Cape Peninsula
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RATIONALISATION OF BUSINESS PROCESSES TO CREATE A UNIFIED INFORMATION SYSTEMS PORTFOLIO IN A MERGER: A CASE STUDY OF A FINANCIAL INSTITUTION

by

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DECLARATION

I, Mongezi Mati, declare that the contents of this thesis represent my own unaided work, and that the thesis has not previously been submitted for academic examination towards any qualification. Furthermore, it represents my own opinions and not necessarily those of the Cape Peninsula University of Technology.

Signed **Date**

ABSTRACT

The failure to rationalise business processes and Information Technology (IT) systems inhibits the ability of organisations to capitalise and create synergies for a merger. Rationalisation of business processes to create a unified Information Systems (IS) portfolio plays a significant role in the success of a merger. The synergies of a merger are entrenched in the rationalisation business processes where the creation of a unified IS portfolio becomes vital. The consolidation of business units performing similar business functions in a horisontal merger creates a negative physiological environment to those affected by the change. A case study of a merged financial institution was conducted where the research explored factors affecting the rationalisation of business processes and IT systems when business units merge. The research questions to explore the factors are: 1) What are the factors affecting the business process and IT systems rationalisation when business units merge? 2) How does the rationalisation of business processes affect the IT systems in the merged financial institution?

Politics and cultural differences are among the challenges experienced during the rationalisation process in the merged financial institution. Collaboration among professionals is important to ensure the success of IS implementation, thus corporate executives need to identify cultural differences during the pre-merger stage. The IT system chosen to consolidate legacy mainframe systems did not align with the organisation's client centric strategy. Alignment can be strengthened by the collaboration of business and IT to ensure a common vision is achieved.

Keywords: Rationalisation, business processes, IS portfolio, synergies.

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GLOSSARY

Terms/Acronyms/ Abbreviations	Definition/Explanation
AWD system	Automatic Workload Distributor is a system used at CSOs to capture and submit new policies.
Business process rationalisation	Allows organisations to streamline, eliminate redundancy and better management of business processes (Tafti, 2011:7).
CICS	Customer Information Control System is an application used by back office staff to process policies sold at CSOs.
Console systems	A system which resides in Organisation B, adopted to replace systems running on the mainframe in Organisation A. The system later became a legacy system as it was not in alignment with the strategy going forward.
CSA	Customer service agent who services clients at the CSOs.
CSO	Customer service office where the client goes to query or apply for policies.
Current systems	Keyword used to describe to legacy mainframe systems.
eBusiness Suite	Human resource management system used in Organisation B which did not form part of the IS portfolio.
Future choice system	Legacy system which resides in Organisation A, absorbed in the OB system during the rationalisation process.
Horisontal merger	Target firm is a competitor that operates in the same industry and targets the same customer groups with a comparable product, service or technology (Feij, 2013).
Information System Portfolio (ISP)	IT systems used by two merging financial institutions.
Information systems	"Information systems (IS) involve a variety of information technologies (ITs) such as computers, software, databases, communication systems, the Internet, mobile devices and much more, to perform specific tasks, interact with and inform various actors in different organizational or social contexts" (Boell & Boell, 2015:2).

Terms/Acronyms/ Abbreviations	Definition/Explanation
IT systems	The term is used to define assets such as applications, databases and infrastructure.
JDE system	JD Edwards system; a financial management system used by Organisation B, adopted as part of the IS portfolio.
Khula system	System procured to rationalise all the Line of Business systems (i.e. mainframe systems and the Console system) used to translate the client centric strategy.
LOB	Line of Business systems used to describe customer-facing application systems.
MPLS	Multiprotocol label switching used to describe communication networks.
OB system	Legacy system which resides in Organisation A, running on the mainframe platform.
Odyssey system	Financial system used by Organisation A which appeals to the mid-to-higher end of the market.
PDS system	Legacy system which resides in Organisation B, used in past mergers for system rationalisation.
PeopleSoft system	Human resource management (HRM) system deployed in Organisation A, adopted during the rationalisation process.
SAM	Strategic Alignment Model
SmartStream	Financial management systems used by Organisation A which did not form part of the IS portfolio.
Synergy	Ability for the merged organisation to eliminate inefficiencies (Adu-Darko & Bruce-Twum, 2014:1).

CHAPTER ONE: OVERVIEW OF THE STUDY

1.1 Introduction

The main reason for embarking on mergers is to capitalise on synergies existing between the merging business units. The aim of this research is to explore the rationalisation of business processes linked to IT systems in a merger. The objective of this study is to determine how organisations rationalise redundant business processes in mergers and what decision making processes are followed by companies to identify information technology (IT) systems matching the rationalised business processes.

This study investigates the factors affecting the rationalisation of business processes to create a unified Information Systems Portfolio (ISP) in a merger (Sarrazin & West, 2011). The expected synergies relate to the consolidation of strategic business units which are used as a strategy to cut costs such as infrastructure and software licenses (De Lange, 2015). Despite having strategies for consolidation, organisations still fail to capture the benefits of merging (Kovela & Skok, 2012).

1.2 Background to the problem

Growth in global mergers and acquisitions (M&A) increased over the past two decades (Adu-darko & Bruce-twum, 2014). According to Sarrazin and West (2011), the expected synergies of the mergers and acquisitions are IT related. An Information System (IS) is highlighted as a critical resource to realise the expected synergies during the integration exercise. Baker and Niederman (2013) advocate that the complexity of integrating organisational assets contributes to the failure in realising synergistic benefits from M&A and indicate IS as a critical functional area that benefits from effective integration. According to Feij (2013), the failure to integrate IS hinders the expected synergies and goals to be achieved from the merger. A study by Toppenberg and Henningsson (2013) indicate that mergers and acquisitions do not generate the financial value initiated for their intended purpose and as a result, an estimate of 60-70 percent of mergers fail to live up to the expectations of shareholders. Integration issues such as functionality, the geographic spread of the organisation, and IS architecture which includes technical aspects are seen as the major inhibiting factors from realising the expected benefits which may hinge on business and IT alignment (Walker, 2012). Schmidt, Otto and Österle (2010) outline integration levels such as organisational, business unit and application landscape integration as well as heterogeneous data sources from which merged organisations can thrive when implementing consolidation strategies. An

important element during the integration phase of the merger is to create a single identity between the merging strategic business units. Tafti (2011) notes that before integration, inherent challenges including duplicate business processes and IT systems exist. Rationalisation of business processes during the amalgamation provides steps towards the goal of attaining unified business units. According to Tafti (2011), rationalisation of business processes allows organisations to streamline and eliminate redundancy and better manage business processes.

Identification of agile IS which are aligned to support the derived business processes, forms part of the rationalisation exercise. Contextual factors considered when making the decision to implement an IS results in the increase of implementation complexity. Conversely, to have redundant systems contradicts the purpose of the merger and could lead to inefficiencies that may hinder the expected synergies (Feij, 2013). IS implementation, based on the study of Schonewille and Bouwman (2012), can be constrained by cultural differences and incompatible organisational interests which include aspects such as communication, management and alignment.

This research explores the implementation of the rationalisation process in the merged financial institution. The findings of the research may assist in exploring factors hindering the rationalisation of business processes to create unified IS portfolio delivery, leading to the problem statement below.

1.3 Research problem statement

Research regarding mergers has been well documented (Lin, Lo & Yang, 2010; Kovela & Skok, 2012; Adu-darko & Bruce-twum, 2014). However, organisations still fail to capitalise on the benefits a merger may offer. The inherent challenge found in horisontal mergers is redundancy of business processes and IT systems which inhibits the organisation's ability to realise synergies (Baker & Niederman, 2013). The redundancy of business processes and IT systems creates cost inefficiencies in staff head count and other technological assets (Feij, 2013). The failure to consolidate business units performing similar functions in the quest to create a unified IS portfolio, negatively affects the organisation's ability to reduce operational costs and takes advantage of economies of scale as well as a future competitive advantage (Kaplan & Maxwell, 2013).

Problem statement

The failure to rationalise business processes and IT systems to create a unified IS portfolio inhibits the organisation's ability to realise synergies of the merger.

1.4 Research questions

RQ1: What are the factors affecting the business process and IT systems rationalisation when business units merge?

RSQ1.1: What are the challenges experienced with the rationalisation of business processes?

RSQ1.2: What effect does the rationalisation of business processes have on the creation of the IS portfolio?

RQ2: How does the rationalisation of business processes affect the IT systems in the merged financial institution?

RSQ2.1: How are the rationalised business processes aligned with the IT systems?

RSQ2.2: How are the IT systems implemented that support the rationalised business processes?

1.5 Research aim

The aim of this research is to explore the rationalisation of business processes linked to IT systems in a merger. A further aim is to explore which factors affect business processes and IT systems when business units merge, and how the failure to rationalise business processes affect the IT systems in the merged financial institution. Once the rationalisation of business processes has been determined, the study explores the approaches used to identify IS to capitalise on in order to create a unified IS portfolio of the merged financial institutions. The learning outcomes of this process can be used by the organisation as a resource for future mergers.

1.6 Research objectives

i) To identify which business processes have been merged by the financial institution.

ii) To examine the rationale and decision process towards the implementation of IT systems during the rationalisation process.

iii) To identify the hindering factors that can occur during the rationalisation process when business units merge.

iv) To determine the basic principles adopted to rationalise business processes and reduce redundancy in the merger.

v) To examine which IS systems and technology infrastructure are deployed upon completion of the rationalisation process.

vi) To determine the difficulties experienced with the rationalisation of business processes.

1.7 Research methodology

Qualitative research into the merged financial institution is undertaken to explore factors affecting the rationalisation of business processes linked to IT systems to create a unified IS portfolio.

1.7.1 Research philosophy

This research followed an interpretive approach to explore the factors affecting the rationalisation of business processes to create a unified IS portfolio.

1.7.1.1 Ontology

The knowledge acquired to fulfil the aims of this research is subjective, thus the study followed the subjectivism principle.

1.7.1.2 Epistemology

The information gathered on the rationalisation approach in the merged financial institution will be interpreted to explore the aims of this research. The interpretivist principle was thus followed.

1.7.2 Research approach

An inductive approach was used as research approach to the study. The approach to conduct this research is a qualitative method to explore people's experiences regarding the rationalisation process implemented in the merged financial institution.

1.7.3 Research strategy

1.7.3.1 Case study

The research strategy followed is a case study of the merged financial institution in order to examine the rationalisation process. A study by Gerring (2004:2) defines a case study as "an intensive study of a single unit for the purpose of understanding a larger class of similar units". A case study strategy is followed because the researcher has been aware of the merger in the financial institution since it became public knowledge. The researcher is also an employee of the financial institution, thus making it easier to obtain information to fulfil the requirements of this research.

1.7.3.2 Sampling

The choice for this study is a non-random purposively selected sampling technique. The study seeks to obtain insight into rationalisation methods applied in the merged financial institution. The study in no way attempts to generalise the findings. The sample participants chosen for the research are senior business professionals (4),

mid-to-senior Line of Business (LOB) systems staff (6), and mid-to-senior shared IT services staff (9).

1.7.4 Data collection

Data was collected by means of semi-structured questionnaires using interviews. The interviews were recorded using a voice recorder. Interviews were transcribed and participants were asked to review the transcriptions in order to validate the information. The purpose for using semi-structured questionnaires is to gather real-life experiences to enable more accurate reporting in the implementation of the rationalisation process of the merged financial institution (Dicicco-Bloom & Crabtree, 2006). The chosen data collection methods enabled the interviewees to freely express how they have experienced the implementation of the rationalisation process in the merged financial institution.

1.7.5 Data analysis

Thematic analysis was used to analyse the data. The data were transcribed, validated, codified, summarised and categorised, and finally thematic analysis was conducted.

1.8 Ethics

The researcher pledges that no advantage will be taken of the interviewees, and their names will not be declared in the study. The name of the financial institution will not be declared nor used to benefit the researcher. The researcher understands that the sole purpose of the study is to be used for academic purposes and not for any financial gain. The researcher undertakes not to misrepresent or falsify any information for personal benefit or for the benefit of the participants of this study. The interviewees were requested to sign a consent letter in which they agreed to participate in the study (See Appendix B).

1.9 Delineation

The research explores factors affecting the rationalisation of business processes to create a unified IS portfolio. The study focuses only on the rationalisation of business processes and not any other component of a merger such as financial gains or losses. The study will not expand beyond research on the merged financial institution. The research is not prescribed as a blueprint for other merged financial institutions when implementing rationalisation tasks and in no way attempts to generalise the findings.

1.10 Contribution to the body of knowledge and contribution of research study

This research contributes by creating awareness regarding the factors affecting the rationalisation process. The study assists in the implementation of effective change management processes. The research can become reference material for studies within the same research domain. It contributes towards standard practices to be followed to rationalise business processes in order to make appropriate decisions when implementing IT systems in a merger.

1.11 Summary

The study explores the rationalisation of business processes to create a unified IS portfolio when business units merge. The researcher explores how the merged financial institution implemented the rationalisation tasks to generate the synergies of the merger. The research questions assist in capturing the hindering factors affecting the rationalisation process in the merged financial institution. The context of this research is constructed through a diverse group of participants.

The elements of the research are composed of different chapters unpacking the intended purpose of the research. Chapter Two discusses the literature review which becomes the foundation of the research and advances the knowledge within the domain (Webster & Watson, 2009). Chapter Three describes the research methodology. Chapter Four discusses the findings and generates themes based on the findings. In Chapter Five, the themes generated in Chapter Four are discussed.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

Mergers have been a general phenomenon since the latter part of the 20th century. The failure to rationalise business processes and IT systems to create a unified IS portfolio inhibits the organisation's ability to realise the expected synergies of a merger (De Lange, 2015). It is unclear what factors affect the business process and IT systems when business units merge and how the failure to rationalise business processes affects the IT systems in the merged financial institution. This chapter reviews the literature on mergers and the rationalisation of business processes as a result of a merger. The keywords *rationalisation*, *business processes*, *IS portfolio* and *synergies* were used to mine the databases. The research problem, research questions and aims of the study were used to identify the keywords for the literature review. Databases from the CPUT library were mined. The databases used are ProQuest, Google Scholar, Emerald, Scopus, Cambridge Journals Online and EBSCOhost.

The chapter is constructed as follows: i) introduction; ii) mergers; iii) due diligence in mergers; iv) business processes; v) rationalisation of business processes in mergers); business processes and IS/IT systems in mergers; vii) business and IS/IT alignment in mergers; viii) aligning business strategy and IT strategy in mergers; ix) operational alignment for performance improvement in mergers; x) factors affecting business unit merging during rationalisation; xi) dealing with resistance to change when merging; xii) cultural management when merging; xiii) change management processes when merging; xiv) consolidation of business processes linked to IT systems; xv) IS/IT due diligence in mergers; xvi) factors affecting the consolidation of legacy systems when merging; xvii) strategies to consolidate legacy systems when merging; xviii) knowledge extraction in legacy systems; xiv) IS in mergers; xx) creating an IS portfolio when merging; and xxi) leadership role in creating a unified IS portfolio in mergers. The chapter ends with a summary.

2.2 Background

A study by Hitt, King, Makri and Schijven (2012) denotes that organisations fail to create value and capture synergies due to inappropriate consolidation processes. The common purpose for organisations to venture into mergers is to thrive on cost reduction, economies of scale, and a bigger playing field in the market (Benitez-amado & Ray, 2013). Although organisations are aware of what they wish to achieve through the merger, they still fail to capture the expected synergies (Toppenberg & Henningsson, 2013). Consolidation challenges are seen as a major

factor which can cause failure in mergers (Zhang, 2010). These challenges may be caused by redundant business processes and IT systems of merging organisations (Hitt *et al*., 2012). Duplication of business processes and IT systems is inefficient and hinders the expected synergies (Feij, 2013). As part of the merger, the new organisational role is to find a way to ensure its business processes and IT conform to its corporate strategy (Kaplan & Norton, 2006). This means that the newly merged organisation is to find a way to decide which business processes and IT systems they plan to implement to align with the corporate strategy and create a unified IS portfolio (Jonkers, Quartel, Van Gils & Franken, 2012). The synergies of the merger rely on the successful implementation of rationalised business processes and the linked IT systems to create the IS portfolio (Tafti, 2011). Although the rationalisation of business processes linked to IT systems seems to be the blueprint for value creation, the complexities associated with executing these tasks provide little evidence to make this statement (Chang, Chang & Wang, 2014). Topics relating to mergers are well researched, however there is little focus on rationalisation of business processes linked to IT systems (Gupta, 2012). Many of these authors focus on challenges relating to post-merger integration (Hitt *et al*., 2012; Stahl & Köster, 2013) whilst other authors focus on the analysis of business and IT alignment (Baker & Niederman, 2013).

2.3 Mergers

> "A merger is when two companies decide to combine and form a new entity" (Walker, 20*12:*7).

According to Feij (2013:1) there are three types of mergers, namely:

> "Horisontal; target firm is a competitor that operates in the same industry and targets the same customer groups with a comparable product, service or technology; vertical target firm is either a customer or a supplier of the acquiring firm, hence two links in the supply chain merge to one; and market centric target firm shares the same customer group as acquiring firm but offers a different product, service or technology".

Defining a merger in the context of this phenomenon is to combine resources such as people, IT systems, data and information to form a new organisation. Various strategies and motivations trigger companies to embark on mergers. Reasons for merging two or more organisations could be to capitalise on new markets, reduce costs, increase revenue, or create a competitive advantage (Ofili, 2014).

The aggressive pursuit of mergers by organisations does not equate to financial benefits, with a 60-80 percent failure as indicated in recent studies (Gupta, 2012; Hao & Guoqiang, 2013; Sinha, 2014). According to Sinha (2014:2), these financial losses can be attributed to various issues such as: i) the lack of attention to people; ii) poor planning generally caused by post-merger integration issues and foretelling synergies that become unreal; iii) loss of key decision makers and gifted staff members due to headcount reduction which may also affect productivity as a result of merging; iv) poor productivity due to losing key staff members, which also leads to loss off customers; v) corporate culture clashes which may cause staff members to become unsure about their positions in the organisation; vi) politics in terms of who gains more power in senior management, causing them to put their interest before that of the organisation; vii) ineffective management resulting in poorly managed integration due to lack of planning and design; and viii) financial losses caused by inadequate and incomplete due diligence which is further discussed in the next section.

2.4 Due diligence in mergers

A study by Savovic (2013) describes due diligence exercises as crucial steps to ensure that risks are minimised as organisations prepare for the merger and acquisition transaction. Due diligence contributes to the realisation of strategic goals of the organisation by estimating how the acquisition will influence the internal business processes and the creation of new capabilities which in turn create value for shareholders (Savovic, 2013). There are various due diligence tasks with important objectives undertaken before a merger becomes official (Hao & Guoqiang, 2013). Savovic (2013:5) presents a set of due diligence tasks conducted during a merger. Due diligence tasks selected for this study include human resources and culture to:

> "…assess human resource risks of the deal, prioritise HR issues that need to be dealt with during the integration, costing and planning the post deal HR changes, ii) management to identify key integration issues and outline new structure for combined businesses, iii) IT feasibility study of integrating systems and associated costs, iv) IT plans for operational efficiency and competitive advantage, v) technical to assess the value and sustainability of product technology, vi) operational to determine technical threats and sustainability of current methods and vii) opportunities for improvement and investment requirements".

To present a narrative for this study, it is important to determine the due diligence to be done in order to achieve synergies and the overall strategic goals of the financial

institution when business units merge. The importance of this narrative is to outline all the elements needed to be presented in order to create a unified IS portfolio in a merger.

2.5 Business processes

The importance of business processes is indispensable as it is a vehicle to execute organisational business strategy. “A business process or business method is a collection of related structured activities or tasks that produce a specific service or product (serve a particular goal) for a particular customer or customers” (Eleonu & Oruh, 2013:1).

Contextualising the definition of business processes in relation to the research problem could also mean that the failure to rationalise business processes may affect service to customers or the way an organisation responds to the needs of customers—which change over time. It important to respond quicker to these needs, in particular for a financial institution, and failure to do so may lead to loss of business (Christensen & Yang, 2010). Razalli, Ringim, Hasnan and Hassan (2015) state that to become competitive, financial institutions need to reengineer their operational processes to respond quicker to customer needs.

Duplicate business processes complicate the means to respond to customer needs and may cause loss of market share. The importance to rationalise business processes do not only create a standardised way of how merged organisations compete in various market segments, but also provide a platform to create efficiencies and respond quicker to customer needs (Bonakdar, Weiblen, Di, Zeißner, Pussep & Schief, 2013). Business processes, as a method indicating how organisations conduct their day to day operations, require relevant IT systems to complement the intended endeavours (Branco, Xiong, Czarnecki, Küster & Völzer, 2013).

Business process reengineering (BPR) and business process rationalisation disciplines complement one another. BPR seeks to improve the way in which businesses perform their functions for quicker responsiveness, effectiveness and cost reduction in organisational challenges (Richard & Agwor, 2015). Business process rationalisation looks at streamlining business processes to reduce redundancy, particularly in mergers, while becoming cost efficient (Tafti, 2011). The fundamental principle encapsulated in these disciplines, in particular the case of mergers, is that both aim to better strategic goals within business units in the organisation. Razalli *et al*. (2015:2) discuss factors that can improve the success of

BPR, including change management which entails: i) people management; ii) keeping good morale in the team; iii) project management to ensure the selection of project teams; iv) ensuring accountability in the BPR exercise and alignment in the organisational strategy; v) management competence to ensure buy-in from top management to provide sufficient resources to the project team executing the tasks; vi) customer focus; vii) market research which becomes important to understand what customers need and ensure that changes in business processes are driven from the customer's perspective; viii) alignment of IT infrastructure with business processes; ix) ensuring that personnel are well equipped to operate the systems and effective management of IT consulting; x) process redesign aimed at adding value to customers; xi) sufficient funding to undertake the BPR exercise; and finally, xii) encouraging creativity and innovation by ensuring that organisational structure is less bureaucratic.

2.6 Rationalisation of business processes in mergers

Breaking silos becomes an important endeavour for merged entities in their quest to realise synergies. Breaking silos is the concept of unifying business units which perform similar business functions when two organisations engage in a merger (Hitt *et al*., 2012). This concept is supplemented in a study by Klausen (2014:5) who states that rationalisation assists organisations in "doing more with less", thus becoming efficient and putting effective measures in place. In a post-merger integration exercise this concept becomes important—looking at how the merged financial institutions managed the inherent challenge of redundancy in horisontal mergers. This then brings us to our research question which seeks to identify the factors affecting the rationalisation of business processes and IT systems when business units merge.

2.7 Business processes and IS/IT systems in mergers

Organisations engaging in a merger and competing in the same market inherently share similar business processes and IT systems. The common purpose for organisations to venture into mergers is to thrive on cost reduction, economies of scale, and a bigger playing field in the market (Benitez-Amado & Ray, 2013). However, duplication of business processes linked to IT systems that execute similar tasks becomes inefficient and hinders the realisation of the expected synergies.

Rationalisation of business processes linked to IT systems is a crucial step towards the creation of an IS portfolio for a merged organisation. However, merged organisations do not succeed in rationalising their business processes linked to IT

systems, which results in not realising the expected synergies (Holweg & Pil, 2012). It is important to understand business processes as a driver of a business strategy and taking cognisance of the fact that having redundant business processes is inefficient and inhibits the objectives of the merger. According to Bonakdar *et al*. (2013), business processes provide a cohesive unit of analysis in the context of corporate realignment. Figure 2.1 depicts the connection of business processes to business models and the business strategy.

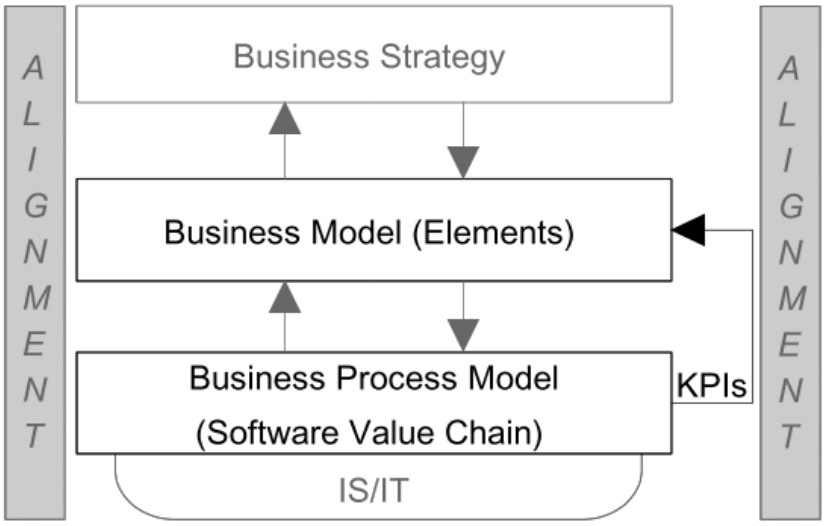

Figure 2.1: Business process model communicating business strategy
(Source: Bonakdar et al., 2013:2)

In the midst of trying to create business processes which align with the business strategy in a merger, it is important to understand the rationalisation methods to be applied in order to reduce redundancy. Ekanayake (2014) states that the existence of redundancy provides an opportunity to standardise, but if not exploited, could lead to inefficiencies. To reduce redundant business processes, it is important to identify business process models performing the same function for the merging business units (La Rosa, Dumas, Uba & Dijkman, 2013). Process analysts identify the term *business process* as looking at opportunities for consolidation, particularly in the context of a merger (Dijkman, Dumas, Van Dongen, Krik & Mendling, 2011). The need to look at the overlap in business processes for a merging organisation allows for the standardisation of business operations and rationalisation of an organisation's IT infrastructure to cut operational costs (Dijkman, Rosa & Reijer, 2012).

2.8 Business and IS/IT alignment in mergers

Business and IS/IT alignment is crucial and presented in this study as a validation to consider the importance of business strategies and objectives aligning with the IS/IT consolidation plans for the merged financial institution. Silvius (2014) states that a dynamic business environment is created by developing new technologies, mergers and acquisitions, and entrepreneurial initiatives; thus to thrive in such an environment requires efficient information technology that supports business strategies and processes. However, despite the criticality to ensure the alignment of IS/IT to business strategies, this is still not the case in most companies (Silvius, 2014). Kwanroengjai, Liu, Tan and Sun (2014) indicate that the performance of an organisation is hindered by the misalignment of operational factors such people, business operations and IS/IT systems, which degrades the value of business strategies. These sentiments are echoed by Mitambo (2014) who emphasises the importance of aligning the business strategy with business processes while IS acts as enabler of the business strategy.

2.8.1 Aligning business and IT strategy in mergers

Giving context to this topic in relation to the creation of an IS portfolio in a merger, it is crucial to ensure that business strategies of the merged financial institution are aligned with the respective IT systems to respond to the dynamics of the business environment. Ullah and Lai (2013:2) adopt Henderson and Venkatraman's (1993) definition when defining alignment between business and IT strategies, stating that "alignment between business and IT is a degree of fit and the integration between business strategy, IT strategy, business infrastructure and IT infrastructure". Ullah and Lai (2013) further indicate that to strengthen alignment in any business or organisation, both business and IT need to understand the business strategy; business and IT need to create a strong culture among themselves; a high degree of communication needs to be fostered and sustained among the two groups; business and IT need to be aligned and strengthened; and a level of trust needs to be attained between business and IT.

Subsequent models such as the Strategic Alignment Model (SAM) (Orozco, Tarhini, Masa'deh & Tarhini, 2015) have been researched and exist in the research community for a while now, aiming to assist organisations with the planning of structuring their business and IT alignment strategies. However, according to Kwanroengjai *et al.* (2014), there is a lack of research in operational alignment seeking to assist organisations in executing their business and IT alignment strategies. Key failures in mergers and acquisitions have been reported by Baker

and Niederman (2013). One such failure is the misalignment of business strategies linked to IT systems at operational level.

2.8.2 Operational alignment for performance improvement in mergers

Critical elements to achieve effective operational alignment focus on business strategy, business operations, people and IT (Kwanroengjai *et al*., 2014). Operational alignment, according to Kwanroengjai *et al*. (2014), focuses on four main aspects, namely: i) strategic fit/alignment where management strategies such as business processes and activities are to be applied at operational level; ii) looking at the capability of staff to ensure people are aligned to perform business operations achieved by adapting the People Capability Maturity Model (PCMM), and socio-technical alignment aimed at observing people and IT in an organisation; iii) infrastructure process fit aimed at ensuring the organisational structure is well placed to support the business processes; and iv) organisational alignment to assess consistency between organisational structure and business strategy.

Assuming that business and IS/IT alignment has been considered by the merged financial institution, the importance to look at operational alignment is on the premise that the organisation is well positioned to execute its business strategy to ensure that the synergies of the merger are realised. Figure 2.2 shows factors needed by organisations to be taken into consideration. These factors can either degrade operational effectiveness or assist organisations in achieving operational excellence.

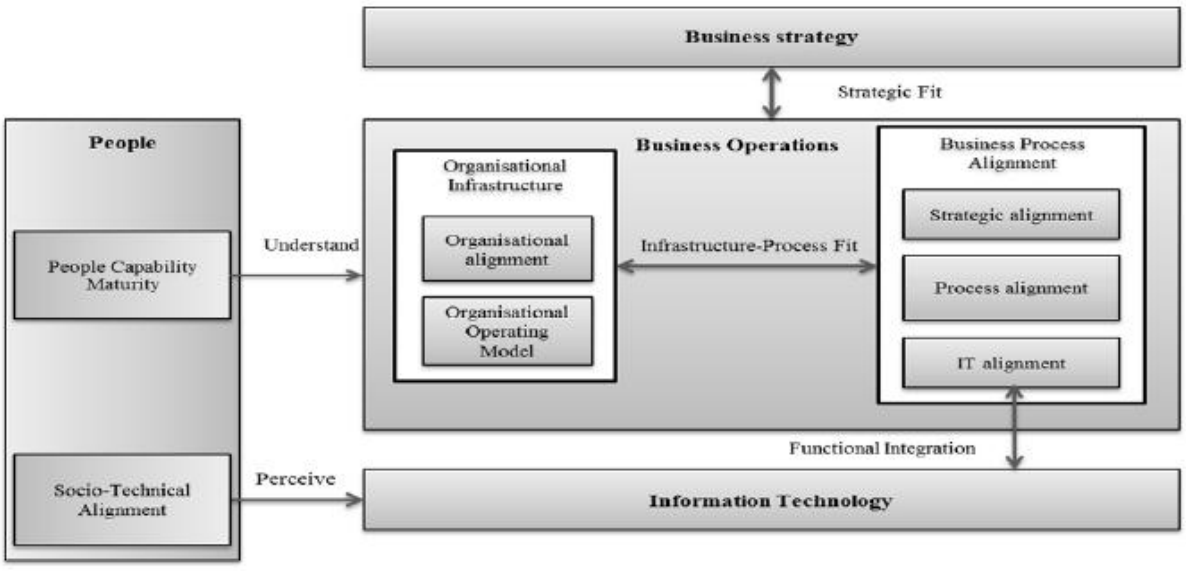

Figure 2.2: Operational alignment framework
(Kwanroengjai et al., 2014)

2.9 Factors affecting business unit mergers during rationalisation

Earlier reference was made to a study by Tafti (2011), indicating that rationalisation of business processes is an endeavour to eliminate redundancy within organisations. The potential and daunting changes which may emerge with mergers, as discussed by Gordon (2015), are policies, structures, procedures and culture, as they impact the entire organisation. According to Kansal and Chandani (2014), cultural and stress management, redundancies, HR restructuring, resistance to change, job insecurity, talent drainage and low motivation are among the challenges faced by leaders in mergers. The process of eliminating redundancy in mergers has a direct impact on how the people perform their duties. The performance issues are as a result of the new requirement that employees need to work on systems they do not know. Employees are also exposed to the fear of losing their employment because of potential downsizing of the organisation (Kansal & Chandani, 2014). The uncertainty presented by organisational changes, as suggested by Belias and Koustelios (2014), estimates that a third or half of all merger failures directly points to employee problems. Based on a report by KPMG, poor handling of the change management process has resulted in 80 percent of merger and acquisition failures (Kansal & Chandani, 2014).

2.9.1 Dealing with resistance to change

The actions taken by those entrusted to execute change management processes can either positively or negatively influence changes within organisations. The lack of trust towards change managers, low perceived benefits of change, low appreciation of the organisation, and low appreciation of organisational justice are factors cited as issues which may hinder positive influence to change (Suhendra, Kartini & Soemaryani, 2014). Suhendra *et al*. (2014) discuss strategic ways in which changes can be influenced positively, particularly in organisational mergers where changes are rife. The dissemination of information, specifically effective communication by change managers, may lead to trust in management which reduces resistance to change. This could also positively influence the employees' perceived benefits of change by installing confidence in terms of job security, social relations and current position. Trust is also established between employers, leadership, supervisors and employees to improve commitment to the organisation. Creating employee attachment to the organisation by ensuring that changes do not pose a risk to staff but provide economic benefits in the form of remuneration, career growth, relationships at work and job security, is also a consequence of dissemination of information and effective communication by the change manager.

2.9.2 Cultural management when merging

The importance of creating a unified IS portfolio requires a high degree of collaborative effort among professionals from different communities, particularly in mergers. This statement is corroborated by Vieru and Rivard (2014:1) stating that "the success of IS implementation projects is highly dependent of effective collaboration among individuals in different professional communities". Corporate executives fail to make an effort to understand differences in cultures during the pre-merger stage and do not have specific approaches to assess and deal with cultural integration issues (Hirsch, 2015). The Daimler-Chrysler and Warner-AOL mergers are cited as examples of corporates that failed to achieve their strategic objectives and financial benefits as a result of failure to integrate corporate cultures (Marks *et al*., 2014; Hirsch, 2015). Marks *et al*. (2014) indicate that managers need to develop a deep sense of cultural intelligence and competence to pre-empt issues that may emerge as a result of cultural differences during post-merger integration.

One of the themes discussed by Vieru and Rivard (2014) is the "us versus them" scenario of no collaboration among staff which occurs when one organisation imposes its identity to be superior over and against the other; also the resistance to adapt to new ways of thinking and acting, and where each member of a different organisation wants to conduct business as it was done in their organisation before the merger. Marks *et al*. (2014:3) discuss steps in which cultural differences can be managed in mergers, for example: i) assessing cultural fit and major integration challenges that can be identified during the due diligence exercise; ii) executives need to determine and clarify the cultural end state, showing how they would like to see to company operate; iii) raise awareness and educate employees on sources of culture; iv) managers need to develop a deep cultural values by learning to ensure people understand how the company operates; v) embracing new challenges; vi) end old culture and accept new culture; and vii) aligning HR practices with the desired new culture.

2.10 Change management processes in mergers

The effect of mergers and acquisitions often exposes employees to high levels of psychological distress, ambiguous roles, and anxiety from uncertainty (Chung, Du & Choi, 2014). The importance of executing change management processes effectively contributes to the success of the organisation. This is reflected in a research paper by Kansal and Chandani (2014) who state that organisations need to have an integration plan which involves establishing a project team comprising of senior executives. Senior managers drive post-merger activities to ensure employees are engaged constantly, effectively and immediately to minimise rumours

and misinformation. Organisations need to have a clear vision through setting up goals, values and policies, ensuring that employees understand and embody this vision, and avoiding cultural conflicts. Kansal and Chandani (2014) site the failure of the merger between Daimler and Chrysler as being caused by: i) not understanding cultural differences; ii) managers not inspiring employees to embrace change; iii) not encouraging the constant involvement of staff to ensure views in matters which affect them, are shared; and v) neglect sharing future roadmaps and product portfolios with the customer. This sharing of future roadmaps and product portfolios can be done by setting up a helpdesk which deals with customer issues to ensure they are well informed of what is happening. By doing this, organisations can retain customers while generating profit. Critical staff retention during HR restructuring plays a key role. It must be ensured that any changes taking place are well understood, and those affected are given training and counselling when necessary. Redundant staff can be offered severance packages and assisted to find another job. As alternative, they can be redeployed to other business units. Kansal and Chandani (2014) indicate that downsizing should be considered as the last resort.

2.11 Consolidation of business processes linked to IT systems

Effective consolidation strategies are necessary to realise the synergy benefits of a merger (Kovela & Skok, 2012). It has been noted by various authors that the synergies of mergers are mostly IT related (Lin, Lo & Yang, 2010; Sarrazin & West, 2011). According to Frey, Hentrich and Zdun (2013:2), synergies are realised by reducing cost:

> "…replacing legacy applications based on outdated technology and difficult to change architecture that cause high maintenance costs; business process optimisation, for example, refers to improving the efficiency of business processes by better IT support with improved user experience and a higher degree of automation, business agility and faster time-to-market for example, referring to flexible IT architecture, enabling businesses to introduce new products, or engage with new partners or in new markets".

However, despite knowing what needs to be done, organisations still fail to capture the synergies presented by a merger (Toppenberg & Henningsson, 2013). The quality and effectiveness of the IT system to provide good service to customers is largely dependent on quality business processes (Heinrich, 2013). Expected synergies can be explored by understanding the implications of having redundant business processes and IT systems (Tafti, 2011). As a basis for seeking to explore various strategies to create a unified IS portfolio, it is crucial to make an informed decision when investing in IT systems. Rationalisation of business processes linked

to IT systems provides an opportunity for merged entities to not work in silos (Hitt *et al*., 2012).

2.12 IS/IT due diligence in mergers

The focus underpinning the need to discuss IS due diligence in this study is on seeking to explore methods applied to create a unified IS portfolio. Many studies advocate that the synergies of a merger are all about proper consolidation of IT resources and the functions that IT enables, including HR, finance, logistics and customer relationship management (Sarrazin & West, 2011; Walker, 2012; Benitez-Amado & Ray, 2013). According to Sarrazin and West (2011), organisations fail to fully address IT issues during due diligence or the early stages of the post-merger planning.

IS due diligence, according to Delak and Svetovanje (2013:3), "provides an opinion on human resources, SWOT (Strengths, Weaknesses, Opportunities & Threats) analysis and also information about the knowledge in the organization*".* Delak and Svetovanje (2013:3) state that IS due diligence is characterised by different types of undertakings, namely: i) requests by top management to obtain the status of a critical part of an IS in the organisation in light of their objectives; ii) initial conduct prior to the merger in order to protect investors and shareholders from making wrong investments or misjudging their resources; (iii) technology conduct when there is a potential technology investment; and (iv) vendor conduct prior to outsourcing to ensure that organisational resources such as infrastructure and data are secure.

2.13 Factors affecting the consolidation of legacy systems in merging

Organisations struggle to transform their legacy LOB systems and therefore hinder their opportunity to become innovative (Alexandrova, Rapanotti & Horrocks, 2015). According to Frey, Hentrich and Zdun (2014), legacy systems perform critical business functions. Systems are still based on a mainframe that is twenty plus years old in a company with outdated hardware and software (Frey *et al*., 2014). Khadka, Saeidi, Jansen, Hage and Haas (2013) state that to remain responsive to new business opportunities, enterprise systems should be designed to enable continuous evolution to realise better reuse and improve business and IT alignment. The main aim of this section is to discuss and understand the factors affecting the consolidation of legacy systems during a post-merger integration.

The challenges associated with an IS consolidation exercise—despite its benefits for merged organisations—are problems such as employee stress, dissatisfaction and

resistance to change (Vieru & Rivard, 2014). Intergroup differences, incompatible organisational cultures, feelings of exclusion, and organisational identity ambiguity are seen to be the major contributing factors to these challenges (Vieru & Rivard, 2014). In the context of legacy systems, inherent challenges such as inflexibility, time-lags for introducing new products, high maintenance costs, and difficulty to maintain are barriers hinging on synergy realisation (Khadka *et al*., 2013). Despite the challenges, these systems continue to run core business functions and the knowledge contained in them is of significant value to the company; thus failure could spell serious consequences for the organisation (Dang *&* Nkhoma, 2013). The lack of proper documentation, skilled manpower and resources hinders the evolution of legacy systems (Khadka, Saeidi, Idu, Hage & Jansen, 2012). Apart from these challenges, new technologies are favoured to be the solution forcing organisations to adopt these in response to market changes, laws and regulations in order to be efficient, innovative, and to reap new business opportunities (Khadka *et al*., 2013).

2.14 Strategies to consolidate legacy systems when merging

Changes in organisational strategies as a result of mergers and acquisition require companies to adopt an architecture and technologies fitting the future state of the business (Akoramurthy, 2015). This topic seeks to understand strategies and approaches that can be used by the merged financial institution to consolidate legacy systems as part of the IS portfolio.

The importance to extract knowledge in legacy systems becomes a crucial step which assists in the decision of modernising these systems (Paradauskas & Laurikaitis, 2015). The intended goal to extract knowledge in legacy systems is to have a deeper understanding of i) legacy sources, ii) application functions which include entities and relationships, ii) data formatting and reporting, and iv) business rules (Paradauskas & Laurikaitis, 2015). The highly customised functionality aspect forcing organisations to maintain their legacy systems is that these systems are not easily implemented in many brand new systems (Alkazemi, 2014). Paradauskas and Laurikaitis (2015:1) present the following to modernise legacy systems:

> "…redevelopment which involves developing system from scratch, using new hardware platform[s], architecture, tools and databases; …wrapping involves developing a software component called a wrapper that allows an existing software component to be accessed by other components; …migration allows legacy systems to be moved to new environments that allow information systems to be easily maintained and adapted to new business requirements while retaining functionality and data of the original legacy systems without having to completely redevelop them".

The number of business rules and software embedded in legacy systems built over many years can be very expensive and a huge risk to the business (Beggar, Bousetta & Gadi, 2014). Common to research papers by Beggar *et al*. (2014), Alkazemi (2014), and Paradauskas and Laurikaitis (2015) caution against making a decision to modernise legacy systems without a thorough investigation into the impact on the business. Alkazemi (2014:2) suggests four dimensions where an assessment needs to be made before making a decision to modernise the legacy systems: i) support, which looks to examine the hardware and software as well as the availability of the source code and team supporting the legacy system; ii) the business requirements of the legacy system and whether it needs to be kept functional; iii) complete shut down or new system replacement; iv) architecture which looks at the pattern of the system and the different entities; v) how the system is integrated into other systems and consumption by clients; vi) the technology platform adopted by the legacy system; and vii) whether it is still relevant and appropriate to be used based on the current business requirements. A study by Frey *et al*. (2014) indicates that many financial institutions are still based on legacy systems, pointing to the need for a roadmap to modernise these systems.

2.15 Knowledge extraction from legacy systems

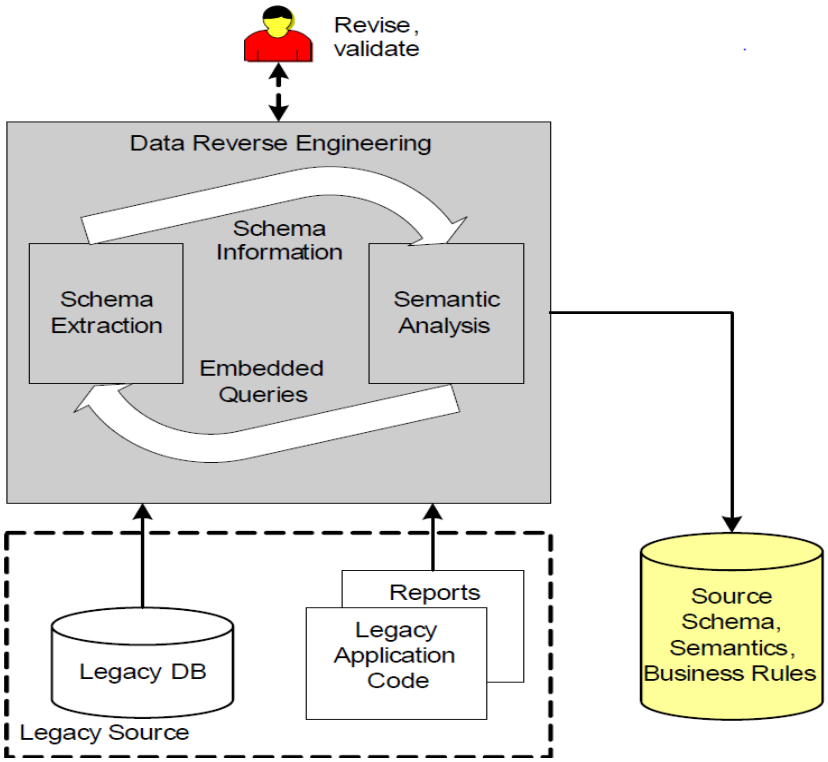

Figure 2.3: Conceptual diagram for legacy database knowledge extraction
(Paradauskas & Laurikaitis, 2015:2)

Paradauskas and Laurikaitis (2015) researched the extraction of knowledge in a legacy relational database where a concept of data reverse engineering is presented. The concept is applied by analysing one or more data sources to obtain structural information from legacy sources to improve the database design or produce missing schema documentation (Figure 2.3) (Paradauskas & Laurikaitis, 2015).

Beggar *et al*. (2014) present a phenomenon of software erosion whereby legacy systems are maintained over many years to correct anomalies and extension requirements as well as business rule changes to a state whereby the code becomes obsolete. These authors propose a Model Driven Reengineering (MDRE) approach (Figure 2.4) which looks at analysing a set of models capturing business knowledge to minimise the gap between a business rule model and a software application which may have occurred over the years as a result of changes in legislation or business requirements. The MDRE approach is presented to ensure there is minimal misunderstanding between business people, store and codify business rules by programmers, and translate the rules into a natural language which conforms to Object Management Group (OMG) standard Semantics Business Vocabulary and Rules (SBVR) (Beggar *et al*., 2014).

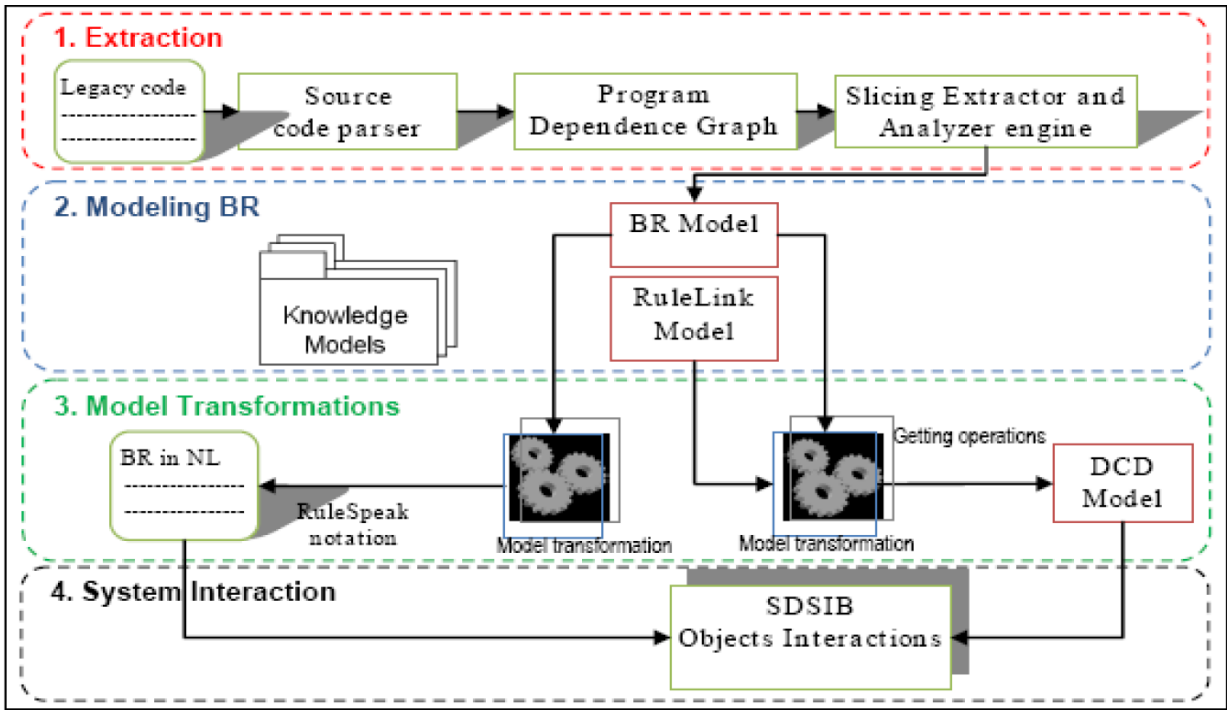

Figure 2.4: MDRE approach depicting phases of business rule extraction in legacy systems
(Beggar et al., 2014:2)

2.16 Information systems in mergers

Information systems are crucial to the success of an organisation. Mirchandani and Lederer (2014) state that strategic IS planning provides a platform for organisations to determine their intended IT system investments in order to achieve its business goals and objectives and thereby enhancing business performance. According to Walker (2012:1), IS strategy encapsulates three elements: “The infrastructure that IT environments are based on, the systems which are used to support the needs of the users comprising of middleware and applications and finally the services which are provided to the users*”.*

The importance of IS in this study is to examine whether the applied operational efficiencies by the merged financial institution resulted in the expected synergies. The creation of an IS portfolio, discussed in the next section, is dependent on the successful rationalisation of business processes linked to IT systems.

2.17 Creating an IS portfolio in mergers

Organisations invest large sums of money into IT systems. Financial Service Providers (FSPs) spent USD 270 billion globally in 2013 (Heinrich, Kundisch & Zimmermann, 2014). Organisations engage in mergers to reduce operational cost, cut costs by sharing IT infrastructure, and increase its customer base (Benitez-Amado & Ray, 2013). A study by Kovela and Skok (2012) alludes that more than 50 percent of mergers have failed to implement cost reduction efficiencies.

One of the activities towards the creation of a unified IS portfolio in a merger is the consolidation of strategic business units (Dameri, 2013). The purpose of consolidating strategic business units is to share resources such as IT systems, but more importantly to determine a way of creating value to customers (Kaplan & Norton, 2006). The cost reduction in a merger depends on the successful implementation of rationalisation strategies to curb the possibility of having redundant IT systems through rationalising business processes (Sarrazin & West, 2011). Having insight into business models of strategic business units is crucial to understanding the rationale surrounding the implementation of an IS portfolio. Business models assist in understanding the strategies, roadmaps and goals of an enterprise (Benad, Bode, Hack, Kleine-Möllhoff & Wagner, 2013). According to Heinrich *et al*. (2014), 60 percent of CFOs and CIOs do not have an insight into their IT portfolios and are not familiar with the size of their core software assets. To further argue this, two large organisations having engaged in a merger will increase the IT assets, making the decision to rationalise a complex one (Kovela & Skok, 2012). Creating and implementing an IS portfolio may be prone to failure

considering that the decision makers such as the CFOs and CIO do not have insight into their core software assets (Heinrich *et al*., 2014).

2.18 Leadership role in creating a unified IS portfolio in mergers

Leadership and decision making is paramount in dealing with post-merger changes in IS/IT systems. This importance is stated by Kovela (2015) who argues that IS/IS systems are critical enablers of a business model. In the context of this study, decision makers need to be empowered to make appropriate decisions in their plan to create a unified IS portfolio. Advisory standards such as ISO/IEC 38500:2008 can be used by directors to assist in underpinning principles of good IS/IT governance coupled with the COBIT framework which is business requirement driven (Kovela, 2015).

Sixsmith (2014:36) notes the importance of fostering good relations between IS/IT executives and business executives. These good relations need to be filtered down to IT and business staff members and include "establishing the responsibility of setting up priorities and standards, joint participation in the development of information system solutions". The organisation's effectiveness relies on the execution of Chief Information Officer's (CIO) critical responsibilities which entail directing the implementation of IS/IT systems to improve cost effectiveness, negotiation and oversight of contracts with vendors as well as guaranteed security of organisational data from external threats (Moses, 2014).

2.19 Summary

The general phenomenon of organisations engaging in mergers is to reduce costs, increase revenue, and have a competitive advantage (Ofili, 2014). Redundancy of business process and IT systems inhibits value creation in mergers (Hitt *et al*., 2012). The implementation of organisational strategies needs to be complemented by the chosen IS portfolio executing business processes. Business and IT/IS alignment is necessary to ensure that business strategies and objectives are effectively executed (Ullah & Lai, 2013). An IS/IT due diligence exercise is crucial when embarking on the consolidation process to understand the business processes and IS portfolios of the merged organisation and how best these complement each other (Delak & Bajec, 2013). The implementation of rationalisation tasks exposes employees to high levels of psychological distress and requires sound change management strategies (Chung *et al.*, 2014). Chapter Three discusses the research strategy and approach to gather and analyse data, where after the findings and generation of themes will be discussed in Chapter Four.

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

The aim of this study is to explore factors affecting the rationalisation of business processes to create a unified IS portfolio in the merged financial institution. The failure to rationalise business processes and IT systems inhibits the organisation's ability to capture the synergies of the merger. Factors inhibiting the rationalisation process are explored through the following research questions:

RQ1: What are the factors affecting the business process and IT systems rationalisation when business units merge?

RQ2: How does the rationalisation of business processes affect the IT systems in the merged financial institution?

The first part of the chapter discusses the systematic approach that was followed whilst conducting the research, the qualitative aspect of the research, the rationale behind choosing the qualitative method, and justification of this method. The next part elaborates on the research philosophy, approach, strategies and data collection used in this research. The latter part of the chapter describes the case study undertaken and a technique called thematic analysis used to analyse and interpret the data.

3.2 Research methodology

According to Prewitt (2012:6), research methodology can be defined as "systematic research procedures which help the researcher avoid self-deception". Research provides the researcher with a plan on how to gather data or information on the subject matter. According to Goldkuhl (2012), research methodology frameworks used for conducting research include research aiming at predicting outcomes, studies aiming at interpreting and understanding a phenomenon, and exercises aiming at intervening and changing something. The focus of this study is on conducting qualitative research in a financial institution to explore and understand the approaches followed to rationalise business processes linked to IT systems in order to create a unified IS portfolio. The aim of this research is to interpret and understand the rationalisation methods applied by the merged financial institution and determine whether synergies of the merger have been realised. The research investigates the rationale of the financial institution's decision to merge, the methods used to implement the decisions, and how the decision and methods generated synergies in the merger.

3.3 Research philosophy

According to Thumawongchai and Huang (2011:13, citing Galliers, 1991), "collecting, analysing and using are the way to conduct a research philosophy". Thumawongchai and Huang (2011) articulate that there are three main reasons for adopting and making reference to a philosophy in research methodology. To begin with, the research philosophy helps to identify: i) methodologies that can be applied in a study; ii) the data type(s) that should be gathered; iii) how this research should interpret the data; and iv) the way in which it assists answering the research question(s). The research philosophy further assists researchers in evaluating different methodologies or methods and making a decision to choose the most appropriate method for their research domain. Lastly, the research philosophy builds confidence in researchers to find a way to conduct the research. Research philosophy can be divided into the ontological and epistemological stance of the research. Other categories are stated by various authors but are not discussed.

3.3.1 Ontology

According to Akehurst, Rueda-Armengot, López and Marqués (2011:2), the ontology dimension "deals with the physical, technical or social support on which and in interaction with which knowledge is created". Ontology focuses on subjectivism and objectivism (Bahari, 2010). To present credible information for this study, the author needs to identify all the major role players from whom relevant knowledge crucial to address the research problem will be extracted. This study follows the subjectivist stance.

3.3.2 Epistemology

Akehurst *et al*. (2011:2) states that epistemology of knowledge "is concerned with its different forms and types". The author argues that interpretive research is about understanding other people's environments, and reporting on this information may not necessarily be factual. Stahl (2013) emphasises the importance of understanding what research is and what the aims and objective are before deciding on the appropriate epistemological stance. Interpretive research has two elements, namely hermeneutics and phenomenology. A hermeneutic approach gains an in-depth understanding of the research phenomenon through continuous engagement with an ongoing development of a body of literature, while phenomenology attempts to identify shared occurrences among various individuals experiencing shared phenomena (Boell, 2014). Key stakeholders in the merged financial institution have been interviewed to understand the rationalisation methods applied and determine whether synergies have been realised. An interpretivist stance was followed during the research.

3.4 Research approach

3.4.1 Inductive approach

This study followed an inductive approach where the researcher extracted relevant data from the key stakeholders to support the key questions this research seeks to address. Bahari (2010:7) and Saunders *et al*. (2009:7) state that "inductive approach involves the development of a theory as a result of the observations of empirical data". An inductive approach involves collecting information from participants and developing themes from this information (Bahari, 2010). Figure 3.1 depicts the inductive logic to qualitative research.

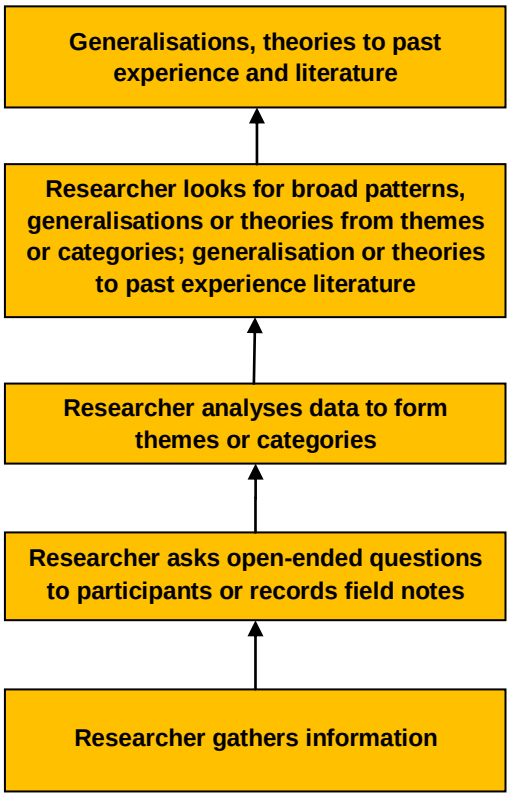

Figure 3.1: Inductive logic
(Source: Bahari, 2010:4)

3.4.2 Deductive approach

Quantitative research strategies are deemed to be deductive in approach. Babbie (2012) differentiates between an inductive and deductive approach in terms of numeric and nonnumeric data. Creswell, Klassen, Plano and Smith (2011) define quantitative research as a "mode of enquiry used often for deductive research, when the goal is to test theories or hypotheses, gather descriptive information, or examine relationships among variables". Figure 3.2 depicts deductive logic and how it differs from inductive logic.

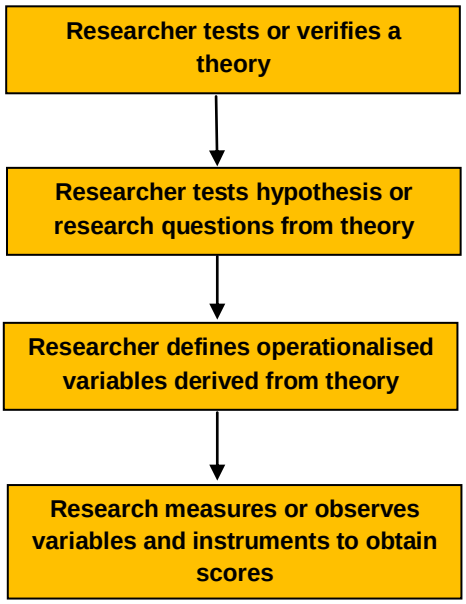

Figure 3.2: Deductive logic
(Source: Bahari, 2010:5)

3.5 Research strategy

The strategy adopted is a case study. This entails studying the selected financial institution to explore and understand the rationalisation methods employed to capture the synergies of the merger (Yin, 2006). The views of key stakeholders associated with the rationalisation process are studied to extract data useful for making interpretations to answer the research questions of this study.

A financial institution has been selected based on convenience and the availability of the institution to the researcher. The key stakeholders (19) upon whom the unit of observation is based, are limited to the following people: business analyst, IT practitioners, IT developers, system analyst, business strategist, and service manager for each business unit that has been consolidated. The participants have been selected based on their understanding of the research domain.

The unit of analysis for this study has been identified as the merged business units where the factors affecting the rationalisation of business units and IT systems are explored.

3.6 Data collection

Data have been collected through interviews and social interactions with the key stakeholders where the researcher asked semi-structured questions to gain different views on the rationalisation process that was followed (Dicicco-Bloom & Crabtree, 2006). The interviews were recorded and the interviewees were requested permission to do the recording. Open-ended questions were asked to encourage the

participants to elaborate on their experiences regarding the rationalisation process. (The interview guide can be viewed in Appendix A). The unit of analysis was identified as the consolidated business units for the purpose of capturing synergies. Key participants were identified within the consolidated business units to gather empirical data needed to answer the research question (Benbasat, 1987). The participants comprised of senior business professionals (4) who provided the rationale for the decisions during the rationalisation process. LOB staff members (6) provided input on the rationalisation of the client-facing IT systems in the organisation. Shared IT services staff (9) provided input on how the rationalisation process was undertaken for shared IT services such as infrastructure and shared application systems.

The information gathered from the participants guided the researcher in making appropriate observations and reporting. Factors affecting the rationalisation process in the merged financial institution are discussed in the latter chapters of this research report.

3.7 Data analysis

Data collected from the participants were analysed through drawing information useful to answer the research questions. According to Wahyuni, (2012:7), “data analysis involves the drawing of inference from raw data”. Managing data from qualitative research entails three important steps: data storage, transcribing audio sources, and cleaning the data (Wahyuni, 2012). The qualitative data collected was transcribed, validated, codified, summarised, segmented and reassembled where after thematic analysis was applied to provide meaningful findings to the study. The research questions and aim provided guidance through the analysis process of the raw data collected to form meaningful findings. Patterns identified and themes developed are discussed in Chapter Five.

3.8 Ethics

The researcher is cognisant of abiding to ethical standards while conducting research. Potential harm to the participants versus personal benefit will be recognised to ensure that the findings presented are within the accepted ethical standards. Ethics, according to Resnik (2011), entails differentiating between acceptable and unacceptable conduct while doing research. The data gathered for this research presents the aims (discussed in Chapter One). Orb, Eisenhauer and Wynaden (2001) indicate that “qualitative researchers are expected to describe the research experience in an authentic manner, often contrary to their own aims”. No ulterior motives have influenced the findings uncovered in this research. The

findings are based on the interview guide (Appendix A) used to conduct interviews with the participants. Considerations that were taken for this research are discussed below.

Honesty

I will be honest in all my communication with the organisation and in the representation of my data. The research will be conducted in the organisation I am employed at in Cape Town.

Objectivity

I will strive to be unbiased in my data analysis and in all other aspects where this is required.

Carefulness

I will be careful in order to avoid errors and negligence in my research.

Integrity

I will maintain being sincere in my methods of obtaining data by always striving to keep my word.

Transparent

I will share all results with the organisation upon their request and ensure that my research remains transparent.

Intellectual property

I will honour any form of intellectual property conduct by giving credit to any contributions made to my research and not using any data without permission. Voluntary consent has been obtained from the organisation and the participants.

Confidentiality

The data gathered will not be used to damage the reputation of the organisation. The name of the organisation will remain anonymous throughout the research to maintain confidentiality of the use of the information found.

Respect

I will respect all participants in the research process and everyone will have a choice whether or not they wish to participate. Participants are able to decline participation at any given time during the research process. Discrimination will always be avoided in the conduct of the research.

Autonomy

Informed consent has been received from all participants and they have the right to stop participating at any time I they wish so.

Beneficence

I will prevent any harm from happening to the research participants and organisation. The research will aim to strengthen the organisation by equipping it with useful information to formulate strategies in the future to counter non-compliance.

Non-malfeasance

I will at all times avoid any act that would harm the research participants and organisation's trust and always treat all information as confidential.

Justice

I will conduct my research during lunch times at the organisation and not disturb working hours of the organisation with my research. All findings will be revealed to the organisation if requested and can be used however they see fit.

3.9 Delineation

i) Organisations fail to rationalise business processes linked to IT systems. This research is limited to reviewing the rationalisation of business processes solely by means of employing appropriate strategies to ensure successful implementation and deployment of an IS portfolio.

ii) The intention of this report is not to provide a rationalisation strategy checklist to be used and generalised.

3.10 Summary

This chapter reviewed methods applicable to conducting research in the merged financial institution. The merged financial institution was chosen as a case study. Qualitative methods were applied to explore factors affecting the rationalisation of business processes to create a unified IS portfolio. A diverse group of participants (19) were chosen to acquire relevant information from. The acquired information has been transcribed, validated, codified, summarised, segmented and reassembled, and thematic analysis was applied to provide meaningful findings to the study. The findings of this research are presented and discussed in Chapter Four.

CHAPTER FOUR: ANALYSIS AND FINDINGS

4.1 Introduction

The research focuses on a merger of two financial institutions which amalgamated in 2010. This study seeks to explore the methods applied by the merged financial institution to consolidate strategic business units through the rationalisation of business processes linked to IT systems to create a unified IS portfolio. Prior to the merger each organisation had a set of business processes and IT systems. The research explores the inherent challenges associated with horisontal mergers such as duplication of business processes linked to IT systems and the rationalisation plans to generate synergies. This then introduces the problem statement to the study, stating that the failure to rationalise business processes linked to IT systems hinders the organisation's ability to realise the synergies of the merger.

The research questions are:

RQ1: What are the factors affecting the business process and IT systems rationalisation when business units merge?

RQ2: How does the rationalisation of business processes affect the IT systems in the merged financial institution?

The unit of analysis is the business process management, and the unit of observation is the non-randomly sampled employees of the companies. Data has been collected by means of semi-structured questions during interviews. The research sample was divided into three groups. The first group was senior business professionals chosen to gain an understanding of the rationale of the decisions around business process consolidation that took place during the merger. These individuals carry knowledge of the information systems deployed in the financial institutions. The second group comprised of participants that work with LOB systems, implementing any business process strategies that are used by the organisation. These participants have the technical knowhow to develop and maintain the systems. The third group were employees assisting in technological decisions in terms of networks, infrastructure and applications shared among the organisational group.

Chapter Four is structured as follows:

i) the case is presented, and
ii) the interviews are discussed and linked to the research questions and the aim of the research.

4.2 The case[1]

The two merging organisations both own duplicate licensed entities and IT systems. Organisations A and B both kept their brands after the merger but are now operating under the banner of Organisation C (the new entity). Organisation B grew organically as well as through acquisitions and mergers over the years and plays the dominant role in the merger with Organisation A. Organisation C has a staff complement of approximately 16500.

The organisations operate in the insurance business, with Organisation A focusing on the lower end and Organisation B on the mid-to-upper end of the market. Before the merger, each organisation had its own IT department servicing their business units with its own data centre. This is still the case even though the management structure was established to have one reporting line for IT. The segmentation of Organisations A and B meant that the primary objective of each IT department is still to focus on serving their individual business units.

4.2.1 Consolidation of IT/IS services to create a unified IS portfolio

The IS portfolios of both organisations have many disparities when compared to each other in terms of the infrastructure platforms and the IT/IS systems used to service business units and clients. Organisation A uses mainframe systems as a LOB system and Organisation B uses the AS400 system platform. The LOB systems, particularly the mainframe systems (Organisation A), have evolved over many years, making it difficult to rationalise with minimal business disruption. IT system overlaps were identified during the merger of the organisations. Systems that could be implemented across the merger from one organisation to another were identified. Organisation specific systems were also identified.

The Console system which belonged to Organisation B and appealed to the lower end of the market was moved to Organisation A with a plan to redevelop all the systems that existed on the mainframe of Organisation A. The Console system is a call centre based system where agents call potential clients to sell policies in the lower end of the market. The redevelopment of systems residing on the mainframe has been marred with complexity because of business rules and code developed over many years. The complexities made it difficult and challenging to rationalise the different systems of the organisations. The following sections narrate how the merged organisation implemented its plans to create a unified IS portfolio. The

[1] The two organisations A and B merged to form organisation C. However, as far as target markets and segmentation go, organisation A and B still operate independently. Organisation C is attempting to rationalise the business processes and IT as a shared service.

implementation of the Khula system attempted to consolidate all LOB systems, and shared services attempted to consolidate IT infrastructure and application systems shared across the group.

4.2.2 Implementation of the new system (Khula)

Organisation C procured a new system called Khula with the strategy to house all the products sold to clients. The aim of the Khula system is to ensure that there is no redundancy of products and that the system can be used to upscale or downscale to sell policies in both lower and mid-to-upper ends of the market. The Khula system is built around the IBM Insurance Application Architecture models which reside on an AIX operating system server platform. The implementation started in 2012 and by 2015 the system was still not operational. Challenges with the new Khula system are further discussed in the interviews with the research participants.

4.2.3 Shared services consolidation

Shared services comprise of teams who support IT networks, infrastructure, application systems and whose services are consumed across multiple business units. As part of the merger consolidation, many changes took place where management established structures to create one reporting line responsible for operations across the organisation. The objective of each manager is to look at duplication of what exists in their business unit and implement rationalisation tasks to create efficiencies. Due to the overlap and functionalities of the application systems in shared services, there has been minimal rationalisation.

This study explores factors affecting the rationalisation of business processes to create a unified IS portfolio for the merged organisation. A further aim is to explore what decision processes were used in executing the plan to create a unified IS portfolio. In the following sections, the interviews and findings are discussed.

4.3 Interviews

This section analyses interviews to determine findings in the implementation of rationalisation strategies in the **merged organisation**. The interviewees comprise of three groups, namely i) senior business professionals, ii) mid-to-senior LOB staff members, and iii) mid-to-senior shared services staff members.

Table 4.1: Work experience of business and IT professionals

Senior business professionals		
Position in the company	**Job function**	**Years of experience**
Programme Manager	Oversees the implementation of the rationalisation strategy	20+
Business Manager	Manages the business operations of the organisation	20+
Business Process Specialist	Responsible for business process analysis and has knowledge of product portfolio executed on LOB systems	20+
Business Analyst	Responsible to analyse business domain, document business processes, assess business models and technology integration	20+

Mid-to-senior LOB staff members		
Position in the company	**Job function**	**Years of experience**
Head (mainframe systems)	Oversees all the products running on the mainframe and the consolidation of legacy systems	20+
Manager (mainframe operations)	Manages the mainframe infrastructure and contracts with the IT vendors	20+
Service Manager (mainframe)	Manages the mainframe operations and the changes to the system	20+
Head (Console/Khula systems)	Oversees the development / operations of applications in Console and Khula as well as the consolidation of legacy systems	20+
Developer (mainframe)	Responsible for developmental changes on the mainframe	10+
Developer (Console/Khula)	Responsible for developmental changes on Console and Khula systems	10+

Mid-to-senior staff shared services		
Position in the company	**Job function**	**Years of experience**
Head (IT operations)	Manages overall IT operations and the consolidation of IT systems	20+
Service Manager	Responsible for shared application systems and the relationship with business partners	20+
Manager (networks)	Managers the network infrastructure, vendor contracts, network consolidation and system integration	15+
Network Architect	Responsible to unify network infrastructure and ensure cost effective and efficient network in the organisation	15+
Manager (servers)	Responsible for servers and assist business units that are consolidating their systems	15+

Position in the company	Job function	Years' experience
Head (HR systems)	Responsible for HR systems and the rationalisation process	15+
Manager (finance systems)	Responsible for finance systems and the rationalisation process	20+
Application Operation Support (finance)	Supports applications in the finance department	10+
Systems Engineer	Responsible for technical issues and the dispensation of IT servers	10+

The findings generated from the interviews of the senior business professionals, mid-to-senior staff in LOB systems, and mid-to-senior staff members in shared IT services, are now reported. The findings are guided by the main research questions of the study. The main research questions are answered using the research sub-questions and specific interview questions related to the research sub-questions.

4.3.1 Senior business professionals (4 interviews)

RQ1: What are the factors affecting the business process and IT systems rationalisation when business units merge?

RSQ1.1: What are the challenges experienced with the rationalisation of business processes?

IQ1: *What planning is involved in rationalising business processes?*

Organisations A and B were careful not to immediately rationalise and bring everything together as there were many factors to consider, particularly in LOB systems (Interviewees 1 & 2). Interviewee 1 said: "When the merger happened between Organisation A and Organisation B about 3.5 years ago, they were quite careful not to bring everything together immediately, except for ITS…" (Appendix A: 1). Interviewee 2 indicated the main decision was which system to adopt, and "Console came in as a platform to build on going forward" while legacy systems would be phased out (Appendix A: 8). The organisations operated in different market segments, with one operating in the mid-to-low and another in the mid-to-high end of the market, and these classifications were made to maintain the stability of the business. There were some business processes and IT systems identified for each organisation based on their appeal to the market, and as a result the new market product (Console) was moved from Organisation B to Organisation A and

the Odyssey product was moved from organisation A to B. The rationalisation was project managed by a third party (Third Party)[2] identifying applicable management operating models with each departmental manager developing a departmental strategy, tasks, and the management of their people. The mandate was to consider cost saving as well as optimisation of processes and systems (Interviewees 2 & 4).

According to Interviewee 3, "the Client Solutions team [were] going [out] into the market to do market research where focus groups were taken to understand their financial needs (i.e. funeral policies, saving policies, etc.)" (Appendix A: 13). The information gathered from the focus groups dictated the types of technologies to be adopted by the organisation, which resulted in a decision to implement a new system because it was too expensive to maintain the conventional systems (Interviewees 3 & 4). Interviewee 1 stated that "a new business area called Product Solutions was established where all backend product capabilities will be placed where there is a lot of duplication" (Appendix A: 1).

Finding 1: Market research was conducted to determine the types of technologies to be adopted as part of the IS portfolio

Finding 2: The merged financial institution took a decision to implement a new system because the conventional system was expensive to maintain

Finding 3: A new business area called Product Solutions has been established to ensure that there is no duplication of products

Finding 4: Rationalisation driven through the Third Party Company looked at redundancy to address inefficiencies

Finding 5: Systems were redeployed to the two companies depending on the needs of the companies

IQ2: *How do you determine the process that must be followed to rationalise business processes?*

Interviewee 4 said that the Third Party Company had "setup interviews with the business to understand how the business works" (Appendix A: 20). According to interviewee 4, the Third Party Company used an agile methodology framework to

[2] The third party is named "Third Party" for this thesis

map out and understand all the business tasks involved. Interviewee 4 also said that business processes were plotted on brown paper (brown paper exercise) where business users explained how a particular process works, and based on the information gathered they would optimise that process.

The Third Party consultancy conducted a statistical analysis based on the interviews done with people supporting (maintained) the LOB systems to determine wastage where a business function is performed, for example where a business function is executed by two employees whilst only one is needed. The Third Party also examined processes from a client perspective and identified inefficiencies. Interviewee 4 said that:

> "…in essence, what would happen is that a client will go to a CSO in the organisation branches to apply for a policy; the CSO agent will capture and submit the policy via Automatic Work Distributor (AWD) to the back office. This was seen as one of the inefficiencies as one customer having too many touch points before his/her transaction is completed" (Appendix A: 20).

These inefficiencies were identified at the point where the AWD system sends the policy information to the back office staff using the CICS system to process the policy before it can be issued, thus using two systems for the same function. The Third Party Company recommended that the work performed by the back office staff using the CICS system to issue policies must be implemented at the CSO, which will shorten the issuing time of a policy. From the data collected, recommendations were proposed and piloted across specific branches to see whether synergies would be achieved (Interviewees 3 & 4). Interviewee 4 said this caused many people working in the back office to be retrenched (Appendix A: 20).

The CIO from the merged organisation had a philosophy document which was used to evaluate the legacy systems from both organisations to see whether the legacy systems are obsolete, conventional, or a modern platform. Each system was scored against stringent criteria to determine the system capabilities. The due diligence which was done based on the CIO's philosophy document, identified that the Console system could be customised to fulfil some business needs because the IT executive did not want to go forward with the legacy systems. The Console system was initially used to consolidate systems that run on the mainframe. Interviewee 2 stated that although comparisons and capability of systems were made, "the driving force behind the adopted system was who got the CIO job as this person will go with what is familiar to them" (Appendix A: 9).

Finding 6: An agile framework was used to map out system portfolios

Finding 7: Employees were interviewed and a statistical analysis was conducted to decide on the rationalisation process to be followed

Finding 8: The CIO developed a philosophy document to look at the system roadmap in particular of legacy systems

Finding 9: The decision was made that the mainframe systems in Organisation A are not the technology to go forward with

Finding 10: The choice of systems has been contentious and preferred systems chosen changed frequently

Finding 11: Organisational politics played a role in deciding which system to choose

IQ3: *Who are the key stakeholders involved in the rationalisation strategy?*

> "The executive CIO; the learning is that you need to be very close to your financial director, head of finance, because often when rationalising systems you need to spend money and the return might not be faster. The marketing product development executive and the sales people are also crucial in ensuring you are continually working with them and that the rationalised system caters for their needs" (Interviewee 1, Appendix A: 2).

Interviewee 3 said the Third Party Company appointed to implement rationalisation tasks "discussed with Retail EXCO where they recommended process and workflow system[s] and workforce management changes" (Appendix A: 15).

Finding 12: The key stakeholders are the executive CIO, the financial director, and head of finance

Finding 13: The marketing and product development executives have been excluded from the rationalisation process

IQ4: *Have you managed to keep all the set time frames to implement the rationalisation tasks?*

The rationalisation tasks are taking longer than originally planned (Interviewees 1, 2, 3 & 4). Interviewee 1 said that implementation is running "behind schedule and that there is only one product currently running on the system" (Appendix A: 2). A

business case was presented in 2011 for the Khula new systems development and the targeted time for implementing and going live was five years (Interviewees 1, 2 & 4). Interviewee 2 said that “the initial set timeframe was between 4-5 years; another plan was to absorb the OB, Group Schemes policies into the PDS system as it had been used for similar function[s] in previous mergers” (Appendix A: 8). There is currently one product running on the system and the hope is to have new business running in June 2014 (Interviewees 1, 2 & 4). Interviewee 2 mentioned that prior to the presentation of the business case there were plans to absorb the legacy systems, OB and the Group Schemes policies into the PDS system as it has been used for similar functions in previous mergers.

Finding 14: The rationalisation tasks took longer than originally planned

Finding 15: No one is taking responsibility for the late delivery of the projects

IQ5: *What are the hindering factors and the challenges to implement the rationalisation tasks?*

Interviewee 2 stated that “the first delay was caused by the assumption to rationalise using the Console system” which became another legacy system (Appendix A: 8). Interviewee 2 said that “one of the change management issues is the skills …and there are a few Java skilled people …who do not have life industry knowledge” (Appendix A: 10). Skills of the employees are mainframe based, which hinders the software development and implementation of rationalisation progress (Interviewee 1 & 2). Interviewee 2 further said that “one of the change management issues is the skills because the systems down in Cape Town are all mainframe based” (Appendix A: 10). The implementation of the Khula system had been marred with too many challenges and as a result the Java developers left the company. The developers also felt they are not looked after by the organisation as they expected it to be (Interviewees 1, 2 & 4). Interviewee 1 indicated that “Java developers move quite quickly and it is very difficult to hold on to them as they can leave the company if they are not happy” (Appendix A: 3).

Interviewee 4 indicated that “the implemented changes impacted certain systems [as a result of the rationalisation] without them [Third Party Company] being aware of it. One of the main reasons was because of IT not being involved in the decisions where they could advise on the system integration” (Appendix A: 21). The lack of knowledge to operate the CICS system by CSA working in the CSOs could be one of the major reasons why they failed to generate new business (Interviewees 3 & 4). Interviewee 4 said: “Cost saving was evident which was meant to be achieved by

the rationalisation tasks implemented by [the Third Party Company] but rate of new business achieved or generated was not impressive" (Appendix A: 21). Data quality issues have been experienced where back office staff were required to patch the data coming from the CSO (Interviewees 3 & 4). During this patching process many mistakes were made (Interviewees 3 & 4). Many of the mistakes can be ascribed to the fact that sixty employees were retrenched during the merger, resulting in a work overload for the remaining employees (Interviewees 2, 3 & 4).

> "…having to move (platform change) the corporate business to be administered in the employee benefit space was challenging for employees as they had to learn a different product. One of the biggest challenges when administering the corporate business under one umbrella is retrenchment of people. The other challenge is choosing people that will train others to administer the new scheme while retrench[ing] the others" (Interviewee 3 Appendix, A: 14).

> "…the organisation created a fear in the people that in 2 years' time the mainframe will be decommissioned and that the PL1 skills will no longer be required and many people looked for alternative employment and they started resigning. This creates more work for people who are left in the current systems team as they do double the work left by people who resigned" (Interviewee 4, Appendix A: 21).

Finding 16: There was not enough time invested in the planning and analysis of systems

Finding 17: There is a lack of skills and knowledge (business acumen) of the insurance business to be able to implement the new Khula system

Finding 18: There is no staff retention plan in place

Finding 19: There is a lack of knowledge transfer due the decision to decommission the mainframe in two years' time

Finding 20: IT teams were not involved or consulted during the rationalisation and integration of systems by the Third Party

Finding 21: Data quality issues occurred at the back office where data was captured

Finding 22: Lack of a change management process where staff in CSOs made many mistakes operating the CICS system

Finding 23: There is a decline in issuing new policies

Finding 24: Staff working in the back office were retrenched

IQ6: *What implications does the failure to rationalise business processes have for the organisation?*

Interviewee 1 commented on the failure of the rationalisation of business processes as problematic for the organisation and states:

> "…looking at the organisation's MMI strategy in terms of client centricity, we won't be able to leverage the full extent of what we want to do on our old systems. If the whole Ukukhula program did not deliver, it will be a setback to business having flexibility to construct products and having to really build a financial wellness offering, and really help a customer as he/she goes to his/her life journey" (Appendix A: 3).

Interviewee 2 mentioned the duplication in IT support staff and IT systems, which creates cost implications coupled with a complex unmanageable environment. Interviewee 3 highlighted that "if Proudfoot's recommendations were not implemented, then the… fee that was paid to them would have gone to waste with a ripple effect of staff not getting paid bonuses" (Appendix A: 16). The recommendations, according to Interviewee 3, are that the Third Party organisation "ended up with a picture of each area where the system is not being used optimally; also find out where IT processes can further be streamlined as well as training needs of the staff. A rand value was also determined on workarounds (i.e. where two people doing manual labour can be put in an IT process where one person will be required)" (Appendix A: 16).

Finding 25: The implication of the failure to rationalise is that the organisational strategy in terms of client centricity will not be realised to full extent

Finding 26: There will be duplication of IT support staff and IT systems with a ripple effect of cost implications which will create and unmanageable environment

Finding 27: The money paid to the Third Party Company assisting with rationalisation would have gone to waste

Finding 28: Staff may not have been paid bonuses if the savings were not achieved through implementing rationalisation tasks

IQ7: *Please specify giving examples of business processes that have been rationalised?*

Interviewee 3 stated that from a business perspective, redundancy/duplication had been identified in customer administration and claims. For example, the company identified a savings product which they were not selling anymore, while the systems cost millions of rand annually to keep running and the vendor was charging 3 to 4 million rand a year to run the servers (Interviewees 1 & 2). (Interviewees 2 and 3 said the future choice product which contains 50 000 policies was migrated to the OB legacy system. Interviewee 3 said:

> "Migration from Future Choice to OB conventional, there was some automation movement from the Future Choice product in the Odyssey system which did not exist on the OB side that was not needed because it was not a risk (i.e. in the maturity space, if a client wants to take early retirement in a policy there is not an automated movement that will take the policy off books after the payment)" (Appendix A: 19).

RSQ1.2: What effect does the rationalisation of business processes have on the creation of the IS portfolio?

IQ8: *Did the employed rationalisation strategies make it easy to decide what systems to be deployed as part of the IS portfolio?*

Two of the respondents agreed that the rationalisation was based on the segmentation work that was done in each organisation (Interviewees 2 & 3). Interviewee 3 said that "Proudfoot showed in the organisations' systems as well as workforce management where the problems lie, and the marketing research gave where product solutions lie" (Appendix A: 17). Once the platform (i.e. IBM, Microsoft, and Mainframe) was established, the organisational client centric strategy made it easy to decide what system to adopt (Interviewee 2 & 3). Interviewee 1 stated that initially it was not easy because the company based their architecture on the Console system, but after consulting the philosophy documents it put many things into perspective.

> "Initially their due diligence identified that they could take the Console system and make architectural changes to it because none of the 7 systems are the ones they wanted to go forward with. The idea was to adopt the Organisation B Console and the PDS system" (Interviewee 1, Appendix A: 2).

Finding 29: The Console system initially chosen as part of the rationalisation strategy did not align with the organisational goals thus making the process difficult

IQ9: *What synergies were achieved with the rationalisation process?*

Interviewee 2 mentioned that "the merger and realisation of synergies was done at a much higher level where products were shifted to adequate business units. At this level there was no rationalisation or decision on what system was to be adopted" (Appendix A: 9). Interviewee 2 also expressed that "what occupies the executives' minds are financial savings; how the tasks will be executed to realise these savings becomes the last thing… [there is] no consideration whatsoever in determining the capabilities of the organisation's systems" (Appendix A: 9). Synergy has been achieved by consolidating client data to create a single view where clients may have multiples policies (Interviewees 2 & 3). Interviewee 3 said: "The new Khula system will be the link to other systems; this creates a cleaner approach than to have access into many different platforms" (Appendix A: 17). Interviewee 3 further stated that one of the synergies achieved as part of the recommendations by the Third Party Company was the consolidation of corporate business, product design, and a product house between the two organisations. For example, if there is a need for a savings product in the lower end of the market, the product design house will look at existing products in the higher end of the market and adapt the product to meet the needs of the target market.

Finding 30: Single system view of client information if they have more than one policy as opposed to more than one system

Finding 31: The consolidation of corporate business and product design benefited the organisation as part of the rationalisation

RQ2: How does the rationalisation of business processes affect the IT systems in the merged financial institution?

RSQ2.1: How are the rationalised business processes aligned with the IT systems?

IQ10: *What criteria must the chosen IT system meet to determine its adequacy for deployment as part of an IS portfolio?*

One of the criteria that were pointed out was deciding on a suitable IT platform. Interviewee 1 said "getting the platform decision right and making sure it involves

overtime to accommodate all capabilities without destabilising the organisation" (Appendix A: 5). Interviewee 1 also said the deployment of the IT system needs to ensure longevity, stability and a platform that is sustainable. Interviewee 2 said the platform "must be future proof [and] support the business processes without harming the customer base". There must also be "enough functionality in the new system to support the current systems" (Appendix A: 11). A further criterion mentioned is the skill requirements of the employees. Interviewee 2 said that there must be sufficient skills in the region to support the system. Interview 3 indicated that the IT system needs to fulfil all the departmental requirements and if not, a 'build or buy decision' has to be made.

Finding 32: IT system needs to look at longevity and run on a stable platform

Finding 33: There must be sufficient skills to support the system

Finding 34: IT system needs to fulfil all departmental requirements

IQ11: *If the IT system meets the criteria, what plans are put in place to deploy it as part of the IS portfolio?*

There are events occurring when the IT system meets the criteria for deployment. Interviewee 1 said "the organisation works with the ITSM system in terms of change management. There is a lot of planning around the releases and launching of a new system" (Appendix A: 5). Interviewee 3 stated that:

> "…the programme manager pulls together so that there is an understanding of what is the highest priority to get into the system. Also looking what product can be put in the market, looking at whether all the required requirements are met before going into the market or looking at the minimal viable solution needed to go into the market. From an IT side they have the scrum and the agile methodology approach to implement new functions in the systems; in the scrum sessions they will look at blue-sky to determine what is required for the product to run and what is the minimum solution required for the system to be functional" (Appendix A: 18).

The interviewees expressed the need to ensure and plan for formal user training.

> "The organisation had to identify transactions that were not done in the branches; the training was to be given to 475 staff members across the country, including staff in the head office. The training was given to a few staff members who in turn will train the rest of the staff members during quite times. The training was rolled out regionally and the first region was the Western

Cape as it is the closest. Five transactions were rolled out in the Western Cape, then business monitored come backs in a two week period for constraints and loopholes in the transaction. This helped the business to see at what level the staff in CSOs are as well as to see anything that was possibly not catered for within the business processes" (Interviewee 3, Appendix A: 16).

The deployment plan involves gradual migration of data and processes at a minimal acceptable risk. Interviewee 4 stated that people working with legacy systems were identified to work with the Khula system (Appendix A: 21).

Finding 35: The Programme Manager evaluates whether all the system requirements and functionality are met

Finding 36: There is a data migration plan put in place

Finding 37: There is a change management process put in place

RSQ2.2: How are the IT systems implemented that support the rationalised business processes?

IQ12: *How are new IT systems introduced as part of the creation of the IS portfolio during a merger?*

The IT systems introduced as part of the IS portfolio must go through an evaluation process. Senior management evaluates the financial viability of the system before it is approved by IT heads.

"…before the system is introduced as part of the IS portfolio, it goes to through two approval processes. The Chief Information Officer (CIO) discusses it with the Chief Financial Officer (CFO) and Chief Executive Officer (CEO); then it goes to the steering committee which comprise of IT heads to ensure that the technology is adequate and no duplication is introduced in the portfolio" (Interviewee 1, Appendix A: 6).

Finding 38: IT system goes through an approval process from the executive team to ensure no redundancy is introduced

Finding 39: JIRA system is used to log changes and for task management

IQ13: *How are the needs for a new IT system determined?*

The IT system must be aligned with the group strategy of the organisation (Interviewees 1 & 2). Interviewee 1 indicated that the "MMI [organisation] model is focusing on different segment channels, products and solutions. The idea around looking at segment channels is to truly identify the different customer needs, and what capabilities are needed to really appeal to those customers" (Appendix A: 1). Interviewee 1 further said the target system needs to encompass the capabilities of the old system. Interviewee 3 indicated the need for collaboration between business and IT where the specifications will be driven based according to the needs of clients.

Finding 40: Capabilities that are not available in the current systems determine the need for a new system

Finding 41: Customer needs drive the need for a new system

IQ14: *What are the challenges experienced with the decision to decommission the IT systems?*

The plan to decommission obsolete IT systems has come with challenges in the merged organisation. Interviewee 1 indicated integration as the issue; a window period of three (3) months is given before the system is decommissioned to ensure no one is using it. According to Interviewee 2, the issues include decisions regarding people working on the old system and contractual obligations of hardware.

Finding 42: People working on the old system and contractual obligations of hardware are challenges

Finding 43: Integration issues make it difficult to decommission IT systems

Summary of findings: senior business professionals

The merged financial institutions operate in different market segments, resulting in them not rushing into implementing the rationalisation process and tasks. Organisation A operates in the mid-to-low end and Organisation B in the mid-to-high end of the market. Prior to implementation, market research for the rationalisation of tasks was conducted, assisting the organisations in determining the types of technologies to be implemented. A new business area called Product Solutions has been established to ensure that there is no duplication of products.

The rationalisation of business processes was driven through a third company which was placed in the organisation for a period of four months to streamline processes. As a result of this undertaking, back office staff were retrenched and their tasks given to staff in the customer services offices (CSO), which meant savings for the company. However, this came with many challenges; the change management process was not effective because of an insufficient number of policies in the organisation due to many mistakes being made by inexperienced staff. Some changes recommended by the Third Party Company resulted in integration failures as some of the senior IT staff members were not consulted when the changes were implemented.

Organisation A has the Odyssey system which services the mid-to-higher end of the market. Organisation B has the Console system which services the mid-to-lower end of the market. The Odyssey system was absorbed in Organisation B with data migrated to the PDS system. As a group, the organisation made the decision to use the Console system as a rationalisation point where all the conventional systems and business rules belonging to Organisation A, would be redeveloped. Development using the Console system commenced but later it was found that the system does not have the flexibility they were looking for, thus adding to the list of legacy systems in the IS portfolio.

Organisational politics played a role as to who would be appointed in the position of CIO, and this in turn influenced the decision to adopt the Console system. At a later stage the organisation opted to implement their client centric vision, which meant they needed to implement a system housing all their products. This strategy was deployed to assist discarding the legacy systems as these systems are expensive to maintain. A business case was presented for a system called Khula. The implication was that the organisation had to source staff with Java development skills. This created uncertainty within the staff working with the legacy systems. The employees were told that the mainframe would cease to exist in two years' time and they were segregated from new members working on the Khula system. As a result of this uncertainty many of the staff members looked for jobs elsewhere, and almost half of the team working on the mainframe systems left the company. Another challenge was the delays in the implementation of the Khula system. Interviewees stated the staff did not have life insurance knowledge to expedite development. A further consequence was that many Java developers left the organisation due to organisational culture and the environment.

4.3.2 Interview with mid-to-senior in LOB systems staff (6 interviews)

RQ1: What are the factors affecting the business process and IT systems rationalisation when business units merge?

RSQ1.1: What are the challenges experienced with the rationalisation of business processes?

IQ1: *What planning is involved in rationalising business processes?*

The two financial systems used by organisations A and B respective kept their LOB systems separate as both operate with distinct brands in different market segments (Interviewees 5 & 6). Interviewee 5 said: "When the organisations merged there was a decision that each organisation must keep their own computer systems; this was particularly because the two organisations operate in different market segments*"* (Appendix A: 22)*.*

Organisation A operates in the mid-to-low market segments using eight (8) systems. Organisation B operates using three (3) systems, servicing the mid-to-high market. The merged financial institution (Organisation C) needed to make a decision regarding which system(s) to adopt in order to centralise the business processes and IT systems (Interviewees 5 & 6). Interviewee 6 argued that due diligence has shown the processes of Organisation C's to be more expensive than those of its competitors as it takes longer to process and issue a policy (Appendix A: 29). A system called Console belonging to Organisation B was implemented in Organisation A with the aim to consolidate the systems running on the mainframe (Interviewees 5, 6 & 10). Interviewee 10 stated that the decision to implement the Console system was based on "the current setup in terms of call centre strategy and also what hardware Organisation A had, the type of skills that were available to be able to extend or implement the Console system as well as adequate infrastructure to be able to support the application… [The] cost to maintain, cost to implement was one of the biggest factors" (Appendix A: 51).

Interviewee 10 also said the main decision was to ensure stability to business without affecting productivity while keeping the cost down. Soon after implementation of the Console system it was realised that the system does not fit the organisation's strategy of client centricity (Interviewees 4, 5 & 9). Interviewee 5: "Soon after the decision was taken, it turned out that Console did not have the capacity to evolve and it became another legacy system" (Appendix A: 22). A business case was developed to build a new system because of the perception that

the mainframe is expensive (Interviewees 4, 5, 6, 7 & 8). Interviewee 5 mentioned that “the decision was as a result of cutting costs because the more systems you have, the more expensive it is to run the business as you will need different developers and system licences” (Appendix A: 22). All the requirements to implement the Console system were looked at and catered for as changes occurring were done with fairly quickly (Interviewees 6 & 10). There were senior developers who understood the system (Interviewees 6 & 10). The new system replaces the Console and mainframe systems. Some senior staff who have been with the company for more than 15 years working on the mainframe side supplied information used for due diligence, but was excluded in the decision to implement the Console system (Interviewees 7, 8 & 9). Interviewee 9 said: “I was part of the people who supplied information as part of the due diligence” to the executive committee (Appendix A: 39). The consequence of excluding senior staff inhibits the ability of these staff members to provide information on business processes and IT functions executed by mainframe systems (Interviewees 7 & 8). Interviewee 7 said that “they involved the architects and never consulted some other people on the current systems” (Appendix A: 33).

Finding 1: Organisations A and B kept their LOB systems separate after the merger

Finding 2: Organisation A adopted the Console system of Organisation B in order to rationalise eight (8) systems

Finding 3: Organisational processes are more expensive than those of competitors

Finding 4: The decision to implement the Console system was cost related

Finding 5: The deployed Console system does not fully align with the client centric strategy of the organisation

Finding 6: The skills to implement the Console system were adequate as changes have been implemented quickly

Finding 7: Senior staff working on the mainframe systems were excluded from the rationalisation process, resulting in the inability to capture business knowledge and IT functions embedded in the mainframe systems

IQ2: *How do you determine the process that must be followed to rationalise business processes?*

Due diligence was undertaken and a business case presented to rationalise business processes. Interviewee 6 said that when the merger took place, a review of business processes between organisations A and B was done. Interview 6 further stated that "as decisions were made, we got to a point where it was decided that it is better if we start from scratch. And some of those decisions, I don't know if they were good decisions, but they were made based on certain reasons and that is why we started from scratch" (Appendix A: 26).

Finding 8: Due diligence was undertaken to review business processes and a business case was presented

IQ4: *Have you managed to keep all the set time frames to implement the rationalisation tasks?*

The timeframe to fully implement the new system was indicated as June to September 2015. All the respondents expressed doubt about these dates being realistic (Interviewees 5 & 8). Interviewee 5 said: "I run legacy system[s] and you need to speak to the programme manager to get optimism on the dates" (Appendix A: 23). Interviewee 8 stated: "I have very little information at my disposal and I sort of get stonewalled if I do request information but I don't see significant progress being made" (Appendix A: 41). Service managers and developers were not aware of any dates as they were not involved in the rationalisation process (Interviewees 7, 8, 9 & 10). Interviewee 9 felt that not enough due diligence was done before the project was initiated. More investigations should have been conducted with regard to processing speed, resilience, security as well as to quantify the costs to be incurred. Interviewee 5 felt uncomfortable to agree that the time frames were realistic for migrating the legacy systems to the new Khula system. Interviewee 6 said: "No, by this time we should be having Console new business, closed current systems, some of the new business closed. We should be having funeral [products] sold only on Khula and not on any other systems, but we still have challenges there" (Appendix A: 28). There has been many challenges experienced pertaining to the fact that it is a new environment with a complex architecture (Interviewees 5, 6 & 10).

Finding 9: All respondents doubt the rationalisation tasks will be fully implemented at the set time frames

Finding 10: The rationalisation tasks were still not fully implemented by the end of 2015

IQ4a: *What have been the challenges to migrate the relevant legacy systems?*

The migration of legacy systems caused challenges that negatively affected the rationalisation process. Interviewee 5 confirmed that none of the current systems has been migrated and the challenge for the funeral product being built into the new system is data quality issues. Interviewee further 5 mentioned that the challenge has led to the decision to stop development in the legacy systems while focusing on building the new system, which may affect the business (Appendix A: 24). Interviewee 8 stated that "definitely complexity on our side, the cost associated with doing it and also the intricate development of data that in some areas are as old as 80 years' worth of data" (Appendix A: 40). A further Human Resources (HR) challenge is that staff working on the mainframe began realising there is no future for them and decided to leave the organisation; the new system also started displaying constraints with development challenges (Interviewees 5, 7, 9 & 10). Interviewee 5: "The other issue that is being experienced is a human resource issue where people working in the legacy system start seeing that there is no future for them in the company and decide to leave the company" (Appendix A: 24). Interviewee 10 noted that "all business requirements that come through have to be handled by these strained resources, it is a bit of resource constraint management" (Appendix A: 53). Segregation of staff makes those working on the legacy systems feel they are working in the 'old world' soon to be shut down that will leave them without jobs while those working on the new system are the future of the organisation (Interviewees 7, 9 & 10). Interviewee 6 said that half of the staff who started the new systems team has already left the organisation. Decisions made by managers are not favourable and cause unhappiness among staff (Interviewees 6 & 10). Interviewee 6 said: "It is clear that some decisions that were made by some managers were not favourable to the people. It's quite clear that they are not happy about something. People don't leave companies but leave managers" (Appendix A: 31).

Finding 11: There have been data quality issues in the new system

Finding 12: It is difficult to stop development in the legacy systems while focusing on building the new systems

Finding 13: Business rules embedded in the code cause the mainframe to be complex

Finding 14: People working on the mainframe side are made to feel there is no future for them in the company

Finding 15: There is no staff retention plan to ensure effective development of the new systems

Finding 16: There is segregation and lack of collaboration among staff who work on the mainframe and those who work in the new system

IQ6: *What implication does the failure to rationalise business processes have on the organisation?*

> "The implications to the organisation are cost because we run too many books of business which equates to multiple teams. In the past before the talks started about the merger there was a project called Sunrei which attempted at consolidating Line of Business systems as they are too old… the challenge with having legacy systems is that when you want to market a product using the old system it will take at least 3 months to implement the new product but on the new system it should be much faster... One of the things that can be leveraged in the new system between the two organisations is having for example one funeral product that can be maintained in one system as opposed to having redundant products" (Interviewee 5, Appendix A: 24).

Interviewee 6 were of the opinion that the organisation will keep losing market share as it takes longer for them to market a new product due to longer implementation time on the current systems. Interviewee 6 is concerned that it is difficult to charge cheaper premiums because the processes are also not cheap (Appendix A: 29). Interviewee 7 expressed concern that there may be no people to support the current systems if the implementation of the new system has failed. The organisation risks an implosion because people supporting current systems feel they are overworked but are not incentivised (Appendix A: 50).

Finding 17: Multiple teams supporting different existing systems lead to cost implications

Finding 18: It takes a long time to implement and market a product in the old system

Finding 19: Business processes are not streamlined, making it difficult to charge cheaper premiums

Finding 20: There are not enough people to support the mainframe in case new systems implementation fails

Finding 21: Staff are overworked as a result of those having left the company

IQ9: *What synergies were achieved with the rationalisation process?*

Little evidence is shown of synergies achieved by the rationalisation process. Interviewee 5 stated that Organisation A leveraged for newer technologies within Organisation B but some synergies are yet to be achieved over time (Appendix A: 24). Interviewee 5 argued that synergies have been achieved through moving the Odyssey portfolio of business from Organisation A to Organisation B where the Odyssey system has been shut down, which resulted in cost savings. Synergies are yet to be realised on the new (Khula) system. A new product was launched on the Khula system but only a few policies have been sold (Interviewees 6 & 10). Interviewee 6 argued that:

> "…a prototype was used on staff members where it was used to sell policies to staff members just to see what challenges can be experienced when the system goes live. There were a lot of challenges that have been identified and were dealt with and then it was opened to outside clients" (Appendix A: 28).

Some interviewees are not aware of any synergies that have been achieved thus far (Interviewees 7, 8 & 9). Interviewee 9 said: "[I am] not aware of any milestones, only aware that the plan is to migrate the data from the current side which will be then used by the Khula system" (Appendix A: 48). Interviewee 10 thought that "there were some bugs that were experienced in the Khula systems which prompted some throttled selling" (Appendix A: 54).

Finding 22: There exists minimal evidence that synergies have been achieved with the rationalisation process

RSQ1.2: What effect does the rationalisation of business processes have on the creation of the IS portfolio?

IQ10b: *What is the process undertaken to identify the IT system(s) that support the rationalised business process?*

The defined processes do not allow senior IT staff members to provide input into the capabilities of the current and future IT systems.

> "Maybe this is a strong statement. I think we did not consult with all the factors on the table to make a better informed decision. I think there is a decision and that decision will go ahead regardless of what I say. If we went for one day and got all the parties in the room and say and I will say none of the traditional application operations mainframe developers, operators, business analyst were consulted in terms of the decision as to where we are going to with the mainframe long term and medium term. I'm the mainframe contracts outsource manager on an infrastructural basis and wasn't consulted" (Interviewee 7, Appendix A: 46).

Interviewee 6 feels the organisation wants to reinvent the wheel by implementing the new (Khula) system and argued that the company is being assisted by the Third Party Company who charges steep fees to assist with the implementation. Interviewee 7 said: "They involved the architects and never consulted some other people on the current systems. The issue …is that it [the mainframe] is too expensive" (Appendix A: 34).

Finding 23: There is not enough buy-in from all stakeholders to adopt the Khula system

Finding 24: No one has enough knowledge to implement the Khula system for the rationalised business processes

Finding 25: There is no process allowing key stakeholders to provide input into systems to be implemented

RQ2: How does the rationalisation of business processes affect the IT systems in the merged financial institution?

RSQ2.2: How are the IT systems implemented that support the rationalised business processes?

IQ12: *How are new IT systems introduced as part of the creation of the IS portfolio during a merger?*

Interviewee 5 indicated that the Khula system has a savings product which is in constrained mode and will only be released to a few people based in the outbound call centre. Interviewee 6 stated that this type of system implementation has never been done before in the country; strong people with extensive knowledge of the insurance industry and development skills are required (Appendix A: 31). Some people were identified based on their enthusiasm, willingness to learn, and willingness to participate (Interviewees 6 & 10). Interviewee 6 mentioned that "the

guys from the current systems also applied and managed to get the jobs. There have been a lot of challenges and some I cannot disclose on record" (Appendix A: 35). Interviewee 7 said that the people implementing the new system do not have the business knowledge which is embodied within the mainframe system. In an attempt to rectify the situation, two employees were seconded to assist in Khula— with positive results.

Finding 26: People with the required skills were identified to assist with system implementation

IQ14: *What are the challenges experienced with the decision to decommission the systems?*

The organisation experienced some challenges in their plans to decommission old systems. Interviewee 5 indicated that one of the main challenges to decommission a system is data quality. (Appendix A: 23). Staff feel side-lined by team members who worked on the new system (Interviewees 7, 8, 9 & 10). Interviewee 7 said: "It created an 'us and them' scenario where current systems were referred to as an old world and the Khula system as the new world". (Appendix A: 34). The morale of staff working in the legacy systems is low, resulting in many leaving the company (Interviewee 7, 8, 9 & 10). The new system is not producing the expected results because of the architecture and underlying components not known to many of the developers (Interviewee 6 & 10).

Another concern is the performance of the system when thousands of users utilise the system as it is not as fast as it was expected to be. Challenges such as different time zones and language barriers are also a concern when support is required from the vendor (IBM) regarding the rules engine of the system (Interviewees 7, 9 & 10). Interviewee 6 mentioned that "there were some bugs that were experienced in the Khula systems which prompts some throttled selling" (Appendix A: 54).

Finding 27: One of the main challenges is data quality issues

Finding 28: The new system was not producing the expected results, thus delaying the decommissioning process

Finding 29: The morale of staff working on the legacy systems is low and many are leaving the company

Summary of findings: mid-to-senior LOB systems staff

The Console system is inadequate and results in the system being added to the other legacy systems. Some senior IT staff members working on the mainframe systems are not included in the rationalisation process; their input is almost viewed as unimportant to the success of the company. The organisation has a fair amount of skills to implement the Console system with the products that need to go to the market. The organisation set time frames to rationalise all mainframe systems by September 2015; all the respondents expressed doubt that this is realistic goal.

With the implementation of the Khula system the goal posts are being shifted to decommission old systems. The respondents mentioned that the architecture of the new system they are dealing with is quite complex. The challenges experienced with the plan to migrate the mainframe systems to the Khula system include: i) data quality issues in the new (Khula) system; ii) complexity of the business rules embedded in the code developed on the mainframe systems; iii) structural changes in management which introduced instabilities among the teams; iv) staff feeling that there is no future for them in the company; v) segregation/lack of collaboration among staff working on legacy systems and staff working on Khula ('us and them' scenario); and vi) shortage of resources to expedite development in the Khula system as well as the support of mainframe systems. These challenges came with poor staff retention.

There is little evidence that the rationalisation yielded any synergies. The organisation still operates eight systems on the mainframe coupled with the Console system and new Khula system. The main concern with the implementation of the Khula system is that it has never been done before in the country, which makes it difficult to acquire resources with adequate knowledge and skills to implement the system. There has been heavy reliance on consultants who charge expensive rates to assist with the implementation of the system.

4.3.3 Interview with mid-senior staff members in shared IT services (9 interviews)

RQ1: What are the factors affecting the business process and IT systems rationalisation when business units merge?

RSQ1.1: What are the challenges experienced with the rationalisation of business processes?

IQ1: *What planning is involved in rationalising business processes?*

An integrated model of IT teams for both organisations was established to create a standardised service and reporting lines across the company. A due diligence exercise for networks was undertaken to ensure that shared services such HR systems, finance systems and telephony in call centres are enabled (Interviewees 11, 12, 13, 14, 15, 16 & 17). Interviewee 17 mentioned that a project was instituted to allow countrywide access, including a company in London, to ensure access to services. Interviewee 17 said: “If the organisation wants to open a branch, they will approach a service provider and say they need connectivity to a specific branch and they will need to commission all of the hardware, links with all the MPLS based services that are required” (Appendix A: 75).

There were two financial systems called *SmartStream* and *JD Edwards (JDE)* before the merger. JD Edwards was chosen as the financial system of the organisation after the merger based on the support and history of the company (Interviewees 12 & 13). Interviewee 13 mentioned that although JD Edwards is the preferred financial system, integration of SmartStream to legacy LOB systems made it difficult to implement the rationalisation process completely. The SmartStream function is left unchanged in the impacted legacy systems.

Interviewee 14 indicated that from the HR side, the organisation had two (2) systems called *eBusiness Suite* and *PeopleSoft* (Appendix A: 64). The PeopleSoft system fulfilled the business requirements to execute HR functions and was thus preferred over the eBusiness Suite system.

Finding 1: An integrated model structure of IT teams for both organisations was established to create a standardised service and reporting lines

Finding 2: IT services including document storage and workflow systems are still not rationalised

IQ2: *How do you determine the process that must be followed to rationalise business processes?*

Organisation C’s IT philosophy became the guiding component to the rationalisation of tasks and the market segmentation of each entity (Interviewees 11, 15 & 16). Interviewee 11 said: “The IT department looked at how they can combine IT; they first looked at integrating the network, there was not much application merging because the business processes remain separate; things like infrastructure remain separate but they brought the management of the IT systems of together” (Appendix A: 54). From the finance side, process mappings were done to determine disparities

as it was noted that modules running on the SmartStream system were not necessarily the same as modules running on JDE (Interviewees 12 & 13). Interviewee 12: “They looked at the modules that were running or implemented at Organisation B; these processes were mapped to determine the disparities. It was noted that the modules that were running on JD Edwards were not necessarily what was running on SmartStream”. Interviewee 14 mentioned that HR business rules and business processes were incorporated into the PeopleSoft system to ensure alignment of both organisations.

Finding 3: The IT philosophy became the guiding instrument to implement rationalisation tasks

Finding 4: Application systems and infrastructure were not rationalised due to disparate business processes

Finding 5: From the finance side, process mappings were done to determine disparities

Finding 6: HR business rules and processes were incorporated into the PeopleSoft system

IQ2a: *What method is employed to rationalise business processes?*

According to interviewee 17, the task needed to be achieved was to install an MPLS link to allow connectivity to environments such as HR and finance systems. Interviewee 19 said the infrastructure of the two entities remains separate; Active Directory and Exchange (AD) remains an ongoing project to consolidate the environments. Finance's method of rationalisation was strongly driven by the JDE system where the approach they needed to take was ensuring minimum customisation (Interviewees 12 & 13). Interviewee 13 noted that the success of the finance rationalisation method was determined by the amount of time they had spent on determining business processes and analysis (Appendix A: 63). Interviewee 14 said that HR tasked their business analysts and systems analysts “to look at the infrastructure and how will I get the data, how accurate is the data, and what is the current process; then it is documented and you basically draw up a URS and you register a project for it and all of the migration and rationalisation is managed through the project” (Appendix A: 65).

Finding 7: The finance method was driven by the JD Edwards system to ensure minimum customisation

Finding 8: HR tasked their business analysts and systems analysts to understand the current process and ensure accuracy of data

IQ3: *Who are the key stakeholders involved in the rationalisation strategy?*

The key stakeholders—business executives, business unit owners—need to have buy-in (Interviewees 11, 12, 13, 14, 15, 16, 17, 18 & 19). Interviewee 14 said "It is important that the business owners that are involved and whoever or the project sponsor, but also in the bigger scheme of things it is also a strategic decision and if it is coming from the top, there is automatic buy-in" (Appendix A: 66). The infrastructure team and IT professionals are also included because any business process change will involve changes to the system. Interviewee 11 noted that "you need someone who has a skill to document a certain IT service, cost it and to do it for a number of services in such a way that they can be compared" (Appendix A: 55).

Finding 9: IT and infrastructure teams were not seen as key stakeholders

IQ4: *Have you managed to keep all the set time frames to implement the rationalisation tasks?*

Interviewee 17 stated that the network consolidation project "took roughly about nine months from the time the project was started and the reason why it took that long is that planning was more important to ensure that everything is done a 100 percent correct". Finance could not achieve the set timeframe for implementation and were extended by five months. Interviewee 14 said that HR had a few challenges but were able to make up time with other tasks. According to Interviewee 14, "with the migrations we went ahead with it a month ahead of schedule and with no hiccups" (Appendix A: 66).

Finding 10: Planning of the network consolidation delayed the implementation

Finding 11: Finance system implementation was extended by five (5) months and HR delivered on time

IQ5: *What are the hindering factors and the challenges to implement the rationalisation tasks?*

> "…the biggest inhibitor to achieve good synergies between your business processes and your IS portfolio is resources, because the merged entity is very much operationally focused" (Interviewee 11, Appendix A: 55).

A further challenge is considering two modes where staff have to be operationally focussed but also look at rationalisation. Interviewee 11 mentioned that moving the finance section to another region made the organisation lose critical staff as they were unwilling to leave their families (Appendix A: 56).

The fitting of the 'as-is picture' into the 'to-be picture' took longer than was originally expected. Too many cycles in order to fully engage the business resulted in late project delivery. Interviewee 17 mentioned that deploying inadequate technology in the customer service offices (ADSL) created performance issues which subsequently delayed the project (Appendix A: 76).

Cultural differences and politics are major challenges which create difficulty in finding a common ground and are major inhibitors of rationalisation (Interviewee 11, 12, 13, 14, 16 & 17). Interviewee 14 said that the reliance to obtain information from a Third Party source on Organisation B was difficult. Interviewee 14 mentions that "we had to get data from … a bank and you know how strict a bank will be on giving information" (Appendix A: 66). Interviewee 15 stated that making sure the vision is clear and ensuring that people do not get uncomfortable or leaving the company is important for the rationalisation project.

Finding 12: Critical staff left the organisation because of a decision to move a service to a region where resources had to relocate

Finding 13: Cultural differences, resistance to change and organisational politics became a problem during the rationalisation process

Finding 14: Deploying inadequate technology in the CSO caused performance issues

Finding 15: The reliance to obtain data from a bank with strict procedures is a challenge

Finding 16: Not dedicating enough time to implement the rationalisation task will the organisation's ability to realise synergies

IQ6: *What implications does the failure to rationalise business processes have for the organisation?*

Cost implications occur if an organisation fails to rationalise effectively. Interviewee 12 stated that "duplication in cost which will occur in people, processes as well as systems" (Appendix A: 60).

> "The project can fail if you don't change and say for instance if we continue to do things the way we did, in ten years' time we would be outdated—there would be new methods of doing things. If we continue to do the same things we would have an undesirable current future" (Interviewee 14, Appendix A: 66).

Interviewee 16 mentioned that the implication of the failure to rationalise is costs, inefficiencies, confusion, and chaos at worst.

Finding 17: The duplication of processes has cost implications

Finding 18: The IT systems become outdated and difficult to evolve

IQ9: *What synergies were achieved with the rationalisation process?*

Shared services such as finance, HR, networks and telephony achieved good results implementing the rationalisation process. According to Interviewee 17, merger had set to deliver an overall saving of millions of rand in five years and this was done in less than the specified time. Based on the telephony system implemented, "line managers and branch managers could in essence monitor their telephone usage and budgets more adequately and these budgets could be controlled centrally whereas in the past those budgets used to sit at the branch itself". From a skills perspective, there will be no need for people with different types of technologies and this allows them to provide a service no matter whom and where the client resides (Interviewee 17, Appendix A: 76).

Every finance operation was rationalised to a single way of working between the two organisations (Interviewee 12 & 13). Interviewee 13 noted that cost efficiencies, a reduction in staff, and a reduction in the number of processes to be maintained were achieved with the implementation of the finance rationalisation process.

> "When you buy something, it gets vetted; the purchase order and the invoice will always match because it is in one system; accounts payable will always pay the right amount because it is in one system and will happen simultaneously. General ledger on your accounts will always be correct because it is in one system" (Interviewee 13, Appendix A: 63).

Interviewee 13 further mentioned that the annually amount spent ran into millions on the OIS suite of systems. Choosing the JDE system is giving a much better return on investment. One of the reasons, according to interviewee 14, is that "there was no duplication of cost, maintenance or licensing" (Appendix A: 67).

Finding 19: Financial savings were achieved implementing rationalisation tasks such as finance, HR, networks and telephony services

Finding 20: One system is used to perform HR and finance services in the organisation

RQ2: How does the rationalisation of business processes affect the IT systems in the merged financial institution?

RSQ2.1: How are the rationalised business processes aligned with the IT systems?

IQ10: *What criteria must the chosen IT system meet to determine its adequacy for deployment as part of the IS portfolio?*

Interview 11 said this is where an independent party conducting and analysis and comparison of service between the two organisations, becomes necessary. Adequate vendor support with strict service level agreements (SLA) is stated as important criteria by Interviewee 11. Interviewee 12 stated that listening to clients is crucial because you want to give clients what they want. Interviewee 18 mentioned that "there are 4 things you need to look at, there has to be stability, operationally sound, flexibility and agility to meet changing needs of business processes, capacity management, cost to deliver the service as well as service management" (Appendix A: 82).

Finding 22: The system needs to meet criteria such as stability, operational soundness, flexibility, and agility to meet the changing needs of business processes

IQ10a: *What plans are put in place to align IT systems with the rationalised business processes?*

A level of engagement and partnership is required between business and IT to effectively implement business decisions (Interviewees 11 & 18). Constant checking is needed to monitor if business needs are met with IT implementation, i.e. ensuring that growth needs, maintenance plans and system agility are catered for. said that:

> "…if there is a strategy change in the organisation, the systems need to have some kind of flexibility to ensure quicker turnaround time to implement. There needs to be skilled IT professionals who will be able to speak in a language that business understands in order to be able to extract the required information" (Interviewee 18, Appendix A: 81).

Services provided at branches still operate separately. Interviewee 17 explained this by saying “there has not been any synergy achieved where you see Organisation A’s branch services Organisation B’s client and Organisation B’s branch servicing Organisation A’s client” (Appendix A: 77).

Finding 21: Branches of both financial institutions still operate separately

RSQ2.2: How are the IT systems implemented that support the rationalised business processes?

IQ12: *How are new IT systems introduced as part of the creation of the IS portfolio during a merger?*

The following undertakings need to be adhered to before introducing an IT system as part of the IS portfolio. Interviewee 12 indicated that IT is introduced as part of the IS portfolio by understanding the value chain and the objectives of the organisation which helps determine what needs to deliver (Appendix A: 61). Ensure minimal disruption to the current environment when a new system is introduced. According to interviewee 18, there must be synergies to be realised and silos to be minimised with a merger. Due diligence is also required, looking at the current system and evaluating what needs to be achieved with the new system. More importantly, due diligence must align with the strategy and goals of the organisation. Interviewee 18 mentioned that the organisation needs to ensure it meets and exceeds the requirements of the strategy (Appendix A: 83). “Determine how it fits to the architecture of the organisation (if the organisation runs an Oracle product it is of no use buying a SAP product)” (Interviewee 18, Appendix A: 61).

Finding 23: The value chain and objectives of the organisation need to be understood before introducing an IT system

Finding 24: The IT system needs to align with the organisational strategy

IQ14: *What are the challenges experienced with the decision to decommission the IT systems?*

One of the challenges experienced by Finance was integration with the legacy LOB systems. Nonetheless, the JDE system was implemented seamlessly. Interviewee 13 stated that a call centre was opened for a period of three months to assist people who might experience issues with the system (Appendix A: 63). This was done to assist those who might have been reluctant using the system. Interviewee 14

mentioned that the decommissioning of systems was handled by the IT team. Interviewee 11 mentioned that on legacy LOB systems such as the mainframe, the difficulty is that some of the code was written 30 years ago and the person/team who wrote the code have left the company (Appendix A: 57).

Another difficulty is developing insurance financial systems with analysts who do not understand the business. Interviewee 11 said: “Understanding the impact systems rationalisation has on clients, for example, policy numbers of clients can change and sometimes it is not in the forefront of the minds of business” (Appendix A: 58).

Finding 25: The plan to decommission legacy systems is hindered by staff’s lack of business knowledge and experience in business processes executed by the systems

Finding 26: Finance experienced integration issues with legacy Line of Business systems

Summary of findings: IT shared services

A model structure was established to standardise services and reporting lines across the company. Due diligence on the operational networks was done to enable the integration of shared services such as HR and finance systems. Due diligence was undertaken to determine which HR and finance systems in the respective departments were easy to adopt. HR adopted PeopleSoft and the Finance section chose the JDE system. Although the Finance section chose a system they were planning to rationalise on, the migration to the new system was done incorrectly due to the tight coupling of the old system (SmartStream) to the legacy LOB systems. The respondent mentioned that if the changes were made to rationalise all the modules of the SmartStream system to the JDE system, they would have introduced changes to the legacy LOB systems. IT services such as document storage and workflows were also introduced but there has not been a plan put forward to unify them. The data centre between the two organisations remained separate but Active Directory and Exchange was still an ongoing project.

The success of the rationalisation tasks to consolidate the network infrastructure was attributed to the nine months spent on the due diligence process. Finance also spent a considerable amount of time analysing business processes while HR had past experience and senior resources assigned to the tasks, and their mandate was to ensure the accuracy of staff data. A quick rationalisation process win, according to the interviewees, is head count reduction.

The challenges experienced in shared services during rationalisation are resistance to change, resources or management too operationally focussed thus neglecting the rationalisation tasks, and deploying inadequate technology that does not fit the requirements. The difficulties with executing rationalisation tasks include loss of critical staff, cultural differences, and reliance to obtain information from third party resources. The respondents have alluded to the fact that if rationalisation is not considered, the consequences will be duplication of costs, while troubleshooting and fault finding in technologies will be problematic.

The financial institutions are still being viewed as operating in silos because clients belonging to Organisation A cannot go to Organisation B's branch to receive customer service.

4.3.4 Summary of findings and theme development

This section provides a summary of the findings of the three groups that served as the unit of analysis. The findings are compared and summarised. From the summary, the themes are developed. The themes guide the discussion in Chapter Five.

RQ 1: What are the factors affecting the business process and IT systems rationalisation when business units merge?

RSQ1.1: What are the challenges experienced with the rationalisation of business processes?

IQ1: *What planning is involved in rationalising business processes?*

Table 4.2 addresses the planning involved in the merged financial institution to rationalise business processes. Two themes were developed from the findings in terms of planning. For both themes it is a case of planning to integrate business and IT strategies, and not planning for HR and change management.

Table 4.2 represents the findings collected from senior business professionals, mid-to-senior LOB staff, and mid-to-senior shared services staff as well as the summaries and themes developed.

Table 4.2: Planning involved in rationalising business processes

Senior business professionals findings	Mid-to-Senior staff LOB findings	Mid-to-Senior shared services findings	Summary	Themes
Market research was conducted to determine the types of technologies to be adopted as part of the IS portfolio	Organisations A and B kept their LOB systems separate after the merger	An integrated model structure of IT teams for both organisations was established to create a standardised service and reporting lines	Market research was conducted to determine types of technologies to be adopted as part of the IS portfolio	Business and IT alignment/ Rationalisation
Rationalisation driven through the Third Party Company looked at redundancy to address inefficiencies	Organisation A adopted the Console system of Organisation B in order to rationalise eight (8) systems	No answer	Rationalisation driven through the Third Party Company looked at redundancy to address inefficiencies	Rationalisation
A new business area called Product Solutions has been established to ensure that there is no duplication of products	Organisational processes are more expensive than those of the competitors	IT services including document storage and workflow systems are still not rationalised	A new business area, Product Solutions, has been established to ensure that there is no duplication of products	Rationalisation
The merged financial institution took a decision to implement a new system because the conventional system was expensive to maintain	The decision to implement the Console system was cost related	No answer		Rationalisation
No answer	The deployed Console system does not fully align with the client centric strategy of the organisation	No answer		Business and IT alignment
No answer	Senior staff working on the mainframe systems were excluded from the rationalisation process, resulting in the inability to capture business knowledge and IT functions embedded in mainframe systems	No answer		Rationalisation Change management
No answer	The skills to implement the Console system were adequate as changes have been implemented quickly	No answer	The skills to implement the Console system were adequate as changes have been implemented quickly	System implementation

The planning to rationalise was done at different levels. Senior IT staff members who support mainframe systems were excluded from providing input into the rationalisation process. The Console system chosen to consolidate systems running on the mainframe was not aligned to the merged organisation's client centric strategy.

IQ2: *How do you determine the process that must be followed to rationalise business processes?*

Table 4.3 reviews the processes followed at three levels to determine the rationalisation methods and two main themes have developed (see Table 4.19 for main themes). The organisation used a philosophy document to review whether the systems should become part of the IS portfolio. The outcomes of systems to be deployed were contentious as politics played part in the choices made.

Table 4.3: Processes followed to rationalise business processes

Senior business professionals findings	Mid-to-Senior LOB findings	Mid-to-Senior shared services findings	Summary	Theme
An agile framework was used to map out system portfolios	Due diligence was undertaken to review business processes and a business case was presented	IT philosophy became the guiding instrument to implement the rationalisation tasks	IT philosophy became the guiding instrument to implement the rationalisation tasks	Policy documents
Employees were interviewed and a statistical analysis was conducted to decide on rationalisation process to be followed	No answer	Application systems and infrastructure were not rationalised due to disparate business processes	The decision was made that mainframe systems in Organisation A are not the technology to go forward with	Rationalisation decision
The CIO developed a philosophy document to look at the system roadmap in particular of legacy systems	No answer	From the finance side, process mappings were done to determine disparities	The choice of systems has been contentious and preferred systems chosen changed frequently	Policy documents
The decision was made that mainframe systems in Organisation A are not the technology to go forward with	No answer	HR business rules and processes were incorporated into the PeopleSoft system	Organisational politics played a role in deciding which system to choose	Organisational politics Decision making
The choice of systems has been contentious and preferred systems chosen changed frequently	No answer	No answer	Application systems and infrastructure were not rationalised due to disparate business processes	Rationalisation Decision making
Organisational politics played a role in deciding which system to choose	No answer	No answer	Organisational politics played a role in deciding which system to choose	Organisational politics

Although the organisation has a philosophy document guiding them on the choices of systems to implement as part of the IS portfolio, it seems no proper due diligence process was followed. The choices of systems were contentious and politics determined the outcome of the system chosen as part of the IS portfolio. It was later found that the chosen system (Console) did not align with the merged organisation's client centric strategy and thus became part of the legacy systems.

IQ2a: *What method is employed to rationalise business processes?*

Table 4.4 reviews the method applied to rationalise business processes. The business requirement was the driver to rationalise business processes. Rationalisation is driven in each business unit to ensure there is no duplication in the IS portfolio.

Table 4.4: Method applied to rationalise business processes

Senior business professionals findings	Mid-to-senior LOB findings	Mid-to-senior shared services findings	Summary	Theme
No answer	No answer	The finance method was driven by the JD Edwards system to ensure minimum customisation	The finance method was driven by the JD Edwards system to ensure minimum customisation	Business requirements
No answer	No answer	HR tasked their business analysts and systems analysts to understand the current process and ensure accuracy of data	HR tasked their business analysts and systems analysts to understand the current process and ensure accuracy of data	Business requirements

IQ3: *Who are the key stakeholders involved in the rationalisation strategy?*

Table 4.5 addresses key stakeholders involved in the rationalisation process. It seems that key stakeholders in terms of who should be part of the merger, was not appropriately considered.

Table 4.5: Key stakeholders involved in the rationalisation process

Senior business professionals findings	Mid-to-senior LOB findings	Mid-to-senior shared services findings	Summary	Theme
The key stakeholders are the executive CIO, the financial director, and head of finance	Senior staff working on the mainframe systems were excluded from rationalisation process, resulting in inability to capture business knowledge and IT functions embedded in the mainframe systems	IT and infrastructure teams were not seen as key stakeholders	Key stakeholders are the executive CIO, the financial director, and head of finance	Stakeholders
The marketing and product development executives have been excluded from the rationalisation process	No answer	No answer	The marketing and product development executives have been excluded from the rationalisation process	Stakeholders
No answer	No answer	No answer	The marketing and product development executives have been excluded from the rationalisation process	Stakeholders

It seems that the decisions to rationalise were incoherent as some people were not considered to be key stakeholders in the rationalisation process. Senior staff members working on the mainframe system were excluded from this process.

IQ4: *Have you managed to keep all the set time frames to implement the rationalisation tasks?*

Table 4.6 addresses the time frames for implementing the rationalisation tasks in the organisation and summarises whether the time frames to implement rationalisation tasks were reached. One main theme has developed from the findings in terms of timeframe.

Table 4.6: Timeframe to implement rationalisation tasks

Senior business professionals findings	Mid-Senior LOB Findings	Mid-Senior shared services findings	Summary	Theme
The rationalisation tasks took longer than originally planned	All respondents doubt the rationalisation tasks will be fully implemented at the set time frames	Planning of the network consolidation delayed the implementation	All respondents doubt the rationalisation tasks will be fully implemented at the set time frames	Rationalisation Implementation
No one is taking responsibility for the late delivery of the projects	The rationalisation tasks were still not fully implemented by the end of 2015	Finance system implementation was extended by 5 months and HR delivered on time	The rationalisation tasks were still not fully implemented by the end of 2015	Rationalisation Implementation

The timeframe to implement rationalisation tasks is unrealistic and no one seems to be taking responsibility for the implementation. The set timeframe to fully implement rationalisation tasks was end of 2015 but the tasks are still not fully implemented.

IQ5: *What are the hindering factors and the challenges to implement rationalisation tasks?*

The challenges experienced by the organisation to implement the rationalisation tasks include cultural differences, resistance to change and politics, cited as themes in Table 4.7. These challenges can be ascribed to lack of planning, staff retention, dealing with cultural differences, and resistance to change in mergers. Table 4.7 summarises the challenges of implementing the rationalisation process when business units merge.

Table 4.7: Challenges to implement rationalisation

Senior business professionals findings	Mid-to-Senior LOB Findings	Mid-to-Senior shared services findings	Summary	Theme
There was not enough time invested in the planning and analysis of systems	There have been data quality issues in the new system	Critical staff left the organisation because of a decision to move a service to a region where resources had to relocate	There was not enough time invested in the planning and analysis of systems	Change management
Lack of skills and knowledge (business acumen) of the insurance business to be able to implement the new Khula system	It is difficult to stop development in the legacy systems while focusing on building the new systems	Cultural differences, resistance to change and organisational politics became a problem during the rationalisation process	Cultural differences, resistance to change and organisational politics became a problem during the rationalisation process	Resistance to change/cultural difference
There is no staff retention plan in place	Business rules embedded in the code cause the mainframe to be complex	Deploying inadequate technology in the CSO caused performance issues	There is no staff retention plan in place	Organisational politics
Lack of knowledge transfer due to decision to decommission the mainframe in two years' time	People working on the mainframe side are made to feel there is no future for them in the company	Not dedicating enough time to implement the rationalisation task will affect the organisation's ability to realise synergies	Not dedicating enough time to implement the rationalisation task will affect organisation's ability to realise synergies	Change management
IT teams were not involved or consulted during rationalisation and integration of systems by the Third Party	There is no staff retention plan to ensure effective development of the new systems	No answer	There is segregation and lack of collaboration among staff who work on the mainframe and those who work in the new system	Change management
Data quality issues occurred at the back office where data was captured	There is segregation and lack of collaboration among staff who work on the mainframe and those who work in the new system	No answer	Lack of a change management process where staff in CSOs made many mistakes operating the CICS system	Change management
Lack of a change management process where staff in CSOs made many mistakes operating the CICS system	No answer	No answer	There is a decline in issuing new policies	Change management
There is a decline in issuing new policies	No answer	No answer	Staff working in the back office were retrenched	Human resource management
No answer	No answer	The reliance to obtain data from a bank with strict procedures is a challenge	No answer	Change management
Staff working in the back office were retrenched	No answer	No answer	There is segregation and lack of collaboration among staff who work on the mainframe and those who work in the new system	Human resource management

Senior business professionals findings	Mid-to-Senior LOB Findings	Mid-to-Senior shared services findings	Summary	Theme
Systems were redeployed to the two companies depending on the needs of the companies	No answer	No answer	Systems were redeployed to the two companies depending on the needs of the companies	Business requirements

Many challenges were experienced which negatively affected the rationalisation process during the merger. Cultural differences and organisational politics were cited as main inhibitors of the process. The incoherence of the rationalisation process has resulted in a decline in issuing new policies. Change management to ensure the rationalisation objectives are fully understood, was not appropriately applied. This caused staff to leave the company. Segregation of staff working on the mainframe and those working on the new (Khula) system is a further main inhibitor of the rationalisation process.

IQ6: *What implications does the failure to rationalise business processes have for the organisation?*

Table 4.8 addresses implications that can be caused by ineffective implementation of business process rationalisation. Three main themes have developed from the findings in terms of implications as a result of failure to rationalise.

Table 4.8: Implications of failure to rationalise business processes in the merged financial institution

Senior business professionals findings	Mid-to-Senior LOB findings	Mid-to-Senior shared services findings	Summary	Theme
The implication of the failure to rationalise is that the organisational strategy in terms of client centricity will not be realised to full extent	Multiple teams supporting different existing systems lead to cost implications	The IT systems become outdated and difficult to evolve	The implication of the failure to rationalise is that the organisational strategy in terms of client centricity will not be realised to full extent	Organisational strategy
There will be duplication of IT support staff and IT systems with a ripple effect of cost implications which will create and unmanageable environment	Business processes are not streamlined, making it difficult to charge cheaper premiums	The duplication of processes has cost implications	There will be duplication of IT support staff and IT systems with a ripple effect of cost implications which will create and unmanageable environment	Duplication
Money paid to the Third Party Company assisting with rationalisation would have gone to waste	It takes long time to implement and market a product in the old system	No answer	There are not enough people to support the mainframe in case new systems implementation fails	Business processes not streamlined

Senior business professionals findings	Mid-to-Senior LOB findings	Mid-to-Senior shared services findings	Summary	Theme
Staff may not have been paid bonuses if the savings were not achieved through implementing rationalisation tasks	There are not enough people to support the mainframe in case new systems implementation fails	No answer	Business processes are not streamlined, making it difficult to charge cheaper premiums	Human resource management
No answer	Staff are overworked as a result of those having left the company	No answer	Multiple teams supporting different existing systems lead to cost implications	Human resource management

The implication for the organisation of the failure to rationalise is that there will be duplication, business processes will not be streamlined, and the organisation's client centric strategy will not be realised. The organisation still has duplicate systems; the Console system meant to consolidate became part of the legacy systems after the procurement of the new Khula system.

RSQ1.2: What effect does the rationalisation of business processes have on the creation of the IS portfolio?

IQ8: *Did the employed rationalisation strategies make it easy to decide what systems to be deployed as part of the IS portfolio?*

Table 4.9 summarises whether the applied rationalisation strategies have benefited the organisation. The main theme developed from the table is IT and business alignment. The table summarises the effectiveness of the employed rationalisation strategies.

Table 4.9: Effectiveness of rationalisation strategies

Senior business professionals findings	Mid-to-Senior LOB Findings	Mid-to-Senior Shared Services Findings	Summary	Theme
The Console system initially chosen as part of the rationalisation strategy did not align with the organisational goals thus making the process difficult	No answer	No answer	The Console system initially chosen as part of the rationalisation strategy did not align with the organisational goals thus making the process difficult	IT and business alignment

The Console system was initially chosen to consolidate all the mainframe systems. After the mainframe system was implemented, it was discovered that the systems do align with the merged organisation's client centric strategy.

IQ9: *What synergies were achieved with the rationalisation process?*

Table 4.10 addresses synergies achieved in the merged organisation through the implementation of rationalisation strategies. Two main themes developed from the findings. The table summarises the synergies achieved with the implemented rationalisation strategies in the organisation.

Table 4.10: Synergies achieved with implementing the rationalisation process

Senior business professionals findings	Mid-to-Senior LOB findings	Mid-to-Senior shared services findings	Summary	Theme
Single system view of client information if they have more than one policy as opposed to more than one system	No answer	One system is used to perform HR and finance services in the organisation	Single system view of client information if they have more than one policy as opposed to more than one system	Synergy
The consolidation of corporate business and product design benefited the organisation as part of the rationalisation	No answer	Financial savings were achieved implementing rationalisation tasks such as finance, HR, networks and telephony services	The consolidation of corporate business and product design benefited the organisation as part of the rationalisation	Rationalisation implementation
No answer	There exists minimal evidence that synergies have been achieved with the rationalisation process	No answer	There exists minimal evidence that synergies have been achieved with the rationalisation process	Synergy

There were no synergies achieved when the merged organisation implemented rationalisation tasks, particularly in LOB systems.

RQ2: How does the rationalisation of business processes affect the IT systems in the merged financial institution?

RSQ2.1: How are the rationalised business processes aligned with the IT systems?

IQ10: *What criteria must the chosen IT system meet to determine its adequacy for deployment as part of an IS portfolio?*

Table 4.11 addresses the required criteria needed in order to implement IT systems that will become part of the IS portfolio. Two main themes developed with adequate criteria to implement IT systems as part of the IS portfolio. The table summarises the criteria for adequate deployment of an IT system that becomes part of the IS portfolio.

Table 4.11: Criteria to implement adequate IT systems

Senior business professionals findings	Mid-to-Senior LOB findings	Mid-to-Senior shared services findings	Summary	Theme
IT system needs to look at longevity and run on a stable platform	No answer	The system needs to meet criteria such as stability, operational soundness, flexibility, and agility to meet the changing needs of business processes	The system needs to meet criteria such as stability, operational soundness, flexibility, and agility to meet the changing needs of business processes	Skills
There must be sufficient skills to support the system	No answer	No answer	There must be sufficient skills to support the system	Human resource management
IT system needs to fulfil all departmental requirements	No answer	No answer	IT system needs to fulfil all departmental requirements	Business requirements

Although organisational skills are seen as one of the criteria to support the deployed IT systems, many people deemed as critical staff have left the organisation, thus nullifying this conception. The requirements to implement an IT system to consolidate the systems running on the mainframe were not fully addressed due to the Console system being implemented but then found not to align with the merged organisation's client centric strategy.

IQ10a: *What plans are put in place to align IT systems with the rationalised business processes?*

Table 4.12 summarises the alignment of IT systems with rationalise business processes. One main theme developed from the finding which indicates that even after the merger, systems are still not integrated in the merged organisation.

Table 4.12: Alignment of IT systems with rationalised business processes

Senior business professionals findings	Mid-to-Senior LOB findings	Mid-to-Senior shared services findings	Summary	Theme
No answer	No answer	Branches of both financial institutions still operate separately	Branches of both financial institutions still operate separately	Business and IT alignment

The merged organisation's IT systems are still not aligned. Branches still operate independently as was the case before the merger.

IQ10b: *What is the process undertaken to identify the IT system(s) that support the rationalised business process?*

Table 4.13 addresses the identification of IT systems that support rationalised business processes. Two main themes have developed. Key stakeholders were not given a platform to provide input into the system.

Table 4.13: IT systems supporting rationalised business processes

Senior business professionals findings	Mid-to-Senior LOB findings	Mid-to-Senior shared services findings	Summary	Theme
No answer	There is not enough buy-in from all stakeholders to adopt the Khula system	No answer	There is not enough buy-in from all stakeholders to adopt the Khula system	stakeholders
No answer	No one has enough knowledge to implement the Khula system for the rationalised business processes	No answer	No one has enough knowledge to implement the Khula system for the rationalised business processes	Knowledge management
No answer	There is no process allowing key stakeholders to provide input into systems to be implemented	No answer	There is no process allowing key stakeholders to provide input into systems to be implemented	stakeholders

There has been no buy-in from all the stakeholders to implement the Khula system. No one has enough knowledge to implement the Khula system, posing a challenge to implement rationalised business processes. Key stakeholders are not given a platform to provide input and express their views in the implementation of the new systems.

IQ11: *If the IT system meets the criteria, what plans are put in place to deploy it as part of the IS portfolio?*

Table 4.14 addresses the deployment plan put in place for IT systems to be part of the IS portfolio. Three main themes have developed from the findings. System requirements evaluation plan, data migration plan and change management took place.

Table 4.14: Deployment plan of an IT system

Senior business professionals findings	Mid-to-Senior LOB findings	Mid-to-Senior shared services findings	Summary	Theme
The Programme Manager evaluates whether all the system requirements and functionality are met	No answer	No answer	The Programme Manager evaluates whether all the system requirements and functionality are met	Evaluation plan
There is a data migration plan put in place	No answer	No answer	There is a data migration plan put in place	Migration plan
There is a change management process put in place	No answer	No answer	There is a change management process put in place	Change management

The challenges experienced with the deployment of the Khula system to rationalise IT systems means the evaluation and implementation plans were inadequate.

RSQ2.2: How are the IT systems implemented that support the rationalised business processes?

IQ12: *How are new IT systems introduced as part of the creation of the IS portfolio during a merger?*

Table 4.15 addresses the introduction of IT systems as part of the IS portfolio in the merger. One main theme developed from the findings where the system goes through an approval process to ensure that there is no redundancy.

Table 4.15: Implementation of IT systems that support rationalised business processes

Senior business professionals findings	Mid-to-Senior LOB findings	Mid-to-Senior shared services findings	Summary	Theme
IT system goes through an approval process from the executive team to ensure no redundancy is introduced	No answer	The value chain and objectives of the organisation need to be understood before introducing an IT system	IT system goes through an approval process from the executive team to ensure no redundancy is introduced	Implementation
JIRA system is used to log changes and for task management	No answer	No answer	JIRA system is used to log changes and for task management	Change management
No answer	People with the required skills were identified to assist with system implementation	No answer	People with the required skills were identified to assist with system implementation	Skills
No answer	No answer	The IT system needs to align with the organisational strategy	The IT system needs to align with the organisational strategy	Organisational strategy

It seems that the approval processes are not stringent. The merged organisation has failed to consolidate the mainframe system and is still experiencing challenges with the new Khula system.

IQ13: *How are the needs for a new IT system determined?*

Table 4.16 addresses the determination of the needs for a new IT system. One main theme has developed where the system needs to address the capabilities of both the old and new system.

Table 4.16: Needs of a new IT system

Senior business professionals findings	Mid-to-Senior LOB findings	Mid-to-Senior shared services findings	Summary	Theme
Capabilities that are not available in the current systems determine the need for a new system	No answer	No answer	Capabilities that are not available in the current systems determine the need for a new system	Business requirements
Customer needs drive the need for a new system	No answer	No answer	Customer needs drive the need for a new system	Business requirements

The organisation was not able to collect knowledge about the mainframe system to ensure it is applied in the new system. The organisation still runs mainframe systems of which the capabilities have not been extracted and applied in the new system.

IQ14: *What are the challenges experienced with the decision to decommission the IT systems?*

Table 4.17 addresses challenges experienced with the decision to decommission IT systems. Three main themes have developed from the findings. The table below summarises challenges experienced in the merged financial institution to decommission IT systems.

Table 4.17: Challenges experienced to decommission IT systems

Senior business professionals findings	Mid-to-Senior LOB findings	Mid-to-Senior shared services findings	Summary	Theme
People working on the old system and contractual obligations of hardware are challenges	One of the main challenges is data quality issues	The plan to decommission legacy systems is hindered by staff's lack of business knowledge and experience in business processes executed by the systems	The new system was not producing the expected results, thus delaying the decommissioning process	Knowledge management

Senior business professionals findings	Mid-to-Senior LOB findings	Mid-to-Senior shared services findings	Summary	Theme
Integration issues make it difficult to decommission IT systems	The new system was not producing the expected results, thus delaying the decommissioning process	Finance experienced integration issues with legacy Line of Business systems	The plan to decommission legacy systems is hindered by staff's lack of business knowledge and experience in business processes executed by the systems	System Integration
No answer	The morale of staff working on the legacy systems is low and many are leaving the company	No answer	The morale of staff working on the legacy systems is low and many are leaving the company	

The plan to decommission the finance SmartStream system has been challenging due to its integration with the legacy mainframe systems. The new system is experiencing challenges, thus delaying the decision to decommission the legacy systems. The current resources lack the business knowledge and experience to implement the rationalisation of business processes executed by the legacy systems.

4.3.5 Themes

Table 4.18 summarises the main themes that have developed from the findings. The themes are aligned with the research questions and sub-questions in an attempt to answer these questions. In chapter Five the themes are discussed and a conceptual model proposed.

Table 4.18: Themes developed from findings

RQ1: What are the factors affecting the business process and IT systems rationalisation when business units merge?	
RSQ1.1 What are the challenges experienced with the rationalisation of business processes?	
Findings	**Theme**
The planning to rationalise was done at different levels, senior IT staff members who support mainframe systems were excluded from providing input in the rationalisation process. The Console system chosen to consolidate systems running on the mainframe was not aligned to organisation C's client centric strategy.	Business and IT alignment / Rationalisation Rationalisation Business and IT alignment Rationalisation Change management
Although the organisation has a philosophy document guiding them on the choices of systems to implement as part of the IS portfolio, it seems no proper due diligence was followed. The choices of systems were contentious and politics determined the outcome of the system chosen as part of the IS portfolio. It was later found the chosen system (Console) did not align with the organisation's client centric strategy and thus became part of the legacy systems.	Policy documents Rationalisation decision Organisational politics Decision making Rationalisation
It seems that the decisions to rationalise were incoherent as some people were not considered to be key stakeholders in the rationalisation process. Senior staff members working on the mainframe system were excluded from this process.	Stakeholders

Findings	Theme
The timeframe to implement rationalisation tasks is unrealistic and no one seems to be taking responsibility for the implementation. The set time frame to fully implement the rationalisation tasks was end of 2015 and the tasks are still not fully implemented.	Rationalisation Implementation
Many challenges were experienced which negatively affected the rationalisation process during the merger. Cultural differences and organisational politics are cited as one of the main inhibitors of the process. The incoherence in the rationalisation process has resulted in a decline in issuing new policies. Change management to ensure the rationalisation objectives are fully understood, was not appropriately applied. This caused staff to leave the company. Segregation of staff working on the mainframe and those working on the new (Khula) system is a further main inhibitor of the rationalisation process.	Change management Resistance to change / cultural difference Organisational politics Human resource management
The implication for the organisation with the failure to rationalise is that there will be duplication, business processes will not be streamlined and the organisation's client centric strategy will not be realised. The organisation still has duplicate systems; the Console system meant to consolidate became part of the legacy systems after the procurement of the new Khula system.	Organisational strategy Duplication Business processes not streamlined Human resource management
RSQ1.2: **What effect does the rationalisation of business processes have on the creation of the IS portfolio?**	
Findings	**Theme**
The Console system was initially chosen to consolidate all the mainframe systems. After the mainframe system was implemented it was discovered that the systems do align with the organisation's client centric strategy.	IT and business alignment
There were no synergies achieved when the merged organisation implemented rationalisation tasks particularly in LOB systems.	Synergy Rationalisation implementation
RQ2: How does the rationalisation of business processes affect the IT systems in the merged financial institution?	
RSQ2.1: **How are the rationalised business processes aligned with the IT systems?**	
Findings	**Theme**
The organisation's IT systems are still not aligned. Branches still operate independently as was the case before the merger.	Business and IT alignment
Although the organisational skills are seen as one of the criteria to support the deployed IT systems, many people deemed as critical staff have left the organisation, thus nullifying this conception. The requirements to implement an IT system to consolidate the systems running on the mainframe were not fully addressed due to the Console system being implemented but then found not to align with the merged organisation's client centric strategy.	Skills transfer Human resource management Business requirements
The challenges experienced with the deployment of the Khula system to rationalise IT systems means the evaluation and plans were inadequate.	Evaluation plan Migration plan Change management
RSQ2.2: How are the IT systems implemented that support the rationalised business processes?	
Findings	**Theme**
It seems that the approval processes are not stringent. The organisation has failed to consolidate the mainframe system and is still experiencing challenges with the new Khula system.	Implementation Change management
The organisation was not able to collect knowledge about the mainframe system to ensure it is applied in the new system. The organisation still runs mainframe systems of which the capabilities have not been extracted and applied in the new system.	Business requirements

Findings	Theme
The plan to decommission the finance SmartStream system has been challenging due to integration with legacy mainframe systems. The new system is experiencing challenges, thus delaying the decision to decommission the legacy systems. Current resources lack business knowledge and experience to implement rationalisation of business processes executed by legacy systems.	Knowledge management System integration

4.3.6 Summary

This chapter discussed the interviews conducted in the merged financial institution. The interviews comprised of senior business professionals, mid-to-senior LOB staff members and mid-to-senior shared services staff members. The interviewees were asked specific questions to assist in answering the research questions. The information gathered from the interviews has been transcribed, validated, codified, summarised, segmented, reassembled and thematic analysis applied to provide meaningful findings to the study.

Tables 4.1 to 4.17 summarise findings and themes developed from the interviews conducted in the merged financial institution. Table 4.18 groups all the findings and themes developed based on the research questions and sub-questions of the study. The main themes in Table 4.19 below are derived from a group of themes outlining the headline findings. The headline findings are discussed in detail in Chapter Five. The findings are grouped within the main themes to provide a narrative of how rationalisation is undertaken in the merged financial institution.

Table 4.19: Theme groupings

Main themes	Themes grouped together to form the main theme
Business and IT alignment	Business and IT alignment / Rationalisation Rationalisation Policy documents Stakeholders Decision making
Rationalisation implementation	Rationalisation decision Rationalisation Synergy Duplication Business processes not streamlined
Resistance to change	Human resource management Migration plan
Change management	Evaluation plan
Politics and cultural differences	Politics Cultural differences
Knowledge management	Skills transfer Skills retention

Main themes	Themes grouped together to form the main theme
Business requirements	Business needs Business knowledge Systems integration System implementation

The main themes discussed for research question 1 are: i) Business and IT alignment; ii) Rationalisation implementation; iii) Resistance to change; iv) Change management; and v) Politics and cultural differences. The main themes for research question 2 are: i) Knowledge management; and ii) Business requirements.

The main themes developed from the group of 16 themes flowing from the findings are as follows:

Themes from RQ1:

i) Business and IT alignment
ii) Rationalisation implementation
iii) Change management
iv) Resistance to change
v) Politics and cultural differences

Themes from RQ2:

i) Knowledge management
ii) Business requirements

CHAPTER FIVE: DISCUSSION

5.1 Introduction

According to Kansal and Chandani (2014), the success of mergers is largely dependent on the effective implementation of change management strategies and processes. Operational excellence initiatives are widely rooted in business process management where development of IS and the allocation of human resources are derived (Grau & Moormann, 2014). The challenge, particularly in horisontal mergers, is the redundancy of business processes and IT systems (De Lange, 2015). This challenge creates silos where organisations are merged on paper but still operate separately (De Lange, 2015).

The research of this study focused on how the merged financial institution effectively dealt with the challenge of business process management in order to work as a unit. The researcher established how the rationalisation of business processes, linked to IT systems in order to create a unified IS portfolio, has been carried out to streamline operational processes so that the synergies of the merger are realised.

This chapter discusses the themes derived from the findings as reported on in Chapter Four. The interviews assisted in determining the processes to be undertaken to create a unified IS portfolio when business units merge, and the challenges inhibiting the rationalisation process.

5.1.1 Research question 1

RQ1: What are the factors affecting the business process and IT systems rationalisation when business units merge?

Theme 1: Business and IT alignment

As part of the merger, the merged organisation's role is to find a way to ensure its business processes and IT conform to the corporate strategy (Kaplan & Norton, 2006). Although the CIO of the merged financial institution has a philosophy document to assist the newly formed merged organisation, in reviewing the state of their IT systems, it was found that the Console system chosen to rationalise the mainframe systems, does not align with the client centric strategy of the organisation. Ullah and Lai (2013:2) adopted Henderson and Venkatraman's (1993) definition of alignment between business and IT strategies as follows:

> "Alignment between business and IT is a degree of fit and the integration between business strategy, IT strategy, business infrastructure and IT infrastructure".

Strategies such as the SAM model can assist the merged financial institution to ensure that their business and IT strategies are aligned so that that the chosen IT systems effectively executes the organisational strategies (Orozco *et al*., 2015).

Some senior managers working with the legacy LOB systems can assist in contextualising the operation of the systems as well as why the underlying business rules were excluded from the rationalisation process. Ullah and Lai (2013) state that to strengthen alignment in any business or organisation, both business and IT need to i) understand the business strategy, ii) create a strong culture among themselves, iii) foster and sustain a high degree of communication among the two groups, iv) be aligned and strengthened, and v) attain a level of mutual trust.

Alignment at operational level also needs to be considered. Kwanroengjai *et al*. (2014:1) argue that there are four main aspects of alignment, namely: i) strategic fit/alignment where management strategy—such as business processes and activities—is to be applied at operational level: ii) the capability of staff to ensure people are aligned to perform business operations achieved by adapting the People Capability Maturity Model (PCMM), and socio-technical alignment aimed at viewing the aspects of people and IT in an organisation; iii) infrastructure process fit aimed at ensuring organisational structure is well placed to support the business processes; and iv) organisational alignment to assess consistency between organisational structure and business strategy. Using these tools will go a long way in assisting organisations to align business and IT strategies. With the merger of Organisation A and Organisation B into Organisation C, the alignment of business and IT strategies did not happen.

Theme 2: Rationalisation implementation

Although there is a concerted effort to rationalise business processes and IT systems to create a unified IS portfolio, there are few successes in this endeavour. Interviewee 17 said that *"*the only thing that has not been achieved as yet is that branches are still operating separately where you still have Organisation A and Organisation B branches working independently*"*. Interviewee 17 also stated that no synergy has been achieved where Organisation A's branch serves a client of Organisation B or *vice versa*. Intermediaries are able to serve clients from Organisation A and Organisation B respectively, but this cannot be achieved by the LOB systems.

According to Frey *et al*. (2013:2), synergies are realised by reducing cost:

> "…replacing legacy applications based on outdated technology and difficult to change architecture that cause high maintenance costs; business process optimisation, for example, refers to improving the efficiency of business processes by better IT support with improved user experience and a higher degree of automation, business agility and faster time-to-market, for example, referring to a flexible IT architecture, enabling businesses to introduce new products, or engage with new partners or in new markets".

Interviewee 11 mentioned that shared IT services such as document storage and work flow systems were identified, but there has not been an effort to choose the appropriate system for the merged financial institution. Interviewee 19 concurred by stating that AWD and Remedy systems are still not consolidated.

Theme 3: Resistance to change

The challenges experienced with the plans and the aftermath of implementing the Khula system are discussed in Chapter Four, question IQ3. Interviewee 5 said that one of the challenges they are experiencing is the decision to stop development on the legacy systems and focus on rationalisation. This uncertainty may create some confusion in employees who are passionate about supporting the legacy systems, but they may be interested in moving to the Khula system as the organisation is strategically heading in that direction. Suhendra *et al*. (2014) discuss strategic ways in which changes can be influenced positively, particularly in organisational mergers where changes are rife. Some of these strategies are: i) the dissemination of information and effective communication by change managers leading to trust in management, which then reduces resistance to change; and ii) positively influence the employees' perceived benefits of change by instilling confidence in terms of job security, social relations and current position.

Interviewee 9 indicated that "there is 10% growth on the mainframe which indicates new development still occurs". Some people expressed comfort working in the legacy space as they have been working with legacy systems for many years and are doubtful whether the changes with the Khula system will bear any synergies. Suhendra *et al*. (2014) outline the importance for the merged organisation to establish trust between the employer's leadership, supervisors and employees to improve commitment to the organisation. Suhendra *et al*. (2014) further advise that an attachment to the organisation should be created through ensuring that changes do not pose a risk to staff. Changes should instead provide economic benefits in the form of remuneration, career growth, relationships at work and job security.

Theme 4: Change management

Upon conclusion of the merger between the two financial institutions, a Third Party Company was appointed to assist in the rationalisation and optimising processes. One of the optimised processes is the way in which insurance policies are captured and issued to clients. Generally, a customer would go to a CSO and apply for a policy; the policy is then captured on an AWD system and sent to back office staff using the CICS system for processing. However, this process has been changed after the merger. Previously the CSO would process the application but issuing the policy was the responsibility of CICS. Kansal and Chandani (2014) state that organisations need to have an integration plan where a project team is established comprising of senior executives driving post-merger activities. The project team needs to ensure that employees are on a continuous basis engaged effectively and immediately to minimise rumours and misinformation. Sharing future roadmap and product portfolio with the customer is important and this can be done by setting up a helpdesk that will deal with customer issues to ensure they are well informed of what is happening and thus retaining them while generating profit.

The staff members working in the CSOs have been assigned more responsibilities including issuing the policy once it has been captured. This has resulted in many staff members working in the back office being retrenched. The implemented changes also affected the integration of some systems. Data quality issues are still being experienced, requiring the remaining back office staff to correct the data. As a result, the company is now generating lower amounts of business. Critical staff retention during HR restructuring plays a key role in ensuring that any changes taking place are well understood and those affected are given training and counselling (Kansal & Chandani, 2014). Redundant staff can be offered severance packages, assisted to find a position elsewhere, or redeployed to other business units. However, Kansal and Chandani (2014) note that downsizing should be considered as the last option.

Theme 5: Politics and cultural differences

In chapter Four it was pointed out that Organisation B had a more dominant approach than Organisation A. Interviewee 2 said that “politics definitely came into play as to who gets the top jobs. The candidate that got the job had an influence as to what systems are to be adopted going forward”. This influenced the decision to implement the Console system residing in Organisation B (Appendix C: 9).

The general notion among staff is that the merger was more of a take over as they experienced the decision as being imposed on them rather than discussed with

them to reach a common agreement. Interviewees from shared services eluded that politics and cultural differences are major inhibitors of finding common ground to implement rationalisation tasks.

The importance of creating a unified IS portfolio requires a high degree of collaborative effort among professionals from different communities, particularly in mergers. This statement is corroborated by Vieru and Rivard (2014b:1), stating that "the success of IS implementation is highly dependent on effective collaboration among individuals in different communities". Corporate executives fail to make an effort to understand differences in cultures at pre-merger stage and thus do not have specific approaches to assess and deal with cultural integration issues (Hirsch, 2015). The Daimler-Chrysler and Warner-AOL mergers are cited as examples of corporates which failed to achieve their strategic objectives and financial benefits due to the failure of integrating corporate cultures (Marks *et al*., 2014; Hirsch, 2015). According to Marks *et al*. (2014), managers need to develop a deep sense of cultural intelligence and competence to pre-empt issues that may emerge as a result of cultural differences during post-merger integration.

Marks *et al*. (2014:3) discuss steps in which cultural differences can be managed in mergers: i) by assessing cultural fit, major integration challenges can be identified during the due diligence exercise; ii) executives need to determine and clarify the cultural end state by showing how they would like to see the company operates; iii) raise awareness and educate employees about sources of culture; iv) managers need to develop a deep cultural learning to ensure people understand how the company operates; and v) embrace new challenges, end old culture, accept new culture, and align HR practices with the desired new culture. The importance of addressing the cultural injustices experienced in the merged financial institution can create a harmonious relationship among the affected staff.

5.1.2 Research question 2

RQ2: How does the rationalisation of business processes affect the IT systems in the merged financial institution?

Theme 6: Knowledge management

One of the main tasks undertaken as part of the due diligence exercise was to review both organisations' IT systems based on the set of criteria in the philosophy document of the merged financial institution CIO. According to Paradauskas and Laurikaitis (2015), the importance of extracting knowledge from legacy systems is assisting in the process of modernising these systems. The intended goals of

extracting knowledge from legacy systems include having a deeper understanding of legacy sources, application functions which include entities and relationships, data formatting and reporting, and business rules. The outcome of Organisation C's assessment (due diligence) indicates that the mainframe systems used in Organisation A is not the technology the merged organisation wants to adopt going forward. The concern is that the technology running the mainframe systems is obsolete and it takes about three months to develop and market a new product.

After evaluating Organisation's B systems, it was decided to use the Console system to rationalise the mainframe systems. However, it was later found that the Console system also does not meet the merged organisation's client centric strategy. These technology decisions—selecting the Console system, among others—were taken without consulting with senior staff members having the experience and knowledge of the systems in both Organisation A and Organisation B. The lack of collaborative effort between business and the senior IT mainframe support team in understanding the knowledge embedded in the system, negatively affects the aims of effective rationalisation. This failure creates complexity in the IS portfolio and adds the Console system to the list of legacy systems due to its misalignment to organisational strategy.

Theme 7: Business requirements

Client solution teams who conducted surveys on the financial needs of Organisation C's clients had gone out into the market to do market research; focus groups were taken to understand the customers' financial needs (i.e. funeral policies and savings policies). The information collected indicated the need for technologies to be adopted by the merged organisation to satisfy the needs of the customers. This decision again resulted in the Console system becoming a legacy system. The core architecture of the new system is based on IBM Insurance Application Architecture principles. The implementation of the new system has led to uncertainty in the people supporting the mainframe system as they were seen as working in the "old world" while those working with the new Khula system are working in the "new world".

One of the interviewees (Interviewee 5, Appendix A) said it created an "us and them" scenario and even suggesting that it would have been better if Khula was introduced as a project rather than new a system replacing the current systems. The way in which the process was managed caused many people who supported the mainframe systems to find alternative employment; subsequently more than 40% of the employees left the company. Razalli *et al*. (2015:2) discuss factors which can

improve the success of BPR, namely: i) change management which entails people management and keeping good morale in the team; ii) project management which ensures effective project team selection; iii) accountability in the BPR exercise and alignment with the organisational strategy; and iv) people supporting the mainframe to assist with the rationalisation process.

New employees were brought into the company to assist with the development of the Khula system. The delays to implement the new system have been ascribed to a lack of insurance business knowledge and the complexity of the new system. It has also been reported that there is at least one person from the Khula team leaving the company on a month-to-month basis. High staff turnover is attributed to employees not being happy with some managers and Java developers being difficult to retain as they receive better offers elsewhere. These issues have impelled the organisation to employ consultants who are charging high fees for their services.

Razalli *et al*. (2015:2) state the following: i) management competence is crucial to ensure buy-in from top management which will provide sufficient resources to the project team executing the tasks; ii) customer focus and market research become important, especially understanding what customers need and ensuring that changes in business processes are driven from the customers perspective; and iii) alignment of IT infrastructure with business processes is needed to ensure personnel are well equipped to operate the systems and management of IT consulting is effective.

5.2 Proposed conceptual model

From the findings and thematic analysis, the conceptual model in Figure 5.1 is proposed for merging entities. The chosen components in the proposed conceptual model show the differences between and similarities of the merged organisations. C1 and C2 depict a horisontal merger between financial institutions. The financial institution shares similar business processes and IT systems. C3 depicts C1 and C2 combining to form one company with rationalised business processes and a unified IS portfolio by choosing IT systems that are aligned to the organisation’s new strategy.

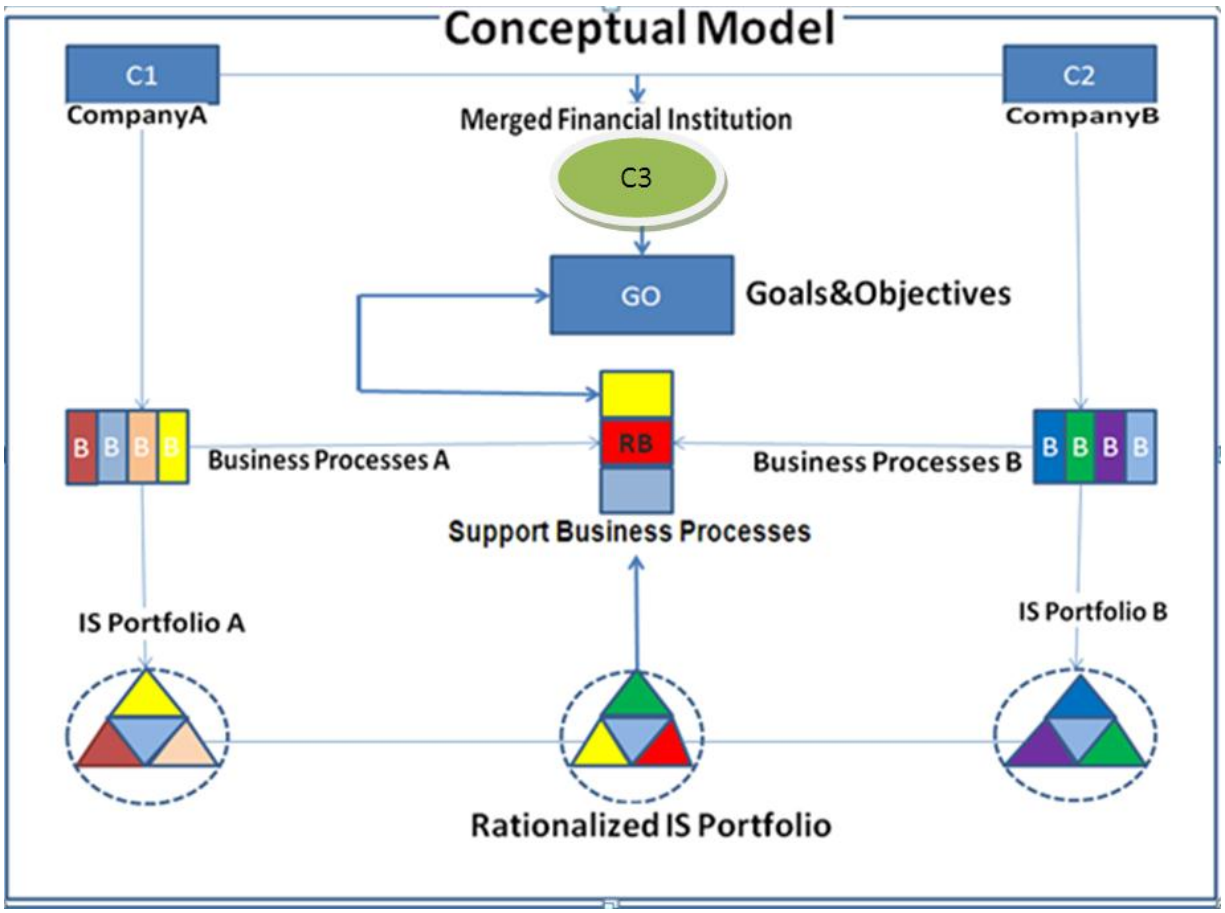

Figure 5.1: Rationalised IS portfolio supporting business processes

In Figure 5.1, Company A and Company B represent the two financial institutions before the merger. Both organisations have business processes performed by the respective IS portfolios. The blue coloured blocks for Company A and Company B (top left and top right corner of the figure) indicate a horisontal merger between the two financial institutions and the inherent challenge of redundancy. The various colours shown for each company depicts the diverse business processes and IT systems existing in the merged financial institution.

When the merger takes place, Company C is born with new goals and objectives to be supported by business processes. A unified IS portfolio is created by drawing from the strengths of the two financial institutions (A and B), ensuring that redundant business processes are rationalised. Organisation C shows a rationalised IS portfolio supporting the business processes with goals and objectives of the merged financial institution.

in Chapter Two it is stated that the synergies of the merger are IT related (Sarrazin & West, 2011). The unified IS portfolio generated by drawing strengths into the merged financial institution shows a narrative of doing more with less where it

supports the rationalised business processes of companies A and B. The conceptual model also shows that failure to rationalise the business processes will result in a merger just on paper where the two companies keep on operating in silos, thus preventing any synergies from realising. Feij (2013) indicates that the duplication of business processes and IT systems is inefficient and hinders the expected synergies of the merger.

5.3 Summary

This chapter discussed the findings derived in Chapter Four. The findings are grouped into themes to narrate how the rationalisation has been undertaken in the merged financial institution. Based on the findings, the literature review discussed in Chapter Two is used as a guiding instrument to assist in the recommendations which will be discussed in Chapter Six.

CHAPTER 6: CONCLUSION AND RECOMMENDATIONS

6.1 Introduction

Organisations fail to implement rationalisation tasks which will enable them to capture the synergies set out during the pre-merger phase. One of the major reasons is the inability to become aware of factors inhibiting the rationalisation process. The themes discussed in Chapter Five indicate factors that can affect the rationalisation process when business units merge. Factors manifesting during the rationalisation process can negatively affect the cost savings of the merged organisation as set out in the pre-merger goals and objectives. The implementation of the new Khula system—meant to replace the legacy mainframe systems—has not shown any evidence of synergies realised since the implementation started more than three years ago. Legacy mainframe systems continue to play a significant role in the business of the merged financial institution.

Interviewee 5 stated that none of the current systems has been migrated and the challenge for the funeral product being built into the new system is data quality issues. A further HR challenge is that staff working on the mainframe began realising there is no future for them and decided to leave the organisation. The new system also started displaying constraints with development challenges (Interviewees 5, 7, 9 & 10).

Awareness of challenges posed by the factors affecting the rationalisation of business processes to create a unified IS portfolio when business units merge can provide executive management with all the necessary information to implement pre-emptive strategies to ensure the realisation of merger synergies. The themes discussed in this chapter outline factors affecting the rationalisation of business processes to create a unified IS portfolio when business units merge. The problem statement as stated in section 1.3—i.e. the failure to consolidate business units performing similar functions to create a unified IS portfolio negatively affects the organisation's ability to reduce operational costs and take advantage of economies of scale and the future competitive advantage—has been confirmed by the study. The merged organisations have been unsuccessful in consolidating the two entities and cannot reap the intended benefits.

The aim of the study is to explore the factors affecting business processes and IT systems when business units merge and how the failure to rationalise business processes affects the IT systems in the merged financial institution. Several factors contributing to this situation have been pointed out. Some of the main factors

include: i) senior staff working on the mainframe systems being excluded from the rationalisation process; ii) politics and cultural differences; iii) inappropriate application of change management principles; iv) resistance to change; and v) inappropriate application of rationalisation process. The study furthermore showed that by not rationalising business processes, the organisation was forced to make decisions not conducive to aligning business and IT strategies, resulting in lower outputs such as a decrease in policy uptake.

6.2 Recommendations

The importance to align and streamline business processes is critical for merged organisations to realise synergies. Planning plays a major role in ensuring that all the factors affecting the implementation of the rationalisation process are carefully considered. The aim to create a unified IS portfolio requires people with extensive business and system knowledge to assist in the rationalisation process. One of the major tasks undertaken to implement rationalisation activities in the merged financial institution is to modernise the legacy mainframe systems flagged as a risk in the philosophy document of the CIO. The merged financial institution has implemented the Console system that was meant to replace the mainframe system, but it could not align with the organisation's client centric strategy. Paradauskas and Laurikaitis (2015) recommend assembling a project team with skilled human capital possessing business and system knowledge to extract knowledge from the mainframe systems. People who understand the history of the organisation play a significant role in the rationalisation process, thus retrenching people should be considered as the last option to keep good morale among team members. A project team should be established which includes staff working on the mainframe systems and making them feel part of the merged organisation's strategies and solutions.

The merged financial institution implemented a new system called Khula which meant to embody their client centric strategy. This caused legacy mainframe support staff to feel inferior to the team working on the new system. Clear communication from executive management is important to ensure buy-in from staff and an understanding of the strategic direction of the organisation. Effective change management processes need to be established to ensure that all the factors hindering the rationalisation process are carefully considered.

6.3 Contribution of the research

Factors such as business and IT alignment, rationalisation implementation, change management, resistance to change and politics and cultural differences create awareness of aspects affecting the rationalisation process. The research highlights

the importance of knowledge management and business requirement solicitation in the plan to create a unified IS portfolio.

6.4 Further research

The scope of the research can be expanded by conducting a similar study in an organisation that also has embarked on a merger. The study should include the role of human factors when organisations merge. The importance of all factors should be investigated and ranked by importance. From these factors, a framework for merging companies should be developed and tested.

6.5 Reflection

Since the inception of the merger it has not been difficult to see how the changes affect the daily lives of the people. As an IT practitioner, I have witnessed many changes happening within our IT and other departments. These changes prompted and triggered thoughts to undertake the study. It has been an interesting and rewarding experience to interact with the interviewees and colleagues from the business and IT departments to gather information on how the rationalisation process in the organisation is viewed.

Many of the people I have interacted with took interest in sharing stories on how the changes in their departments affected them. In some instances the participants shared information irrelevant to the questions asked during the interview. Some participants described how the rationalisation process in the organisation affected them and indicated that they do not have all the answered to my questions. The participants thus referred other participants to be interviewed for this study.

It is indispensable for rationalisation process to take place in the merged financial institution to realise synergies. However, factors hindering the rationalisation process need to be carefully thought through before embarking on the merger. What has been inconceivable is the amount of psychological distress which affected (and still affects) the people during the merger process. This as a result makes the company lose talented staff members who find alternative employment in other companies. The learning from this undertaking is that the success of a company is made by its people, and conversely, if people are not happy, negative results will reflect in the organisation; a good example of this is the issues experienced during the new Khula system implementation.

6.6 Summary

The aim of the study was to understand the factors affecting the rationalisation of business processes to create a unified IS portfolio when business units merge. The

challenges experienced during the consolidation process in the merged financial institution have been investigated.

Chapter One

Chapter One broadly discussed the background to this study and why organisations embark on mergers. The chapter also highlighted that the synergies of the merger are IT related, which led to the formulation of the problem statement. The research questions and objectives meant to address the research problem were stated.

Chapter Two

In Chapter Two, the current status of the literature within the study's research domain was discussed. The rationalisation process and how it is applicable in business processes to create a unified IS portfolio, was explained in detail. The redundancy which occurs in horisontal mergers and inhibits the organisation's ability capturing synergies was highlighted. An example by Klausen (2014:5) stating that rationalisation assists organisations in "doing more with less", thus becoming efficient and taking effective measures, was used.

Chapter Three

The research methodology has been discussed to narrate its applicability to this particular study. The research used qualitative methods to explore factors inhibiting the rationalisation process when business units merge. The chapter also outlined the research philosophy, approach, strategy and data collection methods. A case study was proposed where the merged financial institution became the entity where the research would be undertaken.

Chapter Four

This chapter presented the background of the merged financial institution. The IS portfolios of the merged financial institution was elaborated on. A discussion on how data was collected and the rationale for the research population sample were outlined. Unstructured questions recorded on a device were posed to the interviewees. The data collected during the interviews were later transcribed. Thematic analysis was used to analyse the transcribed data, where after findings were extracted and themes developed.

Chapter Five

The themes developed in Chapter Four were further discussed in Chapter Five. The challenges experienced were discussed in relation to the implementation of the rationalisation tasks in the merged financial institution. The literature presented in

Chapter Two was used to provide a view of what authors are saying in relation to the challenges experienced in the merged financial institution.

The problem statement was addressed by exploring the factors affecting the rationalisation of business processes and IT systems in the merged financial institution. RQ1 and RQ2 were answered through interviewing relevant stakeholders in the merged financial institution. The aim of the research was to explore the rationalisation of business processes linked to IT systems in a merger. A further aim of the study was to explore the factors affect business processes and IT systems when business units merge and how the failure to rationalise business processes affect IT systems in the merged financial institution.

The aim of the study—exploring the rationalisation of business processes linked to IT systems in a merger—was successfully completed. The rationalisation or lack thereof is shown in Chapters Four and Five. The links between the two merging companies from a process driven approach, was established.

In Chapter One the following objectives were set:

i) To identify which business processes have been merged by the financial institution.
ii) To examine the rationale and decision process towards the implementation of IT systems during the rationalisation process.
iii) To identify the hindering factors that can occur during the rationalisation process when business units merge.
iv) To determine the basic principles adopted to rationalise business processes and reduce redundancy in the merger.
v) To determine which IS systems and technology infrastructure are deployed upon completion of the rationalisation process.
vi) To determine the difficulties experienced with the rationalisation of business processes.

The problem statement—i.e. the failure to rationalise business processes and IT systems to create a unified IS portfolio inhibits the organisation's ability to realise synergies of the merger—is answered as follows: Knowledge management and business requirements affected the rationalisation of business processes. The creation of a unified IS portfolio was hindered by five identified factors, namely business and IT alignment, rationalisation implementation, change management, resistance to change, and politics and cultural differences.

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Appendix A: Interview Guide

RQ1: What are the factors affecting the business process and IT systems rationalisation when business units merge?

RSQ1.1: What are the challenges experienced with the rationalisation of business processes?

IQ1: What planning is involved in rationalising business processes?

IQ2: How do you determine the process that must be followed to rationalise business processes?

IQ2a: What method is employed to rationalise business processes?

IQ3: Who are the key stakeholders involved in the rationalisation strategy?

IQ4: Have you managed to keep all the set time frames to implement the rationalisation tasks?

IQ4a: What have been the challenges to migrate the relevant legacy systems?

IQ5: What are the hindering factors and the challenges to implement the rationalisation tasks?

IQ6: What implications does the failure to rationalise business processes have for the organisation?

IQ7: Please specify giving examples of business processes that have been rationalised?

RSQ1.2: What effect does the rationalisation of business processes have on the creation of the IS portfolio?

IQ8: Did the employed rationalisation strategies make it easy to decide what systems to be deployed as part of the IS portfolio?

IQ9: What synergies were achieved with the rationalisation process?

RQ2: How does the rationalisation of business processes affect the IT systems in the merged financial institution?

RSQ2.1: How are the rationalised business processes aligned with the IT systems?

IQ10: What criteria must the chosen IT system meet to determine its adequacy for deployment as part of an IS portfolio?

IQ10a: What plans are put in place to align IT systems with the rationalised business processes?

IQ10b: What is the process undertaken to identify the IT system(s) that support the rationalised business process?

IQ11: If the IT system meets the criteria, what plans are put in place to deploy it as part of the IS portfolio?

RSQ 2.2: How are the IT systems implemented that support the rationalised business processes?

IQ12: How are new IT systems introduced as part of the creation of the IS portfolio during a merger?

IQ13: How are the needs for a new IT system determined?

IQ14: What are the challenges experienced with the decision to decommission the IT systems?

Appendix B: Consent Form

Cape Peninsula
University of Technology

FID/REC/ICv0.1

FACULTY OF INFORMATICS AND DESIGN

Individual Consent for Research Participation

Title of the study: <<Rationalisation of business processes to create a unified information system portfolio in a merger: A case study of a financial institution**>>**

Name of researcher: <<Mongezi Mati>>
Contact details: email: phone:

Name of supervisor: <<main supervisor>>
Contact details: email: phone:

Purpose of the Study: <<fill in – derived from the study's 'aims' statement>>

Participation: My participation will consist essentially of <<fill in, e.g. interviewee, tester, etc.>>

Confidentiality: I have received assurance from the researcher that the information I will share will remain strictly confidential unless noted below. I understand that the contents will be used only for <<fill in, e.g. M Tech thesis, journal article etc. >> and that my confidentiality will be protected by <<fill in>> *(explain how the confidentiality will be protected, e.g. use of pseudonyms, etc.)*

Anonymity will be protected in the following manner (unless noted below) <<fill in>> *(Describe how anonymity will be guaranteed, e.g. if photos are being used, the blanking out of faces and/or places names. If anonymity cannot be protected, state this expressly, explain the reason why and explain the risks involved for the participant, the organization, etc.)*

Conservation of data: The data collected will be kept in a secure manner <<fill in>> *(Describe how and where the data will be stored, who will have access to it, and how long it will be conserved, e.g. digitally recorded interviews will be encrypted and kept in a password controlled environment. Note: original data or a copy of the data should be kept for audit purposes).*

Voluntary Participation: I am under no obligation to participate and if I choose to participate, I can withdraw from the study at any time and/or refuse to answer any questions,

without suffering any negative consequences. If I choose to withdraw, all data gathered until the time of withdrawal will destroyed. <<Change 'destroyed' to something else if negotiated with the participant. Get the participant to initial the change if done by hand.>>

Additional consent: I make the following stipulations (please tick as appropriate):

	In thesis	In research publications	Both	Neither
My image may be used:				
My name may be used:				
My exact words may be used:				
Any other (stipulate):				

Acceptance: I, (print name)_____

agree to participate in the above research study conducted by <<fill in>> *(name of researcher)* of the Faculty of Informatics and Design <<fill in>> *(name of Department)* at the Cape Peninsula University of Technology, which research is under the supervision of <<fill in>> *(name of supervisor).*

If I have any questions about the study, I may contact the researcher or the supervisor. If I have any questions regarding the ethical conduct of this study, I may contact the secretary of the Faculty Research Ethics Committee at 021 469 1012, or email naidoove@cput.ac.za.

Participant's signature: _____ Date: _____

Researcher's signature: _____ Date: _____

Appendix C: Transcribed Interviews

INTERVIEWEE 1

When the merger happened between Organisation A and Organisation B about 3.5 years ago, they were quite careful not to bring everything together immediately, except for ITS which had to go through the process of streamlining by first creating a surfboard model. For example, somebody had to be responsible for all the Microsoft systems and networks, and this person was tasked to ensure that stability is kept, that business does not fall over for long periods of time, and how the two teams supporting the Microsoft platforms would be rationalised. When it came to the Line of Business systems, there was a little bit merging, with the Odyssey system going up to Organisation B and the new markets system coming to Organisation A's retail IT. The way they [are] looking at rationalisation of the organisation is by looking at business capabilities using a capability model.

The MMI model is focusing on different segment channels, products and solutions. The idea around looking at segment channels was to truly identify the different customer needs, and what capabilities are needed to really appeal to those customers. The interviewees indicated the need for having analytical capabilities, understanding the customer better, mining the data better, and watching what customers say about the organisation on social media. Organisation B is using Microsoft analytics and warehousing, and Organisation A uses IBM tools.

What planning was involved in rationalising the business processes?

The interviewee expressed the second wave of rationalisation as the organisation looking at where it embarked on the client centric model. The CEO, COO and CIO started socialising the concept of *segment channel product solution* about 2 years ago and shared the vision of the business areas. A new business area called Product Solutions was established where all backend product capabilities will be placed where there is a lot of duplication. By doing this, they are creating centres of excellence where systems will be grouped based on their portfolio (i.e. investment policy, short term insurance, etc.), and these will be critically examined looking at redundancy and also aligning the product to be adopted with the segment channel. The idea and the strategy going forward is to eliminate redundancy and group product solutions that will appeal to a particular segment channel.

How did you determine the process that must be followed to rationalise business processes?

Going back to Organisation A which had 7 systems, a due diligence process was followed which looked at how these systems can be brought down. The CIO had a philosophy document which was used to look at legacy systems, evaluating whether they are obsolete, conventional, or modern platforms. The issue was not having supporting skills in PL1 language or COBOL. Each system was scored against stringent criteria that were determined to see its capabilities. Interviewee stated that initially their due diligence identified that they could take the Console system and make architectural changes to it because none of the 7 systems were the ones they wanted to go forward with. The idea was to adopt the Organisation B Console and the PDS system. The console was meant to be built and made stronger, bigger and robust, and then migrate all the policies in the 7 systems. As the business started evolving its own strategy, they started devising a fairly complicated architecture for product and 6 months down the line it was discovered that the Console would not fit the requirements. The interviewee stated that they went back to devise another plan where they followed the IBM standard for building insurance called IIA.

Who are the key stakeholders involved in the rationalisation strategy?

The executive CIO; the learning is that you need to be very close to your financial director, head of finance, because often when rationalising systems you need to spend money and the return

might not be faster. The marketing product development executive and the sales people are also crucial in ensuring you are continually working with them and that the rationalised system caters for their needs.

What is the set timeframe?

A business case presentation was done in 2011 for Organisation A's retail side. The targeted time frame was 5 years. The hope was to have new business running in June 2014. The interviewee expressed that they are running behind schedule and that there is only one product currently running on the system. The participant also quoted Gartner evidence that when a new system is being built from scratch it normally takes about 7 years for it to be fully functional, and this exclude migrations.

What can you say is causing the delay to implement?

The first delay was caused by the assumption to rationalise using the Console system; also the IIA is a fairly complex tool. The participant said that they have been ambitious in working with the latest IBM tools, and that they have to get a lot of things working together; the participant expressed that it's not a simple application. The application is a Java script talking to the Enterprise Service Bus (ESB), talking to the process server, talking to a set of services that are around the core insurance engine, and talking to the partner system called Lunos. With the implementation of the IIA system they had to find new Java developers who do not have the insurance knowledge and the real challenge is the domain knowledge, for example people who have business and technology knowledge. This prompts spending a lot of time with the developer about how the business works. The interviewee also mentioned that Java developers move quite quickly and it is very difficult to hold on to them as they can leave the company if they are not happy.

What are the implications if you fail to rationalise?

Looking at the organisation's MMI strategy in terms of client centricity, we won't be able to leverage the full extent of what we want to do on our old systems. If the whole Ukukhula program does not deliver, it will be a setback to business having flexibility to construct products and having to really build a financial wellness offering, and really help a customer as he/she goes to his/her life journey. To be client centric, the organisation looks at what is the value proposition to the client and delivering this hinges on the organisation having a flexible system.

Are there any specific redundant business processes that have been identified?

One of the things the company did earlier this year was to identify that they have a savings product called FCIO which they were not selling anymore. It costs R8 million rand a year to keep the system running and ICS was charging about R3/4 million a year to run the servers. It was a product that had 50 000 policies which started to incur massive costs, and these policies were migrated to the OB system. This resulted in a R8 million cost saving as well costs of people who supported the system.

Did the employed rationalisation strategy make it easy to decide on the adopted systems?

It was not easy because initially the organisation decided on Console, but having the organization's philosophy documents did put a lot of things into perspective as it outlined the direction in which the organisation is going. The participant also expressed that you cannot rely on gut feel when making such decisions as there are huge costs involved. A board was assembled to provide guidance in the decision making and that frameworks do provide assistance in making these decisions.

Have there been any synergies achieved as a result of implementing the new system?

Certainly, MMI purchased a stake in *Hello Doctor world* and were able to implement the trauma benefit quite quickly. Following MMI planning recently, they are thinking of using Khula internationally in the SADEC countries. People are starting to see the systems being used more widely than specific business units.

How are the rationalised business processes aligned with the IT systems?

Duplicate processes equate to duplicate systems. Quite often you are not taking a certain process over the other; you look at improving the process. You need to look at a big pool of business processes residing in IT solutions and you are either comfortable that they can go forward or the merged financial system has to build a new system.

Is it because of legacy systems that you have to build a new system or not having people that developed these systems?

Cost is the factor, and mainframes are there for international companies running millions of customers. The organisation is not big enough to need a mainframe.

What criteria must the chosen IT system meet in order to determine its adequacy for deployment as part of the IS portfolio?

The MMI philosophy should guide the process and the debate is around the platforms to understand whether the chosen system is based on the platform going forward or not. The interviewee used as example the code running on the call centres—VB 5.0—and that this code is not going forward. It needs to look at longevity and stability of the platform; building a system on a platform and suddenly the platform is no longer supported—it will be very difficult and costly to move it to another platform. Getting the platform decision right and making sure it involves overtime to accommodate all capabilities without destabilising the organisation.

Do you agree that rationalisation is not a once off thing?

Definitely! I joined the organisation in 2002 and the organisation planned to look at rationalisation but never had time to look at it. The merger gave the opportunity to rationalise in a broader space by not just going to the market and buying a new system, but first looking into what you have as adding to the new portfolio might add cost and complexity. It is important to Treat IT very seriously at the executive level, making sure that your vendors aren't going bankrupt and out of business applying the ITIL principles.

If the IT system meets the criteria, what plans are put in place to deploy it as part of the IS portfolio?

The organisation works with the ITSM system in terms of change management. There is lot of planning around the releases and launching of a new system, making sure that it is a formal process, training of users. Transition readiness, how do we transition the business to take on this new application with improved processes and efficiency?

How are new IT systems introduced as part of the creation of the IS portfolio during a merger?

Before the system is introduced as part of the IS portfolio, it goes through two approval processes. The CIO discusses it with the Chief Financial Officer and CEO; then it goes to the steering committee which comprises of the IT heads to insure that the technology is adequate and no duplication is introduced in the portfolio.

How are the needs for the new IT system determined?

Adopt an agile approach which is planned across the enterprise, and being clear of what the business needs are and prioritising them. MMI has three strategic things which are growth, client centricity and excellence. The RETAIL business said that out of these three objectives

there are nine objectives; determine how you achieve the objectives; these will bring initiatives which will be scored to determine importance to business.

How are existing IT systems that do not meet the criteria of the new IS portfolio, decommissioned?

Identify them as end-of-life and ensure that the system does not meet long term objectives. Identify a target system for the capability being replaced. Data is migrated off the system and then leave the system in a frozen state for a period of time as a backup in case you need to roll back. Identify staff that were in that team and looking to see if there are any roles they can fill in the new portfolio—if not they will be retrenched.

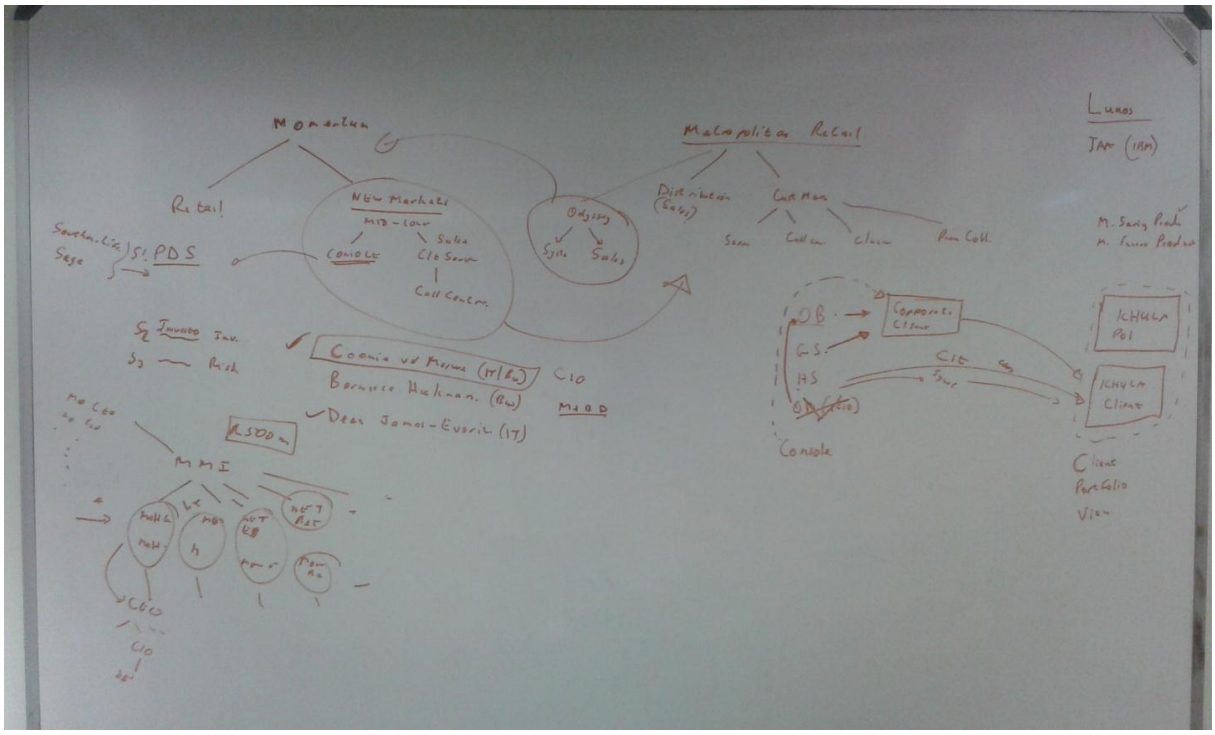
Are there any challenges that were experienced as a result of decommissioning the IT system?

Integration is the issue; a window period of three months is given before the system is decommissioned to make sure that no one is using it.

Can you relate your answer to a system that was decommissioned?

The FCIO system that was decommissioned ran some equipment that was also part of the Odyssey system. The Odyssey application was decommissioned a few years before when it got moved to Organisation B. Organisation B had people still looking at the data in the box making sure that migration of data occurred correctly; this caused a problem when the system was about to be switched off.

INTERVIEWEE 2



Organisation A: Organisation B

Organisation B's new markets sold into the same market as Organisation A, which is the mid-to-low end of the market. They had a system called Console, Sales and Client Service which was operated by a call centre. Organisation B also had PDS (PolleDinStassy servicing system) which contained policies belonging to new markets.

Organisation B: Organisation A

Organisation A Retail had a separate distribution and customer management; within customer management Organisation A had service, call centre, claims and premium collection. Organisation A also operated in the mid-to-low end of the market. Organisation A had a product called Odyssey, which is also in system and distribution channel sales. The Odyssey product appealed to the mid-to-upper end of the market. Organisation A has a system called OB, Group schemes, Odyssey, and Home service. The Odyssey system also had another product called FCIO (Future choice).

Merged: Organisation A and Organisation B

The merger between the two organisations promised 10% decrease in staff and huge monetary savings in synergies. The merger promised a R500 million saving per year. As a result of the merger, the new markets product was moved to Organisation A and the Odyssey system was moved to Organisation B. The question that needed to be answered: **Which system was going to be adopted and utilised going forward?** The decision was then taken that the Console system would be adopted because it is a modern platform; the systems in Organisation A are not progressive and policies running in these systems will be treated as closed books. The Organisation A systems are running on the mainframe written in Cobol and PL1 languages which are deemed as older technologies.

Q1: Did Console come in as a replacement of OB, Group Schemes and Home services?

Console came in as a platform to build on going forward; eventually the OB, Group schemes and Home services system will gradually be removed or faded out.

Are there any set time frames during which these systems will eventually be phased out?

The initial set timeframe was between 4-5 years; another plan was to absorb the OB, Group Schemes policies into the PDS system as it had been used for similar function in previous mergers.

Are the legacy systems likely to be switched off?

Console became another legacy system and now a new system called Khula was proposed and built. The idea is to copy the client data from legacy systems into Khula and run a sync service to keep data updated.

Khula System

The Khula system runs in a framework called Lunos which already has a standard called IAA (Insurance Application Architecture) which has the industry standards built by IBM. Currently the Khula system runs an Organisation A savings product and there are a few policies sold in the product. A new funeral product is being developed in the system; it is still in progress and once it is fully functional it will be open for sales and the new market system will be shut down.

Are you selling any policies in the OB and Group Schemes systems?

Yes, these are the bread and butter of the organisation as it is selling about 5000 plus policies a week. Once the Khula system is fully functional, there will be no new policies being sold in the legacy systems as indicated that they will be phased out. If the rationalisation tasks are not applied correctly then there will be some consequences. Politics definitely came into play as to who gets the top jobs. The candidate that got the job had an influence as to what systems are to be adopted going forward.

What was the decision around adopting Khula as a platform going forward?

The Console system was not mature enough and could not handle the functionality required by the business and thus became another legacy system. The merger and realisation of synergies was done at a much higher level where products were shifted to adequate business units. At this level there was no rationalisation or decisions on what system was to be adopted. The

participant also expressed that what occupies the executives' minds are financial savings; how the tasks will be executed to realise these savings becomes the last thing. At the time of making a decision the interviewee expressed that there was no consideration whatsoever in determining the capabilities of the organisation's systems.

How do you determine the process that must be followed to rationalise the business processes?

There was a comparison of the capabilities of systems but the participant believes that the driving force behind the adopted system was who got the CIO job as this person will go with what is familiar to them.

What method is employed to rationalise business processes?

Basically once the decision has been taken on which system to use, a decision was taken regarding the actual people. The method was what is going to the clients and the business. There were multiple call centres that needed to be brought together, which is a servicing capability. Identifying the best placement was driven by systems solution and location because the majority of business processes and functions happen in Cape Town. There was a small contingency of people in Pretoria; they were moved to Cape Town and the call centres were merged.

Was the training of the users seamless?

Yes, this business is reliant on clients' perceptions; training was extensive so that clients could not feel the effect of the change.

What are the implications if we do not rationalise?

If we didn't rationalise there is a cost implication because IT support people, having multiple systems, create complexity to the IS portfolio. This amounts to duplication of costs with staff having to support multiple systems and working overtime. The current situation with the merged financial institution is that there has been little rationalisation, and a lot still needs to be done. The interviewee thinks that this task will not be fully reached within the set 5 years. One of the change management issues is the skills because the systems in Cape Town are mainframe based, and there are a few Java skilled people which prompted the decision that those who do not have life industry knowledge should gain new skills. This placed a lot of stress on the development and will delay the final implementation of the product.

Would you say this also delays the synergies in the merger?

Yes; when transferring people from the old systems to the new systems, the old systems still need to be maintained and this creates change management issues. People become concerned because when legacy systems become redundant, they will be out of jobs in the near future.

Did the employed rationalisation strategy make it easy to decide what systems to be deployed as part of the IS portfolio?

Yes, because once the platform was established, the strategy made it easy to decide; the strategy does exist but various issues are holding up the implementation.

With the systems that were decommissioned, what synergies would you say were realised (Odyssey, Future Choice)?

There are synergies realised such as policy administration platforms, workflow platforms, AWD, and also Client contact platforms. Currently there are 2 or 3 different platforms for sales and customer service (Remedy). There are redundancies which are being closed down; Remedy will be replaced by the Khula system. The other synergies were more at a group level where one HR system is called PeopleSoft. There are more changes that still need to be done, like AWD

(Work Flows) will be replaced by the IBM process server system. In some instances you will see that instead of rationalising there will be addition of systems which adds to the portfolio, creating complexity and increasing costs.

What criteria must the chosen IT system meet to determine its adequacy for the deployment into the IS portfolio?

The system must be future proof; the platform must support the business processes without harming the customer base; adequate skills sufficiently in the region; enough functionality in the [new] system to support the current systems.

What plans are put into place to deploy the new system as part of the IS portfolio?

The deployment plan is to gradually migrate the data and processes at a minimal acceptable risk.

How are new IT systems introduced as part of the IS portfolio?

Closing the gap on functionalities of existing systems (Jira to log changes and task management).

How are the needs for IT systems determined?

Making sure that the functional requirements are met and also IT systems must fit the group strategy of the organisation.

How are existing IT systems that do not meet the criteria of the IS portfolio, decommissioned?

Create target systems and gradually copy data; it must be a controlled process. Do a pilot test to ensure sure full functionality has been tested. Ensure that contractual obligations with the vendors are taken care of.

Were there any challenges experienced with decommissioning the systems?

Challenges include decisions regarding people who were working on the old system; contractual obligations on hardware.

INTERVIEWEE 3

With the merger, the organisation had to look at market segments of both organisations. The key to the decisions which had to be made was to clearly define the market segments—focus each organisation to a market segment that is appealing. Although they had some middle market type business, they had settled that they are in the low end of the market. Organisation A appealed to the low end of the market and Organisation B appealed from the mid-to-higher end of the market. After the market segments were defined, the Odyssey product did not fit into Organisation A's portfolio and therefore moved to Organisation B as it appealed to the higher end of the market. Once the market segments were defined, the organisation then looked at rationalising systems where the Odyssey product was moved to Organisation B and the system was switched off.

The other tasks involved were the Client Solutions team going into the market to do market research where focus groups were taken to understand the financial needs (i.e. funeral policies, savings policies, etc.). A lot of information gathered within the focus groups dictated the types of technologies to be adopted by the organisation. The organisation decided to implement a new system purely because it is expensive to maintain the conventional system. If a client requested something out of the norm, these had to be manually maintained to suit the client's need. Also, it was very long and labour intensive to build a new feature or a product to be placed in the market.

A team has been set up who look at a trend analysis based on client queries and requests where during IT sprint sessions these flexibilities are embedded in the system. In terms of systems, the organisation had to look at what is working for each organisation and decide which system will be best

suited for the whole company. One of the systems that were adopted by the company was the JDE financial system because of its flexibility being higher than what Organisation A had.
A company called Alexander Proudfoot was brought in to look at the management operating model; the system is functional in the service environment but it is currently mostly manual in the sales environment. Organisation B looked at Organisation A's operating model to see if there were any systems they could use or maintain for their benefit before a decision to either build or buy a new system had been taken.

What was the purpose of bringing in Alexander Proudfoot?

They were brought in to look at cost saving as well as optimisation.

Was this purely based on the merger?

Part of their responsibility and mandate was to look at duplication, not just looking at Organisation A Retail but at a wider scale. One of the recommendations made was to consolidate call centres and have one servicing call centre. These changes will be cost effective in terms of infrastructure consolidation, economies of scale when it comes to staff retention, as well as workforce management. Because the two organisations did not operate in the same market segment, the decision to consolidate the call centres was not suitable. Some of the rationalisation of business processes carried out when it was decided that the operational finance department was moving to Centurion, include the cheque printing—which was done in Cape Town—to be stopped and claims payments to be done via EFT into the client's bank account; this was implemented on the 7th of November 2014.

What were the synergies realised with Proudfoot's involvement in the rationalisation strategy?

The biggest one is the consolidation of corporate business, product design and product house between the two organisations. For example, if there is a need for a savings product in the lower end of the market, the product design house will look at an existing product in the higher end of the market and try to tone it down. This yielded having a lot less product design house actuaries than what it was in past. The corporate business managed by Organisation A Retail (Organisation A health and employee benefits) is now administered under one umbrella, which is one of a kind economies of scale that was achieved.

What were the challenges?

Having to move (platform change) the corporate business to be administered in the employee benefit space was challenging for employees as they had to learn a different product. One of the biggest challenges when administering the corporate business under one umbrella is retrenchment of people. The other challenge is choosing people that will train others in administering the new scheme while retrench the others.

Were there any difficulties experienced during the rationalisation?

Perceptions that things can just be moved and ran at the Organisation B platforms, also taking cognisance of the different market segments the two organisations operate in. Organisation A is a high volume low cost business, and Organisation B is low volume with low cost product wise.

With the existence of Proudfoot, what were the set time frames to deliver on their mandate?

Proudfoot came for a four week period to analyse specific business units; they brought in a specific person for each business unit, and they looked at sales and service and IT and client solutions (product development). Business engineers who understood the environment consulted with Proudfoot to provide them with business process information as well as system integration. In the service space there was a consultant in call centre space and a consultant in the back office environment and another one in the claims environment; each one of them had

to look at the overall business processes and touch points (i.e. how client transaction are processed, how payments takes place and what communication goes out to the clients).

Within the set period they had to come up with a strategy on how which was discussed with Retail EXCO where they recommended process and workflow system and workforce management changes and the EXCO was happy with the saving that were to be achieved. The implementation phase was October 2013 to April 2014 and some will spill over into 2015.

In the past, branches were seen to be face to face interaction and there was not processing that happened (i.e. if a client walks to the branch to request a loan, the transaction gets shipped off to head office for processing). Proudfoot's also recommended that the non-risk transactions must move and be processed by the Customer Service Office's (CSO) and at the time there was about 37 branches. This resulted in work being distributed in about 38 areas instead of having it processed in one area, making use of a staff complement of about 400 people instead of confining it to 120 people at the head office. The net effect of these changes was a head count reduction of about 21 staff members and 26 in the back office environment which led to almost a 10 million rand saving. Another system which was implemented was the digital kiosk to reduce time spent by clients in the branches.

In terms of change management, what training mechanisms were put in place for the staff in the branches that did not have similar knowledge as staff in the back-office?

Transactions that did not have financial risk were done in the branches (i.e. a client walks in the branch to correct a misspelled name). The organisation had to identify transactions that were not done in the branches; the training was to be given to 475 staff members across the country, including staff in the head office. The training was given to a few staff members who in turn will train the rest of the staff members during quite times. The training was rolled out regionally and the first region was the Western Cape as it is the closest. Five transactions were rolled out in the Western Cape, then business monitored come backs in a two week period for constraints and loopholes in the transaction. This helped the business to see at what level the staff in CSOs are as well as to see anything that was possibly not catered for within the business processes. As soon as staff in the CSOs was happy with transactions, there was still a QA process to ensure that everything was still in order, and then it was rolled out to other provinces.

Was there any come-backs?

There were a lot of come-backs where staff in the CSOs did not follow the prescribed steps that was given to them to do the transactions. This did not result in money losses in the company but certain accounts did not balance. Finance provided feedback of the anomalies and these were traced into specific branches where they needed to be corrected. Controls were put in place to ensure that anomalies were rectified.

What implication does the failure to rationalise have on the organisation?

If Proudfoot's recommendations were not implemented, then the R40 million fee that was paid to them would have gone to waste with a ripple effect of staff not getting paid bonuses. The auditors and the risk committees were then tasked to ensure that the recommendations were implemented once the EXCO members were happy with what was presented to them. The ripple effect will have been no bonuses for staff.

Was there any specific methodology followed to rationalise the business processes?

Proudfoot had sat in each department to analyse their processes to try and to see things that they did manually and understand why they were not automated. They then ended up with a picture of each area where the system is not being used optimally; also find out where IT processes can further be streamlined as well as training needs of the staff. A rand value was also determined on workarounds (i.e. where two people doing manual labour can be put in an IT

process where one person will be required). Financial planning where implementations were specified to rationalise the savings.

Did the employed rationalisation strategy make it easy to decide on which systems to be deployed as part of your IS portfolio?

Yes definitely in two ways, which was in the segmentation work that was done in each organisation. Proudfoot showed in the organisations' systems as well as workforce management [where] the problems lie, and the market research gave where the product solutions lie. The combination of these three factors gave what the solutions lay.

Are there any synergies achieved by deploying the Khula system as part of the IS portfolio?

Yes, the first that has been done was to migrate client information in all the different systems that are within the organisation where a client might have multiple policies. The synergies achieved are that the organisation will have a single view of the client and will not have to search on various systems to check which product the client owns a policy in. Having a portfolio view of the client will create a financial wellness; this also creates one risk engine as opposed to multiple financial risk engines. The new Khula system will be the link to other systems; this creates a cleaner approach than to have access into many different platforms. The biggest migrations that will take place is where there is a lot of manual workarounds which create a lot more risk and with Khula it will be less risk with less people to do the manual workarounds.

What criteria must the chosen IT system meet to determine its adequacy for the deployment as part of the IS portfolio?

Three years before the merger Organisation A looked at the blue-sky world, where capabilities were determined in each department looking at what IT needs. Do they require fulfilling their tasks? (i.e. in designing a collection system it was important to determine what flexibility was required to fulfil the department's obligations). The blue-sky thinking was then put in place where once all the needs were determined, decisions to whether to buy a new system or develop in-house etc., what the end picture must look like and what capability it must have.

If it meets the criteria, what plans are the put in place for deployment?

After the blue-sky thinking, the organisation looked at specific products the market segmentation dictated; programme manager was employed for Khula looking at the growth, client centricity and excellence; all the work-streams that was identified for Retail under the three pillars. The programme manager pulls together so that there is an understanding of what is the highest priority to get into the system. Also looking what product can be put in the market, looking at whether all the required requirements are met before going into the market or looking at the minimal viable solution needed to go into the market. From an IT side they have the scrum and the agile methodology approach to implement new functions in the systems; in the scrum sessions they will look at blue-sky to determine what is required for the product to run and what is the minimum solution required for the system to be functional. The organisation has set up three prioritisation forums, one for the product, one for conventional systems and one for Khula and DataStage. These three look at the same things so that whatever gets prioritised in terms of what should be built, that there's a same focus in terms of what must be migrated from conventional. The programme manager on a weekly basis makes sure that there's a check-in with all the EXCO members. The scrum teams on a daily basis provide feedback of where they are in terms of their tasks; then check-in with the quality team to start preparing test cases of the function that is to be deployed in the system.

How is the new IT system introduced as part of the IS portfolio?

It was determined that the current systems are no longer supported and also the risk associated with that determination. Let the IT guys know of the split that the current systems are, what is

making the business viable, but in the next 5 years the Khula system will be the ultimate solution. If someone comes with a new idea, it is easier to put that idea in the new system than in the current system. A vibe is created where by staff need to start realising that solutions and ideas must get implemented in Khula.

How are the needs for the new IT system determined?

The blue-sky thinking is important; the client dictates what needs and business drive IT to implement the required functions in the system. The organisation has business analysts (BAs) coming from the business who were part of the focus groups in trying to determine the client's needs who will dictate to the IT business analyst what functions need to be built into the system, who will take it further. IT BAs will sometimes challenge business BAs to determine whether specific functions are really needed. There are also product owners and all are business people, they are all from communication, claims systems and collection product owners).

How are IT systems that do not meet the requirements of the new IT system, decommissioned?

Unfortunately all Organisation A's current systems have very profitable products, therefore the migration strategy was set up by IT looking what was costing the most in terms of support and those needed to be decommissioned as early as possible. Look at where will business gain most to get the economies of scale. A migration plan has been setup and tracked on a monthly basis, and as soon as migration has happened, there is a window period of three months look at whether everything has been migrated and in terms of new queries are they been settled in the new system.

Are there any challenges experienced with decommissioning the IT systems?

Migration from Future Choice to OB conventional, there was some automation movement from the Future Choice product in the Odyssey system which did not exist on the OB side that was not needed because it was not a risk (i.e. in the maturity space, if a clients want to take early retirement in a policy there is not an automated movement that will take the policy off books after the payment). Some issue after the migration were over payments in policies that are picked up quickly.

INTERVIEWEE 4

Organisations tried to eradicate duplication, tried to create the best streamlined process, they tried to cut out some changes in systems, but there were not a lot of these changes. Business drove rationalisation task with an external organisation called Proudfoot.

Before the rationalisation tasks were applied, the organisation used to have back office staff doing Customer Information Control System (CICS) transactions to process policies sold at the Customer Service Office (CSO). In essence, what would happen is that a client will go to a CSO in the organisation branches to apply for a policy; the CSO agent will capture and submit the policy to via Automatic Work Distributor (AWD) to the back office. This was seen as one of the inefficiencies as one customer having too many touch points before his/her transaction is completed. The organisation then decided to put CICS in the CSOs to improve customer service and efficiencies in selling policies and to cut the AWD process which goes to the back office. The result of this was quicker turnaround time.

The rationalisation task eradicated a lot of people that worked in the back office as there were a lot of retrenchments occurring as a result. These rationalisation tasks occurred in customer administration, admin and claims. Processes had to be optimised by looking at redundant/duplication processes. Some other processes were also looked at where efficiencies could be applied (not specific). This was a retail initiative which looked at optimising processes in order to cut cost which also came with retrenchments. Each manager was required to submit their department strategy, task list and how they their manage people.

Proudfoot

Setup interviews with the business to understand how the business works. Agile methodology map out and understand all the business tasks involved. Business processes were plotted on a brown paper which was a brown paper exercise; business was explained. Stats analyses were reviewed and people were interviewed to determine where there was any wastage; then recommendations were piloted in a certain branch to see whether synergies would be achieved.

System Impact

The implemented changes impacted certain systems [as a result of the rationalisation] without them (Proudfoot) being aware of it. One of the main reasons was that IT was not involved in the decisions where they could advise on systems integration.

Client Service

Cost saving was evident which was meant to be achieved by the rationalisation tasks implemented by Proudfoot but rate of new business achieved or generated was not impressive. Lack of knowledge to operate the CICS system could be one of the major reasons where there were issues of generating new business. This often required the back office to patch the data coming from the CSOs as they made a lot of mistakes. The people (60 retrenched) that left the company put a lot of strain the business is struggling without their people due to workload.

Change management process

People working in the CSO were trained on how to operate CICS.

New system recommendations

A system called Khula has been implemented but has too many hiccups. It is taking a lot longer than originally planned; it may be that this is a new technology they have to learn and adapt to. Some people were identified who work from the current systems to come and work in the Khula system. Some people were technology resistant as they were more comfortable working with PL1 than acquiring Java skills. The organisation created a fear in the people that in 2 years' time the mainframe will be decommissioned and that the PL1 skills will no longer be required and many people looked for alternative employment and they started resigning. This creates more work for people who are left in the current systems team as they do double the work left by people who resigned.

Challenges

Legacy systems on the mainframe are difficult to evolve; too much integration equates to too many failures.

INTERVIEWEE 5

Head Current Systems

There are many perspectives around rationalisation that occurred during the merger. When the organisations merged there was a decision that each organisation must keep their own computer systems; this was particularly because the two organisations operate in different market segments. Organisation B operates in the mid-to-high end market and Organisation A operates in the low end of the market. This prompted a decision to look at the products that were being offered in the market, and one of the decisions taken as a result was to migrate the Odyssey book offered by Organisation A to Organisation B's systems which attracted more the high end of the market.

Organisation A had eight books of different business systems, and there was a decision to look at which system would be suitable so that the organisation can centralise and eventually close the other systems. The decision was as a result of cutting costs because the more systems you

have, the more expensive it is to run the business as you will need different developers and system licences. The decision was then taken to adopt a system from Organisation B called Console to be a future system which was a fairly new technology.

What was the decision around taking Console?

The decision was to grow and evolve it as one system; the plan was to have one system per business unit. The system was brought down to Cape Town and some of the people were brought in who had the skills and knowledge of Console. Soon after the decision was taken, it turned out that Console did not have the capacity to evolve and it became another legacy system.

What was the system serving?

It serves the low end of the market; it is totally a leads-based system which is an outbound call centre-based system. Seeing that Console did not have enough capacity, a decision was then taken to build a new system that will service Organisation A Retail where all the legacy systems will then be migrated to this system. The issue with taking this decision is because a lot of the current systems are very old—some are about 40 years old and some of them have developed some problems. Some of these technologies are on platforms that are no longer supported by vendors.

The interviewee mentioned a long list of things that needed to change that prompted a decision to build a fresh modern new system. Also, a new system needed to be built that tie in with the MMI architecture and philosophy.

Is there any timeframe that is being set to migrate these legacy systems?

Yes there is. The first one that will go off is the group business system (Mid 2015 to Sep 2015) where the system will be migrated to Khula and the mainframe will be switched off.

Looking at what has been achieved now with Khula do you feel that the set time,frames are realistic?

The interviewee stated that there is re-planning and removed herself from committing to the reality of the set time frames.

Looking at the old system, what has been the challenge to migrate the legacy systems?

There has not been any system migrated just yet; the organisation has four main books of business and the group business has been identified as the product to be going across to the Khula system. There is currently a funeral product which is being built in Khula and the challenge is data quality issues that have been identified, and there is a current drive to clean up data before it is migrated to the new system. The other biggest challenge pertaining to mergers and building a new system is that you want to freeze any development in the legacy system but also business must go on as well. The other issue being experienced is a human resource issue where people working in the legacy system start seeing that there is no future for them in the company and decide to leave the company. People worked in the current systems were well over 100 and now they are 70, but yet the work is still there.

What is the implication to the organisation failing to rationalise the systems?

The implications to the organisation are cost because we run too many books of business which equates to multiple teams. In the past before the talks started about the merger there was a project called Sunrei which attempted at consolidating Line of Business systems as they are too old. The challenge with having legacy systems is that when you want to market a product in the old system it will take at least 3 months to implement but on the new system it should be much faster. One of the things can be leveraged in the new system between the two organisations is

having for example one funeral product that can be maintained in one system as opposed to having redundant products.

Did the employed rationalisation make it easy to decide what systems to be deployed as part of the IS portfolio?

Yes, it was easy for business to decide based on market segments

Sunrei?

A consolidation project that came along before the merger started. A lot of ground work had already been done which has now been channelled to the Khula project.

Any synergies achieved with the deployment of the new system?

Leverage on new technology of which some existed in Organisation B. Some of the synergies are yet to be realised overtime. Moving the Odyssey book of business to Organisation B and the system was shut down which saved cost and mitigating risks from running multiple systems.

Are you optimistic that the set time frames will be achieved?

I run legacy system and you need to speak to the programme manager to get optimism on the dates.

What is the process undertaken to identify the IT system(s) that support the rationalised business process?

Scrum methodology brings IT and business together.

What criteria must the new system meet for deployment adequacy?

Flexibility, speed of change and the issue with old systems—it takes forever to put a new product in place. The Khula system is designed to be more client-centric.

What plans were put in place to deploy the Khula system as part of the IS portfolio?

What they got now on Khula is a savings product that is in a constrained mode, released only to a couple of people, which is based in an outbound call centre and not a face-to-face intermediary.

How was KHULA introduced as part of the IS portfolio?

Introduced to Infrastructure and Operations (I&O) and the technology run by MAIS and architects.

Are there any systems that have been decommissioned and deployed on the new system?

Not yet. The Odyssey system was decommissioned and moved to Organisation B, and also the FCIO system was decommissioned and moved to one of the legacy systems.

How are old systems not meeting the criteria of the new IS portfolio decommissioned?

Migrate policies to another book, or marketing migration by phoning people and offering them a change to their product.

What are the challenges experienced with decommissioning the systems?

Poor data and missing data, it must be like data in the old and new systems.

INTERVIEWEE 6

Head Supplementary Systems

When the decision was taken to implement Console, was there any due diligence done to determine its readiness to execute the organisation strategy?

Yes, due diligence was done; there was a business case around that as well. Console is an efficient system; it is easy to put products on that system; it is a modern system; it is a java system running on the latest technology. Sales call centres are using that system where we have asterisks on that system; it is a very efficient system and it does not take too much to run that system; it is also a cheap system. So when the merger came, they looked at what you currently have. When you look at procurement, if you procure a system then you have to come and integrate to that system, and it is not your system and there is a lot of challenges there; that is why most of the projects failed when you bought a system. It made more sense to build our own system, but then, we had a system that we could build on, Console. There was a time when we did a proof of concept and we built two products in one month. Work started when they were looking at normalising the database, preparing for migration, so a new database was going to be created and policies were going to be migrated to the new database and an IBM stack was going to be built on top of this system. As decisions were made, we got to a point where it was decided that it is better if we start from scratch. And some of those decisions, I don't know if they were good decisions, but they were made based on certain reasons and that is why we started from scratch.

What transition plans were put in place to implement the Console system?

Data architects started looking at normalising the console database, making whatever changes needed to be made. Once it started working with the new normalised database then migrate current the data to the new database and start evolving the system while the old is still operating, and once you get to a point where you feel you are satisfied, then switch off the old system. At that time you will have the call centres using the newer system; you can then introduce new products and that was the easy route, but the route we took we went big bang and no company has done that in South Africa, implementing the IBM stack from end to end; that is why we are still experiencing some challenges now. If you look some of the challenges that we experience, it is not Java development, it is integration problems.

Did you have enough skills when you implemented the Console system?

Yes, that is why we could build two products in one month.

At what did the decision to implement the new system (Khula) come about?

If console was going to evolve into Khula, maybe the question is at what point was it decided not to evolve Console anymore but to go the new route. You know ,I don't want to quote people but I was in that meeting where someone said the first product they want in the new system is the Organisation A Service Product (MSP) and there were a lot of discussions about the product model. When you take someone from Organisation A and someone from Organisation B, these two people want to reinvent the wheel in the new system, someone will say what about this and someone else will say what about that and in essence you are talking about your experience. Most of the people were not open to new ideas. Eventually, after a lot of discussions, a suggestion came about to go IAA and that was after the decision to start from scratch was made, the decision was based on the first product, MSP, and that gave our architect the opportunity to say no let's start from scratch because Console had some RPG component, it is running on the AS400 as well as the database. Probably there were some other decisions around running multiple decisions because the process server does not work well on the AS400. The decision was more on getting rid of the RPG.

Would you say RPG is not a progressive language?

It is a progressive language; if you look at Barclays in their trading department they are using that in their stock exchange department. If we remained on the Console system we wouldn't be worried about batch because AS400 is stable; you write a code, there it works; no issues. If there is a problem with batch you just fix it there and compile it, then it works. But on our side, there are a lot of things to consider and it takes a while. So, there are a lot of benefits on the console side. I'm not saying there are no benefits on the Khula side, there are lots of benefits, but there are a lot of environmental challenges. It takes a while to achieve things due to these environmental issues. We went IAA (IBM Insurance Application Architecture) and the challenge is that it is a complex model. You need someone who understands it and not many people have that knowledge. So we went with Lunos and there is this Silvermoon Company—they have implemented a layer on top of IAA where the exposing services are. If you want to enrol a policy, you call a service and everything is done in the backed for you. We bought a couple of components from them. Now, we are dependent on these guys (Silvermoon) and it is more than a year that we have them here; some visit twice a week and they charge a lot of money. They charge around a thousand rand an hour and it is not cheap.

Do you have any products that you have implemented on the Khula system?

We have. Remember, there was a prototype and this prototype was used on staff members where it was used to sell policies to staff members just to see what challenges can be experiences when the system goes live. There were a lot of challenges that have been identified and were dealt with and then it was opened to outside clients. We had two selling from the Goodwood call centre. It is live but we also experienced challenges on the front end; we were using Dongeo and it was more process driven so that is been changed. Now we are going to use Angula as a scripting language on the front end.

Have you kept all the set time frames to implement the new system?

No, by this time we should be having Console new business, closed current systems, some of the new business closed. We should be having funeral sold only Khula and not on any other systems, but we still have challenges there. It is a new environment with challenges.

Do you have enough skills to eradicate challenges such as development?

Development is not a challenge, the problem is the environment itself, process server integrating into WAS, mediation the ESB. All these challenges that the guys are experiencing and ITS is getting involved and things are getting better.

What would say are the milestones that were achieved from implementing the Khula system?

We have *Hello Doctor* that is implemented in Khula but we don't have a lot of policies in the system due to challenges that were experienced. The Goodwood call centre is closed and now we have a call centre in Gauteng; the head of Digital was supposed to train the agents in Gauteng but I heard some of them did not do so well.

Having a Khula system leaves the organisation with a set of two legacy systems; can you confirm if there was any comparison that was done to determine the need for a new system?

Yes, there was proper due diligence and the problem is now you see if you look at our market, I think we are losing a lot of market, we cannot compete with the likes of Sanlam with the systems we have. Processes are expensive, to enrol a policy, the amount that you spend is heavier. If your processes are heavier, how do you charge cheaper premiums, and that is the most contributing factor. I spent some time with the sales guys in the branches (field agents). If a field agent of Organisation B sits with a client and Organisation A's field agent sits with a client and they write policies for those clients, and when Organisation B's guy leaves there, already the policy is issued because they have technology. When an Organisation A guy writes a policy

it will be issued in 3-5 days because it gets written on paper, goes to the office and then it gets scanned and waits in a queue, gets captured on the system depending on how long the queue is as well. The CEO also made some structural changes to get rid of the red tape and the system also was among those changes. We currently have a lot of systems looking at the current systems and the integration is a nightmare as well. The Khula system can also be deployed on tabled where sales can be made, self-service for client as well as after sales. If we have one system there can be a lot of benefits. If you look at multiple systems, there are resources looking after those systems as well. Console was going to be a good system as well, it was cheaper, and some of the decisions which were made, I'm still questioning them.

Don't you think that some of the decisions made were to try and align with the Organisation AI strategy such as adapting to the client centricity model?

Client centricity is servicing a client the way it wants to be serviced; it is about providing a service or product to a client; it is about making sure that their needs are met; giving them freedom to choose what they want. If we can get Khula right, it can be a system that can be used across and many companies are going Lunos way anyway. Silvermoon is doing a prototype for other companies as well. If you want to launch a product, you shouldn't be taking long because processes will be cheaper if we get it right.

Participant

How many people do you think support the current systems?

Based on the interviews conducted, there used to be more that hundred people and now there are only about seventy people.

Participant

That should tell you that there were people who were here but not doing much because work still continues with this minimum number of people and there are no issues. People are here but are not adding value to the organisation.

Why do think people decide to leave the company?

Change is a problem to many people; uncertainty is also an issue for many people. A business case was communicated to the people that the current systems will be shut down in 2016 and new business will no longer run on current systems, but through the challenges that we experienced I don't think 2016 will be a realistic deadline. Some of the things we set to achieve will be on the new system but not all the things we wanted. People leave because they are worried for their jobs; some don't like the way things are and some wanted to be in Khula but they say they were not given the opportunity although they were not qualified. Some people just wanted to be given positions.

When you build a team there is a skill you are looking for; we went out to look for strong Java developers and some people, because they went to a Java course, think they are Java developers.

When the business case was communicated, did you have strict requirements you were looking for?

Obviously, you say now I'm going to build this system, and this is a technology that we are going to use—WAS, ILOG, ESB etc. Taking cognisance that no one has done it in this country, you need strong people. If you take a junior, they will struggle. The guys from the current systems also applied and managed to get the jobs. There have been a lot of challenges and some I cannot disclose on record.

Heard there are people working in Khula leaving the organisation?

You see, that is a tough one we are experiencing—we have lost so many people. Almost half of the guys that started the team have gone and my worry is that we may still lose some.

Why is that?

It is clear that some decisions that were made by some managers were not favourable to the people. It's quite clear that they are not happy about something. People don't leave companies but leave managers.

Is there a platform where these issues are addressed because I assume they are delaying the deployment of the product?

Yes, they are addressed. You see, things were running well although there were some challenges experienced, but things started going out of shape when one of the managers left, and also there were structure changes that affected Organisation B. It was maybe good for business but it created some problems. You see, when damage like that is done, it is not easy to fix. They brought me to Khula, and there were two guys that were leaving and I saved them, those guys. I chatted to those guys and made promises that things will not be the same and luckily they listened and they stayed. I can't save everyone and I have raised this before—why can't HR review exit interviews to determine the reason why people leave the company? It seems as if we are building an empire on a cracked foundation and one day it is going to collapse; this month (Jan 2015) there are three people leaving. Almost every month we are losing people and remember, every time we bring someone new it is a problem. To tell you the truth, I'm there but I'm not excited. I know the part I'm responsible for is premium management and finance and I can't say I'm excited. We need this system for Organisation A to survive. There is also a misconception that people leaving are from the Gauteng region because they say they miss their families. This is not the truth because most people that are from Gauteng were working here in Cape Town.

Is there no intervention from senior management, from the COO?

Remember, the COO is up in the structure, there is steering committee underneath him. However, at some point he does need to intervene and analyse his management as to why they are losing people. One of the things we used to be rated on is losing people and if you lost people in your team, it used to work against us. This helps you look after your people and make sure they are happy.

INTERVIEWEE 7

Service Delivery Specialist - Mainframe

The mainframe developers were not provided the opportunity to rewrite the system. The view from the participant is that the OB system and Group systems, which are the bread and butter of the organisation, will be replaced by the Khula system.

Please explain the OB and Group systems?

OB is for individual policies, and Group is the policies that are sold to companies for their staff. To explain it further, Group is a pension or a funeral scheme that is sold to clients; the client will be the company which will either have 20 000 employees where these schemes will be sold to its staff.

Do you think that mainframe is a progressive technology?

The mainframe is capable a lot of transactions at a very high speed which is difficult to achieve in an integrated environment not properly communicated to people at the outset. The mainframe system is outsourced from T-systems and since the year 2000 has been giving a capability of

everything that has not been used for the past 4 hours gets booked and banked for the organisation, and if needed it gets provided. The development machine for example runs the majority of the time; it runs between 80% and 130% all the time. The advantage of using the mainframe is that you can use it for more than what is allocate, for example, the participant observed the usage of up to 210%, which is a flexibility that you get on the system. On the server side there are still software licensing, maintenance, cost, and all other costs associated with a server.

The issues associated with the mainframe from past interviews include that it takes time to market (old, not flexible, etc.)

The technology currently being used is old because it is using a PL1 code, and there is no reason why languages such as Java and RPG cannot be used on the mainframe. The participant feels that quick to the market is what people use as a buzz word and the mainframe developers can also right code as quick as the code is written on the server side. The mainframe advantages over the server side is that mainframe has been proven as well as the iSeries, but it has limitations such as it is not as fast as the mainframe, cannot do the number crunching that the mainframe does, throughput is slower on the server, remotely the speed is much better on the mainframe. When people talk about mainframe, they don't talk about the ZC series and they will refer to it as an old technology. There has not been proper technology comparison to decide which one is better between mainframe and server.

Were you involved in any kind of rationalisation when the new system was implemented?

They involved the architects and never consulted some other people on the current system. The issue that has been the case with running the mainframe is that it is too expensive; if the MIPS are reduced, this will decrease the services and thus prompt people to work after hours.

Was there comparison done between server and mainframe?

Not aware of any of the people that the participant deals with; maybe there must have been people that have done the comparison but they might have focused on their past experiences with the mainframe.

Based on the participants, experienced users (CSO and client services in the call centres) within the organisation look at response times. Average response time between 5000-6000 transactions is 0.12 a day and nobody to the participant's knowledge has ever done transaction comparison with the server side, in particular from Organisation B's side.

Would you say that when the new system was introduced it created silos between the current systems team and the Khula team?

It created an "us and them" scenario where current systems were referred to as an old world and the Khula system as the new world.

The participant also shared information that the group system was to be migrated to the Khula system in 2013, which has not occurred since now. Prior to the Khula system, the Console system was brought in as a replaced of the mainframe system and only 10% changes were to be applied to the system before it is commercialised. This becomes contradictory of the fact that development of products is quicker on the server side.

Do you know what issues were experienced?

Complexity of the mainframe systems; the console system had about 100,000 policies compared to the mainframe which has 1.4 million. It is quicker to process on the mainframe than processing 100,000 policies on the console system.

The participant feels there was no consideration of the mainframe being used going forward and that people were set on using the Console system. The other issue is that the people who are working on the Khula system had no business knowledge and two people were taken from

current systems and moved to Khula—whom are now making a lot of difference. The participant feels there is no way that they can implement anything before June 2016 with what they have produced thus far. The long term effect of this is that the current systems team is losing a lot of people and in the longer run there will be no people to support the current system if the Khula system has not produced the desired results.

The interviewee stated that on average 4% of the systems migrated to an integrated environment become cheaper. 90% moved to an integrated system environment become more expensive. Also the majority of the people that work on the mainframe come from a COBOL background but not all of them were given an opportunity to learn Java.

The participant also feels that Organisation B's people imposed using an AS400 system as opposed to checking what each system offers.

INTERVIEWEE 8

Manager: Mainframe Ops

What we need to know about the merger, this is the background I need to share with you what my interpretations were. I think the concept behind the merger was fully and totally justified however, from the outset there were very very different environments about what it is MMI does. Organisation A vs Organisation B, for me there is a world of difference. The approach that we took from an executive was first and foremost conforming with the legalities of what the government requires.

They embarked upon the due diligence, and the due diligence exercise in my opinion was a good exercise to get what it is that Organisation A does and Organisation B does before we could look at aligning those processes and what they refer to; analysing the work streams, and the work streams had to show the best breads of the both sides, then try to find what is duplicated. When it came to processes of what we do (Organisation A) and what Organisation B does, there were significant changes and there were significantly large differences. The infrastructures I think was also very much aligned but also very different. I can speak for Organisation A because that's where my area of expertise came from being here for 18 years. I'm not saying I know better than anybody else. We were very diligent and very hard at optimisation of process and infrastructure. On Organisation B's side we had great difficulty getting around trying to understand what they were doing. We struggled to get the picture and I'll be apprehensive to use, the professionalism that we had that drove our processes, procedures, policies and infrastructure was at a much higher level than Organisation B [entitlement which denounces superiority of the other company]. Organisation B was traditional and I am once again apprehensive to use the term old school; let's just say that's where the great misalignment came.

Would you want to say mature?

Yes, I would say the level of maturity was fairly far apart, compared to what the due diligence brought to the table. I think a lot of concerted effort went to the actual processes aligned. I think the majority of those processes from the alignment perspective; remember the merger took place a few months before it was announced. We had to go through a process to say what is it that you do and what is it that I do so that we can meet one another in the middle, and what is the same and those are the three elements. There were the lesser what we do the same was prominent, what we can do jointly sort of made the majority; if I could say 20% there was total difference in terms of what we were doing different. I think about 60% was the effort in terms of getting the alignment; the 60% was where we could get the alignment trade off and then the other 20% was we were doing things exactly the same. The old thing for me was driven by rationalisation and cost saving regardless of what we want and say about merging the company and making it third largest in South Africa, and also remember than we had a very professional process and environment because we were listed on the stock exchange and that meant we

were slightly more matured than what Organisation B was as a trading company. I think Organisation A was the ripest companies that you could find on Africa; we were doing so good and sometimes too go is not good, you have to find other means and ways to further expedite and I think we've reached the ceiling and could not go any further unless you partner with somebody and I'm cautious to use the word take over.

Coming back to the rationalisation of our processes, the means of trying to do this is to get everything documented so that you could look at it. Documenting something and the reality of applying it and using it on a day to day basis is a big difference. Whatever you put on paper, and I've seen this so many times in my life, you can have the best laid plan and the best documented plan inevitably staff will go wrong. That for me on rationalisation and getting an understanding of integration of where we are; started running compares and was challenging and that also afforded the companies to go and see how well or how poorly their process and rationalisation were documented. But I think overall staff became representative and in turn if you understood what Organisation A was doing and Organisation B was doing and you could cost those, then you could [look] at it comparatively and say our process is very much expensive compared to what Organisation B does, like from a service functionality perspective and to what it delivers. Maybe ours are just definably expensive because it is a better quality one because if you start putting a price to quality, then I think you are in trouble and if you like just like other companies who are driven by cost saving without considering the quality and the service element component of businesses, you are also in trouble because you need money to spend money. So that was quiet challenging, but I don't know if all decisions made at that level might have been some of the right decisions; I think some might have shown to be lesser successful but there was preparation and there was consideration around the fact that if it doesn't work, we still have the opportunity to correct that or amend it or change it. The challenge was when the merger started becoming an US and THEM; it became too cultural and getting stuff done and yes, it was a bit of a nightmare and I think there are certain elements around that because we are running two different brands or too different products and things like that. Us being lower income to middle income and Organisation B being middle income to higher income, and I think it is a good balance to have in any financial institution, to have a full range of spectrum and products, and I think compared to where we were three years ago, we have done considerably well. In my personal opinion I think some of the challenges we ran into, yho, I'm very careful to what I say now—I don't want to create an impression that people were reckless but some decisions were made justifiably definably or right so; let's just call it snap decision[s] had to be made and that was contrary. We as Organisation A personally, I'd like to get all the facts analysed to the last detail and necessarily to get that on paper so that it functionally work[s] when you apply it and that was something we at Organisation A really did well. We seriously looked at stuff before we started doing that stuff before it became an expensive exercise that we have to redo. Fortunately by engaging and having differences of opinions and also bringing to the table factual proof, we were able to, I think we were able to find a good trade-off balance. There are still some things probably needing more addressing and more detailed attention and it takes time. This is a case of 'Rome was not built in one day', and now after three years we have not successfully or 110% eliminated and resolved the culture of the two organisations from a divide had. That is still not 100% and I think we are close to it. I'm very excited about what is happening currently in the organisation, like the client centricity model they adopted and I think it is the right way to go. They have found their focuses and once again coming back to what I say personally, its fine to have this concept and have this idea actual implement execution and sustainability long term and the medium term is always where the challenge is. Sometimes those great ideas need a little bit of rethinking in terms of what serves the business interest and that I believe has always been my objective in the organisation—to serve the business interest focusing to say this is going to make me and my department look good.

Looking at how we consolidated some of the services, and I think traditionally Organisation A has been since I started working here two years or so; Peter Doyle CEO at that time looked at the company where we had centralised services supporting the entire organisation. We said “ok boys all the business heads the Retails and the Met health”, we sad “I’m going to empower you to run your business division as business; go forth and multiply”. It was very successful but by merging companies, that was the largest conflict issues we had, we had less, for instance, IT technologies we had replicated them within international, med health, finance, retail, you know all the major ones, we had all those services replicated or the majority of them were replicated, and those services were all doing the same functions serving specific to the business that they serve and its not a bad thing, but if you have the same side at Organisation B where they have a Retail support and whatever else business they serve; now you talking six or eight environments that are exactly the same and you have to rationalisation and for that reason the concept of centralised services and support has now become a very large driving force within MMI and it makes sense at this time. Maybe in ten years’ time they will consider decentralising those services and say to the guys go out and run your own places again, but for now, some of the largest cost savings could be—and in my opinion is—around consolidating processes, centralising them and for that reason we started working on the north, and the south national managers came on. If you have a manager in the north and the south, you will not have standardised processes; we start by pulling decentralised services into centralised services.

Explain who was involved in the due diligence and what were the topics discussed in these sessions?

Regrettably, although I was part of the people who supplied information as part of the due diligence, the executive committee which were the business heads at that time was Dave Law, Connie van der Merwe and Mark Fischer—all the CEOs and the executive guys. They all got together and in my view the due diligence is what is the makeup of this company and what is the makeup of that company; lets understand what we have and the viability of adding them and that’s what the due diligence was for me. Try and find the alignment and the integration capabilities on a seamless basis, and for that reason we pushed a lot of information to the guys and we have to representatively like I had to go and present the mainframe and the printing component, discuss operational costs, my contract values and at the moment I’m running the largest outsourced contracts in the whole MMI. My one contract is probably, well let me put it this way, I’m running about 10% of the entire MMI budget. Coming back from the due diligence, the due diligence was a way for the guys to understand what it is they are dealing with and also documenting the viability of the proposal of trying to merge the two companies and that due diligence, if it wasn’t successful according to law and legally we couldn’t convince government by means of the merging capabilities of the company and they may not have given us a go ahead.

What was the commonality that existed from the mainframe systems looking at applications and infrastructure within your printing environment and what was the rationalisation that took place?

That was a fairly easy one. Of the two companies we only run traditional mainframe which is a batch induced mainframe. You get two kinds of mainframe, which is batch and real time. Now I was running the batch kind of environment and Organisation B was running an AS400 environment which is not really a mainframe it’s like a super computing client-server environment. The rationalisation there was easy, we looked at what we had and we looked at what they had for any compatibility and there was none. They couldn’t change or amend what they were doing operationally and neither could we, those were some of the 20% separate processes. There is work underway now to terminate the mainframe in totality to migrate all the legacy systems and that’s what the Khula project is about. It is to migrate all those legacy systems into an AS400 platform or an open-ended platform. Stuff like WebSphere, Oracle,

Linux, AIX, all the technologies that the guys would use to drive client server environments, but for now we still are separate and misaligned. Although we could not align those services, just is just, mainframe versus AS400.

What was the underlying difficulty in terms of the differences between the two environments that was causing the challenge in terms of aligning the environments?

Definitely complexity on our side, the cost associated with doing it and also the intricate development of data that in some areas are as old as 80 years' worth of data. I did a project about 15 years ago where I was migrating policies from Odyssey issued in 1932 and 1934, so there is legacy old data and stuff that you have to consider; you can't just walk in there, switch it off and then switch it on. The complexity of what the mainframe footprint consist of versus the AS400 are two different things (Night and DayX2). You can migrate but you must migrate with specific methodologies and what they are doing with Khula I'm not familiar with; don't know and don't have a lot of information. It was a case of no contest, there wasn't a possibility that we will do it, the concept of potentially doing it was approved.

From a printing perspective, from that much I can tell you way more, I did a thorough analysis of what it is that we are doing. We have Organisation A that is once again sitting in a very centralised or a decentralised fashion doing their own operations. Organisation B sits and runs, and we run on behalf of various other business units—largest user is about 97%—in our case for printing consisting of digital online viewing of reporting which is more internal to the regions, and then what we call documentation which can be printed reports and/or client facing documents, contracts, the income tax certificates. Some efforts were made in other areas to improve the printing solutions. When I say printing solutions, I want to rather call it a customer communications services environment that means we communicate to our customers in whatever form, and there is some considerable miss alignments, so I did quite an extensive study, so I proposed a centralised solution. The centralised solution as accepted by the executive and MANCO, the executive's role is to look at sourcing those services from subject matter experts and achieving the following: eliminate all risks to all propriety products which do become unsupported end of life, you eliminate all of that and by doing that risk elimination, you are bringing in new technologies which are scalable and dynamic—you are not subjected to a specific platform environment.

The solutions that I have proposed and implemented is very scalable and very dynamic; thirdly the most significant one is that we can bring about cost changes; we can save money—anything between 23 and 36%—on substituting the solution and sourcing it from an outside company. And that goes to show the dynamics of how we thought this through. Now we can try and sit here and do this on our own but what is this company's core business? This is the part that you can't publish. Looking at the applications; the applications were difficult yet similar, remember that our market were different—lower end to medium and medium to upper end—and there were old stuff that have been running; we got stuff that has been running for a long time, like home services is about a 100 years old.

I understand that there was data being copied from the home services system to the Khula system?

Yes, they have not been successful. That's another subject that I'm not prepared to share.

What is the driver behind copying the data off the mainframe?

They want to kill the mainframe, they want to shut down the mainframe in totality, they want to terminate the mainframe services and they want to run operationally on newer technologies platforms.

Are they succeeding in terms of what they want to achieve based on time frames that you might be aware of?

I have very little information at my disposal and I sort of get stonewalled if I do request information, but I don't see significant progress being made. There are quite considerable and very very large challenges facing the guys. You can stick a square peg in a round hole but it depends on how much of a sewage you are prepared to deal with, how much bleeding you are going to deal with. My view was not entertained (stutters), well, when we made all these decisions, considering the mainframe versus open-ended platforms and technologies, I did say that we are making a big mistake by not having enterprise architects to look at the solution and the viability of the solution. It was not popular and it was something that they did not appreciate.

Why do you think so?

We don't have enterprise architects; an enterprise architect is a guy that walks in the front door and you can't really afford them (lowers voice). They are very individual elements; they walk in, say this and that and that and say wait a second we can't do this. If you have architects which are constrained in specific environments then their focus of viability is just on that area without considering the enterprise overall impact, and I'll share this with you and I do think that unless somebody proves me wrong, I think that the mainframe still has and will have a place in this organisation for a considerable time period. Let me tell you why: in 1987 I was working for [another company]. I spent a lot of time looking at computer aided software engineering capabilities and those new buzz words and methodologies. These old loud mouth Americans had a notion that all those old GL2 and COBOL languages will be dead within the next five years. Now those languages—FORTRAN, PL1, COBOL, assembler, do not underestimate them—those are specialist stuff there. It is scary what the guys did with language and technology at the time; now you can take the mainframe, let me run comparatively because it is a same family, the IBM 370, 390 processing technology and the AS400 same family. The mainframe being an elephant and a "dassie" of the same genetic gender and family, the mainframe is powerful, secure, it is safe, it is strong and nobody actually screws around with elephants, the theory around the lions being the kings of the jungle is miss-construed. Elephants live a long time and they are reliable and they just don't die. Now when we look at the components that make these things live, it is their hearts and that's the data. The complexity because of design—and that's their language PL1 and COBOL—it is what makes that elephant's heart beats; now its fine and well to aspire in transplanting the elephants heart in a HYREX, but the elephant's heart is larger than the HYREX, so if we do get this right you gonna have to build a lot of stuff around that HYREX to get it to breath and now it's not that fast and agile anymore—but it's just a personal analogy that I have done. I'm not saying it's wrong, but the majority of companies fail because they don't do their homework. Coming back to the enterprise architectural view which I believe was lacking, we should have taken all the architects and say, fine guys you know your area and you know your area. We needed one guy, one guy to get the big picture to say, guys listen I think this is going to work 100% and that we need to understand, that may not work. What we are currently doing here by our approach, I'm not concerned at all to say this publicly, and it's never been done in the world before. If I'm wrong, I will apologise publicly and I will never speak about mainframe again. I think we need to consider all the options just to make sure that if we run into trouble just in terms of the complexity of what it is that we are trying to do versus what we aspire to do, then that will make a process a little bit easier. What has very successfully been done is, IBM has come up with technology because they foresaw this many years ago; they foresaw that companies will want to migrate their mainframes but the processing capability of the mainframe there is nothing on the planet compared to it, its safety and reliability. If you take that mainframe and you apply blade technology then you can run on any platform—Microsoft, Linux—you can integrate with any application's open-ended system whether you are running on Oracle, SQL or any kind of database, DB2, whatever you want to do, that technology is proven tested in laboratories and its

successfully implemented—that means you retain your data and you represent it via this blade technology and preface it onto open-ended platform at a more scalable C++ and all the fancy languages they write, and now that is not an option we will consider; we will be migrating things like the home services systems and it becomes a close book. You still have to run batch, you still have to do claims, OMB and things like that. Maybe I speak today on the basis that I don't have enough knowledge but I don't understand the logic of wanting to migrate the mainframe to an open-ended if nobody understands what it is going to cost cause I can tell you exactly how much it is going to cost to run a policy on the mainframe and they can't tell me this on an open-ended platform system. At the moment, with the information at my disposal and I did this two years ago, they service a policy at a cost of R39 a policy to maintain the policy on the mainframe.

Voice Log2

What I think is currently happening, like I said I have very limited information because nobody has shared this information with me. I think what is happening is that they still write new business on the mainframe but when they migrate, the entire database of the mainframe for new business onto the Khula side, for new business they will use that platform and I'm sure it can work. It is not an area of my expertise but I know how it works on the mainframe side, I know how stable it is and I know how well it runs at the moment. I think what the challenges are—the guys should have compared apples with apples from the outset. What is it that we are doing now for these systems and applications that are running on the mainframe and where do we want to go with them? Can it be done? Maybe it is because of my lack of understanding or information at my disposal but I think it wasn't done on an architectural level. When I query to try and understand things, people got very very concerned about my questions. They interpret me as somebody looking after his job or securing my position and it's not that. All I'm saying is, did we think of this and did we think of that, but ultimately I can show you what it cost me to run your policies on the mainframe but can you show me your new methodology or your new architecture, can you show me how much it cost to run it there?. That information has never been forthcoming; what I can tell you, there is two case studies and I'm trying to get this guy in to talk to our MANCO from a technology perspective, even if it's just for information sake. You work for a very large financial institution, this financial institution had a lot to do with medical schemes and this company did exactly what we are trying to do. They migrated their mainframe to open-ended platform and they in actual fact had a cut over date and he worked it out not knowing the expense and the extent of what he was dealing with, and he worked it out and said we can do this and it looks good on paper. That morning when they went live, there was figures of about 4.7 million lost for the first day due to incorrect payments made to patients instead of doctors and by the end of the week he was fired. I understand why they fired him, and he can't find work now and nobody can touch him; he is as good as his last job and he went back and realised that he was wrong. I think somebody like that is worth talking to, I'm hoping to bring him in and talk to our guys and maybe create some more thoughts as to what it is that we are doing right and potentially doing wrong.

There was also a very large motor company, not even vaguely close to our magnitude of data, which did this German company, and they went ahead to migrate their mainframe to a client server platform. Within 4.5 months—all of this is on the internet you, are more than welcome to verify me—they had to go back at great expense, face the embarrassment of their failure and sweep everything under the carpet. I think what is worth googling is 'mainframe to client server migrations' and the guys that get it right are the guys with very small databases. We are running about guestimate 5.4 million and I think it's about 3.5 million policies insured lives—it's a significant amount. We integrate with very complicated systems, just the CPY financial side of things, whooo that's very complicated, and I don't know if the oaks understand that. If they can get it right. they will be the first in the world on the magnitude they intend to get and I hope they do for the business sake. There are some challenges which in fact they should try and

rationalise; I believe as I don't have information, that there are quite few challenges with Khula as it stands. It is an interesting world and I don't care who says what, I believe it is motivated about saving money as it is the key driver in financial institution.

Fact! if you don't believe me, drive down to Organisation A; two years ago they went through exactly the same exercise that we are going through now and they abandoned it. When they go through project and buy MIPS from IBM and they buy 400 just for production and we buy 315 MIPS development and production, and that's small, we are compared to Organisation A but some of our systems are more complex than Organisation A. We have to look at our core business sometimes you get so engrossed with how you digress from your core business that you start building these frameworks which cost you so much to maintain, support and run that either burns or crashes or you have to abandon it. I suggested that we go and speak to Organisation A because they have been through this exercise, but the chief architect said no this is how we are going to do it (learn from the people that have better experience). Maybe this is a strong statement I think we did not consult with all the factors on the table to make a better informed decision. I think there is a decision and that decision will go ahead regardless of what I say. If we went for one day and got all the parties in the room and say and I will say none of the traditional application operations mainframe developers, operators, business analyst were consulted in terms of the decision as to where we are going to with the mainframe long term and medium term. I'm the mainframe contracts outsource manager on an infrastructural basis and wasn't consulted. This is not reflecting on it negatively; I would like to if I can make a difference to just say one thing that would get people thinking about something that could get potentially be wrong and with that I don't say they should change the philosophy, the methodology because it gets discuss at a level which doesn't hold the heart in the hand.

It is very interesting that there was no proper consultation with the relevant stakeholders like yourself who is managing the infrastructure of the mainframe

The guys that host the applications, they made those decisions. I would not say there was no proper or sufficient consultation. I just think the uniqueness of the situation and in actual fact I have no right what they should do with their applications, but from an infrastructural perspective I think being appointed in that position I should have a fair knowledge of infrastructure, of what we are capable or not capable of doing, then we have the complexity of applications that sit in those infrastructures. How they rationalise it in Retail IT I don't know and I have no insight into that, but the decisions came out of there that we will take our applications and we will migrate them onto a client server platform environment and we are going to kill off the mainframe and I've said what, you guys realise what you've got here (you've got ancient data, complex stuff and half of the stuff is not even documented).

I think there was a low staff rationalisation with this Proudfoot; this is the part where I will be sharing with you my personal view. I think it was a mistake to bring ProudFoot in and to literally chop resources like they did. First and foremost the concept is not serving business interest and the company that has done it for us, I don't want to discredit them or belittle, if I look at their track record of how many big companies abandoned their services—and they are not cheap—then we once again neglected to go and research the industry standard. You know when there is smoke there is fire. I think that getting rid of that many people to achieve a specific objective—which I still don't understand till today before former retail Chief Executive Officer (CEO) gave over to current CEO—I don't understand the rationale for that because already there is so much pressure from business (there is so much backlog sitting in this company).

Don't you think perhaps there was pressure from the shareholders to save money as indicated in the due diligence based on the rationalisation exercise?

ITS alone had to save an amount of about R500 million which is a significant, and I feel very happy that I could save R36 million. The worst thing for me is to get rid of the people and only a

year or a year and half down the line you discover that you now need those resources to come back, and by now if you are lucky to those people back, you will likely pay more.

There was a big cultural difference; the reputation of Organisation B was quite concerning and it has shown to the way they do things. In all fairness, we managed to find the middle ground; the successes outweigh the failures that we had. The failures were in specific environments where the information was lacking or not known. We also looked at stuff less objective where I think we should have done more.

INTERVIEWEE 9

Analyst Developer current system

The developer works on the legacy system developing in PL1, DB2, and basically maintaining the system until the Khula system is up and running. The participant alluded that they will keep maintaining the current business until the Khula system kicks in. The business being maintained is group funeral policies, which are quite a significant number of policies which bring a revenue of plus minus R200 million a month.

What do you think is the challenge to migrate legacy systems to the Khula system?

Khula will be like your one-stop-shop, servicing clients' needs such as funeral, saving, life, etc. The idea looking at the organisational strategy is positioning themselves to be client centric, and that is what the Khula system will offer.

The participant also alluded that there is a general perception that the mainframe is expensive and also believes that there might have been some due diligence that was done to ensure cost effectiveness when the new technology was commissioned.

Were you interested in working in the Khula system?

The participant feels comfortable working in the current systems but stressed working on the Khula side is also of interest to him as well as ensuring clients are well looked after (rather than necessarily generating profit for the shareholders). The participant also mentioned that he worked in a similar project at his previous organisation and would not mind contributing to the success of the projects.

Do you know of the milestones that have been achieved on the Khula implementation?

Not aware of any milestones, only aware that the plan is to migrate the data from the current side which will be then used by the Khula system. As indicated, the idea is to service the current side until Khula is up and running.

What do you think is a challenge migrating legacy systems from the Khula side?

Most of the business rules are imbedded within the code; getting the data from the legacy system to be in a form that can be used by the Khula system and ensuring business continues similarly the way they run on the legacy side. More importantly, adhering to government regulations of ensuring that the client is being serviced the way he/she is supposed to be serviced. Ensure that Organisational brand is not damaged; making sure that there are minimal customer complaints. The participant also expressed that the transition to Khula is a sensitive issue. There needs to be a clear picture of what needs to be done and achieved for the people working in the Khula system.

Is there any collaboration between the current systems team and the people doing some development on the Khula side?

The participant expressed that the collaboration is more on data migration where the other group's responsibility is to ensure that data is clean before being loaded on the Khula system. So, from legacy there is some kind of collaboration.

Are there any ideas or knowledge sharing from a development perspective between the current team and the Khula team?

There might be here and there, but it was not vigorously driven and that in itself is a risk. The participant feels that is important, particularly because the focus must be the people serviced using the system. Currently on the group side the participant mentions that they have lost 60 percent of their staff and they still have to service the same amount of clients and that in itself is a risk because the client is not given the same service it is supposed to get. The client also alludes that there are some bottlenecks because there is not enough people to service the clients.

What do think are the issues that led to 60% of the people to leave the company?

People are thinking the system is coming to an end and they have families to think off.

Do you think that the decisions taken to migrate to new system have created silos within the teams?

The participant was diplomatic in answering this question. He mentioned that if you are at executive level, the thinking at that level will be driven by making sure that books are balancing, ensuring that costs efficiencies are being applied. Middle management has to drive the plans coming from the top. The underlying risk is that if Khula does not fly, there might be an implosion because already people are getting sick of being overworked and not incentivised.

What is your involvement with the migration project?

The participant's involvement is to ensure that the premium debt of the client is correct. The premium debt is when a client misses an instalment, building debt for his/her policy. The client will then pay at a time when finance is available to pay the debt. The most important thing is to ensure that the matter is sorted out.

In your view, do you think the time frames are achievable?

Not sure. There has been a 10% increase of the mainframe annually. Some question was needed to be answered before the project was instituted to ensure that proper due diligence is done, making sure that you compare what you get from both worlds (processing speed, resilience, security etc.), quantify the costs to be incurred, etc. If things do not come through, the competitors will take advantage.

Interviewee 10

Analyst Developer Console

How do you define Console as a Line of Business System?

Console is a home grown system/application from Organisation B's perspective. The senior executives decided a couple of years ago they have to start selling funeral products to the mid-to-low end of the market. As part of this decision, they decided that they needed to be in control of their outbound call centre where they will call the clients; they then realised that managing the contacts, calling from a spreadsheet or a little access database was not good enough for the call centres because they had a few agents they were planning to setup. They then embarked or creating in-house outbound call centres. They started developing an application able to dial the client, diarise the calls, and record the voice logs—and that is where Console was born.

Console, from an application perspective, has a Java front-end, a Java middle back-end which interacts with a DB2 database sitting on an iSeries platform, and a back-end running an AS400 iSeries written in RPG which does all the database access and updates.

The interviewee stated that the system was performing very well because there are about 150 to 200 call centre agents using the application with an Asterisk implementation for dialler. Asterisk is an open source telephony application platform distributed under the GPLv2; it is a

server application for making, receiving and performing custom processing of phone calls. It is also a Java based application running on an AIX platform with a DB2 database sitting on an iSeries platform.

When the decision was taken what plans were put in place for the implementation of the Console system?

The organisation looked at the current setup in terms of call centre strategy and also what hardware Organisation A had, the type of skills that were available to be able to extend or implement the Console system as well as adequate infrastructure to be able to support the application. All these requirements were looked at and verified to be available in Organisation A. Also the fact that it was freeware, the cost to maintain, cost to implement was one of the biggest factors. The main decision was to ensure stability to business without affecting productivity and still keep the cost down. The stability of Console was running at 99.9% uptime and hardly any downtime.

Another school of thought that came into play was because of the merger. A mindset change was important in terms of business processes and how they are managed. There were a lot of new business requests and IT was feeling a bit strained. This frustrated business and it got them thinking on whether to outsource some skills to assist with new requests. *This where the idea of implementing Khula was born as far as the interviewee is concerned.*

Business looked at how they can lessen the burden on IT in terms of business process requests because they were not keeping up with the amount of requests given to them and that is when an architecture change was thought of because Console was not flexible enough to make these changes quicker.

What successes were achieved when Console was implemented?

The interviewee has indicated that he does not have factual figures off hand that indicated return on investment into the system but alluded that the implementation of it was relatively quicker to implement.

Having worked on the system, what would you say were the challenges experienced?

From a technical point of view, the challenge was integrating the Java front-end to the RPG back-end; also deciding on connectors whether to use JDBC, Java beans or JPA and the decision was needed to be made quicker in that aspect. Some of the challenges were the tight coupling of the Java application to RPG if changes are needed from the Java side; there needs to be another change done in RPG as well. However, because there are quite senior developers to test and implement those changes, it won't take as long as it would have taken if you had junior's developers.

From the business point of view, with the Khula system in the picture, there has been some lost attrition because many developers want to move to Khula. The older staff that support the RPD and even those that support Java are trying to move to the Khula world. It is seen as a "to be" area where most developers want to move into. For example, where there were 5 RPG developers and 5 Java developers, there is currently 1 Java and 1 RPG developer. All business requirements that come through have to be handled by these strained resources, it is a bit of resource constraint management. Because a lot of requests have also gone down on Console, they have gone up on Khula.

When a decision to implement Console was taken, was it a new skill you needed to learn?

Yes. The participant comes from an RPG background which stands for Report Generation Language. The interviewee also stated that it is the IBM language of choice on the iSeries platform other than Cobol. All the old financial institutions running their systems on the mainframe use that language because of its native ability to talk to the database. The participant

stated that he needed to learn Java and those knowing Java did not want to learn Java because they felt it was a step backwards. There was sort of the 'them and us' scenario.

What change management process took place to upskill the staff members that wanted to learn Java?

It was a sink or swim scenario; the organisation brought in Java trainers to give an introduction to those people that were interested in learning the language. After the basics were introduced, most other training was on the job type of training.

Were people given a choice in terms of those that want to learn Java?

There were a few guys that were identified based the enthusiasm, will to learn, and general domino in terms of willingness to participate.

When Console faded, what can you say are the major milestones since Khula was implemented?

The developer stated that he is still working on a 90/10 basis, which is 90% on Console and 10% on Khula. The developers are now in a position to be launching the first funeral product in the first quarter of 2015. The pieces of the puzzle are starting to come together although the goal post has been shifted to what was envisaged.

What are the challenges experienced on the Khula system?

One of the challenges is to have a brand new system with a lot of intricacies that were not tested before. Because it was assumed that because IBM is providing, everything has been tested end-to-end, but it is a bit more complicated than that and this was not known. The interviewee also alluded to fact that there is quite a broad spectrum of knowledge within the organisation, with 1 or 2 people leaving the organisation every month. A lot of the underlying components of the system were not known to a lot of the developers. The complexity was unknown to the development team. The other concern is the performance of the system when thousands of users are thrown at it because it is not as fast as it was expected. The other issue is the support from IBM Resource who knows the rules engine of the system sits oversees and not only there is an issues of language, but there are time difference issues as well. Going with a newer technology, theoretically OK stack but practically untested set of hardware put together is a problem. Morale of the staff that worked legacy systems was down where a distinction was made where those that support legacy systems were termed as working in the old world and those that work in Khula were termed as working in the new world. The participant feels that that kind of distinction should not have been introduced but rather brings Khula as a new project in the organisation. Also opportunities should have been given to the employees that support legacy systems whether it is on a testing role or technical project management role because they have a lot knowledge of the insurance systems.

Is there any development done on Console?

There is still some development which is more enhancements (10%) and bug fixes (90%).

Were any policies been sold on the Khula system?

There were some bugs that were experienced in the Khula systems which prompted some throttled selling.

What types of policies are sold on Console?

3 different funeral products, accident plans and savings plans. The book is worth 60 million.

INTERVIEWEE 11

Business treated rationalisation as a separate entity to IT. Businesses looked at their own rationalisation and did not do it in together.

Is that what you observed happening between the two organisations?

The merger between the 2 financial institutions only happened between the supporting services which were Finance, IT, HR and Governance. The participant made an example of what occurred in the IT department when the rationalisation tasks were carried out. The IT department looked at how they can combine IT; they first looked at integrating the network, there was not much application merging because the business processes remain separate; things like infrastructure remain separate but they brought the management of IT systems together.

They also had a big finance department with IT skills in Cape Town and a big finance department in Centurion with IT skills. These two business units were brought together and were moved to Johannesburg. The other department that merged was the HR department which had done a similar merger with the finance department where they chose a system called PeopleSoft as platform for both organisations.

Organisation A has a lot of vendor purchased software that is robust and scalable; on Organisation B's side, all their software is in-house developed. They have skills, keeping it up to date, and Organisation A has operational responsibilities of working with vendors, making sure that systems are running optimally.

IT services such as document storage and workflows were identified between the two organisations. The participant stated that no one has had the guts to try unifying by choosing the appropriate system for the merged financial institution.

Who is supposed to be making this decision?

The decision must be made by senior business executives; you need someone who has a skill to document a certain IT service, cost it and to do it for a number of services in such a way that they can be compared. A cost benefit analysis of the two IT departments needs to be done to determine which IT service will best suit the merged financial institution. More importantly, the execution of these tasks is crucial as there seems to be lack of implementation.

Are you aware of any timeframe to rationalise the business processes?

No. The biggest inhibitor to achieve good synergies between your business processes and your IS portfolio is resources, because the merged entity is very much operationally focused. It is difficult to be in two modes where you have to be operationally focused and making sure that it is business as usual, and also look at rationalisation tasks.

One of the things that the merged financial institution could do is to look at getting a third party who will look at rationalisation. But the participant believes that there are people within the organisation that can carry out the rationalisation tasks who will bring information or the understandings about how things are being done with each organisation. The quick wins in a merger unfortunately are normally staff rationalisation; that is where you get your quick return on investment. A lot of this takes place during a merger and in doing that you get rid of the intellectual capital which may be people who have the bigger picture and can assist the organisation going forward.

Can you give an example of the people rationalisation within the merged financial institution?

Finance is the prime example because the decision was to move the department to Centurion. In that scenario, as soon as that announcement was made, the department's top achievers decided to leave the company even before the rationalisation had taken place.

Did the employed rationalisation strategy make it easy to decide on what systems to be deployed as part of the IS portfolio?

Only business processes were rationalised where a lot of staff were retrenched. Business and IT did not work together to come up with a unified IS portfolio.

What criteria must the chosen IT system meet to determine its adequacy for the deployment in the IS portfolio?

This is where an independent party comes in, who will do an analysis comparison of service between the two organisations. The organisation looked at content management—they have AWD in the North and Documentum in the South; a content management strategy exists where transactional content, then collaborative documents, will reside in SharePoint; when the business unit was to merge the content into Documentum, they decided it was too expensive and will look for an alternative exercise by rather using FileNet.

Organisation A Retail with the rationalisation tasks have decided to build a new system where it will replace the mainframe. The mainframe is a proven world in terms of support robustness but the new system has not been proven yet and the notion is that if the new system takes off, it will be cheaper than running systems on the mainframe.

What prompted the idea to implement the Khula system?

The change in senior management brought the idea to implement the new system. Organisation A had tried for about ten years to replace some of the mainframe systems but have failed every time.

Why is that?

It is very difficult to develop a comprehensive insurance financial system with analysts who do not understand the business. The difficulty is that some of the code written on the mainframe is 30 years old, and the people that wrote could have left the company.

Do you think it is important to keep staff that has been working and developing systems on the mainframe to share knowledge and skills with new developers to ensure continuity in the organisation?

Ideally yes, but the organisation is not doing that at the moment. Also people that work in these systems might be protective of their information because they might be resistant to change.

Do you agree that having two teams that work on legacy system as well as new systems create silos?

Yes agreed, also inhibits the organisation's prosperity. Organisation B has a PDS insurance system where their strategy is that when a company is acquired, data is just added to the system.

How are the needs for the new IT system determined?

Innovative ideas; if it comes from business, it will be a planned restructuring

How are existing IT systems that do not meet the IS portfolio, decommissioned?

Migrate data off and shut down the system, for example the HR system.

Are you aware of any change process that happens when an old system that does not meet requirement of an IS portfolio is being shut down?

A good example is Odyssey, the data was moved off the system to a system in Organisation B and the system was shut down.

What are the challenges experienced with shutting down the systems?

Challenges are to do with migrations where business processes that were in the old system, must also be in the new system, so it is important to ensure that these work. Understanding the impact systems rationalisation has on clients, for example, policy numbers of clients can change and sometimes it is not in the forefront of the minds of business.

INTERVIEWEE 12

The amount of systems before the merger and the amount of systems after the merger has not changed. The interviewee feels that things should have been done differently and that the process was not embarked on correctly. The things that were done right were to define what the end state of the system should look like. The result of the rationalisation task should represent one ERP system which will represent the ledger and procurement. Looking at the payment systems, there should not be the CPY but only a fax.

What was realised was that because of legacy LOB systems like your policy holder systems from the Retail and EB side, these prevented financial systems from doing the migration correctly. This was due to the tight coupling of the smart stream systems to the legacy LOB systems which, if migrated, would have caused a lot of changes to the legacy LOB systems. When two organisations merge, what is often not considered is the impact to LOB systems and the feeling is that this was not the case with the financial institution being studied.

Planning

Group finance systems should not be looked at in isolation as these systems provide services to other areas or departments; also, it is important to look at what effect these changes will have on other people. Determine what the future should look like and the result was that there must be one ERP, one ledger and one procurement system. A comparative exercise was undertaken to determine which ERP system should be adopted. JD Edwards was selected due to better support, more big company oriented.

How did you determine the process?

They looked at the modules that were running or implemented at Organisation B; these processes were mapped to determine the disparities. It was noted that the modules that were running on JD Edwards (JDE) were not necessarily what was running on SmartStream.

Was there any specific method to rationalise the business processes?

Strongly driven by what JDE does and the approach was minimum customisation as this might cause issue in the longer term. Looked at ‘as is’ analysis in Organisation A and ‘as is’ analysis in Organisation B, and changes were made to both organisations to come up with a uniform process.

Key stakeholders

All the affected parties from Organisation A’s side as a new system were introduced to them

Set time frames

The set timeframe was not achieved and was extended by five months.

Hindering factors

Caused by the rationalisation process itself, fitting the ‘as is’ into the ‘to be’ took longer than was originally expected. There were too many iterations engaging the business, which was caused by resistance to change.

Difficulty

The biggest difficulty currently being experienced is the cultural difference which made it difficult to decide on a process. Finding a common ground was a major challenge, which impeded on making progress with the rationalisation tasks. The interviewee still feels that this is still a challenge.

Implication of rationalisation failure

Duplication in cost which will occur in people, processes and systems

Methodology followed to identify redundant business processes

Proper process analysis looked at the value chain from end to end on what was provided by old Organisation A's OPS finance and old Organisation B's finance—these were mapped on what should be done. This will give you all the business processes and the decision was taken based on which business processes can be rationalised and which can't.

Has the employed rationalisation strategy made it easy to decide which system to implement?

Yes, to some extent, but from a system point of view it was not the rationalisation process which determined what system to be implemented. It was purely based more on functionality and support when you look at purchasing a new system.

Synergies

Procurement, accounts payable, payments and general ledger. Every finance operation was rationalised to a single way of work between the two organisations

Benefits

Reduction in staff, reduction in the number of processes that needed to be maintained, and cost efficiencies

Criteria for IT systems

Look at percentage fit to the business requirement and map it to the product you choose.
Look at local support of the system to assist with issues that may arise with the system.
Cost is also a factor, looking at whether the company will afford to purchase the system.

Plans to put in place to deploy the chosen IT system

Systems development life cycle, only with a slight difference, looking at 'as is' analysis; it is very seldom that you find a system matching 100% of your business requirements.

How is the IT system introduced as part of the IS portfolio in a merger?

Understanding the value chain and the objectives of the department determine what needs to be delivered.

How are needs of the IT system determined?

It must first meet the functionality needs. Determine how it fits to the architecture of the organisation (if the organisation runs an Oracle product it is of no use buying a SAP product).

Decommissioned?

Yes, but due to the legacy LOB systems it makes the process of decommissioning the systems longer. Some of the systems will still exist three years from now due to integration challenges.

Challenges to decommission the systems

Integration to legacy LOB systems

INTERVIEWEE 13

What can you tell me about the JD Edwards system?

Before the merger took place, Organisation A put out a Request for Proposal (RFP) for a new procurement system. Some of the front runners for the contract to implement the system included SAP. The system needed to fulfil checks and balances, where if procurement takes place, the system is able to verify that this is what was procured. During that period there was a system called IPS developed by a company called OIS and the system was with the company for about ten years. The system evolved as business processes changed and it grew with the business processes of Organisation A. The system grew into asset management as well as stock management. When the RFP was sent out, it needed to fulfil a host of business processes before the plug was pulled on the IPS system. Some business analysis that needed to be fulfilled was procurement, stock management, asset management and point of sale management systems.

Two months down the line the merger took place between the two organisations. One factor which made the IPS system not be chosen as part of the IS portfolio is the fact that OIS was a very small company which made the risk to be high in terms of choosing them as the vendor supporting a big organisation. The organisation only had five developers. The IPS system had a limitation where by it was unable to do buying; it only created an invoice where a job runs at night, doing the IT buying.

Organisation B had the JDE system which made it easy to choose the system. JDE fulfilled some of the business processes that were not available in the IPS system. Organisation A and Organisation B have a common ground in terms of business processes and how they use the JDE system.

What would you say were the synergies achieved by decommissioning the IPS system?

Critical success factors were having a unified system and quicker turnaround time to do procurement. When you buy something, it gets vetted; the purchase order and the invoice will always match because it is in one system; accounts payable will always pay the right amount because it is in one system and will happen simultaneously; general ledger on your accounts will always be correct because it is in one system. The whole accounting is being done in JDE and operational finance had more than five systems and nothing is being done on spreadsheets. The IPS system was used for logging when you want to do procurement of either a PC, tables, chairs, etc., then accounting will be done on other different systems.

What were the issues experienced when decommissioning the IPM system?

The OIS system comprised of the IPS, IPM and the change management system. The IPM and the change management system were replaced by the ITSM system, while the IPS system was replaced by the JDE system. The JDE system went pretty much seamlessly because there was a whole lot of business analysis that was involved which took almost about a year and a half. When the organisation had gone live with the system, and because it was a new system from Organisation A's side, they had a call centre which dealt with any issues that were experienced and would resolve them quite quickly. The call centres were operational for about three months, looking at any issues and try to resolve them.

With IPM and the change management system to ITSM, there were technical difficulties which prompted a rollback to the old system. The issues were since then resolved. The issue still lacking is that there is still no asset management tool within the organisation.

What would you say in financial terms was the saving by decommissioning the OIS suite of systems?

With the decommissioning of the OIS suite of systems as opposed to having the two organisations each running their own system, there was a saving of about R1.5 million which

included licensing, and there was normally a payment of R500 000 which was on enhancements. The enhancements had to be done by OIS developers as there were no C# skills within the company unlike with ITSM which has objects that you can drag and drop, making it easy to make changes. On average, there was a spending of about R2 million annually on the OIS suite of systems and this makes the JDE system much better when it comes to return on investment. Also, with ITSM there is much better return on investment as there is less reliance on consultants than was with the IPS/change management systems.

The lessons that was learnt with rationalisation is that spend as much time as you possibly can on business processes and analysis as they will help you when it comes to which system to either build or buy.

INTERVIEWEE 14

It is difficult to say how you choose because you have a set of requirements during the rationalisation process and based on those requirements, there are certain criteria that you then apply to what is available in the market at that point in time when you choose what you want from an HR system. If you only require a payroll, then you'll just get a payroll system; if you wanted a human capital which has all the facets of HR like performance, eRecruit, tele-management succession planning, then you'll probably look at QPRT, but then the staff system gets expensive. Then you also look at buying modules, looking at flexibility of the system on whether you can customise it, how rigid is it, how flexible is it and how stable it is; then you do surveys and you compare. It is quite difficult but it all depends on what are your requirements as a customer. When it came to the merger, we looked at what Organisation A had and we looked what Organisation B had. Organisation A had PeopleSoft and Organisation B had an Oracle product called eBusiness Suite, but they did not own it; it was owned by FNB or First Rand group and was fully configured on the eBusiness Suite. So those are the main things influencing some of the decisions. You look at what is your flexibility, what will the cost be if we have to buy it as MMI, for instance, if we decided to buy the eBusiness Suite it will cost X, if we decide to go PeopleSoft it will cost X and also it provides these functionalities. You do all these investigative information, then you compare, and based on the information in front of you then you take an informed decision. It comes down to what you want as a customer and the information in front of you that will influence your decision in terms of flexibility, functionality, stability, cost, ongoing maintenance support, looking at whether it is supported locally or from abroad, and all those factors will influence your decision at the end of the day.

How do you determine the process that must be followed to rationalise the business processes?

As part of the merger, the competition tribunal said for the first few years there can't be any retrenchments over a period of two years. The other thing was your current benefits must not change over the same period. When the decision was taken that we'll go with PeopleSoft we had to convert all of Organisation B's employees with their current sets of benefits 'as is' to PeopleSoft. We had to take all the business rules and business processes and incorporate them into PeopleSoft and make provision for all those things. MMI then went to a benefit alignment where Organisation A and Organisation B were aligned to one set of benefits. You will know that we have converted to one pension fund now; also the leave benefit is the same now. There are some cases where that migration still has to happen, like sales staff; we only did that now. We made acquisitions such as GuardRisk and again it will have to go to that same loop where they will need to be migrated to the same benefit alignment process.

Is there a specific method that was employed to rationalise the business processes?

There is no specific method and each scenario is different; you send your business analyst as well as your systems analysts to look at the infrastructure and how will I get the data, how accurate is the data, and what is the current process; then it is documented and you basically

draw up a URS and you register a project for it and all of the migration and rationalisation is managed through the project.

Who are the key stakeholders involved in the rationalisation strategy?

It is important that the business owners are involved and whoever or the project sponsor, but also in the bigger scheme of things, it is a strategic decision and if it is coming from the top, there is automatic buy-in.

Did you keep all the set time frames to implement the rationalisation tasks?

As far as possible you try and stick to the deadline and obviously you are faced with a project where it will take X amount of days or hours, and like anything there is stumbling blocks, but maybe you score some time on other things, like with the migrations we went ahead with it a month ahead of schedule and with no hiccups.

What can the milestones be attributed to?

Well I can speak for my team; we dedicated the hardworking and the skilled staff and they know their job very well. We also have done it in the past as well and they are very mature. There are more people that have been working in the company for more than ten years as well.

What are the difficulties experienced during the rationalisation process?

Politics; and also the unknown; different technologies that you also get things from; you have to rely on other 3rd parties also to get information. It's not as if you are in control of those 3rd parties and then if you look at FNB where we had to get our data from and this is a bank and you know how strict a bank will be on giving information. So those are the types of things that were issues.

What implications does the failure to rationalise have to the organisation?

The project can fail if you don't change, and say for instance if we continue to do things the way we did, in ten years' time we would be outdated—there would be new methods of doing things. If we continue to do the same things we would have an undesirable current future.

What methodology is followed to identify redundant business processes?

You can do process maps, process flows, supply chains. It depends on the problem because for different problems you'd apply different methodologies and it depends on the situation that you are being faced with. You can't say exactly what methodology you will use, you look at each scenario individually and make decisions.

Does this tie back to what you mentioned earlier, that it depends on the requirements?

Yes, and the objective, and it needs to be clear and precise of what it needs to achieve. Once you know that, it makes the steps and the things that need to follow easier.

Did the employed rationalisation strategy make it easy to decide what system to be deployed as part of the IS portfolio?

No they don't make it easier; it is your requirement that helps you decide what system. You look at the criteria on whether cost or customer service is important to you. It depends on what is important to you and based on that you decide on what system. Yes, as I have indicated earlier, this was easier to achieve because of past experience.

How does this affect the synergies?

There was no duplication of cost, maintenance or licensing.

How was the new system implementation affected by those that did not have experience with PeopleSoft?

We did a lot around change management in terms of advertising PeopleSoft; we sent mock screens in terms of how this functionality work. We had a block training in terms how to use PeopleSoft and how to access certain information.

What criteria must the chosen IT system meet to determine its adequacy for deployment as part of the IS portfolio?

It depends on the mandate or requirements.

If the IT system meets the criteria, what plans are put in place to deploy it as part of the IS portfolio?

This is discussed as part of the project plan where you set out detailed tasks for your final deliverable or to implement the project.

INTERVIEWEE 15

The organisations have two distinct brands, and looking at the infrastructure, there were synergies to be realised and cross savings. The two organisations' data centres are connected via an MPLS link. An IT EXCO team was formed which had specific focus in particular work streams/projects to ensure stability, cost saving, ease integration, ease of operations as well making sure that everything is in line with the Organisational strategy. The participant used an example of how rationalisation was tackled within the printing department, where Organisation B believed in doing their printing in-house as opposed to Organisation A which believed in outsourcing. The determining factor in this regard was how cost effective it is doing the printing in-house as opposed to outsourcing. Various strategies are drawn when making rationalisation tasks and where changes are applicable as a result, then risk management takes place to ensure smooth transition of the new process. Change agents are very important during the rationalisation process because they need to ensure collaboration and communication is disseminated using the top-down and bottom-up approach. The change agents need to be influential people who communicates positively on changes that are about to occur.

Elaborate on change agents

Change agents are people who decide on what needs to form part of the IT services. There were some challenges in certain instances where there will be disagreements about certain IT services. A mediator will be called in where there is no consensus who will judge on equitability and efficiency of an IT service that needs to be adopted. The mediator will also responsibility ensure that the decisions taken are aligned with the strategic objectives of the organisation.

What other services were rationalised?

There was a network consolidation where call centres were using multiple networks links (voice, data) and MTN was used as a vendor to install an MPLS link, and the synergies achieved with this was that all voice calls within the organisation are free. Prior to this there, was a separate link which ran to Telkom for voice and a separate to MTN for data. Also there is a business case from a storage/records management perspective, the organisation wants to use FileNet where the Documentum and Remedy systems will be decommissioned.

What challenges are experienced with system rationalisation?

Change agents needed to ensure that there is a buy in from executive management as well as from staff in general with changes to follow; they needed to be able state benefits as well as the necessity of doing these changes. Making sure that the vision is clear and also ensuring that people do not get uncomfortable and want to leave the company.

Was there any specific method employed to rationalise the business processes?

From MMI perspective we learn from different methodologies and methods. Organisation B and Organisation A had different frameworks; the two had to adapt to the philosophy of the organisation.

Who are the key stakeholders involved in rationalising the business processes?

An input from the infrastructure team with IT professionals because any business process change will involve changes to the system. With business process changes it is important to look at how the system will respond to technical changes, and crucial to the changes is to ensure that there is less human intervention.

Did you manage keep all the set time frames to implement the rationalisation task?

In some instance the set time frames were kept and in some they were not kept. 100 days were proposed to do the integration.

What milestones can that be attributed to?

Buy in, ample collaboration, having a team that understands strategy, operations as well as implementation. Also ensuring that with the changes, business will commence as usual to make sure that the organisation does not lose market share.

What were the difficulties experienced during the rationalisation process?

Communication, collaboration, creating a new DNA and making sure that you keep the people focused.

What implication does the failure to rationalise the business processes have on the organisation?

The most important thing is to keep your critical staff

What method was followed to identify redundant systems?

There was no specific method; the organisation learnt from what they can use and applied what they can use.

Did the employed rationalisation strategy make it easy to decide what systems to be used as part of the IS portfolio?

Yes, product segmentation made it easy because the organisation is aligning to the needs of the clients.

What were the synergies achieved with the rationalisation strategy?

More synergies will be achieved when the Khula system is operational, moving policies off the mainframe. There will be no batch updates; updates will happen on the spot giving quicker service to the client.

What criteria must the chosen IT system meet to determine its adequacy as part of the IS portfolio?

Making sure that it is not a legacy system, vendors are highly rated in the Gartner quadrant as well as ensuring that you do not put your eggs in one basket. Listening to your clients is crucial in the process because you want to give them what they want.

If the system meets the criteria, what plans are put in place to deploy it as part of the IS portfolio?

There is a structure in place which comprises of the CEO, COO, CTO and a steering committee driving all the changes and they meet to discuss and ensure that changes are being implemented.

How are the needs for the IT system determined?

Understand the market; get a strategy view as well as a business analyst view. Make sure someone follows the strategy and make sure that from architecture, it is adequate for the organisation and monitory value; look at whether to outsource or insource or whether it is in the cloud or not.

How are the existing IT systems decommissioned that do not meet the requirement of the new IS portfolio?

Make sure that if a legacy system is still required it needs to be put on a platform that is cheap to run. The participant made an example where a client goes to a bank and requires a very old statement where a restore of data is required while if a client requires new statement it is readily available because it is currently in the system. Auditors get involved in the process to determine whether data is needed to be kept or not.

What are the challenges experienced with the decision to decommission the IT system?

It is important not to do things all at once because you need to mitigate risk. Make sure that the architecture and infrastructure are scalable; governance; previous audit report;, lessons learnt; apply standards methodologies.

Did the previously acquired organisations use the mainframe?

Yes.

Is the plan going forward to move the Organisation A mainframe system and use the AS400 system?

Yes, ½ of the 4.2 million policies will go to the AS400 and the other 2 million policies will go to Khula.

INTERVIEWEE 16

The MMI IT philosophy was the guiding component of the rationalisation task which was undertaken during the merger. The philosophy focused at what was used to service the client; the *modus operandi* of the organisation and these statements provided the key to define the requirements. The organisation wanted an easy to use process that meets the requirements of the organisation so that there is structure, the audit requirements so that there is a way to measure the success of what has been done.

What was the planning involved to rationalising the business processes?

The planning looked at the needs of each organisation. A business requirements analysis was done looking at Organisation A and Organisation B. The rationalisation also looked at the cost factor on whether there are funds available to rationalise the process. The participant also expressed that during the rationalisation process, people might not be willing to share information.

Is it because they are afraid of losing their jobs?

Yes

How do you determine the process that must be followed to rationalise the business processes?

Determining the process became dependent on the philosophy of the organisation. Looking at the Organisational strategy, the other determining factor is how best an acquired organisation can be repurposed by using existing systems as opposed to operating individually.

What method is employed to rationalise the business processes?

In principle it entails a sharing process, understanding of common goal, identify a plan to get to your goal and how best will it be achieved. There was no specific method and the key mandate was to come with a national method that did not disrupt operations.

Who were the key stakeholders involved in the rationalisation strategy?

All the role players were the key people involved in various aspect of the process; there were also people that sat outside that were able to influence the process.

Have you managed to keep all the set time frames to implement the rationalisation tasks?

No

What are the difficulties experienced during the rationalisation process?

Individual or personal motives and which are not organisation driven (resistance to change).

What implication does the failure to rationalise business processes have to the organisation?

Cost, inefficiencies, failure, confusion and chaos at worst

What methodology is followed to identify redundant business processes?

No specific methodology but the participant expressed the need to ensure that there is no duplication.

Did the employed rationalisation strategy make it easy to decide what systems to be deployed as part of the IS portfolio?

When you have a rationalised process, it becomes easy to map it to a system. The principle of rationalisation is to enable faster decision making.

What synergies were achieved as a result?

The synergy is to reflect and a different way of seeing things.

What criteria must the chosen IT system meet to determine the adequacy for deployment as part of the IS portfolio?

The system needs to ensure that it meets the requirements set out.

If the IT system meets the criteria, what plans are put in place to deploy as part of the IS portfolio?

Project or change deployment process

How are new IT systems introduced as part of the IS portfolio during a merger?

Based on consensus

How are the needs for the new IT system determined?

Exactly the same way as a rationalisation process

How are existing IT systems that do not meet the requirements of the IS portfolio decommissioned?

No formal process in place

What are the challenges experienced with the decision to decommission the IT system that does not meet the requirements of the IS portfolio?

Reluctance from people to stop using the system

System designed with no intended life span

INTERVIEWEE 17

Network Architect

Understand what efficiencies have been applied since the merger started to achieve synergies between the two financial institutions

When the merger was finally completed four years ago, a due diligence exercise was undertaken two years before the merger up until the Completion Board finally gave approval for the merger to go ahead. Part of the challenges the participants experienced was that the two network environments were managed differently. Organisation A had adopted a method of consuming services and not owning services. This is enabled by approaching a service provider and specifying all the required services; how they deliver the service becomes transparent to the organisation. This entailed hardware being owned by the service provider. To give an example, if the organisation wants to open a branch, they will approach a service provider and say they need connectivity to a specific branch and they will need to commission all of the hardware, links with all the MPLS based services that are required. The participant alluded that Organisation A had a model that was a bit more ahead of the Organisation B model. Organisation B owned and managed their entire infrastructure themselves, which was fundamentally a huge difference between the financial organisations. The interviewee stated that this spanned across all other services, not only on the network side where Organisation A only consumed the services rather than owning it; this included hardware, software, licensing and maintenance. From the network side, when everything was finalised, the first task that needed to be achieved was the MPLS link between Organisation A and Organisation B to allow access to some of the environments that were needed. JDE was on a common platform that was used by Organisation B, and Organisation A was using the IPS iWare system. The two organisations operated separately in that sense. The link was purely put to enable access to specific environments that were needed at the time and the rationalisation came later. To add to this, when the PeopleSoft system was designated as the HR platform that was going to be used across MMI, full connectivity was needed be enabled; collaboration for the HR staff in the platform is what drove the requirement from the networking side. A method was needed to allow countrywide access to ensure wherever a person is situated that they are able to access the HR services, and this spawned out to other phases of the project, tying to Project Bell.

Project Bell looked at consolidating the data and voice functions into a single link and delivering these services to a branch. An example of how things used to work in the past is that the telephony services was pretty much handled as a decentralised service and this means that the branches took ownerships of managing their telephony services. If they had a telephony requirement, they will go to Telkom and negotiate a lease period and this could be putting a PABX system on site or applying for a couple of telephone lines and the branches will do this themselves. Part of the problem with this is that the organisation has about 220 branches and that means that you potentially have about 220 individual contracts because each branch is doing their own thing. The other issue is that there were different platforms in each branch because there were no standards (i.e. HYMAX PABX, Siemens PABX and Philips PABX) and this was the kind of model that the organisation had. The other challenge was that there was no single view from a telephone management perspective where you have a console that gives you

a view of what your telephony spending is for the entire group because of all these decentralised systems. Part of the change was to move away from that, and that spawned Project Bell. Project Bell was the enablement of a single cloud based voice solution for the entire MMI footprint, and this included Organisation A and Organisation B and entailed no more physical PABX's on site. The organisation had a model that was used to accomplish these tasks; looked at the size of the site, determine the number of physical handsets that were needed at the site, looked at the call concurrency to say how many simultaneous calls are needed because you could have 50 extensions at a branch, but at the same time you might find that only 10 people are calling at the same time. The biggest gain is the view and the control from a reporting perspective; line managers and branch managers could in essence monitor their telephone usage and budget more adequately and these budgets could be controlled centrally whereas in the past those budgets used to sit at the branch itself. There was not a real mechanism to monitor this carefully and they just got a bill from Telkom. Now you can enforce limits and pin codes and manage that centrally where an individually can use any phone but must enter a pin code where a manager can monitor usage.

There were fundamental flaws in how the project was approached. The participant expressed that they never should have delivered voice services over an ADSL line. This created a lot of performance issues that is being delivered by Telkom in the branches, purely looking at the footprint of the two organisations—Organisation A operates in the low-to-mid market and Organisation B operates mid-to-high end of the market. This played a role in the type of infrastructure to be delivered in the branch. About 15% of the branches had an ADSL and this had problematic implications with voice quality due to inadequacy of the infrastructure. This was fixed by moving away from using ADSL technology as an infrastructure and the organisation has grown to such a point that they are now looking at the dynamic of how a branch operates five years ago versus how it operates now—it is a very different approach. In the past there was much caution around spending; the interviewee expressed that in the past they had to exercise a lot of caution around cost when they put together solutions for the organisation; they needed to be very cost sensitive. For example, they were restricted to implement redundancy to ensure resilience in their environment because it came at a price, but this does not mean because the organisation has grown now suddenly there is money to spend—the organisation still follows the same process of ensuring cost effectiveness. Business is given options before implementing solutions to decide what solution will be suitable for the organisation going forward. Looking at the branches, the participant says they worked on three classification models where a branch can either be small, medium or large. Each branch consists of a specific number of users, for example, a small branch will consist of 1-5, medium 5-15, and large 15-50. The participant said that they took a decision that in large branches they needed to have dual links where you needed to have a primary and a fail-over link. This became important where you deliver voice and data services over the same link you needed to have a fail-over link to ensure that people are able to perform their duties. The MPLS link has evolved; the participant said that they completed the biggest project that they undertook last year (2014); in essence when the merger started you can say there were Organisation A WAN and Organisation B WAN. Both organisations were consuming using the same service providers, but they were seen as two separate entities and not as one entity. Part of the efficiencies included it was not an easy model to manage, there was a lot of duplication, it made troubleshooting and fault finding problematic. There were a lot of workarounds when needed to do things and this becomes part of the network and becomes problematic in the future. The organisation took a stance and said they needed to have one network as opposed to having two, and they needed to call it an MMI office. The organisation is now busy with an Organisation A health take that will be part of the network because they have a fairly large footprint around the country as well.

The only thing that has not been achieved as yet is that branches are still operating separately where you still have Organisation A and Organisation B branches working independently. There has not been any synergy achieved where you see Organisation A's branch services

Organisation B's client and Organisation B's branch servicing Organisation A's client. The Organisation A Retail CEO has questioned this because intermediaries are able to write new clients whereas the organisation's LOB systems are unable achieve this. Since then there has been a paradigm shift where the organisation is now adopting a client centric model to address these gaps over the next three to five years. The organisation is also looking at growing its footprint by opening branches and having a potential of about five hundred branches going live. The organisation is taking a different approach when it comes to branches where they want to enable a full wifi service where clients are able help themselves, where kiosks will be available or a customer being linked to a call centre. The model is driven towards a self-help type o f a scenario. One other thing is to enable Video Conference (VC) capability in branches, where a customer walking into a branch is able to have a face-to-face conversation with a call centre agent (branch of the future).

MTN consolidation project took roughly about nine months from the time the project was started and the reason why it took that long is that planning was more important to ensure that everything is done a 100 percent correct. Before laying everything on top you need to ensure that your underpinning infrastructure is 100% stable and configured correctly because when you add something on top, whether it be voice services or internet, it might fall apart. Organisation A had links into MTN but there was one physical link virtually split into four servicing and delivering requirements for Organisation A and Organisation B, and as part of this cut over there are two links—a primary and a backup able to deliver services for both environments seamlessly. That made sure that the resources are used a lot more effectively and cost efficiently because services were not only used for Organisation A or Organisation B, but for MMI. This was more for the Centurion site as well as for the Parc du Cap site because that is where the bulk of the services are consumed. Everything that sits in the data centre in Parc du Cap is used by Organisation As branches countrywide and services such as PeopleSoft which is used by the entire group, sits in Organisation A's site. Centurion, for example, where JDE sits, they needed to ensure that there is seamless connectivity countrywide. This entails ensure connectivity response times via the MPLS link during the consolidation project. One of the other things that was looked at is that they looked at the two environments, and each entity as Organisation A and Organisation B have various business partners that they deal with such as banks—the organisation interacts with Standard bank, ABSA, FNB, SARS and a whole host of other third parties that both companies share with and use. The plan during the first quarter of this year is to have a single entity and entry point where both organisations interface with those third parties going forward. There is no longer going to be a link for Organisation A going to ABSA, STD bank or FNB, and a link for Organisation B going into ABSA, STD bank or FNB. There is going to be a link from MMI going to ABSA that both Organisation A and Organisation B will use and this ensures that there is no link dedicated to one company to a third party. The plan going forward is the need to be more agile and scalable because as the link currently serves both Organisation A and Organisation B, it needs to be able to serve another company that might be acquired by the organisation. The old environment, when you needed to implement something, you needed to break something and rebuild. Currently there is a solid foundation that has been laid down for network services, where services can just be enabled on top. Another example is the London office in the way that it was set up, they were sharing First Rand offices and as part of the merger they needed to be moved off that infrastructure completely, create an MMI area of services in London which was done with Organisation B global investments and it took two years to actually unbundle them out of the first rand services. As part of that, they relocated to new offices but the benefit of this is that the second office located in the Channel Islands Guernsey has now been brought in to consume those services. This has brought about efficiencies, removed duplication and huge amount of cost saving and from a skills perspective you don't have people looking after the environment in Guernsey and Organisation B global investments. The staff is able to provide services no matter who the client is and where the

service is needed whether it is International or investments they are able to provide and support those services.

What influenced the model to be used because Organisation A consumed services from service providers and Organisation B managed their own services?

The two organisations went into a process where they needed to create a more transparent understanding. Organisation B was spending a lot more time when you look at services that you want to do yourself—you have to make sure that you have the skill onsite in order to do that; for services that you want to enable, you have to make sure that you do the necessary budgeting as part of that. Each team had to show what it is that they had in their environment, how it was managed, and how much it cost—and that was some kind of due diligence that was done. These will then be sent to an IT steering committee who will then decide which model was the better of the two organisations. One of the models put a lot more emphasis on solving problems like doing configurations of routers, and the other looked more at managing the services because they did not want to have those skills in-house although they needed to be able to do the troubleshooting. The dynamic when there was decided to go Project Bell, for example, the organisation needed to move away from doing things themselves because it was not a sustainable model looking at the organisation's strategy. Scalability would have been slow if they continued to do things for themselves; right now it is the service provider's responsibility to do upgrade on links when they need to, and also they do not need to procure any hardware. The organisation as part of the new model engaged vendors to ensure that there were strict Service Level Agreements (SLAs) when it came to ensuring that services run on time and that there are quicker response times when there is a disruption to a service. In the past, if a service was down for a week, there were no penalties imposed to a service provider.

What were team dynamics like pertaining to the differences in the models?

There fundamental thing that existed is the difference in culture and when it came to skills sets, there were not much difference although Organisation B managed their own services. Everybody understood the changes that needed to happen from the model that was adopted as well as the efficiencies that needed to be applied, and also there were good decision makers that made people buy into the ideas. Culturally, the differences between the two organisations are that Organisation B had no structured approach to resolve problems as opposed to Organisation A, they focused to resolve the problem if it occurred at all cost but that does not mean there was no process that was followed at all. There is a lot more collaboration between the teams such as weekly VCs so that teams are in touch with what is happening between the two network environments.

Would you say that there were synergies achieved from a monitory perspective between the two entities in IT Networks?

There were a lot of synergies and a lot of savings that came out of it; the merger had to deliver an overall saving of R500 million over a period of five years and that was achieved in less than that time. Organisation A used to have about 5 000 users in the past and now after the merger the organisation has about 15 000 users on the network. This gave bargaining power which made services to be delivered at cheaper rates; licensing also became a lot more enterprise driven.

INTERVIEWEE 18

National Network Manager

How do IT systems support the rationalised business processes?

The IT infrastructure needs to provide stability, a solid foundation to ensure and cater for the growing needs of the organisation.

How are the rationalised business processes aligned with the IT systems?

There is supposed to be a level of engagement and partnership with IT in everything and anything that business decides. Constantly check if the business needs are fulfilled with the IT implementation, ensuring that growth needs are catered for, maintenance plans as well as agility. If there is a strategy change in the organisation, the systems need to have some kind of flexibility to ensure quicker turnaround time to implement. There needs to be skilled IT professionals who will be able to speak in a language that business understands in order to be able to extract the required information.

How effective is the process to identify the IT system that support the rationalised business processes?

There is no specific method except to say how you get your organisation geared to cater for these business processes. Active engagement or the creation of a communication channel to filter down the information to cater for the business processes.

What criteria must the chosen IT system meet for deployment as part of the IS portfolio?

There are four things you need to look at; there has to be stability, operationally sound, flexibility and agility to meet changing needs of business processes, capacity management, cost to deliver the service as well as service management.

What was the determining factor to use a specific service provider in the network environment when doing consolidation?

There are four service providers, EOH, NEOTEL, MTN and internet solutions. When it comes to consolidation, the important factor is to look at minimal disruption to business, choosing a service provider from a strategic point of view (cost effectiveness, bargaining power and innovation), the list of services that the service provider provides the company.

If IT systems meet the criteria, what plans are put in place to deploy as part of the IS portfolio?

If the IT system meets the criteria, a project needs to be initiated to put plans into action and the project management disciplines need to take place to ensure successful delivery of the project. If a system requires stringent security, then that system needs to be built and managed in-house.

What happens if it does not meet the criteria?

Lease a service from a service provider while implementing a proof of concept to test all the functionalities that you require in a system if there are no adequate skills within the organisation to support the system.

Example: The telephony service/platform at the branches is owned by a service provider where a connectivity link to the service provider is established for the agents to do their work. The reason why the organisation chose this route is because it was cost effective in terms of level of availability as well as capacity. This mitigates having to do maintenance, license cost, housekeeping, infrastructure management as well as minimum staff to manage the environment.

How are the IT systems that support the rationalised business processes implemented?

Understand the integration where touch points are required within the system

How are new systems introduced as part of the creation of an IS portfolio in a merger?

There must be minimal disruption to the current environment; must talk to the organisational strategy; there must be synergies to be realised and minimise silos within a merger. The example can be the domain migration project that is being implemented. Due diligence is also

required, looking at the current system and evaluating what you want to achieve with the new system; more importantly, it must talk to the strategy and goals of the organisation.

How are the needs for the new IT system determined?

Meeting and exceeding the requirements of the strategy.

Is it something that is being practiced in the organisation where a switch needs to be replaced within the network environment?

All the switches within the data centre needs to be replaced because they have reached their end of life support. Part of the strategic objectives for this undertaking is to ensure robustness (minimal disruption to business); agile; cater for growth which forms part of the organisational strategy; ensure that there is enough capacity to cater for any new company that has been acquired by the organisation.

Do you get support from the executives to implements projects that require massive capital?

Yes, cost management is important where you invest in things that you actually need which is supported by a sound business case.

How are systems not meeting the requirements of the new IS portfolio decommissioned?

Systematic approaches where you introduce the new system running concurrently with the old system; then start the process by decommissioning the services one by one.

Have you experienced any challenges when you decommissioned the systems?

Change management process, proper training that did not take place. There needs to be a stringent transition plan within the organisation to ensure transition plans are solid enough to minimise risks that could be experienced.

INTERVIEWEE 19

Senior Systems engineering

From my side, I have not seen anything merged from the merger from a business process. We still run our shop and they still run their shop. Yes, we collaborate but there is no merging because AWD is still this side and AWD is still that side, Remedy is still this side and Remedy is still that side. One thing has combined is your exchange and AD and that is still ongoing and it is still not close to being finished. Where we have shared services, there we have integrated but there are too many individual still to really be affected by the merger.

What was the reason behind the consolidation of AD and exchange?

Centralised management, its easier to manage the whole environment if you've got one AD and one exchange than what we had in the past where you had one for PDC, one for Centurion, one for international, one for the investment guys, one for EB, so you had of those different departments and all of those environments and nobody adhering to the same standards. For management and for standards sake you have to make it one.

Benefits?

Easier management, easier up keeping, easier deployment, easier troubleshooting, everything is just easier; less licenses so it becomes cheaper; less hardware because you need less infrastructure.

Issues to consolidation?

Legacy, with any change you have to change your structure, you have to change your programs, you have to change the way you look at your data and how your data flows and all of that are obstacles and challenges.

What do you think is hindering the consolidation of other shared services (i.e. AWD, Remedy)?

Legacy, plus we have two sites, if everything was in one site things would have been much easier but because we are so big and the size of our environment, it is close to impossible to merge all of it. You will always have two sites running unless we become one site.

With the systems that were merged, were there any that were decommissioned?

Yes, we decommissioned some of the older hardware; the strategy going forward is to virtualise as much as possible and all your legacy hardware will come out. We are busy with the exodus project—we are going to decommission ZA domain servers so we are combining servers or services into one or more. In past we would give you three or four web servers, now we would give you one web server to do the same job. With the new technologies you would perform better than you did with the four.

How are the IT systems decommissioned that do not meet the requirements of your IS portfolio?

With a lot of nagging from the business because they need to change their process. The challenge is having to change legacy systems.

Were there any issues with the servers that you had to decommission?

No there was never any come backs with the server that we had to decommission.