Case Study: Assessing an ERP Implementation in South Africa

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Abstract

The ABC Corporation is about to kick off a massive upgrade of its critical business Information Systems. These types of system upgrades are notoriously difficult and have a low success rate. The exercise can, however, increase organisational efficiency and have a positive impact on automating business processes. The primary objective of this research aims to complete a readiness assessment towards the Enterprise Resource Platform (ERP) implementation at the ABC Corporation. The organisation and individuals in this paper have been anonymised for confidentiality and competitive reasons.

Business Case Background

This topic has been selected due to the low success rate of ERP system implementations within the market. A survey by Panorama Consulting (2016) shows that in 2015, approximately 57% of Enterprise Resource projects exceeded their planned duration, 57% overstepped budget and 46% did not realise their expected benefit. ERP implementation success rates are however, on the rise. According to Panorama Consulting (2016), there was a 9% increase in satisfied customers in 2015 compared to 2014.

This research project takes ERP implementation Critical Success Factors (CSF) into account. The CSF is considered to ascertain whether the complete replacement of business legacy systems with a "best of breed" turnkey solution will result in a higher likelihood of project success. In addition, a postmodern approach towards ERP implementation is broken down and various factors considered in the context of ABC Corporation.

This research project is limited to the boundaries of ABC Corporation. The ABC Corporation group of companies is a leading financial services firm within South Africa. They are currently one of the largest pension fund administrators in Africa. The group comprises multiple business units which specialise in Investments, Health, Pension Fund Administration and Insurance. The organisation also has a highly-developed consulting and actuarial area as well as tied agencies (wealth and short term).

The financial services industry has changed in leaps and bounds over the past decade. From interactive mobile apps to robot-advisors, this sector has not stagnated. ABC Corporation, on the other hand, has not offered many digital services to the market. This is partially due to the focus on its institutional business. The retail sector was largely ignored over its eighty-one-year existence. As such, the information systems which were implemented within the business were not transactional in nature and are not functionally rich. ABC Corporation customers worked largely through their employers and have a minimal interaction with the firm. The interaction was limited to a basic website which offered fund values and kicked off minor changes to policies.

ABC Corporation is an organisation with a rich heritage. This rich history comes with a vast complexity in service offerings ranging from administration services to insurance offerings. Part of the ABC Corporation success was due to a result of developing and delivering highly customised products and solutions. Over the decades of existence, the organisation has been left with a unique environment in order to deal with business needs. The disparate approach which has been taken over the years has brought complexity and duplication in cost and functionality within the environment. Additional customisation over time has further complicated the organisation. This position has worked against a simple and efficient executive vision for the company.

In an effort to improve the customer experience, ABC Corporation is turning to technology innovation. A specific focus has been put on a new Enterprise Resource Platform (ERP). ERP platforms can be defined as business process management software which allows organisations to use a system of integrated applications to manage the business and automate back office functions, which are related to technology and business services.

As part of its customer centric strategy, the organisation has been divided into two primary segments, Institutional and retail. The institutional side of the business deals with corporates that require financial services, whereas the retail cluster deals with individual needs.

The combination of legacy fund administration systems has left ABC Corporation in a unique position. Not only do they have a significant amount of rich data, ABC Corporation can also meet the financial needs of most individuals and corporates in South Africa. This situation, however, does not come without risks. The agility and service delivery potential is significantly reduced by some of the outdated systems. Due to the high level of system customisation, vendor support is limited and the systems require a large amount of development to deliver new services. There is also a high level of platform dependency which may require infrastructure changes in order to deliver small application changes that add value to the business. The core policy administration systems are US dollar based and therefore maintenance and development are linked to currency fluctuations; this link inevitably increases the total cost of ownership. Forex licencing also leads to uncertainty and unpredictable input costs which are difficult to pass onto clients, leading to margin pressure.

System scalability also comes into question, with long term insurance systems as old as twenty-seven years, there is a limitation to their capacity. This scalability issue directly links to the ability to handle the number of members funds and portfolios. The long term insurance systems within ABC Corporation are highly customised and there are very few individuals who are able to support the software and infrastructure.

Finally, the most important limitation concerns the digital readiness of the platforms. Digital readiness refers to the system's ability to deliver and integrate into new channels such as mobile systems and online ready platforms. System integration is an integral part of any ecosystem. When this limitation prevents an organisation from delivering value added services to its customers, questions will be asked.

From a short-term insurance perspective, the organisation uses an outdated policy and claims administration system. ABC Corporation has grown significantly over the years, starting out as a broker and ending up as a direct insurer. The policy and claims administration system have remained the same through this growth. As such, the short-term insurance system has not kept pace with business needs. In order to ensure the insurer can sustain the new business, grow organically and reduce loss ratios and customer churn, ABC Corporation has had to consider a replacement system. The replacement of this system is being driven primarily by the need to satisfy customers by improving customer experience while offering customer centric products.

Both short-term and long-erm insurance systems use outdated technology which hampers business agility. The system is difficult to maintain and customise. This inability to deliver on business needs inherently causes an abundance of manual business processes, redundancy, duplication of effort and excess of bottlenecks within the business.

By replacing the policy administration long-term and short-term insurance platforms, the organisation is hoping to modernise the information technology systems. In addition, to the aforementioned systems, the organisation is considering the implementation of a number of additional systems. These systems include:

Web Portal: The ERP vendor in question can provide a web portal capability across all systems. The portal will efficiently manage the data and integration between the underlying backend systems. This web portal will be transitional in nature.

Front-end Digital platform: The digital system will act as an enterprise content management system (ECM). The ECM will provide and enhance the digital and marketing capabilities of the organisation.

Business Intelligence (BI): A BI system will integrate with all lines of business systems in order to allow for forecasting and central business reporting capabilities.

Reinsurance: A reinsurance system may be implemented in order to replace the existing outdated software and infrastructure. This system will manage complex reinsurance requirements and will include financial control and audit support.

It is hoped that these systems will enable the business to innovate further in a digital age, providing value added services and improving client experience, both on mobile and other online platforms.

The current financial services industry in South Africa has become extremely competitive. Gone are the days of a handful of organisations which have the ability to service client needs. Small lean organisations have burst onto the scene to compete with goliaths such as ABC Corporation. These small agile companies have the ability to offer comprehensive financial solutions at a fraction of the cost of the bigger players.

ABC Corporation is currently considering various approaches, including a ‘best of breed’ approach, to enhance the ERP platforms and improve business agility. Many organisations in the past have used a ‘best of breed’ approach to replace existing platforms with disastrous consequences. Making the ‘best of breed’ a *de facto* choice can lead to making a tactical purchase a strategic one.

The executive team responsible for the ERP implementation have created a new supporting business united named OPTEC. The formation of this division is intended to provide core foundation enablers and improve the customer experience through the use of technology enablers.

As such, OPTEC has decided to focus on six areas to improve the digital landscape:

1. The renewal of business administration systems
2. The definition and implementation of a digital and mobile strategy
3. The reduction of duplicate systems within the Group
4. Identification of layers which may exist to consolidate systems and Information
5. Alignment of IT enablement strategies throughout the various business units
6. Identification of opportunities to reduce cost and improve capacity

In order to boost competitiveness through service delivery, financial services organisations have increasingly turned to innovation and technology in recent years: robo-advisors, crowd-sourced, social media based, identity systems and even bitcoin-inspired payment distributed systems. All of this is being done to influence the customer’s moment of truth!

The moment of truth can be defined as a point in time when a customer or end user decides whether or not they have had a positive experience (Cohn, 2014). A moment of truth can come from any experience with the organisation, from communicating in person with financial consultants to the use of websites and other digital services. These moments create experiences which can be communicated through word-of-mouth. In recent times, financial services organisations have used technology in order to drive down costs and improve business efficiencies.

To ensure that their internal environment is suitable for sustainable growth, financial services players have and will always build internally their capability to deliver customer value. This is done through improving service practices and the ways in which these services are delivered. This is all being done in order to manage customer expectations. Delivering customer value through technology must be measured through positive experiences. Another aspect of this is to ensure metrics are taken to measure the experience.

Literature Review

Enterprise Resource Platforms (ERP) seek to integrate a range of business processes and functions to present an holistic view of the business from a single information and IT architecture (Klaus, 2000). ERP Platforms have been in existence for more than twenty-five years. Even though this technology has been used by organisations for this period, corporates continue to struggle to deliver implementations on time and within budget. (Ganley, 2016). The research shows the reasons why organisations fail to implement ERP solutions correctly. Going through an ERP implementation journey can be a daunting task. Umble and Umble (2002) say that if the organisation is to reap the benefits of ERP, it must first develop a plan for success. They also say that organisations should prepare to see the organisations re-engineered, staff disrupted and productivity drop before payoff is realised. According to Cliffe (1999), companies must involve all employees and unconditionally and completely sell them on the concept of ERP for it to be a success. In this section, we explore why ERP implantations fail and how a postmodern approach can assist in a successful project delivery.

ERP Implementations have evolved dramatically over time. From the classic 'best of breed' non-core, functionally orientated implementation to modern ERP which is core and data orientated. The fundamental difference in the postmodern strategy is that business and IT jointly govern the ERP strategy and apply balanced control and decision making (Hardcastle, 2015).

According to the 2016 Panorama consulting solutions survey, 49% of organisations implement ERP due to out-of-date ERP software, 16% replace homegrown systems and 15% replace accounting software. These factors hold true too, for ABC Corporation. Due to the high implementation failure rates, organisations have had to consider various strategies. The postmodern approach was coined by Gartner in 2015. Gartner is a research and consulting company which has been in existence for several years. Gartner was the first organisation to refer to integrated core business systems as ERP.

Major Causes of ERP failures

In 2012, Ghosh completed a comprehensive study on ERP failures. During the study, Ghosh (Ghosh, 2012) found that due to system complexities and lack of integration, ERP failures occurred on a regular basis.

ERP, by virtue of its scale, objectives and functions requires collaboration between multiple parties (Ghosh, 2012). According to Ghosh (Ghosh, 2012), the failures can be categorised into six areas which are discussed below.

- Lack of Clarity of functional requirements

Desired functionality is often not communicated well by the implementers of the new technology. This can be caused due to the lack of clarity from a buyer's perspective, buyers are unsure of what they are looking for. This is because requirement gathering tools and techniques are not adequately used by organisations. This has a major spin-off effect, vendors can later accuse business of not providing defined requirements.

- Lack of commitment from managers

At times, top management is unaware of the scale and technicality of the ERP project. This lack of knowledge can translate into a lack of commitment down the line. The lack of commitment can then again translate into insufficient resources which will increase the likelihood of failure. Top management frequently delegates responsibility to lower level managers, unfortunately, lower level managers do not have the power to make important decisions, such as changing existing business processes.

- Inadequate Training

All users of the ERP system should be well trained, per Ghosh (Ghosh, 2012), but history shows that this is not always the case. Interactions with the vendor implementation team should also be encouraged in order to boost the business user's competency. Several businesses in the past have entered into bad habits which include training a handful of employees and expecting them to disseminate the information. This approach prevents employees from developing an holistic view of the system.

- Improper package selection

ERP systems can be broken up into smaller components and each component purchased separately, This approach allows customisation for each implementation. Buyers sometimes do not the take the time to build an ERP strategy. Organisations must ensure packages satisfy business requirements. Lack of knowledge and clarity can lead to functional failures within the application. There are instances where buyers purchase ERP packages due to successful implementations in the past. Past performance does not guarantee future results. Business can be misled during the purchasing phase, only to find out that extensive modifications are required after implementation.

- Miscalculations and Expectations

Time and effort for completed implementation are often miscalculated. If implementation dates are miscalculated, additional costs are incurred. According to Ghosh (Ghosh, 2012), It is better to exceed timelines rather than shorten them. Ghosh noted that 25 % of respondents to ERP surveys have cited realistic implementation expectations "as the most important requirement to avoiding failure". Vendors infamously extend benefits in terms of return on investment while underestimating the cost.

- Variables which are sometimes left out of total cost include:
    - Costs of planning
    - Consulting fees
    - Training
    - Testing
    - Data Conversions
    - Documentation
    - Replacing staff
    - Learning curve performance drop

- Incompatibility with business processes

Gaps between software functions and organisational requirements can severely affect ERP performance. Gaps can result from a poor understanding of underlying processes, both of the ERP system as well as the business.

As part of the study, Ghosh (Ghosh, 2012) noted a list of factors that constitute failures.

1. Lower returns than expected.
2. The inability of the ERP system to meet predetermined functional requirements.
3. Crossing budget limitations.
4. Higher maintenance and training costs.
5. Missing development and deployment dates.
6. Incorrect working of the system.
7. Not living up to estimated expectations

Postmodern ERP approach

A postmodern ERP approach can be defined as a technology strategy which automates and links administrative and operational business capabilities with the appropriate levels of integration that balance the benefits of vendor delivered integration against business flexibility and agility. This is ultimately a capability based approach (Drobik, 2015).

Postmodern ERP focuses on the decoupling of a suite-centric ERP into loosely coupled applications. Some of these applications can be specific domain suites (like a short-term insurance application). These smaller applications are integrated as needed. The key factor to a postmodern approach is the prioritisation by functionality and agility. These factors take preference over single vendor driven strategies, ease of IT management or other IT-centric needs. (Drobik, 2016)

The postmodern ERP approach is meant to deliver agility and drive value through targeted strategic decisions (Ganley, 2016). In a 2016 CIO Gartner Survey, twenty-one percent of participants in named ERP as one of the top technology areas for new spending. This reinforces the idea that ERP implementation decisions should be taken with caution. Due to the number of failed ERP projects, the industry has had to find new and more efficient ways of completing these projects.

Implementing a postmodern ERP strategy is clearly different to taking the 'best of breed' approach. 'Best of breed' has been called upon for a number of years within the IT industry and can be seen as businesses purchasing software with little to no IT involvement. This is done by the business to obtain the best solution for each functional area. In the postmodern approach, the ERP suite is being deconstructed and replaced by a more federated approach. This approach may include the use of cloud services or via business process outsourcers. ERP implementations are notoriously expensive, not only in the initial implementation, but the maintenance thereof (Hardcastle 2015). Due to complexity, many organisations plan their ERP strategies based on what their vendor could provide and when the vendor failed to deliver the needed functionality the IT organisation lose the ability to meet business needs (Drobik, 2016). It is vital to understand the difference between 'Best of Breed' and postmodern characteristics. The primary differences are explained in Table 1 below:

Table 1 - Postmodern vs Best of Breed

Factors	Postmodern characteristics	Best of Breed characteristics
Strategy and Architecture	• Business Driven and owned ERP strategy • Supports the execution of the enterprise business strategy by providing a robust core	• Has no ERP strategy • Can prevent the achievement of enterprise strategic objectives through the lack of appropriate integration and poor support for the end to end business model
Plans	• Regular reviews of plans take into account all of the components of the extended ERP solution	• Plans for the best of breed approach does not take the whole solution into account. This will lead to system complexity. • Poor planning may result in failure to retire redundant solutions, increasing technical debt.
Cost Benefit	• In order to support informed decision making and lifetime cost and benefit evaluation will be	• There is no lifetime total cost of ownership (TCO).

	taken over the complete landscape.	
Factors	**Postmodern characteristics**	**Best of Breed characteristics**
Integration and Process Management	• Postmodern solutions take a federated and loosely coupled approach towards implementing the technology. This includes data and processes.	• Best of Breed often results in a tactical point to point system integration and potential manual intervention. Data and process integration are parochial.
Governance	• Coordinated and differentiated to achieve a balanced governance tailored to pace business change.	• Fragmented decision making by individual functions and business units.

(Source: Hardcastle, 2015)

Like traditional ERP Critical Success Factors (CSF's), the postmodern ERP approach also has several success factors. Ganley (2016) has communicated 10 critical success factors to the postmodern ERP Implementations. These success factors are detailed in Table 2 below:

Table 2 - Postmodern ERP Success Factors

Factors	**Dimension of Success**
Create and maintain a Postmodern ERP Strategy	• The executive and senior management should agree on and document a postmodern ERP Strategy. • Review all the ERP investments and determine whether the organisation can leverage off existing investments. The executive should then determine where to reinvest to support the digital strategy.
Obtain and maintain executive management support	• The organisation should attain Executive and Senior Management agreement, develop and maintain an organisational ERP postmodern strategy. • The organisation should gain management support on the strategy by including senior management in governance practices. This is done to ensure that management is informed of the strategy's progress as well as to inform them on business strategy.
Utilise pace layering throughout the postmodern ERP life cycle. Pace layering is a methodology used to classify business application.	• Complete a pace-layered application strategy to develop a detailed view of the organisation's business capabilities by layer. This is done to ensure boundaries of the ERP initiative and document the scope of the ERP strategy. • Update the pace layering business capability model on a regular basis.

	• Adopt a Bi-modal approach towards facilitating the postmodern ERP project.
Understand the organisational maturity, and if necessary, take steps to improve on the maturity	• Formally assess the organisation maturity by considering maturity characteristics such as collaboration, accountability, engagement, risk and reward recognition. • Identify highest areas of maturity risk.
Implement an effective governance process that extends beyond the life of the project	• Review existing Governance Model and identify areas in which governance needs to change. • Adapt frequency of Governance initiatives to meet business pace of change
Address organisational change management and training requirements thoroughly	• Develop communication mechanism to channel information to end users. This should include roadshows, newsletters and intranet updates. • Conduct training sessions to help staff understand the importance of the project.
Ensure your integration and information management strategies address postmodern ERP requirements	• Understand the complex interdependencies of the various postmodern business application scenarios. • Update the application integration strategy to include maintaining data integrity and synchronisation between platforms.
Understand costs and budget accordingly	• Costs should not be cut from organisational change management, training and project management. • Develop a business case for ERP as a whole. Review the business case periodically.

Build an enthusiastic project team lead by an experienced project manager	• Appoint an experienced project manager at the beginning of the project • Consider retention and success bonuses to provide incentives
Minimise modifications	• Perform a detailed gap analysis. Assess the business value associated with each gap, prioritise gaps and assess how best to close the gaps • Set clear expectations about modifications at each project outset.

(Source: Ganley, 2016)

Research Methodology

This section explains the research methodology which was used to assess the approach towards the ERP implementation. Through a readiness assessment, this chapter also identifies how the ERP implementation is understood and positioned at ABC Corporation. The assessment considers ERP Failure Factors. This section also explores whether a postmodern ERP approach towards the upcoming implementation has been considered.

A qualitative approach was used to gather all the relevant data. The qualitative approach was chosen in order identify the underlining orientation of the relevant decision makers. This approach will further assist in identifying whether the organisation is going in the right direction according to the available ERP research. Data which is collected using a qualitative methodology is richer and facilitates a better understanding of the topic under investigation through the identification and analysis of detail and complexity that would potentially have been missed by a quantitative study (Suri, 2011). Since the perception of alignment can be highly subjective, questions remained open-ended to gather as much information as possible. A qualitative approach was applicable as it is also more inductive and subjective when compared to quantitative methods which are objective and deductive (Bryman & Bell, 2007).

The state of ERP implementation with postmodern alignment was also assessed. This approach was undertaken to uncover factors which had not yet been considered by the organisation. These factors could then be presented to senior management for future consideration.

Case Study

A case study is an empirical inquiry that investigates a contemporary phenomenon within its real-life context, especially when the boundaries between phenomenon and context are not clearly evident (Yin, 2009).

A case study provides the ethnographic researcher with the opportunity to observe what is being studied and gather a rich insight. The use of case studies provides information on relationships and processes (Oates, 2006). Per Oates, a case study allows researchers to focus on depth rather than breadth of a topic. Focusing on depth provides detail which is not always easily discovered.

Data Collection

Interviews

According to Creswell (2014), semi-structured interviews can be used as a primary source of data collection. The primary purpose of interviews is to uncover and determine the views of the participants. Responses to the interview questions provide context to the research. The guidelines to the discussion which were held during the face-to-face interviews is found in the interview schedule. This method provided indirect information filtered through the views of the interviewees. The interviewer had full control over the line of questioning during this process. All the questions derived from the research data discussed in the literature review.

The data was gathered by interviewing critical stakeholders on the ERP implementation project. All the interviews were recorded with the permission of the interviewees. The case study method is used when dealing with a complex scenario such as the ERP implementation upgrade at ABC

Corporation. A content analysis technique was used to ensure that replicable and valid inferences could be made.

Ethnography

This section introduces ethnography as a concept which was used in this study. Ethnography is about:

telling a credible, rigorous and authentic story, which gives voice to people in their own local context, typically relying on verbatim quotations and thick description (Fetterman, 2010, p.1).

Ethnography allows researchers to observe the actions of stakeholders without participating. The primary data collection methods of ethnography include observation and information conversations with relevant stakeholders (Hammersley & Atkinson, 2007). Ethnography follows a qualitative approach.

Participant Selection

Purposefully selected individuals employed by ABC Corporation were identified in order to gather pertinent data on the ERP implementation, they included:

Name	Title	Department
Charles	Managing Executive – Modernisation Office	Modernisation Office
James	Group IT Director	Group Information Technology
Quinn	Group Chief Technology Officer	Group Information Technology
Robert	Chief Digital Officer	Digital
Luke	Group Risk Officer & Managing Director	Group
William	Chief Operating Officer	Group
Larry	Chief Enterprise Architect – Architecture CoE	Modernisation Office
Sebastian	Group Chief Finance Director	Group

Limitations

This research has been limited to the above participants only.

Ethical Considerations

The author of this research is currently employed by ABC Corporation. The interest in the implementation of the technology was to ensure that ABC Corporation took the most suitable approach in order to avoid failures which may cost a significant amount of time and money.

The respondents were not harmed developmentally in any way. Stress or loss of self-esteem did not occur. There was no intention to deceive or invade the privacy of respondents in any way.

Presentation and Discussion

The responses of the participants have been grouped into themes which were identified in the literature review. The ERP platforms gathering phase includes the short- and long-term insurance platforms as well as the transact web portal and digital systems.

Current system modernisation efforts at ABC Corporation are being led by the Executive Manager of the Modernisation office. His pseudonym, in this case, is Charles. Charles's primary responsibility is to replace all the critical ERP components which are hampering ABC Corporation from delivering the desired business value to the end customers. The Chief Digital Officer, Robert, was also interviewed during the information gathering phase. Robert is accountable for setting the digital vision and driving the digital strategy. From a digital perspective, Robert's primary aim is to enable customer engagement and build core digital capabilities through the new ERP digital platform. Additional emphasis has been placed on the interviews with Charles and Robert as they have taken a lead role in driving ERP package implementation within the organisation.

It is important to note that there is a substantial reliance on the Information Technology team to deliver on the implementation of the ERP platform. As part of the information gathering process, both the IT Director, James and Chief Technology Officer, Quinn, in Group IT were interviewed. Interestingly, very similar results came out of both interviews, even though the sessions were conducted independently.

Sebastian, as the Chief Financial Officer is considering what the impact of the ERP implementation is going to have on the ABC Corporation financial statements and how that impact will be presented to the organisational shareholders.

William is the overall executive sponsor of the ERP implementation. He plays an oversight role on the ERP project and is ultimately accountable for both the modernisation office and Group IT.

General ERP implementation considerations

Based on the in-depth interviews which were conducted with Charles and William, it is safe to say that there are sets of clear modernisation goals in the short, medium and long term. There are various **expected benefits** which are prompting the efforts of the modernisation exercise, they include:

1. Improving the customer experience
2. Overall System Cost Reduction
3. Improving Resource Productivity
4. Enabling System Scalability

The primary benefits identified by Robert and Luke are the new revenues which ABC corporation want to generate through new customers and markets. Other benefits include driving cost efficiencies through automation and cross selling products and services to customers.

James, as the Group IT Director, stated that the benefits which need to be realised are defined in the business case which is currently being drafted. James, in some cases, agreed with Charles in terms of the primary benefits. This includes a lower cost to serve ABC Corporation clients. In addition, James sees more robust systems with easier access to data as significant benefits to the organisation.

When comparing the answers between senior executives at the ABC Corporation, it is clear to see that there are variations between them. In contradiction to the modernisation team, representatives from the Information Technology division are not clear on what all the benefits are. Expected benefits for a project of this magnitude should be clearly communicated and understood by all stakeholders through a business case and/or an ERP strategy. It is evident that this is not the case. The lack of consensus between the executives could have negative implications for the project over the long term. This includes poor communication and possible built-up resistance to change.

Various **success and failure factors** have been considered by the modernisation executive. Top of mind is the enterprise-wide cost of ownership. This concept is important because there must be holistic buy-in into the ERP implementation project. Buy-in must come in the form of the various businesses in the group as well as the Information Technology and Modernisation divisions. Charles said: "*Technology irrespective of what is implemented is solely an enabler and does not drive revenue*".

Support, understanding and collaboration within all stakeholder groups have all been identified by Charles as success factors of the ERP implementation. Everyone should be driving towards the same outcome in order to deliver a successful project. Open and honest communication between stakeholders is another criterion which Charles is expecting. As a final point, Charles expects good governance through the implementation processes. Ganley (2016) suggests that project owners should formally assess the maturity of the organisation by considering characteristics such as collaboration, accountability, engagement risk and reward recognitions. A self-assessment of this nature will identify areas of weakness which need to be addressed. Throughout this section, high levels of variance in answering questions are pointed out. These are predominantly between the Modernisation office and Group IT.

Robert has considered a number of success and failure factors to the digital ERP platform. The primary success factor is leveraging off implementation partners to deliver the expected digital platform value.

Failure factors which have been considered thus far by Charles and his team include the regulation of future business requirements. In order to deliver on a massive implementation such as this, business projects must be prioritised. It is impossible to deliver on all the expected results without pacing the required business deliverables. Changes to the implementation scope have a massive impact on the cost and timelines of the ERP implementation. ABC Corporation has brought in an independent assurance partner to monitor the implementation of the new ERP system. According to Charles, the lack of this oversight could also contribute to the failure of the project.

Specialised assurance partners can conduct in-depth assessments throughout the ERP implementation and can oversee factors such as:

- Vision and Direction
- Governance and Compliance
- Business Acceptance
- Measuring and Monitoring Changes
- Program Execution and Delivery

People capability and resource availability are another two considerations which must be top of mind when delivering the desired ERP implementation.

From a digital perspective, Robert is concerned about not sticking to the original scope of the ERP implementation and straying to new objectives over time. Robert said: “*Building core capabilities can be easily shortcut to meet deadlines*”. This will ultimately dilute the value of the ERP platform in the long run. Another failure factor is preventing the build of core capabilities to meet short term business objectives. Quick digital wins such as a new microsite, must be weighed up against building the enterprise core capabilities. Robert said,” we *must stay true to the goals*”. Slipping on goals will just delay value realisation and ultimately, cost the organisation more.

James has stated that one of the biggest risks to the project are the unknowns at this time. The IT Director believes that there is a significant amount of work that needs to be done in order to identify the gaps that need to be filled. People are critical to Group IT. James is concerned about how to retain staff through this transformation exercise. Additionally, Quinn emphasised that there is a lack of skills in the environment. Integration of the ERP platform into the existing environment is another major risk of failure.

Sebastian, the group CFO, said: “*The market has given us examples of how this kind of project can go wrong*”. In mitigation, much of the pricing risks have been contracted back to the ERP package supplier. Ultimately, this places a lot of pressure on the vendor to deliver, however, the ABC Corporation has brought in an independent assurance provider to monitor the progress of the ERP implementation.

The Chief Operating Officer, William, stated that failure is not an option. He said: "*I don't think the business can survive for another five years more if we fail*"

Although the modernisation office has taken a direction setting role in the ERP implementation, they have a strong dependency on the Information Technology team. Both James and Quinn have highlighted two major problems; staff retention and upskilling. The information Technology team can take solace in the fact that training has been catered for on a conceptual level. Staff retention is another matter altogether. A staff retention strategy should be developed by Group IT in order to handle possible resignations during this period of change. There is also a potential that there may be an increased resistance to change within the organisation. During the conversation with Charles, he made it evident that the ABC Corporation had become set in its ways after many decades of operation. According to Ghosh (2012), employees often view ERP implementation negatively. ERP automates and invariably leads to job losses. While resistance to change is inevitable, it must be dealt with by the ABC Corporation.

Per Charles and Sebastian, **OPTEC and the business strategy** are fully aligned. Although the ERP implementation is in its infancy, the intention is to support the business. OPTEC is fully aligned to support the five-pillar strategy at ABC Corporation.

Robert, head of digital, believes that this is an area of concern. In order to meet the organisational goals in the next five years, ABC Corporation needs to explore further on how to get to where they want to be. Business as usual (BAU) will have a massive impact on the ERP implementation deliverables. Business may not be directly aligned as they have immediate short term targets and pressure to grow revenue. Robert said: "*Business has to stop what they are doing to accommodate the new ERP platforms*."

William believes that there is approximately 75% alignment between OPTEC and the business. Significant progress has been made over the last number of months and the trend is in the right direction.

Once again, there is a level of variance in the answers from the project stakeholders. This level of contradiction should be noted as a risk. If this ERP implementation is to succeed, the business strategy must be fully aligned to the project drivers OPTEC. Although Charles believes that there is alignment, other executives are not convinced. According to Ghosh (2012), there should be commitment from managers. This does not only apply to group executives in the C-Suite but to business managers as well. In this case, it appears that the implementers of the ERP platform need to engage further with the business to quickly ensure that they are on board with the new vision set by the modernisation office.

Charles, William and Sebastian all believe that there is a **common vision** of the implementation within the organisation. However, Charles stated "*we are maturing as a group of companies*." In the past, ABC Corporation was segmented into various business units which operated in isolation. All the business units are aligned and supportive of the journey through which the organisation is going.

Charles communicated that the business owners are ultimately accountable for the successful implementation of the ERP systems. According to Charles, accountability does not ultimately sit with the modernisation division alone.

Robert believes that there is a common vision in the board room, however, there is an area of concern with employees "*in the trenches*". Robert noted "*Group level will still expect revenues targets to be attained"*. This will have an impact on the common vision.

James and Quinn from IT both agree with the business ambition over the next five years. The vision is becoming clearer to the organisation. However, Quinn has highlighted a risk. There is still no certainty on HOW we are going to achieve the common vision.

Accountability in the business is crucial to the ultimate success of the project. This applies to all the relevant stakeholders in the organisation. This includes the Information Technology division. Quinn, the organisation's Chief Technology Officer, a critical member to the implementation of the ERP project, has reservations. This sense of discomfort comes from a lack of communication. Ultimately it is the Technology Office which is accountable for the delivery of the infrastructure and applications. A vision must be complemented by a defined and documented strategy and roadmap. Without a clear roadmap detailing how the organisation is going to get to the future state from the current state, the project implementers may have a difficult time achieving the pre-determined short and medium term goals.

As part of the original business case with the ERP system vendor, the ABC Corporation as a whole was not given full transparency on the **Return on Investment (ROI) and payback periods**. Per Charles, this was not fully communicated because of the perceived sensitivities around the project, such as the impact on staff. As part of the business case analysis, a comparison was done to check what new system would bring in the long term, versus the use and changes which would be required by the legacy systems. According to Charles, a cost specific approach was taken for this ERP implementation. The organisation considered the cost base with efficiencies approach as a set of drivers to the ERP project. The business case was completed prior to the submission to board for approval. What was not included was the optimisation and growth changes which would be realised. These factors have been allocated to a second phase after the approval by board and purchase of the ERP systems. Phase two of the ERP implementation will have the full cost of ownership and return on investment.

From a digital perspective, a full business case has been completed on the ERP digital platform. The typical return on investment has been looked at from a high level. As an example, the digital team looked at other cases around the globe and saw how customers could be retained with improved digital platforms. A second phase has been kicked off after the purchase of the solution. The next phase will take a more granular look at what the impact is going to be on the different lines of business such as the retail and institutional clusters. At this stage, there has not been an in-depth analysis on ROI and payback periods in the digital environment.

James, the Group IT Director, has confirmed that a thorough business case with value realisation was not completed prior to the purchase of the package. He further stated that a requirement for a business case was backed by the group appointed ERP project assurance provider. A business case is being built with the assistance of external consultants. Quinn felt that the original ERP motivation was not detailed enough.

Sebastian, as Chief Financial Officer (CFO), confirmed that although subjective, the original business case came out with very positive numbers. Net Present Value (NPV) numbers that were provided to shareholders have been NPV positive over a ten year period. It is important to note that the quantification of the expected uplift in revenue has been very subjective. The positive NPV also has a dependency on switching off the existing legacy systems.

Once again, there is a high variance in answers. Some executives say there is a business case others say that a business case does not exist or is not detailed enough. The ERP implementation cost constitutes approximately one eighth of ABC Corporations market capitalisation. This cost estimation does not consider project change requests to the ERP platform and unforeseen costs. Unfortunately, return on investment and payback periods are subjective. Executives, such as Quinn, have confirmed that the first business cases are not detailed enough. Net Present Value calculations should be based on some form of demand forecasting directed by a business strategy. A project of this size should have the relevant business case defined without subjectivity prior to the purchase of the platform. In order to avoid a negative NPV, the organisation should prioritise the relevant business case with payback periods and return on investment calculations. There are two very clear risks to the ERP implementation. First, the level of subjectivity which has been accepted in assessing the cost, benefits and payback periods. Second, the NPV calculations have a dependency in de-provisioning the legacy systems which have run the organisation for almost three decades. While there are good intentions, the relevant stakeholders must remember that ERP implementations fail on a regular basis. The dependency on legacy systems may not disappear as soon as they expect, driving the NPV calculations from a positive to negative results.

According to Charles, **realistic timelines** have been set for the implementation of all the ERP systems. This includes short-term insurance, long-term and front-end infrastructure. There are however, several dependencies which need to be fulfilled prior to the realisation of the timelines. This possibly includes hiring another 80 additional staff members in the Information Technology department alone. According to Charles, this can all be done and what is important is to realise that there are two ways in which this implementation can be delivered: insourcing and outsourcing. Both options will be considered in order to meet the relevant timelines.

From a digital perspective, Robert believes that extremely aggressive timelines have been set in order to deliver the new ERP platform. Robert said: "*The timelines are doable but will require* *absolute discipline and there must be no scope creep into the ERP implementation*". IT outages are also a concern and could have a very serious impact on deadlines.

James, the Group IT Director, believes that the timelines which have been set are totally unrealistic. James has justified this by stating that timelines have been set without understanding the amount of work that needs to take place. James said: *"Go live deadlines have already been defined without the gap analysis work being completed".* Quinn, the Group IT CTO agrees, however, he has said that some timelines are achievable.

Sebastian said:" My *confidence on timelines is at 70%*". However, everyone is committed to achieving the timelines which have been set.

William suggested that "*the timelines are tight*" and agreed that the organisation should monitor progress carefully.

Once again, the variance of answers is extremely concerning. Some executives describe times lines as achievable and others as totally unrealistic. According to Ganley (2016), even though organisations have been using ERP technologies for many years, corporates continue to struggle to deliver implementations on time and within budget. The group Chief Operating Officer, as well as the Digital Officer, have not fully bought into the current deadline. Based on the variance of answers between Charles and James, it is clear that there is little consensus on timelines. The fact that deadlines have been defined prior to the gap analysis work being completed should be a red flag to the ABC Corporation. The contradicting views between the critical stakeholders could have additional negative implications for the ERP project. Timelines can become a source of conflict between the Modernisation and Information Technology divisions, polarising these divisions further than what they already are. According to Gosh (2012), missing development and deployment dates constitutes a failure in the ERP implementation. This realisation needs to be addressed with executive management.

Ghosh (2012) also emphasised that it is better to exceed timelines rather than to shorten them. Ghosh noted that 25% of respondents to the ERP survey have cited "realistic implementation expectations" are one of the most important requirements for avoiding failure.

Major Causes of ERP failures

In order to ensure that the ABC Corporation avoids the major causes of ERP failures, the interviewees were asked specifically about the variables highlighted by Ghosh (2012).

Clarity in the ERP functional requirements does not exist holistically throughout the business. Charles explained that a detailed blueprint process to identify functional requirements was initiated prior to the purchase of the ERP package. This process was intended to start gathering functional requirements. A formal Analysis and Design (A&D) phase was entered into after the purchase of the ERP package. The Analysis and Design phase is required in order to detail the requirements further. Charles explained that there was a different level of understanding between the various ERP components (Line of Business, front end systems and digital). "*Each stream has a different outcome*" explained Charles. Streams, such as the short-term insurance, have clear functional requirements, however other streams such as the front end transact systems are not clear. After the completion of the A&D phase, there will be clarity on systems with regards to their functional requirements. It is important to note that the A&D phase will only occur after the purchase of the ERP package.

Robert believes that there is clarity around the digital functional requirements. A lot of time was used to analyse the as-is environment. This time helped build out the required functional requirements. Business analysts were used to drafting functional requirements. This exercise helped build out the digital Minimum Viable Products (MVP). The MVPs ensure that there will be no loss in ERP digital functionality. In addition, the digital team engaged with various business units, including retail and institutional clusters, to build further business requirements.

Within Group IT, both James and Quinn agreed that there had been a lot of work done to clarify the functional requirements of the new ERP platform. This included a full gap analysis between the current and future state. A lot of detail is available around this requirement.

According to Ghosh (2012), desired functionality is not often communicated well by the vendors. This is due to the lack of clarity from a buyer's perspective. There are case studies which show that ERP vendors shoot back at business that do not provide clear functional requirements

(Waste Management vs SAP, 2008). Ghosh (2012) also stated that gathering tools and techniques are not adequately used by the organisation. The primary consequence of not attaining clarity of ERP functional requirements is repeatedly changing goal posts and requirements through the ERP implementation. This shortfall manifests itself in change requests to the ERP vendor. These change requests not only have a significant impact on project implementation costs but also on timelines. With human resources stretched already, these change requests add additional stress to project deliverables. After spending some time with the interviewees, it is clear that there are some variances in the answers regarding clarity of ERP functional requirements. Where Charles, the modernisation lead, states that there is still a way to go, Robert, on the other hand, as digital lead, with a smaller portfolio, has more certainty around the requirement. It is of upmost importance that clarity of functional requirements is attained as soon as possible. It must be noted that there are several negative implications to only performing an Analysis and Design phase after the purchase of the ERP package. There may be additional requirements which are unearthed during this phase which will have a negative impact on timelines, costs and human resources.

According to all the participants, there is 100% **Management Commitment** from senior executives. Charles stated that management commitment is also being driven by the independent assurance provider which places additional emphasis on the requirement on business owners. It must be noted that two months prior to the interview, Charles and his modernisation team were fully accountable for the ERP implementation in every business.

The Digital team believe that there is an absolute commitment from senior management for the digital transformation of the organisation. There is, however, a lack of understanding from a practical perspective. According to Robert, there is going to be more pressure over time to deliver on business requirements while the ERP upgrade is under way. Ghosh (2012) noted that ERP projects without sufficient resources are doomed to failure. The concept of balance between Business as Usual (BAU) and the ERP implementation must be taken into account by the senior executives in order to ensure the success of the project. It is unrealistic to expect BAU to continue without interruptions or delays.

James in Group IT, confirmed that there is full buy-in from a senior management level for the need to transform. James stated that: "*Legacy systems are holding the ABC Corporation back due to a significant amount of under-investment in the past*". The board has acknowledged the current state of IT will not suffice for the future objectives.

It appears that a one-hundred-and-eighty-degree turn has been made by senior executives and the board of the ABC Corporation. There are long-term insurance platforms in the organisation which have been in use with very little modification for just under three decades. The business did not prioritise the modernisation of these systems during this period. There was however, a strong need to "keep the lights on" and ensure these outdated systems operated without failure. The re-emphasis on updating these systems by senior management is welcome by the Information Technology division. Per Ganley (2016), the organisation should attain executive and senior management buy-in. This question has been unanimously answered in a positive manner, with the exception of the digital team. Although there is senior management buy-in, there is a potential for a lack of understanding of the implications of the ERP implementations. This could have a negative implication by expecting the same level of deliverables from the digital and Information Technology teams during the implementation of the ERP system

Charles explained that the level of **training** required by the ABC Corporation staff was significant. Given the complexity of the ERP implementation, the roll-out would affect front, middle and back-end staff. There are a diverse number of skill sets which need to be catered for by the training programme. This includes a range of training from software development by back-end staff to independent financial advisors, sales, call centre agents and new practice management capabilities within the business. As part of the newly established Change Management Centre of Excellence, a significant amount of budget has been allocated towards staff training.

Significant training is also going to be required from a digital perspective. Robert stated that: "*New technologies require new skills*". The training which is going to be needed is absolutely critical to the success of the new ERP implementation. There are also a number of sensitivities around changing staff skills. The ABC Corporation does not have the required internal skill set at this point in time of the implementation. Robert believes that training is not only an IT requirement, but also a business one. This is essentially a change across the value chain of the organisation. Another concern of the digital space is whether enough budget has been allocated to training.

James and Quinn confirmed that from an Information Technology perspective, the level of training is unknown. James has however, acknowledged that there will be a significant amount of training required. This is based on the fact that there are new systems and processes involved in the ERP implementation. Quinn is concerned about retaining staff and developing a roadmap for all the affected employees.

Sebastian, as CFO, has confirmed that there is a significant budget which has been allocated towards training.

Having budget allocated towards training is a good first step however, a detailed plan to ensure that all ERP users are well trained is taking too long to be developed. Staff in the back office are under stress and uncertain about their future due to the introduction of a ERP new system. This can have negative implications on critical staff retention and employee satisfaction. All of the participants highlighted the fact that training is an unknown to a point. Internal skill sets are also of a major concern on all systems. Once the system is in production, mishandling the ERP system can have a significant impact on overall revenues. Employees should also be made aware of the ramification of their actions. Information dissemination is not an adequate training strategy and must not be considered by the ABC corporation.

ERP package selection was primarily conducted out of the modernisation office and the exercise was led by Charles. Over an extended period of time, it became evident to Charles that the line of business systems (Short-term, Long-term and Web platforms) were ready for "sun setting". Both Charles and Sebastian confirmed that as part of the ERP package selection process, a full Request for Purchase process (RFP) was completed. Some of the relevant stakeholders within the OPTEC and modernisation office were involved in discussions with vendors and suppliers. Charles stated: "*Modernisation is about simplification*". Digitising the organisation in order to make the operating model of the group more efficient was a known fact that needed to be addressed. One of the primary drivers in the ERP selection was to find a supplier which would provide an end-to-end service capability. There are very few of those in the financial services sector. This ‘best of breed’ approach was selected in order to reduce complexity and provide functions such as straight through processing within the services environment. The selection of the current ERP vendor was on this premise. In addition, a procurement partner was used to play a validation role to ensure a BEE position was considered in the procurement of the ERP package.

An intense process was followed to select the digital platform as part of the ERP package. The process kicked off with an IT audit, followed by a blueprinting exercise. This process was led by the digital implementation partner which had been contracted to assist the organisation. After the analysis phase, a decision was made to “rip and replace” the existing digital environment. After the strategic decision was made to purchase a new digital front end system, the digital team followed an RFP process to select the digital platform. Vendors were then assessed against a number of criteria until one vendor remained.

The selection of the ERP package was done in isolation from the Information Technology executives. IT has not been exposed to any due diligence or vendor selection processes. James has however, acknowledged that there was IT involvement in the selection of the digital platform. This includes factors such as functional requirements and vendor presence.

On the digital platform, a full RFP was completed before vendor selection.

According to William, a strategic decision was made to select an ERP package which included all the platforms in one. This included short and long-term insurance platforms, Business Intelligence, middleware and the web transact portal. This decision was made in order to minimise the level of integration which would be needed if the organisation went with a more federated approach. Drobik and Rayner (2016) suggest that a key factor in a postmodern approach is the prioritisation by functionality and agility. These two factors should take precedence over single vendor strategies, ease of IT management or other IT-centric needs. As detailed by William, the approach which was taken by the ABC Corporation focused primarily on an all-in-one platform. This approach has many benefits, including contracting ERP implementation risks back to the ERP vendor and minimising integration points. This approach does however have some drawbacks. By selecting a ‘best of breed’ platform for the short- and long-term ERP systems, the ABC corporation may be at risk of not prioritising business functionality and business agility as per Drobik and Rayner (2016). This may have some negative outcomes. Business processes which may have given the ABC Corporation a competitive advantage may no longer exist after the implementation of a new ERP system. This will only be known when the Analysis and Design phase is completed. This is however, a the lack of needed functionality occurring after the implementation.

Hardcastle (2015) states that the fundamental difference in the Postmodern strategy is that business and Information Technology jointly govern the ERP strategy and apply balanced control and decision making. Between the IT Director, James, and Chief Technology Officer, Quinn, there is a significant amount of organisational knowledge. Based on the interviewees' responses, it appears that the Information Technology division was not consulted prior to the ERP package selection. Given that there is a high dependency on IT for successful delivery of the project, this can be seen as a significant risk to the ERP implementation.

Incompatibility with existing business processes has also been considered by the modernisation team. First and foremost, Charles stated that there was very few to no organisational processes that were fully documented that could be used by the ERP selection team. As per Charles, a fully integrated end to business processes is what should be known prior to the package selection. As a solution, additional consultants have been brought on board to detail the organisational capabilities. Data, regulatory overlays, straight through process workflows all need to be considered by the consultants. Charles has stated that there are going to be a number of new business processes, as well as augmented business processes because of the new ERP package. Process and decision modelling will be handled by a new process development Centre of Excellence which will be established before the end of 2017. This new centre of excellence will be designated in the modernisation office. Process re-engineering is contractually obligated with the various business units inside ABC corporation.

According to Robert, the digital team was not constrained by existing business processes. Blue sky approach was taken towards the digital platform. However, the digital team did engage with the business in order to ensure that they understood what their expectations and requirements were from a digital perspective. This ensured that there was not a complete disconnect between the digital team and the business.

Both Quinn and James in Group IT, believe that the incompatibility with existing business processes will be coming out of the current Analysis and Design phase which is currently underway. The required amount of detail has not come out to this point.

The prior analysis of existing business processes by the digital team will certainly assist them in successfully delivering a fit-for-purpose digital platform. Even though the digital executive, Robert, has taken a blue-sky approach, he will make sure that the digital implementation efforts will be compatible with existing business processes. The same may not be said for the short- and long-term insurance systems.

According to Ghosh (2012), misfits with underlying processes can severely affect ERP performance. The lack of documented business processes is a significant risk to the new ERP implementation. Considering that the lead modernisation team has very few business processes to work with, it is assumed that there may be business process gaps which were not identified prior to package selection. It is the hope of the modernisation team that by moving to an industry leading 'best of breed' platform, various business processes will be automated and many efficiencies gained. However, without fully documenting the existing business processes prior to package selection, there is a high element of subjectivity in process incompatibility. It can be assumed that the ABC Corporation will have to change the way it works and deals with customers once the new ERP package is in place. This change could have both positive and negative effects on the end client. Customers which have highly customised experiences with the ABC Corporation may be the first to feel the change of experience with their insurance provider.

According to Charles, **all the costs** that are identified in the literature review, have not yet been catered for. Given the complexity of the organisation, the best efforts were applied to understanding the extent of the cost base. As part of building the business case, basic cost efficiencies and optimisation were considered. The cost of operating in the current environment was also front of mind. With the digitisation which the ERP package brings to the organisation, Charles states the cost of operating will be drastically reduced. The ABC Corporation is currently a very manual business and a very staff heavy organisation. With full digitisation, there may be less of a dependency on people. Although this has not been calculated, the ERP platform in question is currently being used globally by a number of insurers. These insurers perform the same functions with minimal staff. In addition, Charles has stated that with the new ERP platform, non-organic growth costs, such as enterprise acquisitions, costs can be reduced. The current legacy systems would not be able to cater for new acquisitions.

The majority of costs have been considered from a digital perspective. One area of weakness that was identified by Robert was the fact that they have not considered the learning curve performance drop costs which can be expected in any ERP implementation. As an immediate mitigation, the digital team will be leveraging off the implementation partner and slowly transition back to internal resources from an IT perspective. Business considerations have not been accounted for yet.

James and Quinn in Group IT, both believe that the all the costs have not yet been catered for. James believes that certain assumptions have been built into the budget, however he is not fully confident that all relevant costs have been catered for. James said: "*New costs are coming out of the woodwork as we are progressing through this journey."* Quinn is convinced that additional costs will be discovered over the length of the project. According to Quinn, the people costs are the most uncertain in the ERP upgrade.

Sebastian, as CFO, has confirmed that there is a very detailed list of costs. It may however, not cover variables such as learning curve performance drops. The CFO has confirmed that subjective contingencies have been catered for, and he has hedged all the relevant costs.

Cost underestimation in the context of a project of this magnitude could have a significant impact on the organisation's bottom line. The subjectivity identified by the CFO is of concern, both James and Quinn in IT, have also raised concerns about the lack of cost consideration. Having said this, the best effort approach has been followed by the modernisation team. Given their ERP package selection constraints, there was not much else that could be done in the short period of time that they had.

Postmodern ERP considerations

An **ERP Strategy** had not been documented, approved and distributed prior to the package selection, however, Charles did make mention of a legacy modernisation strategy within the group. According to Charles, the previous modernisation strategy was very IT focused and did not tie into the future state of the business vision. The current state of modernisation planning was decided by taking a “10 000ft view” of the organisation and looking at how best to optimise the organisation. According to Charles, optimisation ultimately happens through the integration of services and the enabling of core capabilities, given the desperate nature of ABC Corporation. The modernisation office went through a transformation process without changing any of the existing ERP core operating platforms and found that if the organisation went down that path, they would be left with a hugely complex environment, following a significant investment. It was ultimately decided that this strategy would not provide the desired outcome for the group. The documented ERP strategy has been identified as a deliverable and will be documented within the next phase of the ERP project.

Although the ERP strategy was not documented, the digital environment did have a strategy drafted and approved.

Both Quinn and James in Group IT, have not had sight of the any ERP strategy at ABC Corporation.

William has confirmed that an enterprise wide ERP strategy has not been documented and that there is no plan to complete one in the short term.

Umble and Umble (2002) suggest if your organisation is to reap the benefits of ERP, it must first develop a plan for success. The lack of an enterprise ERP strategy at the ABC Corporation can be seen as one of the greatest risks to the ERP implementation. In order to learn from past organisation ERP implementation failures, the ABC corporation should be developing a postmodern ERP strategy. Developing a ERP strategy will give the organisation an opportunity to view and document its opportunities and risks. Developing a target business model will also enhance the organisation’s capabilities, while making sure that it does not hamper profitable business processes. Establishing accountability and benefits realisation will also go a long way to ensuring successful delivery of future systems implementations.

Drobik and Rayner (2016) outline that due to complexity, many organisations planned their ERP strategies based on what their vendors could provide and when the vendor failed to deliver the needed functionality, the IT organisations lost the ability to meet business needs. Based on the interviews conducted with the relevant stakeholders It appears that this may be the case at ABC Corporation.

Charles has stated that significant **Governance considerations** have been put forward during the modernisation journey. It is important to note that the establishment of the modernisation office occurred when the ABC Corporation board agreed on making the investment on a new ERP platform. This ultimately meant that the modernisation would be establishing competencies which the organisation never had before. This includes everything from enterprise change and process and program management to enterprise architecture. According to Charles, Governance is largely driven by group program management. This is, however, a very immature practice and will be developed over time.

In the digital environment, there are fewer governance requirements other than the short- and long-term insurance platforms. Basic reporting is in place and regulatory as well as other governance requirements will be catered for in the future.

James from Group IT, has confirmed that with the appointment of an independent assurance provider, governance considerations are being taken into account. This only occurred after the purchase of the ERP package. Quinn has had no sight over governance considerations thus far.

Luke, as Chief Risk Officer and Group Managing Director, confirmed that governance considerations have been taken into account. The executives have a reliance on the various committees and the independent assurance partners to ensure that all governance considerations are catered for.

The level of business change will be immense with the ABC Corporation ERP implementation. As such, good governance oversight is essential. Project and organisational governance provide company stakeholders with assurance that project deliverables are being delivered in a responsible manner. The move to appoint an independent assurance provider was driven from the Group Risk office and is intended to provide such assurance. All in all, good governance will improve the likelihood of a successful outcome of the project. Once again, it is noted that there is limited sight of governance efforts by Group IT. The lack of understanding should be addressed,

The group **Enterprise Program Management Office** (EPMO) never existed in its current form. The PMO office was primarily established within Group IT. True enterprise wide program management is key to the ultimate delivery of the new ERP package. Very specific skill is required for program management. This requirement was treated seriously, and there is now a new office in place. New systems to report, manage and track projects are currently being assessed.

It is important to note that Quinn, as the Chief Technology Officer, feels that not enough consideration has been given to the establishment of the project management office. Quinn said: "*The project management around a project of this magnitude is very weak*".

Ganley (2016) suggests that an organisation implementing an ERP solution should build an enthusiastic project team lead by an experienced program manager. By virtue of working in the organisation, the author has identified that a significant effort has been made to establish an enterprise wide project management office. The project management office was transferred from Group IT to the modernisation office. The EPMO has further been bolstered by a number of program managers dedicated to the successful implementation of the ERP platform. Having said this, it is important to note comments by the Group Chief Technology Officer. He has explicitly stated that the project management capability around the ERP implementation is weak. This should be addressed as soon as possible.

The **ERP 'Best of breed' approach** was chosen over the customisable line of business systems because the existing legacy systems were "over-customised" per Charles. The over-customised systems are very expensive to maintain and, according to Charles, do not work inter-dependently. Independently, the existing customisable line of business systems work well, however, straight through processing in an integrated fashion is always a challenge. The existing architecture also does not cater for a single view of the client, nor does it provide a consistent customer experience.

Quinn from Group IT, believes that sufficient attention was not given to the customisable line of business systems prior to the purchase of a new ERP package. Quinn also believes that the selection of the new ERP package was made outside the consideration of the existing environment.

Carefully considering a 'best of breed' approach versus the customisable line of business systems appears to be a controversial topic within the ABC Corporation. It is evident, through the in-depth interviews and discussions, that the Information Technology division believes that some of the customisable lines of business systems should have been considered in more detail. By using the existing customisable systems to perform long-term insurance functions, the ABC Corporation may have been able to save a substantial amount of money. This is however, not true in all cases. The short-term insurance and digital platforms had reached their limitations, according to the platform owners. No additional amount of investment into the existing systems would have made them function at the level which business expected. In these instances, a platform replacement was needed.

According to Charles, the impact of the new ERP package has been considered on the **organisational business model**. The core objectives which the organisation needs to meet over the next five years were of paramount importance. The business model impact has been considered from an organic as well as non-organic (acquisition) growth. The various lines of business have also been considered, namely retail, institutional and emerging markets.

James confirmed that changes to the organisational business model are only being considered at the time of the interview, through the analysis and design process. Quinn said that the impact on the organisational business model had not been considered at all.

A pace layered approach towards the organisational current and future state capabilities is now available. Although this was not completed prior to the package selection, ABC Corporation has made it a priority to enable enterprise architecture services in order to make more informed decisions. The pace layering approach is being led by the Chief Enterprise Architect in the organisation. The Enterprise Architecture team is located within the modernisation office.

Enterprise Change Management capabilities have never existed within the ABC Corporation. According to Charles, until mid-2017, there was absolutely no understanding of the enterprise change management. Charles suggested that change management can be seen as "the fluffy stuff", implying that management had not believed in its importance until now. Motivating for and tying funding back into the KPI of this team has been difficult. With change management now in the group, Charles believes that the organisation is on the right track. Since the level of change management maturity is low in the organisation, external professional services may be considered in the short term to help execute the ERP implementation journey.

The Chief Digital Officer agrees that enterprise change management at ABC Corporation is at a very early stage. Robert described the change capability as poor but expects this to change over time through the new change management centre of excellence.

James and Quinn both agree that the change management capability has been historically weak within the ABC Corporation. Due to the fact that there is only one person appointed to the change team at this stage, change management will have a lot of work ahead as the ERP implementation progresses.

According to Robert, Enterprise Change management is used successfully at many large financial institutions around South Africa. Enterprise change allows organisations to focus on factors other than the project core focus, such as communication with the greater organisation. Cliffe (1999) suggests that companies must involve all employees and unconditionally and completely sell them the concept of ERP for it to be a success. Although the competency is new at the ABC Corporation, it is evident that the executive in charge, Charles, will make a concerted effort to ensure that it is implemented correctly throughout the organisation. He has employed an enterprise change executive and intends on using outsourcing services to quickly deliver on the much-needed enterprise change during this ERP transformation. In contrast, considering the historical enterprise change management capability, there are a number of speculative views on enterprise change. Both Digital and IT divisions, for example, understand the magnitude of the

ERP implementation change and have reservations on whether enough has been done or is going to be done to ensure that the change is successful. It is important to note that all the participants in this research have acknowledged the importance of this new team.

The **level of ERP customisation** which is required to deliver the expected business value is significant. According to Charles and William, the bulk of the system is off the shelf. The system does, however, come with a “blue-sky wish list”. These critical application functions are being used all over the world through the new ERP package. There are however, some levels of customisation which will be considered as part of the deployment process. This customisation includes regulation and taxation within the South African context. Although customisation of the ERP package is not fully catered, the new system is highly configurable. A strategic decision has been made to NOT customise the core functionality of the line of business systems, this includes both short- and long-term insurance platforms. The customer layer will, however, be tweaked from a configurability perspective only.

Charles, the modernisation head, has however mentioned that company culture is a component which needs to be addressed over time. This is a major change for the organisation and people will need to be open to a new way of operating. This in effect, will determine how end users take to the new system without the level of customisation which they are use to.

The customer front end, from a digital perspective, will become highly customised in order to ensure that the customer experience is unique and differentiated. According to Robert, this will occur only with business involvement.

The level of customisation is a concern for Group IT. Quinn and James believe that there is a significant amount of customisation which will be required for the implementation of this new ERP system. Per Quinn, originally the ERP package was scoped to include little to no customisation. This is now changing as the project is progressing.

Ganley (2016) also noted that modifications should be kept to a minimum. A detailed gap analysis on the ERP system should be completed and the business value associated with each gap assessed. Gaps should be prioritised and assessed on how best to close each gap. According to the literature review, the modernisation team is taking the right approach to minimising changes to the system both in core and customer facing capabilities. This does however, contradict the sentiment in the Information Technology division. With their decades worth of industry knowledge, Quinn and James are convinced that a significant amount more of customisation will be required in order to keep the organisation’s competitive edge. The lack of customisation may inevitable lead to the loss of major clients of the organisation and have a negative impact on the ABC Corporation’s balance sheet.

Conclusion and Recommendations

The problem statement outlined the aim which was to evaluate the approach taken towards the Enterprise Resource Platform (ERP) implementation at the ABC Corporation. It was identified through the literature review that there are multiple factors which could cause organisations to fail in such an undertaking (Ghosh, 2012). In addition, Postmodern success factors have been developed over time which organisations can use to develop strategies and plans in order to avoid common mistakes (Hardcastle, 2016).

After a review of the literature, a number of research prompts were developed to assess whether stakeholders at ABC Corporation had considered factors which had caused other organisations to fail their ERP implementations. The research prompts were used as a foundation to assess the ERP implementation. The research followed a qualitative study which included a number of participants.

Content analysis was used to explore the themes necessary to understand the approach which was taken to implement the new ERP platform at the ABC Corporation. The various themes uncovered several disparities between senior stakeholders at the ABC Corporation. This research provides insight into these disparities.

The following recommendations are made, based on the outcomes of the interviews of this research:

- A common vision should be clearly articulated and bought into by all critical stakeholders. This should be driven by senior executives responsible for the project implementation.
- An ERP strategy and roadmap should be documented, approved and distributed in order to set clear direction.
- A Return on Investment and payback periods should be articulated in a business case with minimal subjectivity.
- Cost underestimation can be a significant risk to the project. All costing gaps should be considered urgently in order to avoid over investment into the new ERP platform.
- Clarity on business functional requirements should be attained as soon as possible in order to develop realistic timelines.
- ERP Implementation timelines should be reassessed due to lack of buy in by all critical stakeholders.
- Official communication should be sent to senior management in order to clearly describe the impact the ERP implementation will have on 'Business as Usual'.
- Employee Engagement exercises should be taken on a regular basis through the implementation of the ERP package in order to keep organisational staff informed on the progress of the implementation. Employee engagement exercises will also assist in gauging staff morale and reduce resistance to change around the project.
- A staff retention strategy should be developed by Group IT to handle possible resignations during this period of change.
- The transition of cultural values should be clearly articulated, documented and communicated to staff by the senior executives.
- Selection of the ERP package was done in isolation from the Information Technology executives. This practice goes against a postmodern ERP implementation best practice and can contribute towards project delivery delays. IT executives should be brought up to speed on all decisions made regarding the ERP package.

- The A&D Phases should be made a priority in order to reduce the likelihood of incompatibility with existing business processes.
- The independent assurance provider should be retained until post project implementation.
- Additional emphasis should be placed on bringing the EPMO team activities closer to the Group IT division. These two areas have a high level of reliance on each other.
- A detailed training plan should be developed for all employees at ABC Corporation. This should include business as well as IT staff.
- Enterprise change management competency should be developed as a priority.
- Further academic research is recommended. The ERP implementation has only begun at the ABC Corporation. In order to ensure that the executives are kept informed, additional research should be conducted at the various phases of implementation.

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Appendix A

Interview Schedule

Thank-you for your willingness to participate in this study. My name is Nuno Duarte and as a member of the Wits Business School MBA class of 2016, I am currently busy with my final year research project.

The primary aim of the research is to evaluate the ERP implementation approach of ABC Corporation.

As part of this project, I will be gathering information through a semi-structured interview of which you are part of. This exercise is being undertaken so I can better inform the organisation on the upcoming ERP project. The interview should take approximately 30 minutes.

This is a descriptive study and for scoping purposes the study included the implementation of:

- Short-term Insurance platform
- Long-term Insurance platform
- Transactional web front platform
- Digital front end platform

By definition, ERP platforms are defined as business process management software which allows organisations to use a system of integrated applications to manage the business and automate back office functions, which are related to technology and business services. ERP applications automate and support a range of administrative and operational business processes across multiple industries, including lines of business, customer-facing, administration and the asset management aspects of an enterprise.

Interview Prompts

The interview prompts were categorised into three sections:

- General ERP Implementation
- Causes of ERP failures
- Postmodern ERP implementation considerations

The interview questions were summarised into the tables below as well as the objective of each group of prompts.

Table 3 - Interview Prompts – General Considerations

#	Interview Prompts	Grouping	Objective
1	Describe your role in this ERP implementation.	General ERP Implementation	Identify whether basic considerations have been taken
2	What are the expected benefits from the implementation of a new ERP system?		
3	What are the success or failure factors which you are considering?		
4	Do you think there is alignment between the business strategy and OPTEC, explain why?		
5	Is there a common vision on the ERP implementation in the organisation?		
6	Describe the business unit in which you operate and its function.		
7	What considerations & modelling has been done and what ROI expected, return on capital, payback periods?		
8	Do you believe realistic timelines have been set?		

Table 4- Interview Prompts – Causes of ERP failures

#	Interview Prompts	Grouping	Objective
9	Is there a clarity in terms of functional requirements, please explain your understanding?	Causes of ERP failures	Identify whether critical success factors have been considered
10	Describe the management commitment from senior management?		
11	Describe the level of training which will be required by ABC Corporation staff?		
12	Describe the process which was taken to select the ERP package (Due diligence work done on the vendor, partners, reference sites)?		
13	Describe the considerations which have been taken in order to ensure incompatibility with business processes?		
14	Have ALL costs and budgets been considered and planned for? (a. Planning costs, consulting, Training, Testing, Data conversations, Documentation, replacing staff, learning curve performance drop)		

Table 5- Interview Prompts – Post Modern ERP implementation considerations

#	Interview Prompts	Grouping	Objective
15	Has an ERP strategy been considered prior to the package selection? Has the strategy been documented, approved and distributed?	Postmodern ERP implementation considerations	Identify Postmodern ERP considerations by ABC Corporation
16	Can you describe the critical components in planning to select this package?		
17	Have governance considerations been put forward? (Risk management and mitigation), please explain.		
18	Describe the integration and information management strategies which have been considered thus far.		
19	Describe the plan to build a project management team to lead the implementation		
20	Have the customisable line of business applications been considered versus the best of breed approach? Please explain.		
21	Has the effect of the new system been considered on the organisational business model?		
22	Has a pace layering approach been considered to develop a detailed view of the organisation's capabilities?		
23	What is your opinion on the change management capability at ABC Corporation?		
24	Describe the level of customisation which will be required in order to deliver the expected business value to the business.		