to as the interpretative approach (Leedy 1997). Qualitative research approaches comprise case studies, ethnography, grounded theory, phenomenological studies (Leedy 1997), and can also include action research (Myer 1999), and biographies (Creswell 1998).

3.1.3 Research Method Selection

The purpose of this study was to explore and describe a situation and to investigate the events within a given environment. In the absence of any related, researchable outcomes - measurable objects and their relationships – the qualitative research method was chosen for this study (Leedy 1997). If previous studies had revealed the existence of any known variables attributable to the research problem, and they were deemed native to this particular environment, then the data could have been applied and tested by adopting the quantitative method. Likewise, if the researchable sub-problems were defined as best suited to a quantitative method, or a mix of both quantitative and qualitative, then they would have been assessed in accordance with the appropriate method. Also quantitative methods would not give the depth and detail desired for this investigation.

3.2 Qualitative Research Approaches

Research approaches are described as characteristics of the research methods (Leedy 1997). The research approaches described herein are applicable to the qualitative method and include:

- case study;
- ethnographic;
- grounded theory;
- phenomenological;
- action research; and
- biographical studies.

The case study approach is highly recommended for studies focusing on information systems, and is widely used to glean information about objects and their interrelationships within an environment (Leedy 1997; Myers 1999). The authors also acknowledge the significance of case studies when the objects or environmental parameters are unknown. Ethnographic research studies the behaviour of an object within a cultural and social context (Myers 1999), while grounded theory research is data driven and concerned with multiple phases of data sampling and the examination of the complexity of the relationship between object, data, theory and phenomenon (Leedy 1997). Phenomenological studies are defined as a research approach that attempts to understand participants' perspective's and views of social realities' (Leedy 1997). According to Myers (1999) and Leedy (1997) action research focuses on a specified problem by monitoring post-implementation results while biographical studies centre on the 'life of an individual' (Creswell 1998).

Given that this study needed to focus on describing the events and their interrelationships within the given environment it was decided that a case study approach would best serve the investigative needs of this research. In addition, the environment in question had a predominantly business and

technology focus, the characteristics of which were undefined; therefore, an ethnographic, phenomenological, or action study was deemed inappropriate. Similarly, a biographical study could not support the object of the study. Consideration was given to a grounded theory approach but given the investigative nature of the study a case study was deemed more appropriate.

3.2.1 The Case Study Approach

This study is concerned with describing the characteristics of a phenomenon at a given point in time; therefore, the case study approach was deemed more appropriate for the purpose of gathering information (Leedy 1997; Creswell 2003; Myers 1999). According to Creswell (1998; 2003) a case study is an exploration of an object of study, which can assume the form of:

- a single case phenomenon that is intrinsic where the object of focus is the uniqueness of a situation,
- a single case phenomenon that is 'instrumental' where the object of focus is to illustrate an issue(s); together with
- multiple cases (collective case study) where more than one case is studied.

Case studies can also be confined to one instance of a study (within-site) or many instances (multi-site) (Creswell 1998). A within-site, instrumental study was considered the appropriate research approach because one instance of an event was to be studied with the information gathered and collated to illustrate a situation at a given point-in-time. The object of the study could not be considered unique because the activities or elements associated with the

environment were not known, nor were they pre-empted, at the onset of the study. The single case study approach was more suitable because it provided an in-depth analysis of an event, avoiding any possible dilution or generalisation of information, a situation that might arise if using multiple case studies (Creswell 1998).

According to Bouma (1993) it is also inappropriate to make generalisations from a single case study because the information gleaned from that study might not be relevant to other instances of the phenomenon. This study is concerned with what is happening within one organisation, operating within one environment, only. Although this denotes the limitation of the study it does not discount its validity, which has been managed in accordance with procedures relating to validation of research findings (Leedy 1997; Creswell 2003). Such strategies used within this study include:

- Triangulation: involves the cross-referencing or examination of various data sources used within the study with the view to substantiating the findings.
- Member-checking: where the findings are returned to the participant for verification of content, especially the use of themes (Leedy 1997; Creswell 2003).

A qualitative research sample should also focus on selecting the appropriate subjects, location, groups, and situations, to be interviewed or observed in order to provide an accurate and reliable overview of what is happening within that environment (Bouma 1993; Miles & Huberman 1994; Creswell 1998). This approach was used in this study.

3.2.2 Data Collection

According to Myers (1999), qualitative data techniques lend themselves to: interviews, participant observation, field work, and archival research. Creswell (1998) sees case study research instruments relying on in-depth data collections that are information rich and cut across multiple data sources.

In a case study open-ended interviews are often used as a means of collecting information in way that is devoid of the researcher's bias or pre-conceptions of the object of study (Bouma 1993). This type of interview allows the researcher to conduct open information sessions and so enable the participant to respond to an issue as they see fit.

This study needed to focus on describing the securities services environment and its related business activities. Open-ended interviews best met these objectives because participants were able to reflect describe and offer a rationale as to the characteristics and operation of their environment. A structured interview format would not have accommodated some of the emotional content, which surfaced during the interviews.

3.2.3 Data Analysis

Leedy (1997) discussed a range of case study data analysis processes, which included; interpretational, structural, and, reflective. He suggested that interpretational and structural studies were better suited to objective writing styles that made use of tables, figures and matrices to enhance the reporting process (Leedy 1997). Creswell (1998) saw case study data analysis as

relying on description, themes, and assertions with research findings best conveyed using the narrative form.

This research is an explorative, single case study and it was deemed inappropriate to use a data analysis technique purely derived from tables, matrices, figures, or any other structured reporting process. There were no predetermined datasets to compare, group or codify. Instead, the free-flowing interview profiles, literature and other data materials, were combined to provide a snapshot of events at a given point in time.

Bouma (1993) used the term data summarising to describe the research analysis process. He believed that qualitative research findings were best expressed using two methods; the narrative form that described the case study outcomes, and the grouping and comparing of the data after it had been codified, classified and thematised (Bouma 1993). Both techniques required the data to be reported in the narrative form (Bouma 1993).

The object of this study, in part, was to explore the application of technology, and other business activities in a global market environment. The information derived from the interview materials, and the documents provided by the organisation, underwent a triangular analysis to ensure the presence of an exhaustive collection of accurate and timely information. In accordance with the findings of this study, and the techniques promulgated by Bouma (1993) and Creswell (1998; 2003), a narrative format that includes an illustrative model has been chosen to communicate and report the research findings.

What follows is a discussion of those research processes as applied to the case study.

3.3 The Case Study Research Process

This study comprised three core areas of investigation. The first was a detailed initial appraisal of the literature relating to subject matter experts' views concerning the composition of global e-business solutions. It included broader views relating to information technology management and management practices generally, including both historical and contemporary practices of each. The initial review was undertaken to leverage key areas of discussion to be used in a skeletal outline for the data collection instrument. The models shown at *Figure 1* (page 17) and *Figure 2* (page 31) were used to illustrate the topics as defined by the literature and to demonstrate their interrelations as identified by the researcher. Henceforth, all of the topics listed herein are those defined and discussed in detail in Chapter 2. The issues that emerged from the initial review requiring further investigation included:

- organisational structure;
- organisational culture;
- change management;
- decision making processes;
- business processes;
- business and management strategies;
- organisational internal and external business relationships/alliances;
- client service strategies;

- technology and its management practices; and
- the role of marketing and marketing strategies.

The second stage of the research involved a study of a large, global organisation that implemented and managed e-commerce solutions worldwide. Here the objective was to explore how an organisation implemented and managed a global business solution while identifying the core areas of consideration and/or those in need of further investigation. This study ultimately focused on gathering information from the business heads and/or high-end decision makers and subject matter experts from within the organisation's core, and strategic business components. The end result was that this approach provided access to the organisation's knowledge base, its operational environment and its strategic objectives. More importantly, it provided a window into the mechanics of the organisation.

This action is what Creswell (1998) described as a purposeful sampling strategy – developing a sample criterion with the intent to deliver the research objectives. Miles & Huberman's (1994) strategic sampling options, criterion and opportunistic, were chosen as the best strategies to ensure the right mix of data collection options. Briefly, the study's basic criterion was to meet the research objectives, which had already been defined. However, there was also the need to remain less focused on those objectives to allow some flexibility with regard to the data that was collected. It was thought that this approach would eliminate the possibility of pre-empting all data requirements and permit the study to evolve in accordance with the data that was forthcoming.

The business units chosen for the initial investigation were selected in accordance with the topical issues identified in the initial literature review (see *Chapter 2, sections 2.2 - 2.7*), which are those issues itemised at page 44 above. These issues were loosely grouped into themes according to the interrelations identified by the researcher in the models shown at *Figure 1* (page 17) and *Figure 2* (page 31), then aligned with those organisational business components identified from the literature (see *Chapter 2, sections 2.2 - 2.7*) as critical in providing a global solution. The business components and themes identified were management, technology, marketing, finance and human resources. This approach can be described as the criterion sampling option (Creswell 1998).

The issues and themes / business component correlation is shown at *Table 1* (below).

Table 1: Issues and Themes Correlation

		Themes / Business Components				
		Management	Technology	Marketing	Finance	Human Resources
Issues	business and management strategies	business and management strategies	technology and its management practices	the role of marketing and marketing strategies	decision making processes	change management
	organisational internal and external business relationships/ alliances			client service strategies		
	organisation structure					
	organisation culture					
	business processes					

The participant organisation was asked to provide textual materials that were retrospective, current and visionary in nature, and included the following:

- information obtained from their website;
- annual, financial and shareholders reports for the period 1997-2001;
- corporate profiles;
- extracts of annual general meetings for period 1998-2000; and
- regional reports, organisation charts and the company's technology systems profiles.

These materials provided a window into the structure and characteristics of the organisation at each particular point in time and from these materials it was clear that *Table 1* (page above 46) did not adequately represent the organisational composition. Consequentially, the information gleaned from these materials, together with each interview transcript, underwent preliminary analysis to ensure the right mix of business units had been selected. The study was extended to include participants from other business units not exclusively represented in *Table 1*. For example, enlisting the services of global management, securities services and web-services representatives ensured there was a blend of global and local business expertise.

This approach provided a flexible research platform and the opportunity to draw from a pool of alternative or non-prescribed information resources (Bouma 1993; Miles & Huberman 1994; Creswell 1998). It ensured a broad range of issues were investigated and that participants from the key business areas were able to express their views and share their experiences and

perceptions. Each interviewee described below signifies an operational component of the organisation. Their positions combined represent the strategic management and decision makers within the organisation. The interviewees, who for ethical reasons have been given aliases, are listed in *Table 2* (below).

Table 2: Staff Interviewed and Position Within the Organisation

Name	Position	Section of Organisation	Date of Interview	Comments
Charlie	CEO	Global	Email dated July 2000	Not interviewed. However email to staff is used with approval.
Mary	General Manager - Australia	Computing Services – Aust.	May 2001	
Paul	Executive Manager - Victoria	Securities Services – Aust.	Nov. 2000	
John	Manager	Strategic Business Development - Global	Aug 2000	
Peter	Director	Marketing - Global	Feb. 2001	
Rick	Manager	Web Services - Global	Sept. 2001	Interviewed via email

A series of four one-on-one, face-to-face open interviews were conducted at the premises of the participant organisation located in Melbourne, Australia. One interview was obtained by email. The researcher sought and was granted permission to use information contained in an email from the CEO to staff members. The interviews averaged between one to two hours in length. The email interview was conducted using the same open-question format.

Each interview participant was provided with a customised interview guide beforehand, which outlined the open-ended questions they were asked to respond to during the interview. Because there was little insight into the mechanics of the organisation the interview guides were customised to enable the extraction of data specific to a particular business unit. The interview guide or interview protocol (see Creswell 1998) was also used to

help the interviewee and interviewer maintain a focus on the key areas of interest and research objectives (Bouma 1993; Seidman 1998). Again, the key areas of interest were those gleaned from the initial literature review.

Open-ended questions were chosen to elicit the views of the participants from the company's core business units. The composition of these questions was primarily based on the key issues that emerged from the initial literature review. The questions were divided into two parts with the first part generic to all participants. For example, each was asked to describe the organisational structure and culture, its decision making processes, and to describe any notable changes in these areas with regard to the company's global business activities. The second set of questions was subtly tuned toward the participants' specific business area. Here each participant was asked to describe their area's information technology architecture, business processes, management practices and strategies and business relationships. They were also invited to elaborate on perceived changes in any of these areas, in the light of the organisation's global business activities.

The interviews were tape recorded with the participant's approval. The interview data were transcribed immediately to ensure accuracy of detail then emailed to the interviewee, for content verification (Seidman 1998; Creswell 2003). A similar procedure was used for the sole email interview. The participants were free to make amendments to the document, as deemed appropriate, and then return the file via email to the researcher. Hand written notes were also taken during each of the interviews to follow-up the issues not clarified during the interview process (Seidman 1998; Creswell 1998).

The information gleaned from these interviews was substantial and indicated that apart from the issues already canvassed there were other elements in need of investigation that were related to the implementation and management of global business solutions. The model shown at *Figure 3* (page 71) illustrates those elements and issues validated by the interview and textual materials, which are discussed at section 4.1.6. Consequentially, the third research component focused on the themes that emerged from the interview and textual materials. This involved further categorisation of the data into themes some of which replicated those issues already raised in the initial review. The remaining data was categorised through the identification of recurring issues (Creswell 2003; Bouma 1993).

A subsequent literature review was undertaken in order to capture, discuss, and again, analyse the points of view of a range of subject matter experts. A comparative analysis of the literature, documents provided by the organisation, and the data derived from the interviews provided a degree of triangulation and served as a measure by which to validate and justify the emergent themes (Creswell 2003). The model shown at *Figure 10* (page 172) illustrates the issues validated by the interview and textual materials and the subsequent literature review. These outcomes are discussed in Chapters 4 and 5 of this study with the model's attributes detailed in section 5.2 and 5.2.1.

3.4 Significance of the Study

The significance of this study is that it provides large organisations with an overview of the issues to consider when implementing a global business

solution. It can be seen as a guide to global management and further, it identifies the core areas of consideration required to inaugurate global business activity. Researchers will also benefit from this study as it provides a baseline from which they can further explore the applicability of these findings to other industry types.

What follows is the identification of and justification of the choice of the case study participant.

3.5 The Participant Organisation

It was a requirement that the chosen organisation was Australian owned, or at least based in Australia, had both national and global business interests with a high level e-commerce activity and had to fit the description of a large sized organisation. For the purposes of this research the author has chosen the Australian Bureau of Statistics definition of a large business, which is defined as having 200 or more employees (Australian Bureau of Statistics 1999).

The organisation finally selected to participate in the study had shown considerable growth in the short period since entering the global market, and it was felt that this organisation would provide a clearer picture as to how businesses managed global activity. There was also a strong technology focus, which was considered an excellent base from which to explore the role of technology in a global environment.

The business is a global securities services and technology organisation that manages over 52 million account holders worldwide for in excess of 7,000

companies. Established in 1978 the company, which for ethical reasons will be referred to as 'ABC', was a local, niche technology company totalling approximately 30-40 staff members. Those numbers have since grown to over 4,000 staff members worldwide. In 1994 it embarked on the acquisition of Australian and New Zealand registry businesses, and in 1997 entered the overseas markets. ABC now provides a range of proprietary technology products, and securities services to over 15 countries, and consequentially, operates in a number of different securities markets.

3.6 Conclusion

In summary a combination of data resources were gathered to maximise the pool of information, which overall provided a greater insight into the ABC organisation and its environment. Two separate literature investigations provided experts' views on specific issues, which were used in an analysis of the data collected through the interviews with ABC's management staff. Textual materials provided by the company also formed part of the analysis. The approach used for this research - a case study - was deemed appropriate to the nature of the research problem and the data analysis and presentation was conducive to a case study approach. The next section Chapter 4, presents the results of the data collection process while the following section, Chapter 5, discusses the findings.

Chapter 4: The Case Study

4.0 Introduction

This chapter will present the case study describing ABC's development from a small technology company to a global securities services and technology organisation within the timeframe 1978 to 2001. The chapter comprises two core sections with each section divided into themes in accordance with the findings arising from the interview and literature materials. The first section entitled 'Its History' outlines ABC's local and global business development from the period 1978 to 2000. This provides an insight into the company's adopted business practices and technological solutions implemented during this period of transition. Likewise, the second section entitled 'The As Is Organisation' concentrates on the timeframe 2000-2001 and captures those themes most prevalent within the company during that period of its development.

The majority of the issues discussed in this chapter are addressed in Chapter 5 in accordance with their role as enablers and/or inhibitors of the organisational operational and global environments relationship.

4.1 History

This section tracks the company's local and global expansion isolating those themes considered integral to its global objectives of that period (1978 to 2000). Based on the data collection and corresponding literature materials, the core themes discussed in this section include:

- organisational structure;

- strategic alliances;
- management strategies; and
- information technology.

4.1.1 Local and Global Expansion

ABC is an Australian owned company established in 1978 to provide specialist computer services to the Australian securities industry. It had the major share of the Australian securities services market and with a staff of 30 – 40 it had an internal structure that was described as ‘flat’. Mintzberg (cited in Morden 1996, p. 38) stated that large organisations were more likely to be departmental and have formal and rigid operational patterns; a view also shared by Hope & Hope (1997). Given that ABC was at that time a small, flat structured organisation its development was not constrained by the operational or behavioural style consistent with large organisations of the same period.

Following its listing on the Australian and New Zealand Stock Exchanges in 1994, ABC embarked on the acquisition of securities systems software businesses that serviced Australian and New Zealand key market participants. In 1997 when new regulatory requirements were introduced to these markets the company set about acquiring securities service businesses in both New Zealand and Australia. John describes the rationale behind ABC’s development:

‘The parents of the company saw this opportunity, through vertical integrating, to actually buy those securities operations, which it did’.

‘After a lot of soul searching we decided that we'd not take the risk. We didn't want to take the risk that someone else with a different software solution might buy our major customers. So we'd try and buy them and, we ended up buying securities businesses in New Zealand. Once we'd done that people with their own securities businesses in Australia said these businesses are worth something, we never thought they were worth anything, let's take the money and run. So we picked up a couple of the large ones in Australia fairly quickly’.

During 1997 the company seized an opening in the United Kingdom which effectively gained them entry to the overseas market. From here they were able to extend their range of propriety-based business systems and related services to the international securities industry. John explains the initial process:

‘When the Royal Bank of Scotland, which was one of the big securities services businesses in the UK, were looking for a new technology they did a global search, found ABC and said you're right for us you have the right technology. So we started doing that and we did for nine months until they said this is all too hard because our end of converting our data to your computer technology is too hard, just buy the business. So we bought the business, which gave us 35% market share in the UK’.

John told of a similar experience in Ireland where ABC was ‘virtually given’ a couple of securities services business because their Government had little confidence that their own industry providers had the technology to process

the required transactions. In South Africa there was no one with the perceived technological knowledge to handle an exercise on the scale required. ABC was asked to provide these services and in doing so acquired 'a couple of small securities businesses', and in the case of South Africa ended up with 60% of their securities services market. John's account of the company's progress to date is reflected in the following statement:

'Since then we've basically just bought businesses in Ireland and the US and Canada. So that's the securities services business. Growth by acquisition - growth by cheap acquisition'.

By the end of the 1990s, the company had evolved into a global securities and technology services organisation providing business systems and professional services to the securities industry worldwide. An organisation is described as a global operator when it invests in multiple world regions (Hope & Hope 1997). However, the securities businesses that ABC brought were components of accounting firms or banks, and according to Paul, their business practices were heavily controlled through departments, divisions, and heads of business. Once acquired, these businesses were merged into its securities services unit. Morden (1996) describes the divisionalised organisation as a hierarchical configuration of superordinate-subordinate relationships where divisional managers make decisions rather than corporate executives. He also suggests that an organisation's structure can be influenced by its industry type and its underlying historical factors, a combination of which will determine the organisation's corresponding management style.

The technology arm of the business, Computer Services (CS), which evolved from the original organisation, is said to have a 'very flat structure'. Similarly, ABC's support units; finance, marketing, human resources, business development and analytics for example, which were formed to stand the company up, also have 'flat' structures. This type of organisational configuration is similar to what Morden (1996, p. 47) describes as the 'organic structure' where the organisation is innovative and flexible, and '.....strongly oriented to the customer, the market and the technology'.

What emerged over the years were two very distinct organisational structures; securities services (businesses acquired from the securities industry), and CS and ABC's support units (the technology business and those units designed to support the greater organisation). Paul, Victorian Manager, Securities Services, describes – with a hint of frustration the configuration of the company:

'The current organisational structure is a difficult one because it depends on which part of the organisation you're looking at. If you look at the securities services part of the business it's got a structure. It's got a structure within Australia, it forms part of the global securities services structure, and it in turn forms part of the total ABC group. So it depends on which part of the organisational structure you are looking at'.

ABC's global securities business evolved into a consortium of regional, national and local operations blanketed by the company's technology and support units. When combined these businesses form the greater ABC. The

securities businesses have to some extent similar operational and management structures and corresponding departments and divisions. For example, in each state and/or locality in each country of operation there is an investment unit responsible for a specific work flow within its geographical area and there is little or no cross pollination from other divisions within that securities business.

The configuration of ABC's securities business sits within Morden's (1996) analysis that organisations can perpetuate historical characteristic of an industry. Both John and Paul state that the securities industry globally is said to be entrenched in traditionalism with some structural and operational similarities between the securities businesses in each country. This is not the case with the less formal, innovative and flexible attributes of ABC's organic structures that provide support beyond the existing industry environment.

4.1.2 Strategic Alliances

During its development through the late 1990s ABC sought global expansion by establishing strategic alliances with an international securities business.

John explains:

'When we entered the Hong Kong market, we actually bought into a business that was partly owned by the Hong Kong Bank and they are now a partner in business. It is just a classic business type venture'.

He also informed me of the company's international and national alliances with expert communication and technology companies, which were

established to progress and enhance ABC's range of products and services on the world market:

'We've got a range of different alliances. There are alliances on the technology side. We've got preferred providers. We have other people with whom we work closely. For instance there is a company called Document Services [DS] a high tech printing house. Basically, with a securities services operation where you are generating lots of communications to clients there are people who put it into envelopes - that thing is pretty natural'.

Paul suggests that the alliance with DS and CS can be defined as 'internal business relationships' because of ABC's controlling interest in that company:

'We [ABC securities services] have relationships with DS and CS, who are both part of the larger ABC organisation. It's a supplier-consumer relationship where there is monetary exchange. We [ABC securities services] are service providers ourselves. We pay DS and CS for the services they provide, and we in turn on-charge those costs to our clients'.

Today, strategic alliances rely less on improving products and services and more on customer service and maintaining a customer centric focus (Hope & Hope 1997). Paul and John state that historically, the securities business has not been particularly customer focused - this is a negative attribute that ABC is conscious of and is in the process of changing. Supportive of this is

Morden (1996) and Crainer (1996) who found divisionalised, hierarchical organisations (like ABC securities) to be less customer focused than other structure types.

Paul believes that ABC has continuously worked toward consolidating its operations; however, he sees the latter part of the 1990s as the most challenging:

‘From 1978, the next 20 years or so was just consolidation. The last five years have been the most exciting and dynamic’.

4.1.3 Management Strategies

The above comments perhaps explain the launch of a series of management strategies from which ABC realigned its organisation with the view of reaching its global objectives. Paul states that the late 1990s was a new era for ABC, which required its strategic planning and management practices to be closely aligned with its business objectives. The company’s objective was to be the world's biggest and first truly global, securities services organisation. In order to achieve this it implemented a number of business strategies, which included:

- increased market share through the acquisition of, or alliances with, securities and/or technology businesses;
- global distribution of its proprietary securities services technology products; and
- increased market share through organic growth.

The company endeavoured to maximise its market competitiveness and embarked on the acquisition of international and national securities services, and technology businesses. The acquisition of 'foreign subsidiaries' and the establishment of international alliances are considered part and parcel of managing global operations (Martin et al. 1994, p. 627). However, global expansion did not necessarily result in cost savings as suggested by Crainer (1996). The consequence of global expansion for ABC was the emergence of a number of disparate operations within the organisation. As the company continued in its pursuit of global objectives these operations were considered a hindrance to its future growth. The company moved to eradicate these operations and in doing so implemented management strategies that consolidated its securities service business in each country into state and/or central operations.

ABC's initial adoption of global management strategies was perhaps a reactive response to enable better management of its disparate businesses, which it inevitably inherited as a direct result of its global expansion. This expansion also meant the company actively pursued the global distribution of its proprietary securities services technology products. Effectively, there was an across-the-board reorganisation of all business units within ABC.

During this period of consolidation the development and systems support teams were merged into a single information technology group. This placed CS in a position where it could provide research and development capabilities to the greater ABC, comprehensive information technology solutions to its clients and the securities markets in which it operated. In a

communication to all staff Charlie informs them of the practicalities and objectives of the CS restructure:

‘We are a global business and to succeed we must maintain global control of technology, which is why we set up ABC Computer Services. For too long we have tried to do all development out of Australia and for securities services, out of Melbourne’.

Paul highlights some of the benefits gained by ABC during its restructure:

‘The greater ABC is now in this interesting position where it provides, by way of ownership of securities services, all of its systems. Computer Services is the company's wholly owned IT provider, who is also custodian of its [ABC's] intellectual property and proprietary systems. It [Computer Services] also provides the same systems to the company's largest (Australian) competitor. So there is a very interesting dynamic. There's the supplier ABC who provides us [securities services], which it owns, with the same service that it also provides to our biggest competitor’.

The strategies implemented during this period resulted in considerable management and operational improvements. For example, ABC businesses were said to be better co-ordinated and better able to prioritise their resources, but more importantly they were aligned with the company's global objectives. However, according to Peter, consolidating these operations was not a simple process:

'When you try to instil some sort of consistency in approach through businesses that are being run by people that are used to running their own businesses and making their own decisions they just tell you to nick-off'.

The reaction Peter describes is understandable given Crainer's (1996) assessment that global rationalisation is synonymous with job losses, economies of scale and cost reductions. Crainer (1996) also notes that globalisation is about integrating previously local and autonomous organisations, which some stakeholders see as the erosion of local content and/or identity.

4.1.4 Information Technology

The ABC organisation is predominantly a technology company comprising a combination of technology systems and professional services, provided and managed for a range of clients situated around the world. Its securities and technology services are considered as core operational components; however, technology is regarded as its core competency. Hamel & Prahalad (cited in Morden 1996, p. 363) define a core competence as an historical aggregate of an organisation's knowledge base often exploited by an organisation to identify and maximise its market competitiveness. Paul reflects on the company's humble beginnings when in its infancy ABC was considered to be just a small technology organisation:

'Simply an IT company that built a particular system then provided that system to a number of securities service operators'.

When ABC commenced development of its systems for the Australian and New Zealand securities industry, its information systems were classified as second-generation computers (1960's to 1980's). According to (Inmon et al. 1997) second generation computers were client-server transaction processing systems (usually mainframes) with terminal to terminal access (Inmon et al. 1997). These systems were common place among paper-centric industries such as finance and insurance (Martin et al. 1994). ABC's systems were initially designed to support common securities transactions, as described by John:

'Securities Services keep a list of clients, they pay interest [to clients], they keep that list up to date so when new accounts are opened and old ones closed, people who close accounts go off the system and people who open accounts go on. They keep the details of people having interest paid straight into their bank accounts, so you have bank account details. There are a whole lot of options clients have when receiving interest and there's a whole range of bits and pieces that securities services look after'.

When the company shifted into the UK market in the early 1990s it was initially to facilitate cross-border settlement. John explains:

'[In this instance] cross-border settlement is where people in London buy Australian investment folios and because no-one in London knew how to actually process that, we provided the processing link to London and supported a number of securities service businesses there'.

The rise of the networked office (circa mid 1980s) in conjunction with telephone cable and modem interfaces, enabled an interchange of data between local area networks (LAN) and wide area networks (WAN) making national and international system transactions a reality (Inmon et al. 1997; Curle 1996). John added that the processing links used in the cross-border settlements during the 1990s were essentially dedicated 'hard lines' because the company did not engage in Electronic Data Interchange (EDI), even though, according to Curle (1996) it was the most commonly used paperless electronic transaction technology during the 1980s and 1990s. John explains the company's position:

'We've run a private network and that's actually not classic EDI. EDI works well if you've got many-to-one communication relationships. We tend to have very few users and we have just provided them with hard lines [leased lines], historically'.

When the company moved into the overseas markets in 1997 its global securities businesses began to flourish and its range of support products and services were expanding. ABC's operations spanned many countries requiring its information technology to transgress national borders. By the late 1990s the company had forged a global network of interconnected systems. Mary stated that the benefits of having a global network meant that every office within the greater ABC was linked, and there was now seamless collaboration between North America, Australia, and the UK, and other areas such as New Zealand and Hong Kong. She said this arrangement made it easier for CS to provide global services to the greater ABC and its clients:

'We already monitor the UK machines here during our daytime. These days with all the remote monitoring tools it gets easier and easier for us to provide this service all around the world. That's why we have the same technologies and tools globally so our staff can monitor and provide services globally, for example we can support the UK and they can support us, because we are using the same processes and tools'.

The company always managed its own internal networks until it moved into the overseas markets when there was no alternative but to accommodate third party providers. According to Hope & Hope (1997) a caveat enforced by most developing countries is the alliance with business investors and the local telecommunication companies. This has certainly been ABC's experience as Mary explains:

'The third party suppliers we use elsewhere in the world are responsible for managing the relationship between the local telco [telecommunication] providers. We had some misapprehensions initially about moving to a fully managed network. However, our responsibility is to our clients for the important services we provide. It doesn't matter who manages the network – we [ABC] are the face in front of the client. Hopefully, we have enough back up in our contracts. Optus had a crash last year [2000], and the securities services market was down for a day. That was a nightmare! There is nothing anybody can do if the telco provider goes down; we are totally in the hands of the telco provider in that respect, and this could happen even if we managed the network ourselves!'

The company's global expansion made it necessary to implement an information technology management strategy to oversee control of its technology requirements. This strategy in part, essentially sought the implementation of an information technology (IT) architecture and/or platform, which Cortada (1998, p. 98) defines 'as a collection of guidelines, software and hardware components, that work together' to ensure that the right mix of technologies are compatible, cost effective, and readily meet the organisation's requirements.

Up to now ABC's individual business units were investing in incompatible technologies and systems in the key support areas of; information management, marketing, human resources and finance. The IT management strategy required all purchases to be approved by the CS managing director, and, according to Charlie, the procedure was deemed by some as a bureaucratic exercise:

'...although some will say that we are getting too bureaucratic it is the only way to ensure global solutions'.

From the company's inception, and throughout its acquisition of securities businesses, technology has always been its core competency. Owning the technology (intellectual property - IP) of its core business operations has always been a priority. According to John, the company never licenses its IP to other organisations; however, the proprietary systems that are leased or sold to various securities businesses are covered by licensing agreements that protect ABC's intellectual property. Mary elaborates on some of CS's IT management practices and IP and supplier arrangements:

‘We do not have relationships with other IT organisations and we don’t outsource any IT components. All our IT is developed internally, every bit of it. We work closely with Microsoft [ABC has a license agreement with Microsoft which enables them to use their code] and we have a global agreement with a few suppliers who provide us with hardware and software [Commercial Off The Shelf (COTS) products]’.

By the end of the late 1990’s ABC was faced with the predicament that its acquired securities business was heavily reliant on paper based information. According to both John and Paul, these businesses were traditionally components of accounting firms or banks. They were said to be very hierarchical, process driven and very old fashioned - an industry profile they said was prevalent throughout the globe. Paul offers an explanation:

‘There are two business processes within ABC securities services that coexist. There is the internal business process, which is electronic based, automated and streamlined, then there is the external business interface, which is very much paper-based. The external interface with clients is very old fashioned even though the forms are streamlined it’s still bits of paper that go in the mail and comes back to us in the mail’.

Regardless of its technological initiatives and capabilities the company experienced operational inefficiencies because of the traditional, paper-based processes of the securities services businesses. The company’s longer-term view was to dramatically reduce the reliance upon paper based information, and to streamline business processes across its local and international markets. Morden (1996) noted that hierarchical organisational

workflows were traditionally departmentalised by function rather than process and he saw this as impeding inter-organisational and/or global operations.

4.1.5 Summary

ABC has evolved from a small, local specialist technology company to a global securities and technology services organisation providing business systems and professional services to the securities industry worldwide. The organisation had one simple objective, to be the first and biggest global securities service company.

In pursuit of this objective, the company embarked on the acquisition of securities businesses situated around the globe. Once acquired these businesses were merged into ABC's securities services business unit. The technology arm of the business, Computer Services grew from the original, technology organisation to form the company's global IT development group. The amalgamation of these two core businesses, securities services and computer services, resulted in two very distinct organisational structures, and subsequent cultures.

As the organisation expanded its global presence there was some evidence to suggest performance and management inefficiencies. Consequentially, the company set in play various management strategies to assist with its transition into the global environment. There was also the additional impetus to drive its securities services businesses in the direction of paperless, electronic transactions.

Given the literature findings thus far it would appear that the company did as best it could in terms of orchestrating appropriate global strategies, including management information technology practices. Nonetheless, the company's securities businesses did not appear able to fully embrace these strategies nor the global technologies made available to them. As a result two distinct business processes coexist within ABC; a paper-based interface between the securities services businesses and their clients, and the organisation's internal electronic workflows. This anomaly is discussed in detail in Chapter 5.

During this phase of its global expansion the organisation encountered a number of influencing factors which can be defined as follows:

- a requirement for organisational structural and cultural change;
- the implementation of specific management strategies;
- the development of global technologies and related MIT policies;
- building strategic alliances with 3rd party technology providers and other areas of expertise; and
- a requirement to re-engineer business processes.

These factors combined, in part, facilitated ABC's organisational operational and global environment relationship, which is represented in *Figure 3* (page 71). What follows is an explanation of this relationship depicting the company's expansion into the global marketplace, together with a comparison of the attributes and relationship identifiers of *Figure 2* (page 31) and *Figure 3*, respectively.

Figure 3: ABC's Initial Organisational Operational Environment and Global Environment Enablers and Inhibitors.



Figure 3 depicts those factors ABC was required to facilitate and negotiate in order to effect its transition from a national company to a global market player. These findings validate some factors and nullify others identified in the literature as shown at Figure 2 (page 31). The validated factors can be identified as enablers and/or inhibitors of the organisational operational and global environments relationship, and have been grouped accordingly. Industry type remains the governing factor of all interaction both within the

organisational operational environment and that of the global environment. However, ABC found that certain conditions must be present in order to facilitate an external relationship. These are discussed next.

For example, the global environment exists when the global environment enablers listed in the top right green bubble are present in a form that is conducive to upholding a global market exchange. In addition, the organisational operational environment must factor in a range of attributes to allow it to engage in global market activities. These attributes are listed in the top left green bubble. During its expansion into the global market place ABC encountered the presence of a number of inhibitors both internal and external to its organisational operations. These are listed in the bottom left and right red bubbles respectively. Similar to the literature findings, some enablers and inhibitors do have interchangeable roles, and this is highlighted by listing the factor in both the enabler and inhibitor bubbles within the operational and/or global environment. These interchangeable roles were attributed in part to the transitional and hybrid nature of the organisation. For example, technologies were considered by the company to be an organisational operational enabler; however, given the experience of its own securities business, technologies (or the absence of) became an operational inhibitor.

The inhibiting factors were considered barriers to the company's attempt to integrate its internal operations (represented by the small red arrows) and to interface with the global environment (represented by the large red arrows). The enabling factors were strategies and/or procedures adopted by the company to integrate its internal operations (demonstrated by the small

green arrows) and to interface with the global environment (represented by the large green arrows). These strategies and procedures are discussed in detail in Chapter 5 of this study.

The organisational operational environment and global environment relationships can be defined in the following terms:

- Industry type negatively influences both the organisational operational environment and the global environment;
- Global environment enablers have a positive influence on the global environment and facilitates the organisational operational and global environment relationship;
- Global environment inhibitors have a negative influence on the global environment and restricts the organisational operational and global environment relationship;
- Organisational operational environment enablers have a positive influence on the organisational operational environment and the global and organisational operational environment relationship; and
- Organisational operational environment inhibitors have a negative influence on the organisational operation environment and the global and organisational operational environment relationship.

4.1.6 Comparing Practice and Theory

The comparison relates to *Figure 2* (page 31) and *Figure 3* (page 71). *Figure 2* is based on the literature findings of factors considered enablers and/or

inhibitors of an organisation's operational and global environment relationship. The literature defines three core elements: industry type, the organisational operational environment, and the global environment. Similarly, ABC's transition into the global environment is underpinned by the same three core elements as shown in *Figure 3* (page 71). A number of inhibiting and/or enabling factors interacted with the company's internal and external operations. Some of the factors outlined in *Figure 3* are similar to those described in *Figure 2* (page 31); however, the company acknowledged more internal (organisational operational) inhibitors and less global inhibitors.

The initial literature review suggested legacy systems were a major inhibitor of the organisational operational environment. ABC's experiences reveal that a number of other factors impeded its internal operations during its transition from a national to a global company. The company experienced less global inhibitors compared to the findings in *Figure 2* (page 31). The internal inhibitors found at *Figure 3* (page 71) suggest that the company's acquisition of securities businesses might have negatively impacted on the organisation as a whole. *Figure 3* shows a minimum set of global inhibitors present during the company's early transition, compared to the number identified by the literature shown in *Figure 2*. This anomaly, in part, might be explained by the company's global immaturity where its acquisition of securities businesses, at that time, did not extend to all national markets. Henceforth the influences of a national culture and its jurisdictions were not a great issue. Unlike the literature, the company did not consider global technologies an inhibitor because that is its core competency and it was capable of providing a global solution. The literature cited the industry regulations/regulatory framework as

a global enabler. However, the company saw it as a global and internal inhibitor because it characterised the rigidity of the securities businesses it acquired, which negatively influenced its internal and global environments.

The literature findings shown at *Figure 2* (page 31) did not define the dynamics of the organisational operational and global environment relationship as has been demonstrated by the company's experiences shown in *Figure 3* (page 71). These key influencing factors and their relationship to the company's internal and global environments are discussed in detail in the next section.

4.2 The As Is Organisation as of 2000 - 2001

This section describes the composition of the company during the period 2000-2001 and explores the core themes relevant to their global objectives at that time. These themes were identified from their recurrence in the literature reviews and the case study materials. The core themes discussed here include:

- organisational structure;
- organisational culture;
- business processes;
- business and management strategies; and
- technology.

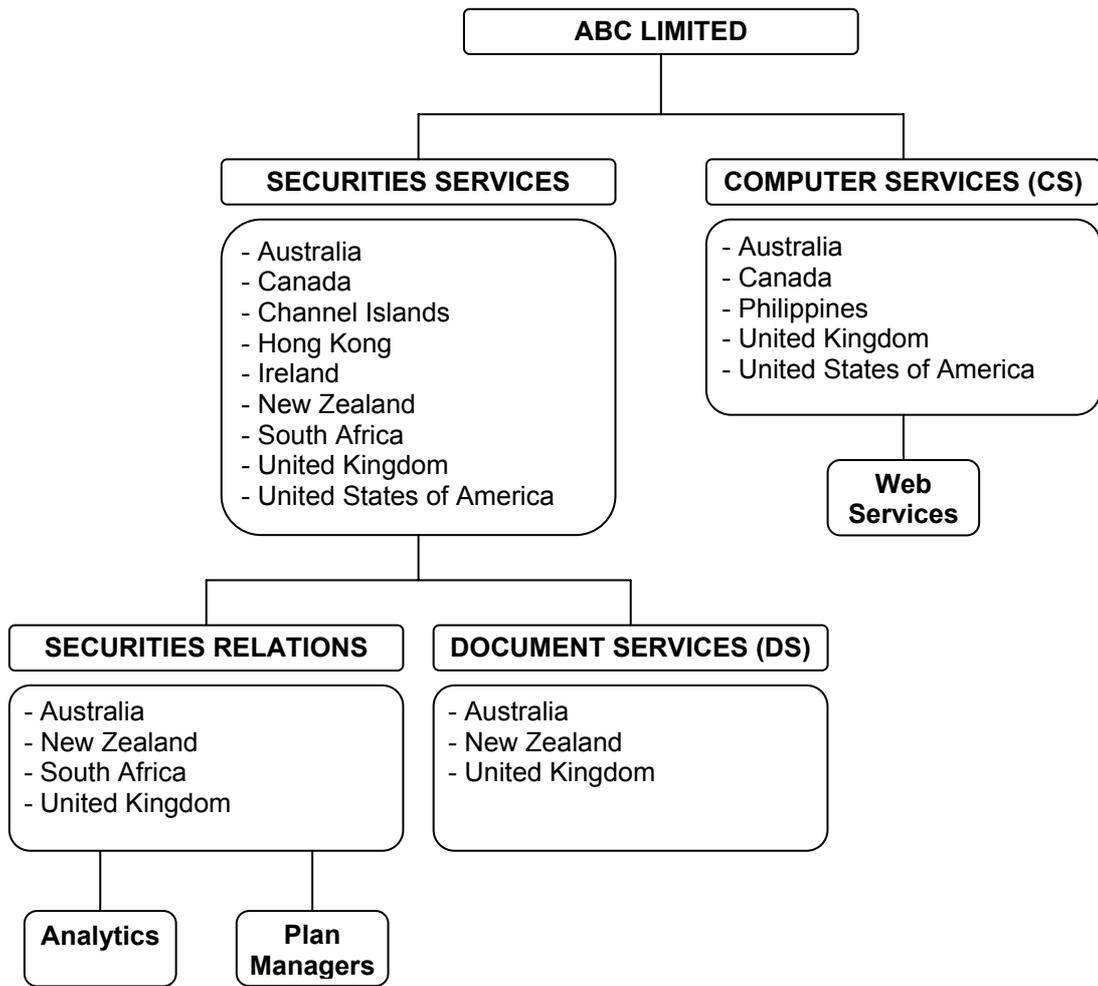
4.2.1 Organisational Structure

The year 2000 saw ABC undertake further reorganisation of its operations this time into regional group structures, with the intention of establishing an

infrastructure from which to support its global and local securities services business. Regionalisation was largely a cost effective strategy used by multinational companies to manufacture close to its customer base (Pinto 2002; Daniels 1994), with the geography of the regions generally based around time zones (Pinto 2002; Martin et al. 1994). Similarly, ABC's regional infrastructure supports the company's operations on a time zone basis where the United Kingdom has responsibility for South Africa and Ireland. Australia and New Zealand are closely aligned, and then there is Hong Kong. North America was soon to be serviced as a single market, once the operations in that region were fully established.

The rationale behind the regional structure was twofold. First, it was part of a global management plan to reduce operational dependency on the corporate support infrastructure; previously all support services were fielded from the head office located in Melbourne. The regional infrastructure enabled ABC to decentralise its support services. Rockart (1998) stated that large organisations operating in the global markets tended to regionalise their organisations, and without relinquishing overall control, instigated autonomous management strategies at the regional level. The second reason ABC regionalised and decentralised its support function was to progress the company's global objectives. It was paramount that the company establish a mechanism to better manage and integrate its securities services business.

Figure 4: ABC Group Structure



The ABC group structure shown at *Figure 4* (above) comprises a mix of business units, which includes; securities services, computer services, web services, document services, and securities relations - incorporating analytics and plan managers. These units are the securities services support infrastructure and are replicated for each of the four regions:

- United Kingdom;
- Australia;
- Hong Kong; and
- North America.

Mary's description of the operation of the regional infrastructure provides a comprehensive view of their organisational structure:

'We have subsidiaries operating globally and have representation in all time zones. The technology section, CS, develops software for our securities services business, including our internal Management Information Systems (MIS). CS supports all ABC desktops, local and global communications and infrastructure, and provides scanning services and workflow to our businesses globally. Computer Services also have an internal web development team [Web Services]. A business section, Securities Relations, supports our securities services business. Attached to the securities relations unit are analytics – who do analysis for our clients on their account holders – and plan managers - who look after and process employee share plans globally [on behalf of the company's clients]. ABC also has a document services section [DS] - our printing and publishing subsidiary – supporting our securities services business.'

Mary has also described the organisational structure as 'very flat', which she said was unusual for a company as large as ABC. Tom Peters is renowned for the concept 'small within the large', creating the illusion of 'self contained units' within the greater organisation to ensure the business remains innovative, flexible and viable (Rockart 1998; Morden 1996, p. 344). This concept bears some resemblance to the composition of ABC's regional group structure.

Paul explained that the structural differences between the company's two core business units, securities services and technology services, was attributable to 'organic' growth and growth by 'acquisition'. He used the term organic to describe the company's natural expansion, what he interpreted as the act of attracting more clients, and/or broadening the range of its technology products and services. Henry Mintzberg's (Morden 1996, p. 46) concept of the organic organisation is one that is 'innovative', 'fluid' and 'selectively decentralised' (where some authority remains centralised) and knowledge based staff are assigned to projects working as teams in a democratic environment (Ormand et al. 2000; Rockart 1998).

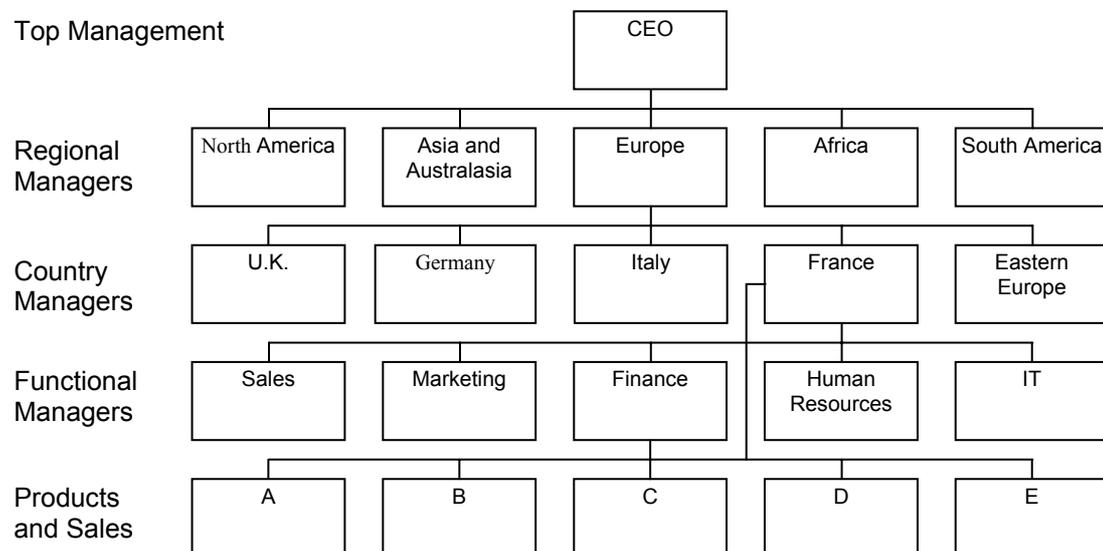
Both Paul and John define growth by 'acquisition' as the act of buying into or buying out securities businesses with the purpose to further the company's expansion into the global, and/or local markets. It has already been established that these businesses were by the nature of their industry very hierarchical; Paul provides a more detailed insight:

'It [ABC] acquired existing securities businesses, which were quite traditional and hierarchical - they were part of chartered accounting firms. There is still some residual culture of that. The Australian securities services business has got what I would call a traditional hierarchical structure. It really is quite different to the other [ABC] components. I would say that the securities business in Australia would be the traditional informed typed business. It's got departments, divisions, heads of business, a managing director - all the things that you would characterise with a traditional hierarchical type

organisational structure. It has a similar structure to its industry clients.'

In the light of these comments we can assume that ABC's securities services operate within a hierarchical framework, an example of which is shown at *Figure 5* (below). This structure is also described as the classic M-form multi-divisional organisation (Itoh 2003; Hope & Hope 1997; Morden 1996). The M-form intra-organisational relationships are underpinned by position and/or authority, a structure indicative of a communication regime that mirrors the military chain of command where information flows upward through the hierarchy and decisions flow downward (Talbot 2003; Hope & Hope 1997).

Figure 5: The Organisational Hierarchical M-form Structure (Hope & Hope, 1997, p. 89)



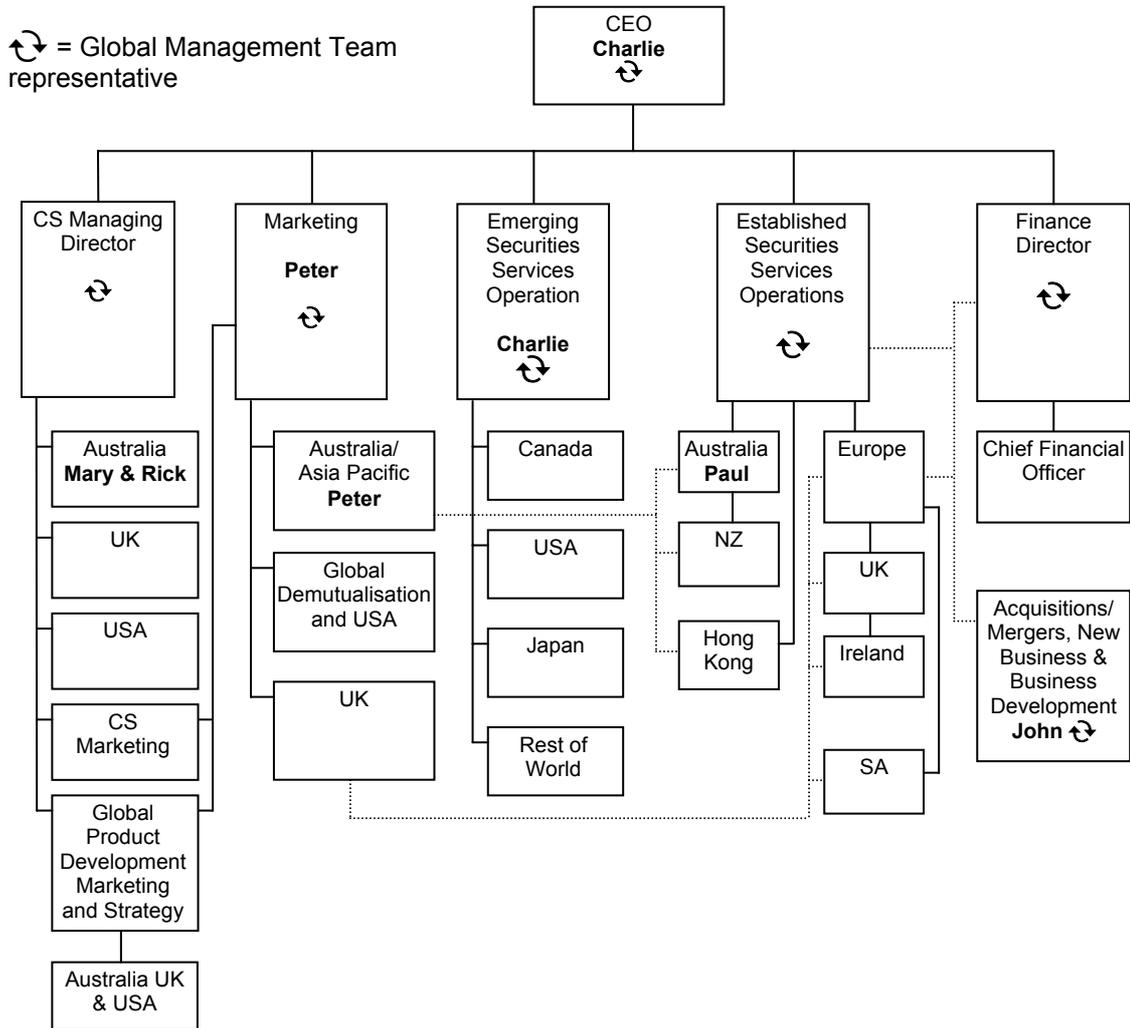
The M-form, hierarchical organisational structure, and its corresponding management style, was deemed inappropriate for the economic practices of the 1990s (Itoh 2003; Hope & Hope 1997; Crainer 1996).

The greater ABC – the sum of all its components - operate within what Peter describes as a ‘matrix’ structure, which is shown in the high level ABC matrix structure displayed at *Figure 6* (page 82). Peter refers to the matrix as ‘.....a structure where there continues to be dotted line responsibilities to each of the business heads’. He explains this concept in terms of the company’s marketing business although this strategy is widely practiced within the greater ABC:

‘So what you have typically are the marketing areas sitting within the business with a direct line of report to me [Marketing Director] and a clear and concise dotted line to the director of the local businesses.

According to Peter this type of structural arrangement has the benefit of supporting intra-organisational communication. The matrix structure supports multiple communication streams and information flows (Itoh 2003). Morden (1996, p. 44) defines the Matrix structure has a series of ‘horizontal and vertical’ relationships that are determined by the organisation’s ‘functional or geographic’ operations, its team based activities, and the requirements of its ‘strategic business unit’. This is supported by Goold & Campbell (2003) and Rockart (1998) who saw the matrix structure as one of the new communication-intensive, organisational styles that evolved because of businesses need to operate in progressively more competitive and complex environments.

Figure 6: The ABC Matrix Structure



Percy Barnevik of Asea Brown Boveri (ABB) (Craimer 1996, p. 55) restructured his business as a matrix in order to develop a global, dynamic organisation:

‘We want to be global and local, big and small, and radically decentralised with centralised reporting and control’.

The underlying principles of the matrix structure fits within ABC’s regional restructure of its securities services business, which were effectively divided into two sections; ‘emerging’ and ‘established’ operations. Emerging

operations is defined as those securities businesses that have been acquired from alternate parts of the globe, and have not yet been consolidated nor fully integrated into a regional operation. These businesses were specifically North American based.

Established operations are defined as acquired securities businesses that have undergone extensive technology and infrastructure consolidation and have been fully integrated into a regional group structure. These businesses are situated in the UK, Australia, New Zealand, Hong Kong, South Africa, and Europe, all of which are outlined in the ABC matrix structure shown at *Figure 6* (page 82).

The company's objective in segmenting its securities services operations into two sections was to enable the efficient management, resourcing, and processing of its workflows within the established regions. This was an operational move away from the traditional hierarchical structure to a more flexible, workable arrangement. Paul explains the rationale:

‘There has been tremendous growth [within the company] and as I said, a lot of that growth has been brought about by acquisition and I guess the same experience is going on now in the US. There are different business models and different business environments, and they [the global management team] are trying to overlay the ABC way of doing things, in again, a very different market. We did it very successfully in the UK and there is no doubt that we will do it very successfully in North America’.

Paul recognises two significant factors of international business, namely the discrepancies between the various business environments and the complexity of superimposing a single business model across those environments. Indeed Martin et al. (1994) and Daniels (1994) discuss a plethora of issues considered barriers to global business, which were of major concern for multinational companies of the 1980s and early 1990s. The situation described by Paul raises questions about whether or not there can be a truly global securities services solution, and it appears that this and other issues raised (CIBRE 2003a; CIBRE 2003b; Daniels 1994; Martin et al. 1994) have yet to be resolved. It is likely that the operational flexibility gained by ABC from its restructure brought about the delivery of some global securities solutions, but to what extent will be discussed in the subsequent sections.

ABC ensured that it retained central control of its established and emerging securities services operations, heading each with a chief operations officer. In addition, a managing director oversees a country's overall operation and executive managers lead the securities services operations at the state and/or local level. As previously discussed, there were numerous local operations within each country, and for this reason, ABC chose to consolidate each country's local services by dividing them into state and/or location based operations. Paul describes the Australian securities services local operations:

'The securities services business [in Australia] is a national office operation; it has a managing director with support areas attached

there too. Things like: finance administration, human resources, marketing, and customer service (a sub-group of computer services), legal and compliance, and learning and development. All those areas that support the business proper - we have that at a national level. We then have a state business - and each of those states, whilst not autonomous, is run as stand-alone, end-to-end processing operations. With one exception, we are starting to centralise some of the business activities, namely the call centre, initially. Outside that at this stage, each of the other state operations is autonomous in the sense that they still have responsibility for the end-to-end processes of their securities services. Whilst they are autonomous, they just can't go off and do their own thing: they are part of the ABC business and they are responsible to the managing director'.

It would appear that the securities service operations are deeply localised with some over-arching responsibilities and corporate control augmented at the national level. Paul has already stated that the functional structure is an industry typology that is manifest throughout the globe. This statement is supported by the literature where the presence of divisionalised and interdependent intra-organisations is said to negatively impact the implementation of generic technology solutions and global information flows (Maznevski & Chudoba 2000; Carley 1999; Rockart 1998; Daniels 1994; Martin, B. 1992).

John's portrayal of the securities services operations from a global perspective also supports Paul's observations:

‘The securities services business is like this. As far as business issues and process issues within those organisations [securities services], the Australian operations are autonomous to the New Zealand operations and the UK operations are autonomous to both. The same as the HK business is autonomous to the South African business. Each of those [businesses] has a board that has representation at the head office level’.

Both John and Paul’s comments pose interesting connotations. Paul’s remark that the national securities services was in the throes of centralising some processes indicates that the state operations have duplicated business processes or each have distinct operating procedures. Daniels (1994, p. 175) refers to these organisational types as ‘multilocals’ ‘.....a set of independently operating self-reliant and geographically dispersed units’ that function within solitary markets in isolation of any global perspective. In a similar vein John notes that the regional securities service operations run in isolation of each other, meaning they either have distinctive business requirements, or they too are duplicating workflows. These criteria fall within the multilocal characteristics as described by Daniels (1994), and more recent those of Sanford (2004) and Whitt (2004).

To reinforce its global presence ABC brought together a number of business heads under the banner of the ‘global management team’. The global management team oversees the regional group structures shown at *Figure 4* (page 77). The team comprises the CEO, and one member from each of the business units; securities services, CS, document services, plan managers,

marketing, and finance, and includes representatives from its sub-groups, acquisitions/mergers, new business & business development, and legal and compliance. The group members and their area of expertise are highlighted in *Figure 6* (page 82).

Their role is to support the respective regional structures while at the same time progress the company's global objectives. This solution is not unlike Hope & Hope's (1997, p. 94) description of the 'strategic business unit' as a conglomeration of 'specialist areas' interacting with the 'hierarchy' to enhance the organisation's overall operations. A similar solution is proposed by Kontes (2004) and Gottman & Hawkes (2004). Tapscott et al. (1998, p. 80) refer to the assembly of these specialist areas as 'integrated functions' and that these also describe the new 'E-form' organisation. The E-form organisation draws on strategic resources from within the organisation and the industry environment so as to better manage market development (Tapscott et al. 1998). Managers exposed to the E-form environment are better equipped to make informed decisions because they are cognisant of the interplay with their own unit and that of the greater organisation (Tapscott et al. 1998). There are similarities between the E-form environment and that discussed by Kontes (2004) and Gottman & Hawkes (2004).

ABC also has a global product development group who report via the director of marketing to the CEO on issues affecting the wider organisation, and on local issues to each country manager, as Charlie states in a memo to all staff:

‘Although we now have some excellent securities services operations around the world, all producing good profits, the real value for ABC is our global presence. In order to capitalise on this it was agreed at the last board meeting to setup a global product development group. This group will be responsible for marketing, sales and product development for ABC's securities services systems’.

The driver behind the global product development, marketing and strategy group was simply the need for ABC to further establish its global presence. The company needed to cement a link between its various operations, which it undertook through marketing strategies, such as promoting its global image. This action is perhaps what Crainer (1996, p. 222) describes as the state of ‘glocalisation’, and more recent the approach proposed by Barron & Hollingshead (2004) where companies strive for a balance between global and local market responsiveness.

Peter, as the marketing director, is ultimately responsible for ABC’s global and local marketing strategies. Crainer’s (1996) definition of glocalisation, and Barron & Hollingshead’s (2004) approach, parallels Peter’s comment about the establishment of the company’s global product development group:

‘You will appreciate that our growth was very rapid and the businesses we were buying had in many cases established “marketing” departments. The in-house marketing departments in each of these businesses developed a silo mentality and were looking after their local business needs in isolation of any global considerations. It wasn't perceived to be necessarily fundamentally important that we should

impose a global structure on these groups at that time. And that, thankfully, has changed. In retrospect, I would try to establish a sense of “global” and put up proposals for changing the marketing structure to reflect this. However, I did get some opposition from the business leaders who had entrenched their marketing staff within the business to their total satisfaction. [Peter explained that this was a ramification of the lack of support at the global level]. One of the consequences suffered by other companies who go through rapid expansion - a fragmentation of image and an absence of “global” thinking. The phrase “think globally, act globally” is the key one in determining what it is we are trying to achieve’.

The issues Peter emphasises are threefold. First, he identifies the need to establish a global strategy or uniformity of image throughout ABC’s business operations. Second, he raises the important point of local versus global content, undertones of which appear in his comment on ‘fragmentation of image’. Third, there is an issue of resistance to change, specifically within the securities services business, where he states that the business managers appeared reluctant to acknowledge the organisation’s global operational requirements. Ironically, Peter’s comment ‘think globally, act globally’, would prove to be ABC’s nemesis.

The organisational restructure and management initiatives described thus far enabled the company to share its resources across international boundaries. This has resulted in infrastructure cost savings, and access to a global staff pool of technical and commercial expertise. I asked John to explain how the

company utilises its resources in the course of presenting a business transaction, and he responded with the following:

‘It depends, that’s the nice thing about being informal. At the end of the day if you're committing the organisation significantly, then you need to get the Board [ABC Board of Directors] comfortable with it. Generally, whoever has been driving it [the project] puts a board paper together. In that process you talk to people within the organisation who have an interest in what that project is, and that's what I mean by it depends. And if it's spending 90 million buying a business in Canada then there are funding issues so you have to involve the finance people. There is always a technology aspect to whatever we do so there is always a degree of technological due diligence, there's financial due diligence, there's due diligence on the marketing environment that you're going into. That's generally the level of expertise that you might seek to get involved’.

In order to initiate a business proposal there are a number of company representatives who need to be consulted prior to its submission to the Board. The representatives that John describes are effectively, the global management team. They are the decision-makers from their respective area of expertise and/or business unit. When John described how the company put together its business proposals he referred to the ABC Corporate Board of Directors. The Board is responsible for setting the strategic direction of the organisation and monitoring the company's performance on behalf of its shareholders. As a public company ABC is regulated by its actions under the

Australian Corporations Law and as such it is a requirement that it establish a Board of Directors. In addition, its controlled entities (business units) are incorporated within each country of operation and they too have obligations under the respective corporations' legislation.

John explains the role of the Board within the company:

'They [the Board] are very effective decision makers but they are not involved in the day-to-day running of the business - as they shouldn't be - they talk about strategy, they talk about where we are going, they think about the future rather than the past'.

Morden (1996, p. 405) describes decision making as:

'The choice of a course of action from among the available alternatives. The making of decisions implies the commitment of resources, the direction, enterprise action, and the acceptance of the risk associated with the decision'.

John reminds me that although the Board has oversight of the company's high-level strategic decisions, these are largely reliant on the support and guidance from the global management team. Morden (1996), Crainer (1996), Rockart (1998), Dalton (1999), and Maznevski & Chudoba (2000) perceived this decision making process to be closely aligned with an organisation's corporate goals. This appears to be the approach taken by ABC.

As previously stated each country of operation has a board of directors that supports their own securities business. They are referred to as national

boards and are independent of the ABC Corporate Board of Directors insofar that they deal with the day-to-day local business issues, which generally involve their immediate clients. Paul refers to this as 'micro-level' activity. The corporate board is concerned with global level activity involving what Paul describes as 'large deals, take-overs, or acquisitions'. He reflects on the company's board operations:

'Globally, at the big end it happens very quickly. Locally at the micro-level, it happens far too slowly. And I think that there is a paradox there. It seems that we can make big decisions that have a big impact quite quickly and almost incidental type decisions that have minimal impact seem to take forever. It's a strange dynamic. It could be that there are too many stakeholders at the local level. It tends to be a little bureaucratic, a little paternal. The maturity of the business in terms of time - it's a very young business - in terms of being in its consolidated state, and maybe there is some resistance to letting go of control'.

Paul acknowledges that in relation to the decision-making process both boards operate in a different fashion. He suggests that the inabilities of the securities services business to bypass bureaucracy, together with their fear of the potential loss of power through relinquished control are possible reasons for their indecisiveness. This sentiment is reflected, in part, by Crainer (1996), Munkvold (2000), and Maznevski & Chudoba (2000) who saw the hierarchical structure as burdensome because of its rigidity and slow decision making process. Crainer (1996) and Maznevski & Chudoba (2000) acknowledged this as a legacy of the 1960s and 1970s economic

climate where national markets were relatively constant and management had little requirement to implement a mechanism for rapid change. The literature appears to support the importance for organisations to make decisions that mirror their corporate vision.

In all some of ABC's business units, by design, are innovative and adaptive and these are in direct contrast to the character and function of its securities business. The company has two distinct organisational structures and cultures that are seemingly able to co-exist. First there is the structure that is flexible with a culture that supports an 'open door policy', and comprises the 'organically grown' (original) components of the organisation. This structure also embraces those units established during the course of the company's global expansion. Second there is the securities services business that has evolved from the organisation's acquisition of established, hierarchical businesses, said to be 'very old fashioned' and 'very process driven'. Paul reflects on the company's growth noting the differences between the core businesses:

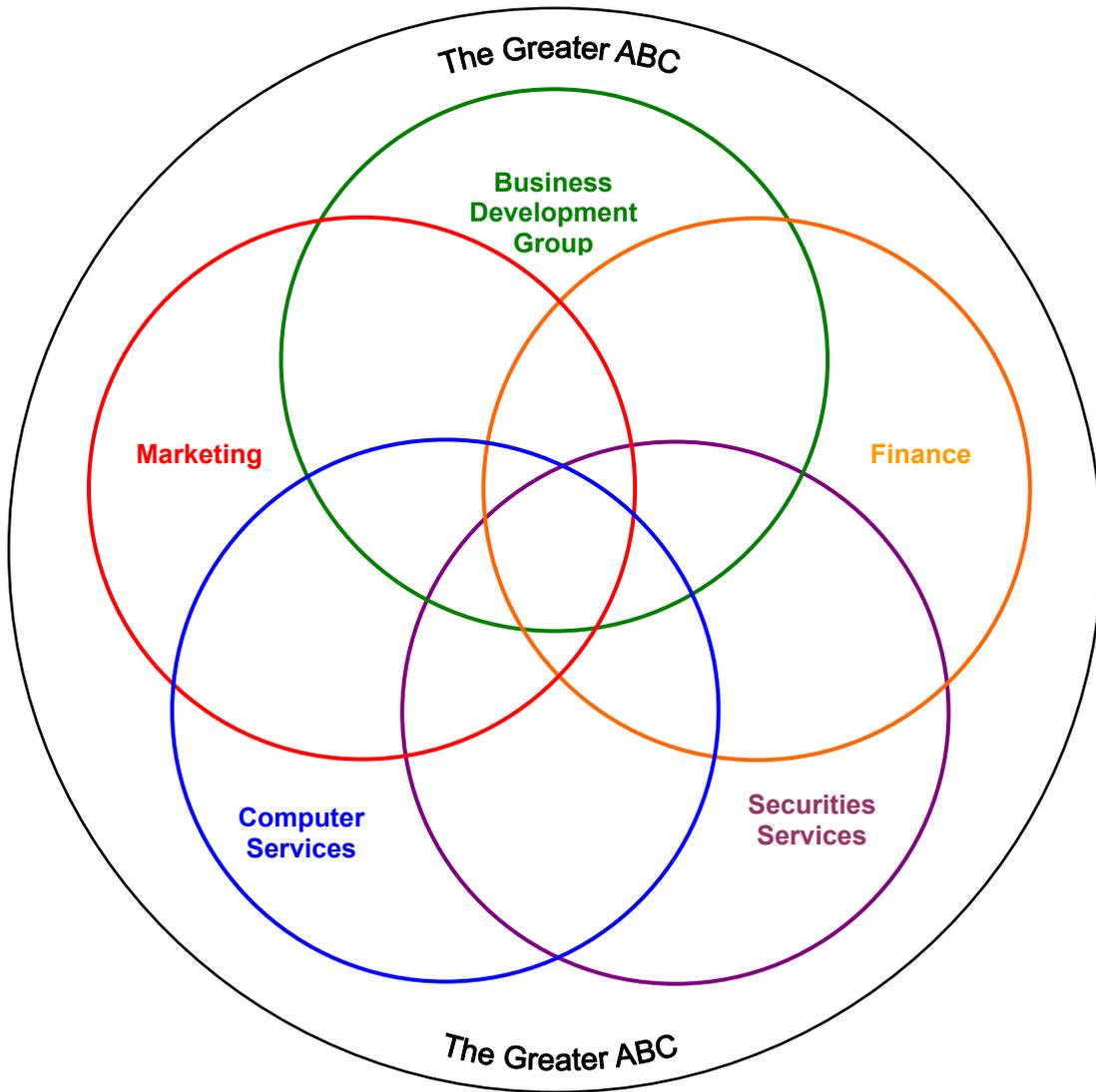
'ABC has come from a quite flexible approach - having a fluid structure - almost not even having an organigram [shape or form] that you can put your hand on and say that this is what the structure looks like. That's why there is a cultural difference between that part of the business, which is the organically grown ABC [the original business units that have evolved], to this part of the business [securities services], which has grown by acquisition [those businesses that the company has bought into]'.

Peter illustrates how the company accommodates these opposing factions and how they function under the ABC organisation:

'If you want to know what a perfect structure is it's what the circles represent [reference was made to a diagram of ABC's internal interaction shown at *Figure 7* (Page 95)]. I'm known as the circle man. I hate squared structures because here that's what happens [pointing to the diagram shown at *Figure 7*]. We create powerful teams that implement all the overlap areas. They talk to each other, they feed off each other, and in the end they come out with propositions that actually serve the business needs'.

Hope & Hope (1997, p. 30) detailed the importance for organisations to think 'outside of the box' and to review their normal business practices in order to succeed in the new revolutionary business environment. They added that companies should refuse to 'accept the existing rules, practices, or traditions of an industry' and to seek relief from the rigidity of existing 'corporate culture' (p. 32). A position shared by Howard-Grenville & Hoffman (2003). Similarly, Drucker's (1993, p. 58) assertion that knowledge is evolutionary and to deny its inevitable and continual renewal will render anyone [or any company], 'obsolete' gives credence as to why ABC evolved the hybrid organisation.

Figure 7: The ABC Internal Interaction



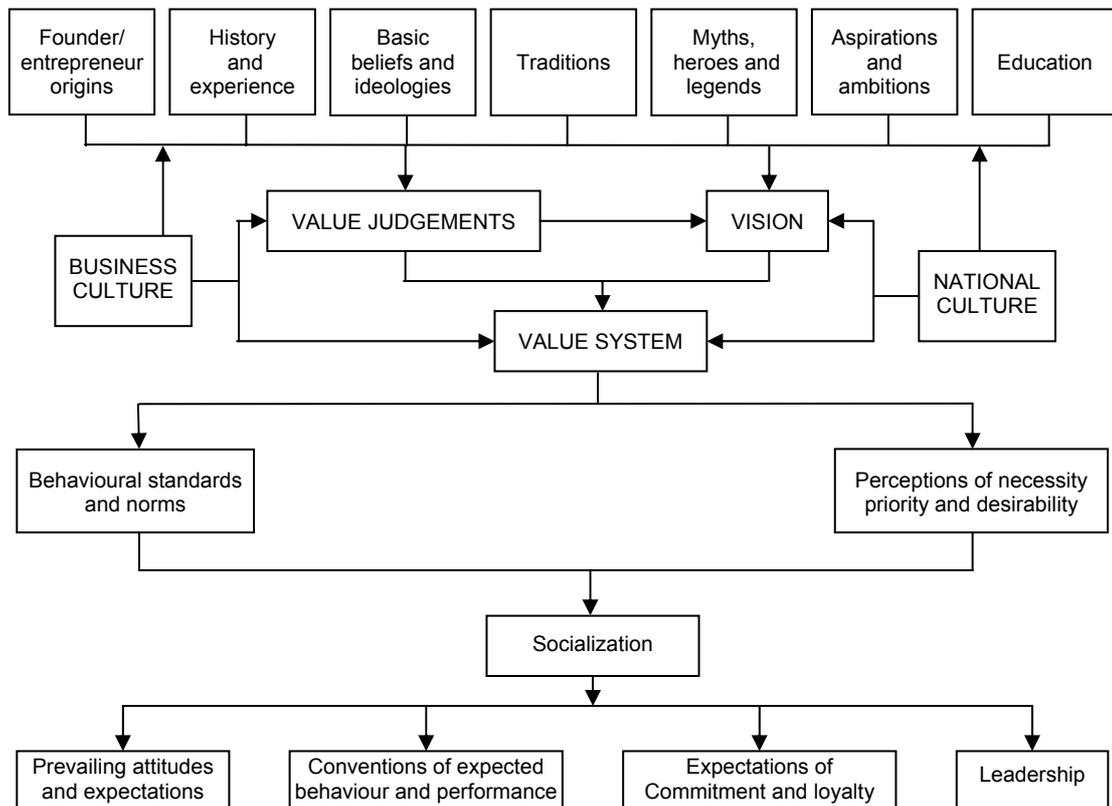
4.2.2 The Culture

By the late 1990s ABC comprised a number of global, regional and local operations. These operations were coordinated through a mix of business and management strategies, and technology solutions supported by an infrastructure of enabling services. It was a period of global expansion, which saw the organisation operating within, and extending into, a range of diverse cultures. The acquisition of international securities businesses, and expansion into those markets, orchestrated the breakout of two distinct organisational structures and cultures. The company moved to mitigate its

impact on the organisation by implementing a number of initiatives. These initiatives are discussed in conjunction with the literature findings.

Morden (1996) and Alavi et al. (2004) stated that business and national culture play a prominent role in moulding organisational culture. Business culture influences an organisation at the society level, largely through its values, standards, and expectations. National culture was said to influence an organisation through the collective conditioning, socialisation, education, and life experiences of its personnel (Morden 1996; Edberg et al. 2001). National culture was the dominant factor insofar that it determined a company's 'management style', its 'communication' and decision making processes, down to the formalisation of its 'structure' (Morden 1996, p. 206). Morden's organisational cultural profile is shown at *Figure 8* (below).

Figure 8: Organisational Culture Profile (Morden 1996, p. 137)



Slowinsky et al. (2002, p. 3) found that business acquisitions and mergers in a global environment created enormous problems for stakeholders, with 'cultural integration' listed as a major issue. They offer the solution that following a merger or acquisition the newly formed entity must be prepared to absorb legacy cultures, both 'national' and 'organisational' and form a 'workable culture of its own' (2002, p. 10).

The existence of 'disparate' cultures within an establishment promulgates an image of the 'schizophrenic organisation', one that is wrought with opposing and disconcerting views (Slowinsky et al. 2002, p. 1). When John refers to the operational and cultural differences between ABC's two core businesses he describes their characteristics as schizophrenic:

'The organisational culture is schizophrenic in that there is the old ABC [CS], which is technology focused, very open, very social, it's a nice place to work. Then there are securities businesses that we acquired which have traditionally been part of accounting firms or banks, and are very hierarchical, very process driven, very old fashioned'.

ABC's situation is essentially twofold. Firstly, following its acquisition of securities and related technology businesses, the company was obliged to reconcile a range of national and business cultures. Second, the very same acquisition process impelled the company to sustain two distinct organisational cultures. This led to a requirement to reconcile its own cultural identity. Peter shares his experience regarding the level of cultural integration within the organisation's regional operations:

‘Their [US] move on the evolutionary life cycle of change is far more rapid than you would find, for example, in Canada. There you have got a heavily bureaucratic structure and silos because you have got four major branches each with quite a large number of staff that has never been supported at the national level. Thus they have created their own individual business styles’.

Peter offers another example where in the UK acceptance of the ABC culture has been slow:

‘The Poms love their structures and they love their boxes. It doesn't matter what you do they will always want to represent their boxes and they will always want to be in them, yet they fight to get out of them. And look, in time they will because they always do. Look how long it took them to get to teabags’.

Peter's comments suggests some variation in the level of acceptance between each country of operation indicating that business and national culture will, to some extent, influence an organisation's behaviour. Morden (1996) and Alavi et al. (2004) also share this view. Compare this with Drucker (1993) who argues that large companies have the same constitution (business culture) irrespective of the national culture within which they operate. However, after analysing the interview data, and in light of the majority of the subject matter experts' views, it would appear that industry type is the foremost organisational influencing factor. This is shown at *Figure 1* (page 17), *Figure 2* (page 31), and *Figure 3* (page 71), respectively.

However, the findings show that national and business culture, and industry type will actively determine the organisational culture.

With the subsistence of disparate operations within the organisation ABC perceived it was in danger of exposing fragmentation of image to its competitors and/or clients. Its activities would be seen as underpinning the organisational culture, and therefore, its corporate behaviour and identity would be judged according to that culture. To compensate, the organisation sought effective management and communication of its culture across its business units. This would ensure a cohesive approach to managing its local, regional and ultimately, its global operations. To meet this objective the company launched a number of strategies that focused on cementing the organisational culture both from an internal and external perspective. The strategies included marketing, communication and change management and these, in part, can be considered organisational and/or global business enablers. Essentially, these strategies were developed to propel the organisational culture with the view of meeting the company's global objective.

ABC had gone to great lengths to consolidate its operations introducing various management and business strategies always with a view to meeting its global objectives. According to the literature taking this approach was an accepted practice. For instance Edward Hall (cited in Drucker 1993, p. 61) stated that cultural communication, rather than verbal, was society's most effective intermediary. While Slowinsky et al. (2002) considered it an essential practice especially in the presence of corporate mergers or

acquisitions. Crainer (1996, p. 222) highlighted the need for a 'global marketing strategy' to assist in the sharing of knowledge and experience throughout the organisation. A view also shared by Venaik (1999).

Peter explains that when ABC started acquiring large securities businesses it established a strategy through which it could promulgate its culture. It uses marketing as a means of propagating its culture both internally - within its own business units - and externally – to its clients and competitors. According to Peter the process was, essentially, a marketing strategy and communication was the driving force:

'This is how it happened, we were a small, Australian company with the major share of the Australian market. In this context there had been no real need for marketing in its accepted sense. When Charlie went to US, where competition and selling are accepted practices and where the whole business ethos is quite different, he immediately grasped the influence that marketing can have over successful business outcomes. Once we got into that channel of thinking the rest was really fairly easy. We are not like other marketing departments where you have got a division that looks at research and analysis and potential markets. Marketing for us is about servicing the business. Marketing focuses on external communication to support the business and on internal communication. It looks at both of those as having equal importance'.

Communication is one of the key operatives of the ABC organisational culture. The company coordinates its global activity through effective

communication delivered through a variety of media using both informal and formal processes. As Peter says:

'We focus on external and internal communications, but internal communication is always the one that's the trickiest and therefore the most challenging. It's very difficult to try and do. We would like to be in a position where all staff who want to know something are able. When you start talking about internal communication everybody seems to try and formalise it. They all believe that communication is something that arises when you have a meeting and an agenda and you all sit down and then somebody then tells everybody what's going on. My vision of that is absolutely quite the opposite. Communication is a multi-layered structure that ranges from the formal to the absolute informal - leaning across the desk with a cup of coffee in your hand saying how are you going today? The most difficult part of that is on the formal level - exactly what do you communicate to whom and how? And that's something that we are looking at right now'.

ABC also proliferates and consolidates its culture by enabling its businesses to draw on the experiences of a global pool of staff. In effect the company will second staff to various parts of the globe to work on special projects, and from a management perspective, to take responsibility for the coordination and motivation of staff at those sites. Slowinsky et al. (2002) perceive this as an important step to bridging the organisation culture gap. This process has already been described in detail by Peter (see *Section 4.2.1*) and

demonstrated at *Figure 7* (page 95) where the company's key business units work together as a team to progress the company's global objective.

Mary told how CS participates in the global sharing of expertise and how their international technology staff is always first inducted into the ABC business culture before participating in any of its projects:

'CS has the "A" team, which is the global programming and business analyst team. The team travels around the world developing our systems to cater for the variances in that particular market. We took the cream of the crop some time ago from Australia, sent them to the UK to develop our systems for that geography. Then sent existing staff from the UK to Australia to train so they commenced their development program here in Australia. As well as the principles of co-development, our culture and all of those very important values were passed onto the UK visiting team, during their three month stay in Australia and consequently the culture is passed on through this process all over the world. We have people here at the minute from Montreal and Chicago learning our culture, our development methodology before they return to North America'.

What Mary describes is a translation of culture from one place to another using a team approach, which according to Paul does not happen in the securities business because they are departmentalised and take a 'function based approach' rather than a 'team-based approach'. This cultural translation is perhaps what Konles (2004) and Daniels (1994, p. 6) refer to as a 'cross-functional coordination' where companies transcend notional

boundaries to create the right mix of expertise and teams are organised on a task basis rather than by departments or divisions.

Combining the cultures of the respective securities businesses with that of CS has been Peter's prime responsibility. Communicating the global integration of the ABC culture has been one his greatest challenges:

'I am a great believer in saying that what size brings to an organisation is a logistical challenge to create the myth of retaining "small image" but at the same time being big. It's about structure in small teams that are dynamic with a value that is individual still. To take pomposity out of the equation to try to bring everybody's creative skills to the table and making people appreciate the big picture - that's the challenge of communication, every tick of the clock'.

ABC also uses marketing as a tool to promulgate its culture and inevitably there are two marketing strategies within the ABC organisation. One focuses on the company's external interface to customers while the other interlaces its internal business units located within various parts of the globe. This bipolar approach was adopted to accommodate the company's requirement to function within dissimilar markets, and the need to transition its securities business into one organisational culture.

It is not uncommon for Multinational Companies (MNCs) to modify their marketing strategies and communication style, and alter the content and tone of their corporate web pages to harmonise with the business and national culture of a target county (Okazaki & Rivas 2002). Their investigation shows

that this a widespread practice among MNCs. Likewise, the Australian company Driza-Bone had to adopt multiple marketing directives because of this cultural diversity; however the company maintained the importance of retaining some semblance of a controlled [marketing] policy or standard (CIBRE 2003a).

Similarly, ABC has reached an agreement with its business units on a set of basic minimum standards, which Peter says were developed as a marketing strategy to consolidate the company's image. It is important to the company that this is viewed as a consultative process as it represents, to some degree, a bonding of the various business and national cultures. These standards are simple but according to Peter 'send out the message to our businesses that there are some basic and consistent ways of how we represent ourselves - visually.' The standards include:

- literature templates, i.e. for purpose of formulating proposals; and
- graphic templates – however all business units will have their own colour scheme.

ABC is meticulous in its approach to propagating its culture but Peter describes some demographic and cultural issues that the company has little or no control over:

'The idea of is not to stifle the way in which the local businesses go about having themselves supported through our marketing. Absolutely not. I mean you have got to realise that the English culture is quite different from the Chinese culture, from the South African culture.

There is not a chance that we would just throw this great Australian cultural umbrella over everything and say this is the way you do it. You have to rely on the local expertise to say look, this is the way in which we would like to approach this. We don't try and control that and we never will'.

Peter is saying that ABC recognises the need to factor in cultural considerations. Indeed the literature findings show this is a dilemma faced by many companies when trying to export to other countries. There is a significant amount of local knowledge and respect required when transporting a product or service from one culture to another. ABC has a similar agenda in that its businesses and clients operate within diverse markets and cultures and it too is faced with the comparable chore of rolling out customised versions of its products and services to its businesses and clients.

The majority of ABCs clients can be defined according to Daniels (1994) interpretation of multilocal enterprises: companies that operate within pseudo isolated markets. For instance, ABC operates and supports businesses within every time zone around the globe. It interacts with a diverse range of financial markets, and each of those markets in turn forms part of a business and a national culture. The company readily acknowledges that some customisation of its products and services are required in order to provide full functionality and support to its businesses and clients who operate within these markets. These requirements are by and large determined by the business and national culture of each country of operation, and ABC will

customise its proprietary based systems to enable its clients to meet those requirements.

ABC's internal and external marketing strategies remain flexible so as to accommodate the business and national cultural requirements of each country of operation. However, as Peter explains the company has a non-negotiable policy for its businesses regarding some marketing standards.

Although the company appears to have been successful in harnessing, to some extent, its securities services business at the regional and local level, there has been some difficulty in unifying its relationship with the CS arm of the organisation. Paul's description of the two opposing cultures indicates that ABC's initiatives, aimed at cultural and operational consistency of its businesses has not provided an overall solution:

'When you put those organisations [organic and acquired businesses] together and grow them into a business, which is owned by ABC, with its culture, whilst there has been a blending of the two, securities services, which has come from an established traditional background, has still got some of that baggage - in fact lots of it. There is a distinct difference in culture and operating procedures'.

Paul's comments suggest there might be some resistance to change from the securities business quarter. Whilst discussing his role in promulgating the ABC culture, Peter touched the issue of change:

'As director of marketing I am responsible for implementing change. When you acquire customers the size of the ones we are acquiring

then people like me need to be actually out there to get the culture into those businesses. To achieve this we do a whole swag of things, including restructuring marketing departments, which we did in Canada and the US'.

Shifting the culture of the securities business has been an arduous task for Peter. Sometimes it just doesn't work as he attests from the experience of walking into an organisation framed in a heavily structured environment:

'Sixty percent of your senior executive can't think that there is anything else that ever existed in the world. Of that 60% you can probably turn 30% around and to the rest, in the end, you have just got to say goodbye'.

ABCs objective is to become the first truly global securities service provider and is continuously developing a support base that will contribute to that ideal. Morden (1996) and Alavi et al. (2004) believe that an organisation can be defined in terms of its business and national cultural influences. Although this company has tried hard to install an organisational culture within its global securities business Peter admits that they have not always been successful. Considering the challenge to be an ideal he believes it is an organisational culture the company should continue to strive for. The paradoxical situation brought about by the need for cultural exchanges could explain the necessity for ABC to support independent regional and local operational structures. The issue here is clearly global versus local contingencies.

John believes that ABC has been pretty opportunistic in the way that it has grown given that it hasn't had a main longer term strategic plan. For that reason ABC sees itself as a flexible, adaptable organisation open to change and ready to grasp opportunities that will enable it to meet its global business objectives. Charlie signs a memo with his favourite quote; one that he believes demonstrates the true ABC organisational culture:

'The biggest risk is not to take one'.

4.2.3 The Business Processes

It has already been established that following the acquisition of global securities businesses two opposing business cultures and multiple operational processes emerged within the organisation - a consequence of its local and regional activities. ABC set out to establish criteria around which it could streamline and manage its business processes – both internal and external - in accordance with those activities. For instance, the introduction of various management strategies and the resultant restructure of its business enabled the company to accommodate local business requirements, whilst at the same time keep sight of its global mission.

Alvin Toffler (Tapscott et al. 1998, p. 60) predicted that the information age would demand that organisations accommodate new operational requirements, specifically in the areas of technologies, business processes, management practices and organisational structure. Tapscott et al. (1998) added that the impending changes of the information era were reminiscent of the demands of the industrial revolution in that changing economies commanded new business practices and ecosystems. The flow of

information within the divisional (hierarchical) organisations was considered very much 'vertical' because their business processes were by nature departmental or function based and did not lend kindly to 'enterprise wide integration' (Tapscott et al. 1998, p. 63; Itoh 2003). The ascendance of 'information silos' or disparate operations within these organisations prompted a review of activities, which culminated in what Attaran (2003) and Tapscott et al. (1998, p. 63) dubbed as the 'cross-functional business process'.

The role of technology was to support enterprise wide business processes by enabling the movement of information horizontally across the organisation, and through the corporate and geographical borders (Attaran 2003; Tapscott et al. 1998; Hope & Hope 1997). This is the approach adopted by ABC to marry its local and regional operations. Mary describes how CS supports the company's business processes and explains how they interact with the corporate vision:

'We develop programs and we keep our securities systems under maintenance. We have to keep abreast of all the [securities] market changes and as that market changes we develop what is required in terms of our and our client's, legislative obligations. We continue to add new features to improve our processes generally. We are developing new global technologies [primarily web based with a view to delivering global interconnected and interactive systems] all the time to assist us with our growth, knowledge sharing and productivity improvement'.

When establishing its regional operations ABC effectively adopted what Hope & Hope (1997, p. 94) describe as a 'process-based' structure – a practice that supports a businesses entire information requirements (Ruikar et al. 2003). All in all, the company's internal business processes consist of a technology, securities systems, support services, and professional services interface. Distributed globally, these combined activities provide its business and clients with an international network of innovative securities services and related technology products. Hence, ABC's external business processes are complex in that the securities services business operates in different countries and within diverse financial markets.

Notwithstanding these complexities ABC has identified a set of core activities (generic tasks) that are common to the industry worldwide. However these activities have proven difficult to harness because each country of operation has a prescribed set of unique jurisdictional and legislative requirements that ABC's clients and its business must operate within. Paul describes the business processes of the securities business emphasising the internal and external variants, and singles out some of the idiosyncratic tasks:

'Our business processes are interesting in that they are two-dimensional. There is the internal business process and there is our external interface, and again there is a paradox there. Our external interface with our clients is very paper based. We produce literally millions of pieces of paper every year, millions. Every piece of communication that we have with a client is paper - so we send out paper. They often have to fill in forms and they send back paper. So

the interface with clients is very old fashioned, they are all streamlined forms but it's still bits of paper that goes in the mail and comes back to us in the mail. Yet internally, everything we do is electronic. Our client's accounts are maintained on computers. The system that we have now, which details the client's name, their address, their account holdings and all those other critical pieces of information, are all held on the big ABC securities system. All of our internal workings are quite automated and quite streamlined, and are electronic. But our external faces are quite the opposite. It's an interesting dynamic'.

Paul's comments reveal that ABC supports both electronic and paper based processes. The company's internal processes are largely electronic and workflow centric, while the interface between the securities business and their clients are very much paper based. Paul went on to explain that the Australian state operations are very much stand-alone business units in that they alone are responsible for their end-to-end processing operations. Meaning that there are clients attached to each state securities operation who deal directly with that office. The client's account details are held on the state system and that office does the processing work for those clients. Each state office operates a prototype of the same securities system - the proprietary system owned by ABC. The details from all states are aggregated and transferred to ABC's national account register. All states use the same system platform, and by and large the same processes, but there are some variations in their business activities, which Paul describes:

'We've got general business procedures and practices, with some local [state] variation, and other variations that are brought about by virtual size. The local variations such as State legislation, stamp duty for example, play a minor role in processing differences, but it's not overly critical. Mainly I would say that it [business process variation] has to do with size. The larger offices, Sydney and Melbourne, are departmentalised and the securities functions there tend to be split between those departments. In the smaller locations [Brisbane, Adelaide and Perth] there is more a blurring of responsibilities. You have people there that are potentially more multi-skilled; because that's the way it is in a small office. When you have 20 people doing a task the process tends to flow between departments. The line between those departments isn't as distinct as it is between the departments in Sydney or Melbourne'.

These comments raise two important issues: that there is duplication of product and services between the states (*see Section 4.2.1*); and jurisdictional obligations in the form of compulsory payment of stamp duty, which inevitably varies between states.

Barron & Hollingshead (2004) and Daniels (1994, p. 176) state that global companies are inclined to replicate services in each country of operation in order to satisfy 'local market requirements'. Daniels (1994) suggests that 80% of a company's international systems support replicated processes whilst the remaining 20% of the system's activities are customised to accommodate local content. This implies that the majority of these activities

are industry related generic tasks, and the minority are tweaked to meet the information requirements of each country of operation. Daniels (1994, p. 57) suggests that 'a global architecture cannot be 100% the same'. Using the financial system as an example she states that a 'complete consistent approach' is unachievable because of the sheer 'diversity of functions, locations, and data' (Daniels 1994, p. 57). The preferred path is to reach a balance between 'global consistencies' and 'local diversity', where a product can support both 'global' and 'local' customers (Daniels 1994, p. 174; Barron & Hollingshead 2004).

This phenomenon could explain why ABC supports modified versions of its securities system in each state and country of operation. For example the company engages in customisation of its products and services, which it essentially duplicates between each state and country of operation. According to Rick, Manager, ABC Web Services, these anomalies are attributable to mandatory corporate governance of its businesses and its clients, which can be statutory by nature and jurisdiction dependent. Martin et al. (1994) discuss similar problems faced by multinational companies during the 1980s when attempting to align their systems and business processes with the intention of operating within diverse business and national cultures. While Corbitt et al. (2004) discuss more recent experiences. Ironically, Martin, B. (1992) stated then that it was doubtful that a single system could support an organisation's global operations because of the need to accommodate local practices and organisation standards.

Indeed this appears to be the issue with ABCs local and regional operations. John has already stated that each country operates as an island in that each has its own board of directors who are responsible for making decisions that effect local business processes. While Paul's comments describe the Australian based securities operations John's provides a broader description of the securities services regional operations. The anomaly is that each of these operations have unique information requirements, which ABC accommodates by customising (reengineering) its business processes.

The company introduced electronic workflow in an attempt to rationalise the business processes within its securities business and to reduce the reliance on paper based information. Electronic workflow is in essence a business process broken down into a series of automated activities (O'Brien 1999; Kontzer 2003). Taking this approach has enabled the company to streamline part of its internal business processes, realising increased productivity and efficiencies. Although there are processing differences within the securities services at the local and regional operational level, the company is committed to harnessing those generic transactions tasked to the securities services industry worldwide. To that end it has moved to consolidate into electronic workflow those regional business processes that comprise common and core activities, a measure taken to promote efficiencies in the management of its global business.

Electronic workflow can be web-enabled, and is noted for its ability to transcend corporate and geographic boundaries and reduce duplication of activity (O'Brien 1999; Udell 2004). However, Paul has already stated that

many of the company's business-to-client interfaces are paper-based, and although this situation has to some extent been addressed with the implementation of web-enabled services he suggests that the majority of the organisation's external transactions still remain paper centric. Paul believes that the regulatory nature of the securities industry globally is an impediment to some of the company's business process re-engineering (BPR) initiatives:

'Gone are the old days when people used to sit there and actually hand write clients' account holdings, which were just big lists of information. We are trying to change that model. We are trying to get our clients to use the Internet more often, which they do. We're trying to make communications electronic rather than paper-based but as in many of these fields of endeavour the technology is in advance of the legislation. There are some things we can do electronically and are physically able to do, but not legally allowed to. These issues are still really impeding our progress. But we're managing to make good progress'.

In describing the securities services core processes Paul has effectively outlined ABCs preferred business model, which is a series of processes that records the client's details and account status (referred to as the name-on, name-off process). In a bid to further its global presence, the company advocates that clients endorse this business model. As Paul points out, this model is used successfully and effortlessly in those finance markets where a similar securities framework or standard processes exist. ABC refers to its securities services operations within these markets as 'established

businesses', meaning the company has been able to efficiently implement its business model and associated technology solutions with minimum rework. Paul explains the benefits of adopting their business model but expresses some apprehension about the likelihood of ever establishing a global 'over-arching' business model:

'Not only does it suit our business to have that model adopted globally but it just makes good sense. This model suits all stakeholders, so it's the model that we advocate. The model is particularly focused on the securities services part of the business at the front-end. ABC as the bigger group has things in a number of pies. Not only at the securities business process end but in our securities systems and other areas as well. It might be more difficult to have an over-arching business model covering all of that. Well, there will have to be a change in the model because not every jurisdiction globally has that model in place'.

Martin et al. (1994, p. 632) saw the 'national model' as an independent interrelated network of business processes, business rules, hardware, systems software, and organisation standards. Daniels (1994, p. 40) lists two other important attributes of the business model, namely internal and external 'controls' and 'coordination', which can be viewed as process or information flow regulators. In the same vein Reinhardt & Jan (2001) stated that the introduction of new or redefined business processes would require overhaul of any related policy and procedures.

ABC admits that success of its electronic workflow has been exemplary at the local level of its operations. However, at the regional operational level a

complete securities services workflow system has been trialled at one location, only. The company states that workflow initiatives undertaken at the regional level requires further integration of a wide range of business processes, technology systems and associated infrastructure. It is for this reason that the company acknowledges that there is work to be done in consolidating those business processes and procedures that cross multiple jurisdictions and finance markets.

Reinhardt & Jan (2001, p. 126) imply that the Internet will affect the way in which 'organisations do business' but this is highly dependent on aligning this 'challenge' with their business processes and strategies. ABC clearly states that it is committed to evolving the securities service industry's use of web-based technology into its day-to-day business processes. It believes that it has already introduced some like initiatives to the industry, and as previously mentioned, will undertake further development and testing of their environment in an attempt to fully integrate a web-based transactional solution for the securities industry. The comments thus far imply that the global industry as a whole needs to develop a mature and unified approach to using web-based technologies in its workflows.

ABC believes that its electronic business processes are designed to add value to its and its client's, businesses. There is a focus on the client's specific needs within each region, and an awareness of what each region's requirements are. By the nature of the industry, these requirements are largely concerned with a client's legal and statutory obligations regulating its management. These jurisdictions can be local, national and/or global by

nature (Steinberg 1999). Where possible, ABC provides its business and clients and the securities industry, generally, with a comprehensive range of electronic workflows. These are simply technological and/or regulatory solutions aligned with its business model, which the company implements with a view to advancing its global objective.

Rick describes the role of the web development team in company's transition to web-based business processes:

'We receive service requirements from the global services group and local business units. These service requests are prioritised on a global basis. Once a project is underway, it is allocated to one of the teams for development. The service developed is usually global in application and then tailored for each country in which we supply it. We are moving more business processes on to the web. Typically this involves taking instructions from clients online instead of paper as occurred previously and delivering reports to clients, which was previously delivered in paper form. Some advantages are being gained by combining previously separate sources of information [integrating various systems/databases]. This involves ensuring security is maintained and concentrates on improving existing processes. All services are developed generically and then localised as required'.

What these findings show is that ABC's capacity to provide the industry with technologically sound and logical solutions has been impeded by the industry's regulatory coordination and control of its business processes. It

would seem that the company has the technology to propel the world securities industry forward but the local and regional industry regulators prevent it from realising its objectives to become the biggest and first global securities business. These findings appear to be supported by the literature insofar that regulatory frameworks are seen as global business inhibitors (Hamblen 2003; Reinhardt & Jan 2001; Daniels 1994; Martin et al. 1994).

4.2.4 The Strategies

Strategic management at the organisational level can be defined as a business strategy combining a number of planning processes (Crainer 1996; Morden 1996). Morden (1996) describes the planning process as largely occurring within a medium to long-term timeframe, which he equates to a two to five year period. The 'five-year plan' was a distinct trait of the hierarchical organisation (Hope & Hope 1997, p. 88). Contrary to theory, and according to Mary, Charlie has publicly declared that the company doesn't adhere to a rigorous strategic planning regime:

'I am sure that you might have heard through the press that Charlie doesn't actually have a five-year plan or any of those sorts of things. Our decision making process is quite a swift one. If we decide that we are going to do something, certainly in terms of the market place that we are in at the minute for instance, decisions to develop new pieces of software or whatever are made quite quickly. Decisions to grow in different areas or different parts of the world are taken more seriously of course. We go through all the same processes most large corporate companies go through but, all in all, it is quite a smooth process. We

don't have to do great big plans that have to go through a stringent approval process. The swift decision making process is also an important factor in our success, in my opinion'.

The decision process that Mary describes is indicative of the greater ABC but not its securities services business. As already mentioned the company supports two decision making processes. While the corporate board's process is described as relatively informal, according to John, the securities boards are described as having 'quite formal decision making structures within'. This he says is due to the nature of their operations in that they are significantly risk management businesses. The securities business boards are involved strategically in setting budgets and monitoring the performance of their respective operations. John explains how the corporate board operates:

'At our corporate level decision making is reasonably informal, obviously big ticket things go to the board and the board is kept in the loop but we do not have executive committees or anything like that. It's one of the attractions of having a company that has a founder [Charlie – CEO] who's a major shareholder and who has a strong personality that at the end of the day you don't need all that stuff because the accountability is pretty simple.'

The corporate board comprises a number of ABC executives, who along with the global development team make decisions concerning the company's strategic operations. John points out that having the CEO, as a core board

member is a strategic management factor in itself, as he reflects on the company's strategic objectives:

'Charlie is famous for being quoted in the Straits Times in Singapore, of all places, as saying that anyone who's got a three year business plan doesn't understand what is happening in the world. Because no one knows what it [the world] is going to look like in three year's time. ABC has been pretty opportunistic in the way it has grown. It hasn't had a main strategic plan.'

During 2000-2001 the company gained access to the North American markets, resulting in further disparity of its securities operations. Paul explained that this was largely due to the different account practices (business processes) used in its existing businesses (Europe, Asia, Australia, New Zealand and Canada) compared to the procedures used in the USA. ABC's preferred business model (name on-name off) was not supported in the USA. This presented a further hurdle in its pursuit of a global securities business and consequentially, as previously stated, the company undertook to further restructure the organisation and redesign its business processes.

The company's technology, securities and support operations were consolidated into regional-based group structures with the view to better service its business, and its client's, individual needs whilst pursuing its own global business objectives. Supportive of this are Rodgers et al. (2002) who see e-business as the means by which companies can interconnect systems to provide operational efficiencies and profitability to its businesses and its clients.

Regionalisation was also viewed as an opportunity to decentralise management of its international operations. Previously its businesses had been largely resourced and managed from a central corporate office, which the company acknowledged had placed unnecessary pressure on personnel resources and support services. Establishing the global development team was another strategic management initiative. Its role is to oversee the regional offices and to ensure where practicable continuity of business processes within the respective regions. The team is also responsible for protecting the organisation's global identity and promulgation of its technology products and services at all levels of operation.

Cowey (2001) identified a number of global practices, namely, management, organisational and IT support strategies as the key objectives to integrated organisational operations, products and services. The author viewed these practices as a nominal shift from local to global thinking. ABC implemented similar strategies in order to swing its operational focus from local to global. One example of this is the further restructure of CS, where a web development team was formed with a view to enhancing products and services to its businesses and its clients.

The company has also introduced a range of technology management practices which have already been touched on and will be discussed in detail in *Section 4.2.9*. Briefly, the practices to date include one central authority for all IT purchases; decentralisation of CS development services to better support its global business, and the intended automation and rationalisation of its call centres using a national Voice Interactive Response (VIR) service

in each country of operation. Information technology management strategies were developed in the late 1980s as a means of integrating an organisation's needs through IT investment (Cortada 1998). ABC uses such a method to streamline and manage its technology requirements.

Client support or customer service is another strategy already discussed and one implemented by the company under the customer service unit currently located within the CS group. Clients are ABC's internal technology users and the securities services external users. There is one customer service unit attached to each regional CS group and their responsibility is the maintenance of the local operations within that region. Customer service is a by product of competitive strategies and its implementation is seen as rounding an organisation's relationship with its customers a practice that is deemed critical in a global environment (Morden 1996; Crainer 1996; Daniels 1994).

Developing an all embracing marketing strategy is a critical component of establishing a global image - a concept that has been successfully employed by many companies over the preceding years (Crainer 1996). Equal to the task is ABC who has actively used marketing as a strategic tool in the rollout of their culture and technology to stakeholders.

In retrospect, ABC has implemented a succession of strategic business and management strategies with the view of meeting its global objectives, while at the same time being cognisant of its local and regional operations. Some of the strategies implemented during 1999-2001 evolved because of the

challenges the company faced in the course of its expansion. The strategies include in part:

- Consolidation of all securities services operations in each country by state into central locations.
- Securities services operations and ancillary support business units reorganised into regions, marked by time-zones.
- Reorganisation of the securities services operations into two groups:
 - emerging operations, and
 - established operations.
- Introduction of a global management and web development teams.
- Implementation of information technology management practices.
- Inauguration of a comprehensive marketing strategy.

Principally, these strategies were developed to foster strong management within its local, regional and global operations. In addition, taking this approach enabled the company to further expand its business using more robust acquisitions and through organic growth. Strategies were seen as an organisational and global business enabler.

4.2.5 Strategic Alliances

ABC has established a number of strategic alliances with various industry participants and technology providers in addition to the in-house services provided by CS to its securities business. The firm's alliances include,

partnerships, where a joint venture has been established with an overseas securities business with a view to establishing a presence in that market. International or local acquisitions and/or mergers provide the company with a 'buy-in' to those markets. This is a business strategy that enables the company to further increase its market share through local expansion or organic growth.

The company also establishes supply service agreements with other securities industry participants – in some cases they are its competitors - to push its proprietary technology products into the global markets. This is a strategy aimed at enhancing its market share by leveraging off its technological expertise. Meaning, the company's longer-term objective is to influence change within the securities services industry. Alliances with a range of specialist technology providers; electronic document management, and telecommunications, for example, ensure ABC is at the forefront of electronic document delivery and transaction processing. According to Mary, these alliances have helped establish a competitive edge in the finance market:

'ABC is the only company in our field that can provide an end-to-end structure and service offering a truly global solution'.

The company views its alliances as a means of progressing its global operations because it can offer a range of services to give it an industry competitive edge. Martin et al. (1994) state that the formations of strategic alliances are a common practice among multinational companies because it fosters international competitiveness. ABC's strategic interest is to continue to

push toward a global, securities service business through its alliances. Rosabeth Moss Kanter (cited in Morden 1996, p. 165) views company alliances and/or partnerships as characteristic of 'post-entrepreneurial corporations' or 'hybrid' organisations, who see a need for flexible processing arrangements with other organisations. It has already been established that ABC fits the definition of a hybrid organisation.

The company's strategic alliances play a major role in meeting its business objectives since its partnerships can be tailored to add value to its business and its client's operations. These alliances are increasingly being focused on relationships that will further the acceptance of web technology within the securities industry. However, not all alliances are deemed satisfactory, especially the company's arrangements with international telecommunication providers, which Mary refers to as contractual agreements with third party providers. This issue was discussed in *Section 4.1.2*.

By and large, the company will process and manage its activities independent of any alliance but will participate in cohabited business relationships if there is a perceived advantage. Mainly it seeks to expand its business through the distribution of its proprietary technology products, continued business acquisitions, and through natural growth, alone.

4.2.6 Change Management

According to Morden (1996, p. 295) change management is the process of managing change, describing the act of change as follows:

‘Change is a normal and on-going feature of personal and organisational life. Change is caused, triggered or driven by a variety of influences. Some of these triggers or drivers are external; others are internal’.

Peter Drucker (cited in Crainer 1996, p. 36) is referred to as the ‘prophet of change’ and renowned for his insight on the importance of instigating efficiency gains in a global environment, which he believed could be realised through organisational change driven by management practices. Munkvold (2000) discusses the origins of organisational change from a technological perspective, which he associates with currently accepted change management practices such as BPR and TQM. Galliers and Newell (2001) stated the significance of breaking down functional and hierarchical barriers in order to achieve technological and strategic change. While Carley (1999) discusses organisational change in terms of improving and automating information flows within the organisational sphere. She cited digital, physical and cognitive issues as the main barriers to change and stated that:

‘Technological solutions are expected to eliminate barriers to entry, make information ubiquitous, enable increases in info-spheres, increase access to people, and speed the rate of change. Yet, most studies of automation show that the impact of technology is typically different than expected and less effective than expected; that major problems are the result of social or legislative processes that cannot be overcome by technology, and that networks linking people, knowledge, and companies both enable and constrain the impact of

technology' [this issue generally is discussed in detail in *Section 4.2.3*] (Carley 1999, p. 325).

Carley (1999) also believed that organisations needed to implement a change management strategy, undertake research and development, and develop strategic alliances in order to remain adaptable to 'environment changes'.

ABC has undergone tremendous organisational change as a result of its local and global market expansion, which has been facilitated through natural growth and the acquisition of established securities and technology businesses. Its growth has been rapid and progressive, and implemented within a relatively short timeframe. The company appears to have risen to the challenge and adapted its operations (where possible) to better meet its local, regional and global responsibilities. Daniels (1994) sees organisational change as a global requirement. The company clearly advertises its ability to manage change, identifying opportunities that will support its global objectives. However, these findings demonstrate that global activity also invokes some operational impediments such as those discussed by Carley (1999), Daniels (1994), Martin et al. (1994) and Reinhardt & Jan (2001).

John explains that because the company operates in different financial markets there is no blueprint model for its global business development. This suggests there is some flexibility in the implementation of its business activities. The company admits that some tasks have proved more challenging and there are lessons to be learned from the experience of each

market environment. Put simply, John takes the view that managing change is about leveraging off previous experiences and learning from mistakes:

'We are very flexible about how we get there, we have been opportunistic. We don't have a model [set paradigm], and things have to adhere to our model or we don't do them. We do things differently every time. The thing is to get there. To provide a footprint and then try and work out what all the bits mean inevitably it will end up with 500 bits and 350 of them make sense and 150 of them don't and that's life. We make mistakes, everyone does. You can't grow as quickly as we have without making mistakes. But we try and make little ones and recognise them when we are making them and get on with life'.

John raises an important point, one also established by Carley (1999), that organisations can have dramatically different performance profiles and that the transfer of best practice solutions from one to the other may not be a practicable nor a rewarding solution. ABC attempts to benefit from its previous experiences by implementing, where practicable, change management procedures and the interchange of operational achievements from one market environment to another. For instance, Paul commented that wherever the company goes it takes with it its culture - 'the ABC way of doing things'. This approach was successful with their UK business and those experiences are used as guidelines within other markets such as North America.

Hope & Hope (1997, p. 216) postulate that organisational change is more about '.....winning the hearts and minds of the key influencers within the

cultural layers and communities of practice is one of the keys to success'. This implies that attempts to influence cultural practices presupposes the need to localise the product or service in accordance with a given market environment. ABCs customisation of its product and services is heavily dependent on the accepted national and business culture of each country of operation. Morden (1996) defines this as an external driver of change. Indeed as already discussed these very factors controlled the international operational practices of Driza-bone (CIBRE 2003a) and Fosters Brewery Group (CIBRE 2003b). Similarly, ABC's change management processes appear to be closely aligned with perceived improvements to their organisation structure, management strategies, business processes, technology solutions, and more importantly, their global mission. Morden (1996) defines these elements as internal drivers of change.

As previously discussed, the company deploys a range of instruments to orchestrate its global mission of which change management is one. Given ABC's experience, change management comprises a package of products and services (Slowinsky et al. 2002). As an example Peter, in his role as the director of marketing, oversees the change management procedures and he describes some of the ongoing activities associated with managing change:

'Marketing to our existing clients is absorbed within the business [marketing] through our client relationship management structure. All these guys are out there to ensure that we are providing the proper level of service, that we meet expectations and try to exceed it wherever we can. I would also like client relationship managers to also

have a grasp about ABC the global company. What it is what it does, where it's going, why it's going there, what the changes are in industry - so that we become much more like consultants to companies than just mere transfer agents or account managers. So we have client relationship managers. We also have client service managers by the way that manages the people doing all the hard work for the companies to make sure things are entirely correct'.

Peter views change management as understanding what the needs of each of the finance markets are. This he does by taking an integrated approach to its customer service and business relationships. He points out that ABC knows the technological boundaries of each of the markets in which it operates, and keeps abreast of any proposed moves within the securities industry globally. Peter explains that there is a conscious effort within the company to be cognisant of the external industry drivers because if there is going to be an industry wide change it is going to be driven by a conscious move toward cross-border transparency. Financial borders that are opaque and can be considered as a barrier to change. A good example is Oxley (1998) who states that the financial sector, in some parts of the globe, is notorious for imposing investment conditions, which has the effect of restricting or curtailing a company's normal business practice. ABC faces a similar plight within the securities industry.

Oxley (1998) also proposes that global trade liberalisation and the acceptance of a generic framework for the global liberalisation of the finance sector are desperately needed to pave the way for integrated markets. The

author states that the biggest barrier to global market reform is government policy, specifically investment policy. However, in some cases these markets are translucent and new technology has facilitated the simplification and efficient movement of funds and administrative tasks between different countries across multiple jurisdictions. Peter comments on these market changes:

‘I mean the way technology is today is that investors are getting much more access to international markets and they can broaden their risk base and their investment strategy much more. We can see those developments and we understand where they are going’.

Lane (1999) emphasises the role of the digital economy in configuring the global economy stating that it is the key driver of economic and social change. The author believes the Internet will establish new networked forms of activity based on relationships that bypass hierarchical structures and market constraints. There is much talk about changes to traditional laws, policies, culture and institutions but there is no clear vision as to the extent of those changes (Lane 1999). There is a need to fully integrate the disciplines of law, economics, business, technology and politics, to better understand the longer term contribution and required changes brought about by the digital economy (Lane 1999).

A comparable scenario can be seen where the company has taken advantage of increased business in international financial exchanges and progressed toward implementation of its global securities service strategy. Its strategy includes simplifying transactions so that its clients are required to

deal with one supplier that services multiple countries. This situation is achievable only when those suppliers and finance markets operate jointly and in harmony with ABCs proprietary technology. Accordingly, managing change is about promulgating its technology products to finance markets worldwide, with the longer-term objective to alter the operational and governance patterns of these markets as described by Paul:

‘There is a lot of work because you have to start at a whole lot of levels. It's more than just a market. You have actually got to redefine the market and change that market. You have to change it at all levels so there has to be lobbying. Whether your Government will understand the need for change and industry participants will understand the need for change, then you try and drive that change. You initially have to adapt, and then change, and try and drive the change. You actually become a participant by accepting what they do initially and then gradually try and lobby and get things changed and get people to fire’.

As Morden (1996) suggests, managing change is about dealing with internal and external drivers and triggers. While the company manages its internal change requirements it also seeks to steer its clients away from certain market developments that it sees could create possible inefficiencies and additional costs to its clients. For example: financial market transfers that might require its clients to invest in extraneous data repositories or other technologies not supported by ABC. Martin et al. (1994, p. 632) refer to this as maintaining ‘homogenised data structures’, ensuring that as much as

possible of the organisations 'data elements' are standardised to effect the interchange of information.

It would seem that standardising an organisation's global data requirements is a difficult task (Martin et al. 1994). There is a minimum set of data that this firm would wish to capture in order to propagate its model. However, Paul spoke about the viability of ever implementing a global business model because each financial market operates within a different business environment, and each has its own business model and/or required data set. He infers that for ABC to deliver an all encompassing global solution implies changing the operational patterns of currently independent financial markets and governments, which might prove difficult, if at all possible. The alternative might be to maintain separate models that allow for 'consistency and diversity' says Daniels (1994, p. 57) who also supports an enterprise scenario 'trade-off' comprising a global uniform approach while retaining a 'local look and feel' output.

Coincidentally, this paradox confronted ABC when in the course of consolidating its global operations it was challenged by a requirement to incorporate local business content into what it believed should be global generic, securities service tasks. As previously discussed the company customises its securities systems to accommodate the local operational content for its businesses and for its clients. This phenomenon could explain the company's strategy to regionalise its business operations and segment its securities business into two sections (established and emerging operations) so as to enable the efficient management, resourcing, and

processing of generic workflows within the established regions. The company states that there is now an awareness of each country and region's specific operational requirements, which are considered before decisions are made on any system redevelopment or global technology rollout.

In all, the company appears to have gone to great lengths to redesign the organisation with sympathy to recent and accepted change management practices. For example, it has seemingly designed its information technology architecture in accordance with what Munkvold (2000) describes as socio-technical equilibrium between cultural and organisational needs. There are also similarities between the change practices described by Morden (1996), notably managing the decision making, communication and consultative processes. However, given ABC's strategic planning the jurisdictional and legislative barriers to change still remain within the securities business globally, and as Mary suggests the industry culture generally is another impediment:

'Part of the industry that the business has been in, we've come from banking and accounting industries where people do not readily adapt or accept change. ABC is fortunate to have a technology arm, which was the founding business and therefore able to drive the business forward. The securities business is slowly getting used to changes that computer services are driving'.

According to Mary, technology is one of key drivers of change within the organisation, and a global phenomenon. For example, changes in the securities services activities now allow client's to amend their address

through the Internet. This might seem a minor change; however, as Paul points out the majority of the securities business changes have been internal rather than external. As already stated their external business activities are still very much paper-based and industry regulated. Peter has already spoken of other instances where initiating change within the company's internal business environment has not been well received - these instances have not always been technology related. Charlie's pertinent comment below is an indication of the company's commitment to change:

'We will be arranging some visits by the US marketing team to other offices to advise in this area. This initiative is critical to the success of the organisation and I therefore ask for the support of all staff. If we cannot co-operate to make this work then we will never be a successful global company and I will not tolerate local politics undermining our global mission'.

The company has experienced some internal and external resistance and/or barriers to change, which can be attributable to:

- variable operational and governance processes of other finance markets,
- jurisdictional requirements of each country of operation,
- traditional, unrelenting business practices of the industry, generally, and
- reluctance to accept new technologies and/or business practices.

Resistance to technological change is viewed as a business culture legacy with structured (hierarchical) organisations more likely to resist such change (Macredie & Sandom 1999; Galliers & Newell 2001). National cultural differences are said to impede global trade markets (Oxley 1998). Governing bodies such as the World Trade Organisation (WTO), Australian and Pacific Economic Community (APEC), International Monetary Fund (IMF), and the Organisation for Economic Co-operation and Development (OECD), are working towards deregulation of governance and control of the financial and investment industries. Industry governance and control is something that has impeded ABC in its quest for an accepted global securities practice, albeit, it is attached to a different industry but these findings suggest that the industries are closely related. It appears likely that any changes forthcoming from the securities industry will need to be facilitated globally and accepted locally.

4.2.7 The Technology

ABC's core competence is technology. It provides and manages a combination of proprietary technology systems and professional services for its securities business and clients throughout the globe. The company provides its securities business and clients with its 'international network' (technology platform), providing value added services through a range of specialist products. Its products, which are primarily technological solutions for the securities industry, are developed in-house. The firm does not outsource any of its core activities. Cortada (1998) sees outsourcing being primarily used as a compensatory measure for lack of skills held within an organisation or used for the delivery of a one-off or short-term project. ABC

ensures it retains any specific skill sets within the organisation with the view to protecting its Intellectual Property (IP). Mary informs us that CS is the only company in the world that can provide a unified global securities service:

‘We have a global network that links every office all over the world, so we have seamless collaboration between North America, Australia, and the UK, including other areas such as New Zealand, Hong Kong, etc. So in essence it is easier for us now to provide global services’.

During the late 1990s and early 2000s the company continued to invest heavily in technology Research and Development (R&D) with the objective of increasing its market share. Hope & Hope (1997, p. 91) using Asea Brown Boveri (ABB) as a case study describe how it is not unusual for IT to exceed 90% of the R&D budget. Mary said that the CS unit strives to ‘keep abreast of the world’ and in one year alone the company expended A\$30 million on technology development concentrating on its core industry - securities services. This equates to eight percent of the company’s consolidated operating revenue and 95% of their overall R&D expenditure.

Mary states that web technology is now the organisation's biggest development area. Also, the organisational restructure resulted in the establishment of a web development team. The team’s role is to develop internal and external electronic business transactions for the greater ABC and for the securities industry, generally.

ABC’s global technology platform comprises a number of its proprietary, securities transactional and analytical systems. These back-end systems

interface with high speed imaging systems using Electronic Data Capture (EDC) technology. This technology supports the company's local and regional, internal information requirements. Other web-based technologies already discussed include a global electronic document management (electronic workflow) system, and Interactive Voice Recognition (IVR), which provides its clients with an automated information service.

Rick describes the company's systems platform as comprising a mix of relational databases, flat file structures, mainframes and clustered application servers, the composition of which varies from system to system. There are eight core securities systems through which CS supports the company, and its clients' local, regional and global operations. Some of these systems inevitably interact with external securities industry regulator and transfer agent systems and there can be multiple versions of the same system, or derivations of, in operation within different market environments. As Paul explained earlier, ABC's Australian securities business has offices located in nearly all states with each operating a custom version of the same system.

Traditionally, securities systems were developed to support local market content with little requirement to cross 'corporate borders' until the early 1990s when these 'international business systems' were designed with a view to global information exchange (Daniels 1994, p. 176). The author describes the interlocking of technology platforms as 'global systems', where '...the global and local balance of information requirements for the business are taken into account at the time of design of the systems, rather than adding additional capability on a country by country basis' (Daniels 1994, p.

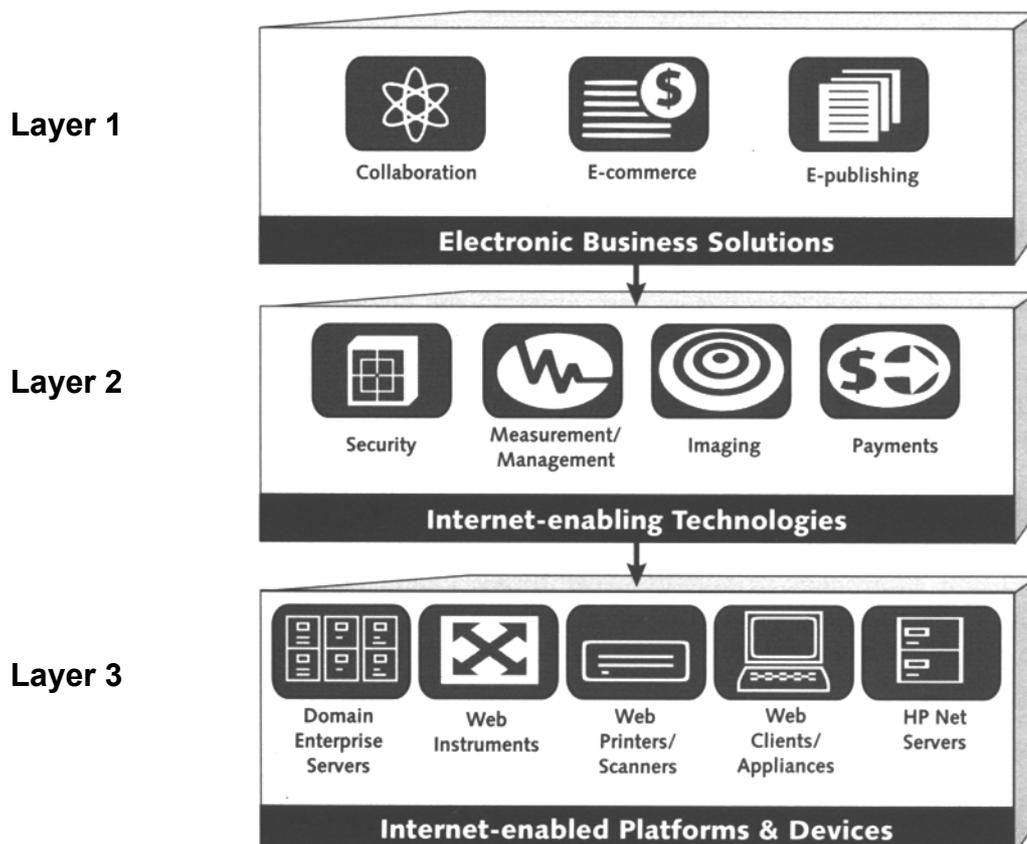
177). Unfortunately, the opportunistic nature of ABC's business acquisitions and the chronological role of technology within the organisation could not immediately accommodate a global system of this nature.

Most of the company's transaction based systems support electronic, real-time data entry, along with inquiries and reporting functionality. Some of its systems are modelled on a high performance, open platform environment, incorporating the latest distributed architecture technology. This enables interoperability with other international securities systems; industry regulators, and transfer agents. As Mary and Rick explain, this is why there is a requirement for CS to design and manage securities processing systems that meet the operational needs of the respective financial markets.

Notwithstanding the idiosyncratic nature of its environment the company continues to drive its objective of creating a truly global securities services solution. To that end it has adopted a client-server, object-oriented platform, which facilitates a modular and incremental approach to system design and customisation. This solution has enabled it to move toward a workable global architecture. This architecture is considered more robust than previous developments because of its ability to integrate mainframe technologies into a Windows environment taking advantage of various Microsoft technologies. Developing within the Windows environment has been a breakthrough for the company because that environment allows it to use a range of development tools through which it can produce modern and efficient business processes. Its products can now be readily deployed electronically through the user desktop, or other media such as the web, EDC, workflows and IVR.

ABC's technology architecture is similar to the preferred 'internetworked enterprise infrastructure' promulgated by Tapscott et al. (1998, p. 273) and shown at *Figure 9* (below). From the information gleaned thus far, it would seem that the company has Internet enabled technologies, platforms and devices. However, there appears to be some regulatory and legislative issues impeding a unified approach to comprehensive electronic business solutions. For example, 'collaboration', 'e-commerce' and 'e-publishing' are attributes described by the authors as the key determinants of consolidated business practices (Tapscott et al. 1998, p. 273). These are the areas where the company has experienced difficulties and the research findings suggest that ABC's global operations fall between layers 1 and 2 as defined in *Figure 9*.

Figure 9: The Internetworked Enterprise Infrastructure (Tapscott et al. p. 273)



ABC is the sole proprietor of the middleware code it has developed, which seemingly allows it to collate information stored in myriad data repositories, dispersed over its numerous networks. Mary says that technology development is mostly undertaken in the location where there has been a requirement to do business. Previously, most of the development had been centred in Melbourne and Sydney. She explains how the development process was initially decentralised:

‘When we first moved into the UK we were sourced to undertake a company conversion. The company had 8 million account holders - one of the biggest companies that we processed at that time. We just couldn’t get through the amount of forms for corporate action. So it was either outsource it or develop something internally to do the scanning, which is what we did, develop our own system to cater for the large volumes of data. Consequently, this functionality has been deployed and it is used throughout the company’s global operations’.

Wherever there is a major technology development that particular CS team will be responsible for updating subsequent releases of the new product to the wider ABC and its clients. Some products and services are developed generically then localised as required. CS is required to adapt its products and services to suit the diverse markets within it, and its clients operate. With every business acquisition there maybe the requirement to re-engineer existing systems and perform data conversions in order to align the new business (as far as practicable) with ABC’s technology platform. For instance, the company will develop its product to service the UK market, and

then re-develop its product to service the North America market. As Mary points out, this practice allows it to cater for multiple geographies around the globe but she also views the situation as an inhibitor of change:

'We re-engineer what we've got if we can, and in parts we develop totally. Because each market place in each country has similarities and in a lot of ways is quite different. We did that for the UK and they've got their own platform happening and we are doing the same for the US. So there are parts that we have to develop from scratch and parts that we can modify from their existing core system. The Australian system is also quite different. In the UK for instance they took our securities system, left the parts that they didn't use and developed the additional parts that they did require and ended up with a system that would work. So the same sort of thing will happen in the US because the market places are so different. It's unfortunate with our current technology that we have to have three different versions. We have the US; we've got the UK and Australia. As we progressively try new technologies hopefully, we will be able to use one base code around the world, which caters for multiple geographies. All these systems run separately at the minute. The final goal is to get the one code up there'.

Many of ABC's transactional systems are now web enabled, replacing the need for its clients to use dedicated terminals to access information, as was previously the case. Rick says that its web technologies have, to some extent, minimised the necessity to re-engineer its securities service systems:

'We have developed a common software layer that sits between the backend systems and the front-end technologies (web-based and IVR). This enables different backend systems to be introduced and mapped to the common software layer. This is an essential part of global expansion strategy (on the IT side). Most web services concentrate on taking advantage of the speed, ease of delivery and cost saving of electronic communications (i.e. replacing paper based processes) rather than true process re-engineering. Some true re-engineering has occurred but this is a much smaller area of concern for us currently'.

Although the technologies Rick describes above have changed some of the company's workflow activities these have largely been limited to clients accessing their account details and holdings.

4.2.8 Web Technologies

Paul believes that web technologies add value to the company's existing processes and services and that there are plans to extend these technologies throughout the securities services. Mary adds that there is a heavy focus on developing new technologies to improve workflow and communication between its businesses and clients. She added that web development is undoubtedly the main driver in the technology space and that this media is continuously under review for further development. In addition, the company promulgates its commitment to developing web-based technologies in recognising the benefits from efficiencies to be gained in

information flows and communication between its local and regional business.

The web development team is responsible for supporting the company's internal and external business requirements. Its Intranet, for example, hosts a large volume of information for the benefit of its internal activities, Rick explains:

‘Although there is not much direct “business” [e-business] between local and regional business units, there is extensive use of information sharing techniques such as email, shared drives and files and local/regional intranets. There is also a move to provide a global, corporate wide Intranet. There isn't much transactional activity between the different business areas’.

Essentially, Rick is saying that there is very little e-business activity between the respective businesses including e-business transactions between their alliances, partners or other service providers. This suggests that the company's local and regional business process are very much stand-alone and that its business partners, DS and the Hong Kong Bank, for example, are largely associated with these stand-alone transactions. Alliances with third party software and telecommunication providers do not lend itself to e-business activity.

It has already been raised that the company recognises that there are generic tasks attached to managing account holders globally, and on that basis the company is initiating internal workflow activity between the

securities businesses within the various regions. The company sees the Internet as a viable channel in the longer term for replacement of traditional securities services processing functions. Internet technologies applied to e-business/e-commerce solutions have saved corporations 'hundreds of millions of dollars' (Rodgers et al. 2002, p. 184). Whether this analogy can be applied to the securities industry is perhaps more dependent on regulating the regulators rather than regulating the technology.

As Mary said Internet technologies underlie the company's global network linking every office all over the world providing global web services for both its clients and its businesses. Rick provides more detail on the nature of their technical infrastructure:

'We have three main operational regions (Australia, UK and US). Each region services a different time zone. We have web farms in each region connected by "fast links". Each region has its own connection to the Internet. We take advantage of specialist hardware such as global directors and SSL accelerators. Security is considered of utmost importance'.

Although security is discussed in the following section, the company's global activity is supported by a series of 'web farms', which Rick explains, is a technique that allows web servers to be grouped or 'farmed' together within a region. This technique allows the client's request to be directed to a server that can provide the best service, meaning it can be re-directed to the server that is least busy. Another benefit this solution provides is a very high level of

redundancy '.....if one server is unavailable, the other servers immediately pick up the processing load'.

Their technical architecture also supports what Rick describes as 'anywhere to anywhere linking'. Clients can access any backend system for which they have been granted permission. For instance, a client in HK can be granted permission to access and view their account holdings on the UK system. This technology also enables various reports to be available online as soon as they are produced rather than waiting for manual delivery. Rick points out that the timeliness in the delivery of information has been improved because clients are able to access back-end systems in all regions with the support of fast links. Once again, the focus seems to be on client transactions rather than e-business.

Rick explains that the web development team was essentially established to develop and operate the company's e-business/e-commerce activity between its target audiences: the securities services business and its clients. The team's immediate focus is to service (through the provision of Internet services) the needs of their external clients rather than their internal customers. As discussed, Internet services afforded to clients include online access (both inquiry and transactional) to ABC's backend systems. According to Rick, these activities have not resulted in the re-engineering of any of the securities business processes; rather, they have merely replaced some that are paper based. However, Rick states that the organisation is experiencing some gradual re-engineering of its processes as an indirect result of e-commerce.

Rodgers et al. (2002, p. 185) state that e-business solutions require architectures that are both 'flexible and scalable' hence some re-engineering of legacy systems will be required if they are to be aligned with a proposed new e-business infrastructure. This rationale might explain why the company has not undertaken to re-engineer the majority of its securities services business processes or systems. Their systems are entrenched within a plethora of heavily regulated and independent infrastructures; therefore, the establishment of an over arching e-commerce/e-business solution at this point in time would seem obtainable.

Paul didn't think that e-commerce at the minute had contributed much to change the overall securities business operations with the exception of its internal processes, which had become more electronic:

'Rather than using the bits of paper in their paper form we electronically capture that image on screen, and then move that image around to the various departments that need to work on what used to be a bit of paper. They work on that bit of paper now in the electronic form'.

Paul's overall concern rests with the firm's interface with its clients, which he and others view, are still largely paper-based and obsolete. Although he recognises clients now have the ability to perform some activities via the company's Internet site; he feels that the technology is capable of providing more services and that their progress in this area was being impeded by the regulatory nature of the securities industry.

These findings show that legacy systems, and self-regulating infrastructures are inhibitors of global business activity and impediments to the organisational operational environment. ABC implemented (where appropriate) web technologies as a means of alleviating both the contriteness of the securities industry's regulatory framework, and to better integrate its business units. Therefore, web technologies can be viewed as an organisational operational and global business enabler.

From this information it would appear that the securities industry is devoid of a set of common business practices that will allow for the implementation of a generic e-business/e-commerce solution.

4.2.9 Managing the As Is Technology

ABC has progressively moved to align its technology unit with its global objectives. In the latter part of the 1990s and early 2000s the company implemented significant change within its technology group through which, as already stated, it realised many benefits. There were efficiency gains in productivity and cost savings achieved through the sharing of support and development staff, prioritisation of tasks, and rationalisation of the technology infrastructure throughout its local and international operations.

In addition, the company has established a range of information technology strategies to enable it to meet its objective to facilitate a truly global securities service market. Its investment in technology research and development ensures its businesses remain competitive and profitable. For this reason innovating technologies are seen as the way of providing better services and more efficient processes to the securities services markets. Mary says that

some of the company's IT management practices have changed over the years to accommodate the sheer volume and complexity of the organisation's operational environment:

'While the business has to have very strict guidelines in terms of procedures and policies CS is still quite a free and open company. We try and keep it that way but there are certain, more formal things that we do need to do now as a result of our global growth. We do board reporting and we do things like formal reviews and salary planning and budgets'.

Perhaps the most dramatic of changes has been the restructuring of CS into teams based on its product lines and/or proprietary systems which Mary saw as beneficial in ensuring that there is a concentration of expertise with the right mix of skills. The teams are categorised as follows: development and operational, systems design and implementation, new systems group, web development and workflow. Mary adds that this arrangement allows the sharing of its technology expertise to be seconded, when required, to any office around the world to work on specific projects. Consequentially, the company is able to focus its initiatives and fully resource a development group that is situated at one location.

Other IT management strategies avidly pursued include protection and ownership of its IP, which is considered a priority. There have been reported instances where others have abused ownership of its IP, and this resulted in legal action against the perpetrators. The company is concerned about protecting its knowledge but at the same time it will seek ways to reuse and

extend this knowledge to new developments through its own technology group and/or with the assistance of its alliances. It will establish strategic alliances with a range of specialist technology providers, electronic document management and telecommunications providers, for example, but will ensure it retains ownership of its IP.

Having said that, the company has not previously outsourced any of its core technology components, but to ensure access to the latest technology, such as Wireless Application Processing (WAP) it is intended that some of its research and development will be undertaken in conjunction with third party technology providers.

E-business/e-commerce presents multidimensional security issues which have been discussed and analysed by many and from various perspectives (Godwin 2001; Gritzalis & Gritzalis 2001; Ratnasingam 2002; Tran & Atkinson 2002). For example, Tran and Atkinson (2002) outline an assortment of world regulations governing cross-border data exchange between multinational companies. Although the authors view these regulations as potentially risk minimising they are also part and parcel of the regulatory framework that Paul describes as impeding the company's global progress. However, the company is compliant in meeting global security standards (see Tran & Atkinson 2002) and runs a secure network with what Mary describes as '...all the latest and greatest firewalls and anti-virus software, including system security and physical security'. In addition there are formal data back-up procedures in place and redundancy processes

incorporating a 'hot site' in each of the regions. In the event of a disaster the company can continue processing seamlessly from these sites.

The company does not consider security as a major risk factor. Although it implements and constantly revises its risk management strategies these are not considered critical tasks. According to Charlie, one of the company's most important strategies was to implement tighter control over its technology products to ensure saturation of the company's global solutions:

'We cannot afford to have each country doing their own thing when it involves technology, which includes systems such as management information, marketing, HR and accounting'.

The company considers management of IT an important part of its local, regional and global business practices. It has been shown that management of IT is an organisational operational and global business enabler. The provision and management of generic products and services across global markets requires a range of strategies. These findings demonstrate that managing an organisation's IT needs is considered a core requirement and mandatory to support its global objectives.

4.2.10 The 'As Is' Summary

ABC implemented a series of changes during the period 1978 to 2000 in an attempt to support its multiple, local securities services business. The 'As Is Organisation' (*Section 4.2*) describes the further changes undertaken during 2000 and 2001, with the view to meeting its global objective to be the biggest, first truly global securities services business.

The company's rationale behind the 2000 - 2001 organisational restructure was, largely, to decentralise its support services and to progress its global objective. To effect these changes the company required a mechanism from which to manage its growing securities business and henceforth facilitated a mix of specialty business units that were overseen by a flexible management approach. Essentially, this structure was replicated for each of the operational regions. Supporting these operations was a succession of management and business strategies. The literature findings suggest that it was good practice for an organisation to decentralise its operations and to restructure its support services in accordance with its operational and global environment requirements. ABC progressively undertook these activities.

In the course of supporting its operations, and as it moved towards its global objective, the company shed light on a plethora of key factors that from these findings can be defined as organisational, operational and global environments directives. The key factors emerging from this study include:

- organisational structure;
- business and national culture;
- decision making processes;
- business processes;
- management and business strategies;
- technology;
- marketing;
- regulatory framework; and
- industry type.

It has been demonstrated that the implementation of global activities has a profound effect on all elements within the organisation. These factors and their relationship to the organisational, operational and global environments are discussed in detail in Chapter 5 of this study.

Chapter 5: Discussion

5.0 Introduction

This chapter concentrates on the research findings identified in Chapter 4. The discussion centres on the company's transition from a national to a global securities business and ultimately focuses on those issues deemed by the company to have a critical affect on the organisational operational and global environments relationship. What is revealed are a plethora of organisational operational and global environments factors that act as enablers and/or inhibitors of the company's internal and external business relationship.

The company managed its transition to the global marketplace by implementing a series of management/business strategies, and procedures and/or initiatives. These strategies and procedures are effectively an aggregate of the key factors and corresponding model shown at *Figure 10* (page 172), and is discussed in detail in *Section 5.2* of this chapter. This model demonstrates the interaction between the industry type, and the organisational and global environments. It defines the enablers and inhibitors commensurate with that relationship. The model draws from the company's experiences and the literature findings but largely reflects the company's interaction with the securities industry within its own environment and its global environment activities.

5.1 Environment Relationship Enablers and Inhibitors

What follows is a breakdown of the key factors, which were considered, and are discussed in accordance with their influence on the organisational operational environment, and the global environment relationship. Their influence is acknowledged in terms of enabling and/or inhibiting that relationship. Some of the key factors outlined below may appear both as an enabler and an inhibitor, and some may also be listed as influencing both environments. This is because a key factor can have a positive and/or negative influence on either environment.

5.1.1 Organisational Structure

To ensure some measure of overall organisational and operational identity the company gravitated its business components and management style toward what has been described herein as a matrix structure. According to the literature discussed in Chapter 4, this structural arrangement evolved because of the need for organisations to operate in increasingly complex environments. Indeed, ABC restructured its business in order to accommodate various levels of its own and its client's global activities. This culminated in the need to support a suite of technology infrastructures, management strategies and business processes. Changing the organisational structure enabled the company to interact with the global environment and to better manage its own operations and those of its clients.

Perhaps the most extraordinary factor that emerges from this study is the two very distinct organisational structures that co-exist under the umbrella of the ABC company. This is a legacy of the company's acquisition of traditional

securities businesses which have failed to blend with the organisation's pre-existing business components. These businesses are hierarchical, require orthodox business processes and are, according to the literature intolerant of change. Interacting with global markets requires a specific organisational structure and the inflexibility of the securities industry made organisational restructure an arduous task. The company also experienced problems aligning its securities business with the mainstream organisation. This is due in part to each local securities market needing a specific organisational functional structure, defined by the industry in general, and the business and national culture of each country of operation.

5.1.2 Business and National Culture

The company adopted a cross-pollination approach to promulgating its business and national culture across its operational and the global environment. In taking this approach the company sought to break down the cultural barriers by opening up the local business organisational structure. The literature states that cross pollination of culture was one of the primary enablers of organisational change. ABC considered communication and marketing as key tools in promulgating its culture across an organisation. In a global environment an integrated business culture is paramount for sustaining an operational and global relationship. However, as this study shows ABC was unable to implement a global culture.

The literature suggests that business culture can be sustained over time to the point of influencing a company's internal and external business relationships. Indeed, ABC found it difficult to mitigate the cultural differences

brought about by its acquisition of securities businesses world-wide, and the sheer nature of the industry culture itself. The national and business cultural differences between the company's two core components remain prevalent. The literature suggests that national culture plays a dominant role in determining the level of acceptance of a business culture. This has been clearly demonstrated in this study where some countries readily adopted a diverse business culture while others were less apt to embrace.

5.1.3 Management and Business Strategies

The literature states that in a global environment, organisations more than ever need to be flexible, ready to grasp business opportunities, and as a matter of consequence, be prepared to take some uncalculated risks. Innovation is the key, as is fluidity and open-ended business planning. As shown in this study, organisations should remain open to change and, contrary to the literature, avoid implementing a business plan that exceeds a 3 year term. This company has learnt from its mistakes, it has taken chances, and it readily admits that sometimes it has met with negative outcomes but mostly its management and business strategies have yielded positive results. Various strategies were implemented with the view to increasing and sustaining economic growth within the organisational operational and global environment.

What is gleaned from these findings is the succession of appropriate and practicable management and business strategies required to support an organisation's operational and global objective. As an example, ABC's marketing and management strategies and technology solutions were

developed and implemented, in part, to meet local content requirements and delivery of its services and products. The company could not wholly sustain generic management and/or business strategy practices given the idiosyncratic nature of its securities operations. The nature of the securities industry demands a precise operational ethos, which seemingly nullifies the company's motto 'think globally, act globally.

5.1.4 Industry Type

ABC securities business operations were deeply localised and autonomous, a characteristic that is said to reflect the state of the industry world-wide. Perhaps this characteristic can be attributed as a hangover from the finance industry from which the securities industry has evolved. According to the literature the finance industry, historically, is renowned for its minion of jurisdictional dependencies and these findings show the securities industry as having similar characteristics. This study supports the literature claim that traditional, hierarchical organisations are highly controlled, are departmental rather than process driven and accordingly do not easily lend themselves to change. These factors, in part, are viewed as barriers to a consolidated organisational operational environment, and a barrier to global business solutions and global trade.

5.1.5 Decision Making Processes

A single corporate structure overseeing the greater organisation enables operational and global decisions to be implemented relatively quickly. As shown in this study it provides an organisation with the flexibility to implement its business strategies when required, and thus maintain a competitive edge.

The literature states that organisations today need to be opportunistic and ready to take advantage of economic change. Swift decision making processes are a primary enabler of organisational operational and global environment relations.

At the other end of the spectrum ABC's securities business is thwarted by numerous independent boards that make decisions on behalf of their respective securities business rather than collegially. Ironically, at the micro level where there is seemingly an abundance of bureaucracy, the decision making progress is slow. The literature views this as a legacy of national based economies where there is an intra-organisation focus and therefore little need to address global matters or matters requiring change. A slow decision making process is seen as an inhibitor to change and global activity.

5.1.6 Change Management

ABC experiences constant change due to its ongoing acquisition of securities businesses world-wide, and in the process of its natural growth. In a global business environment especially, managing change requires dexterity, commitment and patience. Throughout its evolution ABC set in place rigorous change management controls that cut across technology, marketing, culture, structure, management and business strategies and business processes. These factors are effectively change agents. There is an abundance of literature covering change management practices as discussed in chapter 4 that support, in part, the findings of this study that change management is an integral component of the organisational operational and global environments. Change management is a global presence enabler and

change agents are paramount to an organisation's ability to adapt to the specific organisational structure commanded by the global markets.

As shown, this company experienced some resistance to its operational change management practices. The literature states that hierarchical organisations are less prone to accept change because of their deeply imbedded business culture and their lack of flexibility. This appears to apply to this case because of the nature of the securities industry. There was also some reluctance to accept change because of pre-existing local empires within the securities businesses the company acquired. Perhaps the greatest inhibitor to global activity this company experienced is having to change the existing organisation in order to accommodate an industry, and its businesses, that have an aversion to change.

5.1.7 Business Processes

The company was, to some extent, able to implement generic workflows within its respective securities business environments. The literature shows that workflows enable an organisation to automate and streamline its information flows. ABC was able to achieve automation of some its business processes through the implementation of workflows. This action, essentially known as business process re-engineering, resulted in client service efficiencies and resource and financial savings for the company. More importantly, it was seen as the bridge toward establishing a comprehensive generic securities workflow capable of automating the industry's global business processes.

An important fact gleaned from this study, and the related literature, is that global activity may trigger an operational state of 'glocalisation', whereby a company is required to balance its global identity with local responsiveness. It is a paradox because this situation requires a company to customise content of their product according to the pre-determined requirements of each country of sale or operation. ABC was required to capture and maintain separate business processes for each country of operation. This very factor inevitably prevented the company from reaching its global objectives because it could not apply a generic model to the task of managing its securities business, and that of the industry in general.

5.1.8 Regulatory Framework

Another core issue inhibiting the company from meeting its global objectives is the regulatory nature of the securities industry and the fact that these regulations vary from country to country. The fact that there are two distinct organisational structures and cultures that co-exist within the organisation has to some extent been adequately compensated for through the implementation of various management and business strategies. Over-regulation of the securities industry world-wide is an issue the company continues to grapple with. It could well be argued that this is a cultural issue because it falls within the socially accepted business practices of a country's national culture. The literature gives little credence to the influence that regulatory frameworks or governance legislation have on business. In this instance, ABC was unable to implement all of its technological solutions because the regulatory nature of the securities industry prevented it from doing so.

5.1.9 Marketing

The literature defines marketing as a support strategy used to comprehensively align business with its client base. Marketing is also described as a tool used for generic branding and ABC used these both strategies on an internal and external capacity. Externally it uses generic branding to create and maintain a global image and internally it uses marketing to harmonise its business operations. Marketing was also used as a change agent within the organisational operational environment and the global environment. Promulgating the organisational culture is one example where marketing was used as a change agent. Its ultimate function was to enable the company to move forward into the global market place.

In a global environment, internal marketing of the company's objectives is of paramount importance. Failing to provide a comprehensive marketing strategy can unwittingly isolate pockets of an organisation. ABC found this to be the case when in its ignorance it gave little thought to the need for a marketing strategy in the true sense of the term. Inevitably some of the company's securities businesses developed 'silo' mentalities' resulting in the loss of a global image, and an inconsistent approach to the delivery of its customer service.

5.1.10 Technologies

The company used technology to meet its global objectives. For example, systems re-engineering was initially the approach taken to integrate legacy or ABC non-proprietary systems into its infrastructure. Web technology is now the company's biggest development area and as the literature states this

approach has become a priority for most industry leaders. However, this study shows that the company's attempts to move its business processes into a web environment were thwarted by the repression of the industry regulatory framework, governance legislation and the business culture practices of the industry, generally. While there is some evidence of web-based activity altering the securities industry relationships and transaction types these were limited to intra-organisational and some pseudo business-to-client web activity. These findings are contrary to most literature stating that technology will provide high level and comprehensive global business solutions. Here, technology has been defined as an organisational operational and global environments enabler because it is a key factor in reconciling that relationship; however, as this study shows the business culture and practices of the industry can have a negative impact on the implementation of technology.

5.1.11 Management Information Technology

The literature states that aligning IT with business objectives and client demands is a critical factor determining the competitiveness and success of a company, even more so in the presence of interactive, web technologies. ABC has implemented many IT management strategies and has invested heavily in research and development in its efforts to meet its global objectives. These strategies have ranged from restructuring IT departments to policy implementation, managing IT related strategic alliances, retaining its intellectual property, and generally moving its technologies toward a common and secure architecture. However, the company has found that applying risk

mitigation practices to its technologies will not avert the regulatory framework from impeding the company's global activities.

5.1.12 Global Markets

The organisational operational and global environments relationship is dependent on an organisation's ability to expand globally. This is supported by the literature, which states that organisations need to maximise opportunities and expand globally in order to remain competitive. Economic growth is an enabling factor and ABC took every opportunity to gain 'buy-in' into the companies that would enhance its global expansion.

At the same time, global expansion can also be seen to inhibit the organisational operational environment because of the plethora of management and business strategies required to support business acquisitions. One example the literature cites is the laborious but critical task of integrating new business and national cultures with the existing organisation. Indeed, ABC went to great lengths to enforce cross-pollination of cultures throughout its businesses and as this study shows its success has been limited to some extent by the regulatory framework of the industry and the governance legislation of each country of operation. Consequentially, global expansion can inhibit the organisational operational environment as well as impinge on the efforts to establish a global environment relationship.

5.1.13 Strategic Alliances

The literature advocates building strategic alliances both within the organisational environment and the global environment. ABC's internal strategic alliances can be described as a partnering arrangement whereby it

retains full control over all product and services and management of the overall business partnership. Another form of alliance is where ABC will enter into an arrangement with a securities business to gain 'buy-in' into that country of operation. The company's internal strategic alliances provide it with the opportunity to concentrate on its core business but at the same time allow it to retain control of the end product and service. Having control of the alliance ensures overall business alignment and the seamless delivery of products and services to its clients. This study shows that internally controlled strategic alliances enhance the organisational operational and global environments relationship.

Contrary to the above, external or global alliances can also inhibit the organisational operational and global environments relationship. In this study's terms of reference global alliances are described as arrangements where the company has little or no direct control of the product or services offered nor the business management of that alliance except through contractual agreement. For instance, ABC has no choice but to enlist the services of third party telecommunications providers. These services are monitored by a contract only; henceforth the company has no control over the alignment of those products or services with its business proper. As shown in this study there have been disruptions to the company's business and at times the delivery of product and service has been inadequate but the company has no alternative but to continue with the alliance. In this instance external alliances are seen as key factor inhibitors.

5.1.14 Customer Demands

Client demands are an integral part of determining an organisational operational and global environment. Without a client base there are no markets. Similarly, client demands are business drivers and push an organisation to continuously develop its business acumen. The literature states that having a customer or client services focus provides an organisation with a competitive edge. Given the regulatory nature of the securities industry ABC has developed, as well as it may, a mature customer service outlook and this focus is retained when it expands into the global environment. The company caters for all its client needs in an approach considered appropriate to the country of operation. Satisfying client demands has enabled the company to adopt a flexible approach to the development of its products and services. This has provided it with an industry competitive edge.

Satisfying client demands in a multi market environment requires duplication of services and customisation of product. The literature clearly states that organisations that sell their products or services within multiple countries or markets, or across national cultures will be subjected to localising their content in accordance with that country's, market or cultural need. This study demonstrates a similar experience where ABC was required on many occasions to customise its product at the local, national and global level of its operations. In this instance, client demands are seen as inhibitors of global activity because they promote customisation of product and inhibit the ability for a company to use generic branding of its product or services.

5.2 Composite Global Enablers and Inhibitors Model

Figure 10 (page 172) is the 'Composite Global Enablers and Inhibitors Model'. This model captures the main themes described in the literature and those validated by the company's experiences as confirmed through the data collected. It shows the enabling and inhibiting factors of the organisational and global environments relationship, as discussed in Chapter 4, and detailed in this chapter. A comparison of these findings to those described in *Figure 3* (page 71) reveals some key differences. These differences are largely attributable to the degree of organisational and global maturity evident during certain stages of the company's transition from a national to a global organisation. *Figure 3* and *Figure 10* describe the key factor variances.

The organisational operational environment and global environment relationship can be defined in the following terms:

- Industry type negatively influences both the organisational operational environment and the global environment.
- Global environment enablers have a positive influence on the global environment and facilitate the organisational operational and global environment relationship.
- Global environment inhibitors have a negative influence on the global environment and restrict the organisational operational and global environment relationship.

- Organisational operational environment enablers have a positive influence on the organisational operational environment and the global and organisational operational environment relationship.
- Organisational operational environment inhibitors have a negative influence on the organisational operational environment and the global and organisational and operational environment relationship.

What this model shows is that certain conditions must be present in order for the company to facilitate a global relationship. For example, the company can engage with the global environment under the presence of the global enablers listed at *Figure 10* (page 172), in the top right hand green bubble. The small green arrow signifies that these enablers support the global environment. In addition, the organisational operational environment must factor in a range of enablers to allow it to sustain both an organisational operational and global environments relationship. These enablers are listed in the top left hand green bubble. The small green arrow signifies that these enablers support the organisational operational environment. When the elements in both green bubbles are present the organisational operational and global environments relationship is established. This relationship is represented with the large green arrows.

During its period of transition ABC encountered a number of inhibitors to its business operations. These inhibitors were both internal and external driven and are listed at *Figure 10* (page 172), in the bottom right, and bottom left red bubbles, respectively. The organisational operational environment inhibitor factors are considered barriers to the company's attempt to integrate its

internal operations and this is shown using the small red arrow. Likewise the global environment inhibitors are considered barriers to the global environment and this is shown with the small red arrows. The global environment inhibitors are external factors the company regards as hindering its global activity. This relationship is depicted using the long red arrows.

5.2.1 Key Factors Comparison

Figure 3 (page 71) shows the key factors present during the company's transition from a national to global entity. The organisational operational and global environment conditions at that time were similar to those experienced later during the transition period, which are shown at *Figure 10* (page 172). The relationships remain the same but some key factors have been omitted or included for reasons explained as follows:

- Global competitive markets (as referred to by the literature) was amended to global markets to better reflect the nature of the securities industry, which is driven by its framework rather than competition. It was seen by the company as an organisational operational environment inhibiting factor because of its support requirements.
- Elimination of geographic boundaries (as referred to by the literature) was omitted because this was not deemed to be a key factor by the company during the later stages of its transition.
- Marketing was included as it was seen by the company to be a key organisational and global enabler factor.

- Business culture was included as a global environment enabler as the case study has shown it to be critical to its global activity.
- National culture was included in the organisational operational environment as an enabler and inhibitor and added to the global environment as an inhibitor because these findings have shown it to be an influencing factor.
- Both the literature and company experiences lean toward the fact that the global environment demands a specific organisational structure. Hence it has been added to the global environment as an enabler.
- Decision making processes has been included as both enabler and inhibitor to the organisational operational environment because the company has shown from experience that this is a critical relationship factor.
- Customer demands were included as a global environment inhibitor as the company saw its requirement to customise its products and services as impinging on its global objective.
- Legacy technologies has been omitted as an organisational operational environment inhibiting factor because the company implemented web technologies to integrate its legacy systems.
- Business processes was included as a global environment inhibitor because the requirement to localise business content impeded the company's efforts to introduce a global securities model.

- The company experienced resistance to change within the global environment and its organisational operational environment. Resistance to change has been added as a key inhibiting factor, accordingly.

Figure 10: Composite Enablers and Inhibitors Model



5.3 Summary

This chapter discussed, analysed and compared the findings presented in Chapter 4 of this study. The outcome of the analysis has revealed a number of enabling and inhibiting factors attributable to the organisational operational and global environments relationship. The findings also delineate those factors highlighted by the literature, and verified by the case study, as requiring consideration when initiating activities within the respective environments. These findings have also allowed the development of a provisional model, based on the literature and company's experiences. The model reflects the key enabling and inhibiting factors as well as the relationships between the key environment entities notably: industry type, the organisational, operational environment, and the global environment.

5.4 Significance of the Findings

In considering the factors shown in this model, organisations can determine a factor criteria based on those issues considered more appropriate to their own organisational and global relationship requirements. This can be achieved in two stages. First the organisation needs to determine their maturity in terms of their organisational, operational and global environments relationship. Consequentially, the organisation might identify with factors outlined in *Figure 3* (page 71) if the relationship is in transition, or they might identify with the issues outlined in *Figure 10* (page 172) if the relationship is mature.

Second the organisation might select those key factors it determines to be critical to its organisational and global relationship success, or alternatively,

its choice might be in accordance with those areas in which it is having difficulties. The organisation will glean from these findings how these key factors can be applied to its advantage and how to mitigate against impediments to the organisational and global relationship.

Indeed this model, to some extent, should be acknowledged by organisations as a blueprint for successful organisational, operational and global activity. If organisations adhere to these key factors, they will realise the how and why of implementing and maintaining a successful and robust organisational and global relationship strategy.

Chapter 6: Conclusion

The initial aim of the research was to investigate how the case study managed its information technology requirements within a multi-market environment. It sought to identify those practices commensurate with global business activity and to determine their influence on the organisation and the implementation of a global business solution. What the study revealed were the key enabling and inhibiting factors of a global business solution. These findings brought to light the dynamism of the organisational and global relationship. Within this relationship there exists a plethora of issues, which have been identified as the organisational operational and global environment relationship enablers and inhibitors. These issues form the 'Composite Enablers and Inhibitors Model'.

The case study participant was used as a means of bridging the gap between practice and theory. The literature stated that companies moving into global markets should expect to undergo organisational change. This study shows that the level of change experienced by ABC has been dramatic and undertaken within a relatively short timeframe. The company evolved from a small, local, proprietary technology company into an international securities organisation supporting complex internal and external business relationships. The literature proposed that organisations needed to restructure their operations in order to accommodate local, regional, and global business activity. In fact some literature proposed this type of approach as mandatory for a global business solution. Seemingly, this company accommodated its business operations in a fashion similar to that proposed in the literature.

The literature stated that multinational companies today, as they have done in the past, modified their business strategies and management style in order to harmonise with the cultural characteristics of a target country. Similarly, ABC admitted there were some demographic and cultural issues that it had little or no control over and hence it had no option but to customise its products and services accordingly. What I found most interesting in this investigation were the issues flagged by the multinational companies of the 1980s and 1990s as notable barriers to their global operations. Although not exhaustive they included: monetary policy, language, operational time zones, regulations and tariffs, various industry standards (including technology standards), and the cultural and professional practices of different countries.

There is evidence to suggest that notable barriers to global business have existed for some time, which raises the question about the validity of a truly global business solution. Although this study shows that some measure of global interoperability can be achieved through organisation restructure and the promulgation of business culture, in this instance, the extent and level of global activity appears to be limited to intra-organisational transactions.

Have multinational companies progressed toward a global business solution? As shown in this study if a checklist of the items mentioned in Chapter 4 were compiled, and using ABC as the benchmark, it could rightfully be claimed that language, operational time zones, tariffs, technology and, to a limited degree, monetary policy are no longer considered barriers to global business. That leaves regulations, industry standards cultural and the professional practices of different countries as the inhibiting factors. Why isn't technology on this

list? Because ABC have convincingly shown that it is capable of providing and supporting an international network and global technology platform. As shown in this study, its technology architecture comprised a number of proprietary based securities, transactional, and analytical systems seamlessly linked through a web-based interface. From these findings it is fair to assume that the company has the technology and knowledge-base to implement a comprehensive global securities solution; however, the industry regulatory framework, and multiple jurisdictions within which it operates prevents it from doing so.

To that end perhaps the most frustrating factor is that the company is continually faced with the task of rolling out customised versions of its products in order to meet these complex regulatory requirements. Add to that the national and business cultural differences and you have the insurmountable task of standardising a single set of business processes across multiple markets. The literature refers to this phenomenon as a state of glocalisation; the required multiple roll-out of a customised technology solution. Furthermore this company's Australian operations are diversified at the state level where, because of local multiple jurisdictions, it is required to support independent versions of its securities system. As an adjunct to that, ABC and its clients are governed by the respective corporation's law of their country of registration. All in all, these businesses are influenced by the business and national culture of the country in which they operate. Conducive to the literature findings, ABC was obliged to customise its proprietary based systems to enable it, and its clients, to meet these requirements. However, not promulgated by the literature was the dominance

of an industry regulatory framework on the organisational, operational and global environments relationship.

Through the literature subject matter experts and the data collected this phenomenon can be traced back to the early financial systems that were developed to support local market content. These systems had little or no requirement to transact outside any national borders and sufficed until the 1990s after which time business systems were designed as global information exchange platforms. Albeit this study has shown that the interlocking of various technology platforms requires a balance of corporate and local information. Even though these requirements are taken into consideration at the system design stage, within the securities industry there remains an operational need to re-engineer a system's data requirement on a country by country basis.

Given the idiosyncratic nature of the securities industry what attempts are being made to accomplish a global business solution? From a technology perspective the company realises the immediate solution lies within a modular and incremental approach to system design and customisation. Henceforth it has developed a workable global architecture based on a client-server, object-oriented platform approach and integrates a mix of technologies into the Microsoft Windows environment. From this state it can manipulate the data through a range of applications, which it disseminates in various formats both paper-based and electronic.

By and large, ABC's global technology architecture, and its management and business strategies are similar to the solution proposed by the literature. The

literature prescribed a collaborative or integrated approach to business processes and practices which they stated promoted efficient e-commerce or global business solutions. However, the suggested approach appears fanciful given ABC's difficulty consolidating the key factors mentioned above because they were either industry type or culture dependent and therefore less likely to change.

The findings of this study show the securities industry to be devoid of a set of common business processes or a business culture that will allow the implementation of a comprehensive global solution. The company admits that it has been unable to implement a unified business culture within its own securities business let alone the industry as a whole. Although considered at times by some staff to be idealistic the company will continue to strive for a global securities solution.

ABC's global strategy is simply to rollout its preferred business model, which comprises a series of processes and a prescribed set of data structures that records the client's details and account status on a single securities system. To be adopted as a global solution the model must suit all stakeholders, which it clearly does not. The company readily acknowledges the difficulties of having an over-arching business model covering all the variables of the securities industry world wide. To a similar end the literature proposed that industry and government policies and procedures be reviewed with a view to marrying these with the changing global business processes.

To perpetuate the required level of industry change there is always a conscious effort to steer the international securities industry away from its traditional operational environments to a more flexible, single, global business model solution. However, the task of amalgamating the various securities business environments, and the complexity of superimposing a single business model across those environments proved insurmountable. According to the literature ABC was not alone in its failed attempts to fully integrate its business methods in international environments. Other Australian companies from other industry types have also failed.

This company has shown its commitment to evolving the securities industry use of web-based technology. At the time of writing the industry's recognition of this technology is immature. In addition, the regulatory frameworks, together with the multiple jurisdictions, prevent the company from realising its objectives to become the biggest and first global securities business. Understandably ABC continues to lobby governments for jurisdictional and industry change to enable greater acceptance of web-based technology and global business solutions.

6.1 Limitations of the Study

There were two primary limitations to the study.

6.1.1 The Sample Size:

- The research consisted of one case study comprising a single Australian company from one industry supporting local, regional and global activity.

- A larger sample size is required to substantiate these findings across this and other industry types. However, the securities industry is unique in that there is only one known Australian competitor.

6.1.2 Statistical Conclusions:

- No statistical conclusions could be drawn because of the single case study sample.
- Statistical conclusions can only be drawn from a much larger and diverse sample size.
- Whilst statistical conclusions maybe interesting and give an overall picture it is doubtful that they would have revealed the depth and number of factors identified as enablers and inhibitors that this study has done. I find it doubtful that such a study would have revealed the 'Janus' nature of the myriad of factors identified.
- There was an absence of known and/or measurable factors present in any previous research of this kind. This prevented the researcher from taking this study to a broader sample base.
- The minimum research concerned explicitly with the combined factors discussed in this thesis is recognised as a potential limitation to the model.
- In light of the above, this research as an exploratory and illustrative case study provides an insight into the organisational, operational and global environments enablers and inhibitors.

6.2 Further Research

The provisional 'Composite Enablers and Inhibitors Model' shown at *Figure 10* (page 172) demonstrates the organisational and global environment key factor enablers and inhibitors. All or some of these issues could be further researched across this and other industry types, to substantiate (or contradict) the applicability of these key factors as inhibitors or enablers in the terms of reference of this study.

Further research could involve a larger sample size using diverse industry types. This will ensure that the findings reach a greater audience and are made available to other industry types. Because this area of study has been greatly ignored, its continuation is even more critical and any related research findings should be considered invaluable to businesses faced with the task of supporting local, regional and global business activities.

Glossary

Item	Description
ABC	Case study participant's alias
B2B	Business-to-business
BPR	Business Process Re-engineering – redesign of processes usually for operational improvement
COTS	Commercial Off The Shelf
CRM	Customer Relationship Management
CS	Computer Services (ABC's technology group)
E-business	Electronic business
E-commerce	Electronic commerce
EDI	Electronic Data Interchange
E-Form	Ecosystem-form
HK	Hong Kong
IP	Intellectual Property
IRM	Information Resource Management
IT	Information Technology
M-Form	Multi-divisional-form
MIS	Management Information Systems
MNC	Multi-national Company
R & D	Research & Development
SME	Subject Matter Expert
SME	Small-to-medium enterprise
UK	United Kingdom
USA	United States of America
WAP	Wireless Application Processing
Back-end systems	Core transactional or data storage systems
Business alliance	Coordinated business operations or resources between organisations
Business culture	The manner in which an organisation conducts its business, which is generally influenced by a national and/or industry culture
Business model	A preferred information requirement
Business process	A set of information, activities or tasks that accomplishes something for a business
Business process re-engineering	redesign of business processes usually for operational improvement
Buy-in	Establishing a point of entry into a business, industry and/or country
Cross-border (transaction)	Transferring information across different countries
E-commerce environment	Electronic business environment
E-commerce/e-business	Electronic business transactions (an interchangeable term)
Ecosystem	Interactive systems
E-form organisation	An integrated company with a market oriented business approach. Deemed to be the new corporate model
Enabler	A factor that supports the organisational operational environment, and/or the global environment, and/or that relationship
External environment	A domain considered outside of the organisational environment
Front-end systems	Systems that interface with the user/operator
Global	Used to define the whole world-world domain
Global activity	Actively participating in the global environment
Global business environment	Whole -world business domain
Global business solution	A business solution applied to enhance whole-world activity

Item	Description
Global business/operator	An organisation that conducts its business on a whole-world basis
Global e-commerce	Whole-world electronic commerce activities
Global economy	Whole-world communities and/or markets
Global marketing	Whole-world marketing approach
Global markets	Whole-world economies and/or financial markets
Global organisation	An organisation that conducts its business on a whole-world basis
Globalisation	Expansion into whole-world markets using global strategies i.e. alliances
Glocalisation	Reaching a balance of whole-world and local economies
Hard line	A single, dedicated point-to-point data connection (usually via telephone – leased line)
Industry environment	The sum of an industry's components and interfaces
Industry regulatory framework	A set of conditions and/or actions under which an industry is obliged to operate
Industry type	An industry that can be categorised according to a specific function
Information age	The period immediately following the industrial revolution nominally accepted as the 1960s onwards
Inhibitor	A factor that impedes the organisational operational environment, and/or the global environment, and/or that relationship
Internetworked	A collection of interconnected networks
Intra-organisational relationship	A company's internal business interactions
Local market	An economic environment pertaining to a specific state/county and/or country/nation
Localisation	Sensitising a product or service in order to accommodate local market requirements
M-form organisation	A company comprising multiple divisions that are centrally managed. Deemed to be the traditional corporate model
Multi-locals	Geographically dispersed business functioning within local markets in isolation of any global objective
Multi-market environment	A composite of many market economies
Name on-name off	ABC's preferred securities business model where the acquirer's name goes on the account register then off again when they are sold
National culture	The sum mental conditioning of a country's nationals
Organic growth	Describes a company's natural expansion
Organic structure	An organisational configuration that is innovative and flexible
Organically grown	Those parts of the business that have evolved naturally and/or from the original arm of the company
Organisational culture	The sum influences of business and national culture and industry type
Organisational operational environment	A domain considered to be part of the organisational environment
Organisational structure	Refers to a company's operational framework or architecture and its internal relationships
Securities Services	ABCs core business group
Strategic alliances	Planned business relationships with other entities with the view of enhancing a company's products and/or services
Theme	Core topic or major area of focus
Vertical integrating	Gaining competitive advantage by controlling an entire business function
Virtual organisation	A seamless network of partners or alliances sharing core competencies

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