



POLYTECHNIC OF NAMIBIA

HAROLD PUPKEWITZ GRADUATE SCHOOL OF BUSINESS

**An effective implementation of an enterprise resource planning system - The case of
an oracle system at MVAF Namibia**

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Leadership and Change Management in the Harold Pupkewitz Graduate School of
Business at the Polytechnic of Namibia

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DECLARATION

I, Lavinia Kapandu Shikongo, do hereby declare that this is my own work and where work of others has been used, I have duly acknowledged. This Thesis is being submitted in partial fulfilment of a Master's Degree in Leadership and Change Management, at the Polytechnic of Namibia through the Harold Pupkewitz Graduate Business School (HP-GBS), Windhoek, Namibia.

I further declare that this paper has not been submitted before for any degree in any other University.

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LIST OF ABBREVIATIONS AND ACRONYMS

Motor Vehicle Accident Fund	MVAF
Enterprise Resource Planning	ERP
Information Technology	IT
Claims Management System	CMS

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ABSTRACT

Implementing a wide enterprise system results in the organisation's business processes being re-engineered; therefore it requires critical planning and extensive change management for all employees. The Motor Vehicle Accident Fund's (MVAF) Enterprise Resource Planning (ERP), (an ORACLE system) implementation has been one of the highlights in the organisation's history since the organisation has various stand-alone systems, across units within the organisation aimed at yielding the same results. It is against this background that this research involved conducting a study of how the ERP/ORACLE was implemented at MVAF.

A study was made of the change management interventions and the role of leadership at the MVAF. The evaluation includes the role of leadership in leading change, employees' experience and reception of the changing environment. Furthermore it looks at how the organisation managed the change process as well as the effectiveness of the communication, training and support as experienced by employees.

A total of thirty-nine out of seventy employees who were in the employment of the MVAF between 2009 and 2012 participated in this survey. Findings indicated that the MVAF used an effective methodology and process to implement the ERP/ORACLE system and by appointing the project core team consisting of members from every unit, as the custodians of the project implementation, yielded good results for the Fund.

The leaders of the MVA Fund played a pivotal role during the change process and they positively influenced their teams to value the benefits of the new system, they helped and guided those who were resistant to change to accept the new system. Results

indicated that majority of employees took lesser time to learn the functionalities of the new system. Learning the new functions in less time is evidence that employees reacted very positively to the new system and embraced the process which required their involvement throughout the implementation phase, with specific reference to drawing up specifications and user training, hence, an effective implementation. Lastly, the communication, support, training and education rendered through the implementation of the system was very effective and contributed significantly to employees' buy-in into the vision of implementing the new system.

Among the recommendations stemming from this research are: the need for the leaders of the Fund to pay special attention to the soft issues of change management, and encourage the leadership to have a full appreciation of their role in communicating project changes or developments.

CHAPTER 1

1.1 Background Information of the Motor Vehicle Accident Fund

Motor Vehicle Accident Fund (hereafter referred to as MVAF) has a statutory mandate to design, promote and implement crash and injury prevention measures. It was founded to provide support and benefits to all people injured and the dependants of those killed in motor vehicle crashes in accordance with the MVA Fund Act No.10 of 2007.

The establishment of the MVA Fund was born of necessity by the insurance industry's announcement of intended increases of third party premiums by up to 600 per cent. The industry had cited escalating road traffic accidents as the root cause of the intended premium increase, but Government was concerned that the proposed escalations were out of reach for most motorists.

A new set of amendments were adopted in 2001 which reviewed some of the compensation parameters set by the establishing Motor Vehicle Accident Act, 1990 (Act No. 30 of 1990). The upshot was a set of minor limitations on payment in order to ensure the Fund's continued sustainability. The amendments further transformed the then Motor Vehicle Insurance Act, 1972 (Act No. 56 of 1972) to the current Motor Vehicle Accident Act, 2007 (Act 10 of 2007). This change was important in distancing the fund from insurance companies and their infamous reputation for being reluctant to settle claims. MVA Fund is mandated to provide services to people who are injured or the dependants of those who are killed in road accidents in the form of the following benefits:

- General damages (pain and suffering)
- Funeral expenses
- Loss of support

- Loss of earnings

The two Acts; Motor Vehicle Accident Act, Act No. 30 of 1990 and Act No. 4 of 2001 were fundamentally the same as they both stipulated that the Fund's liability be predicated upon the fault of the driver and this meant that as long as there was proof that an accident had occurred and the driver of the vehicle involved was negligent, the MVA Fund was liable to pay compensation. As a result a lot of road crashes victims were not covered hence they ended up being a burden to the government.

The Motor Vehicle Accident Fund Act, 2001 (Act No. 4 of 2001), was however amended by Parliament through the MVA Fund (Act No. 10 of 2007), which is the current governing law and it has enabled the MVA Fund to provide for automatic cover of claimants irrespective of the cause of accident. The amendment was necessitated by the government's desire to provide the Fund's services to as many people as possible. The MVA Fund Act, Act 10 of 2007 has therefore brought about universal coverage to the MVA Fund's claimants. The Fund is mandated to do the following:

- Provide medical treatment to those injured in motor crashes,
- Provide compensation in the form of an Injury Grant, funeral grant, loss of support and loss of earnings benefits
- Promote road safety and accident prevention and to
- Ensure effective emergency transportation and rehabilitation of the injured persons.

The MVA Fund is owned by the Namibian Government and reports directly to the Minister of Works and Transport. The MVA Fund is run by a Board of Directors

which is appointed in terms of the MVA Fund Act, Act 10 of 2007, and it is responsible for approving MVA Fund strategies, annual budgets and any business plans. The Chief Executive Officer is responsible for the day to day running of the organisation's business. The MVA Fund has a staff complement of 130 employees. The Fund's structure is functionally divided in three units; Executive, Operations and Corporate Services. The Executive division deals with Strategy and Communications of the Fund, the Operations division deals with claims management and its related functions while the Corporate Services Division provides support for the management of the organisation.

The Motor Vehicle Accident Fund has a total of one hundred and thirty (130) employees, of which seventy-two (72) are females and fifty-eight (58) are males. Five percent (5%) of the total number rests at the Executive Management level with only one female executive member. Nine percent (9%) constitutes the Senior Management level whilst twelve percent (12%) represents the middle management of the organisation.

Forty-three percent (43%) of the employees have obtained degrees in various fields of study; while forty percent (40%) are in possession of diplomas. In addition thirteen percent (13%) of the employee population have Grade 12 certificates and four percent (4%) have obtained master degrees in different fields of studies.

The MVA Fund implemented its five year (2013 – 2018) Strategic Plan, which is the organisation's second Strategic Plan. It provides a "road map" for the organisation as it seeks to assert its role within the road safety, emergency and rehabilitation, and social security sectors in Namibia. This Plan has focused on the key interventions that the MVA

Fund will undertake to consolidate its presence and its role within the country's social security sectors. The current plan was designed to address the challenges which were unearthed during the implementation of the preceding Strategic Plan (2008-2012) and to unequivocally bring a new focus to the organisation in terms of service delivery.

The strategic plan identified service excellence, providing sustainable rehabilitation to road crash survivors and building capacity into the emergency medical response field as strategic themes.

The plan reflects the scope of the MVA Fund's responsibilities and refocused mandate in the enacted MVA Fund Act, No.10 of 2007. The MVA Fund was faced with many challenges, hence the strategic shift and business strategy re-alignment to cope with new trends and rapid changes in the industry, market development, and growing customer needs.

1.2. Change Management

In Namibia, organisations have to invest a considerable amount of money in modern, effective and efficient Information Systems in order to remain competitive in terms of meeting customers' expectations. Integrated Information Systems are the catalyst to service excellence. Hawkings (2007) argues that Enterprise Resource Planning has become an essential infrastructure for many of the world's leading companies because it provides for an increased level of integration to support core business processes.

According to Jorgensen, Owen, and Neus (2009) research has revealed that the ever increasing turbulence and hostility which characterise the operating environments of public and private sector organisations necessitate far reaching programs of strategic

change. “For many it would seem that the equation of change without progression, improvement and correction, carry with it an implicit devaluing of all that has gone before” (p.50).

In this regard Jorgesen et al. (2009, p.51) made the following statement: “For most organisations, formal change management has not yet permeated business or project operations to a significant degree. Today’s change management, if explicitly performed at all, often occurs in the form of improvised solutions, but a consistent and structured change management approach yielded tangible benefits for most organisations”.

Between 2005 and 2008 respectively, the MVAF had implemented four Information Systems geared towards improving service efficiencies. Until 2011, the MVA Fund’s server was running four major software applications, namely;

- A Claims Management System (CMS) for claims assessment, claims payments and effective rehabilitation,
- A Performance Management System (Vision Active) aimed at managing employee performances, rewards and recognition,
- An Accounts Package, A Complete and Comprehensive Program for Accounting Control (ACCPAC) financial system - its primary purpose was to provide financial accounting functions, including General Ledger, Accounts payable, etc. The package did not provide the required level of functionality as well as integration to other applications, and
- The Sage Group Very Important Person (VIP) package- for payroll and leave management services.

An interview held with the Senior Manager at the Claims Unit revealed that “irrespective of the fact that the deployment of the above mentioned Systems was done successfully, the implementation part of this Enterprise Resource Planning (ERP) with regard to claims and performance management part, failed dismally” (H. Shilongo, personal communication, February, 20, 2013). According to the MVA Fund’s Management, there was “total resistance from employees”, the Systems were not optimally utilised by employees as they resorted to “their old ways” of doing things. As a result, the Systems became dormant and were discarded. In 2009 the MVA Fund resolved to procure another Enterprise wide Integrated Information System – ORACLE in order to address gaps that were uncovered in the review of its (2004-2008) Strategic Plan (MVA Fund Management Report 2009). These were:

- Ineffective information sharing within the various units of the internal value chain
- Rigid and disparate Information Technology (IT) applications
- Insecure claim file handling

As a result of the above issues the MVA Fund was faced with so many challenges which manifested themselves into the following:

- high claim processing turnaround time due to non-streamlined internal business processes
- Inability for management to make accurate and/or timely decisions due to the unreliable business information
- Inability for management and staff to make accurate performance related decisions due to the absence of a performance management system

In light of the decision to implement a new Enterprise Resource Planning, the MVA Fund had the daunting task of ensuring an effective implementation of the new Enterprise Resource Planning- ORACLE. The new system is custom-made for the organisation's unique environment and is viewed as a total solution for the organisation, intended at improving efficiency, effectiveness and productivity levels and ultimately improve customer satisfaction.

Based on the opinions of Jorgesen et al. (2009) on the importance of change management strategies to any organisational change, it can be deduced that the MVA Fund, in implementing its ERP system, should recognize the role and importance of employing formal change management models in order to enact and sustain the implementation successfully.

1.3. DEFINITION OF KEY WORDS

1.3.1. Change Management

Nodler and Tushman (1995) defined "organisational change as an empirical observation of a difference in form, quality, or state over time. Changes within an organisation take place in response to business and economic events and to processes of managerial perception, choice, and actions where managers see events taking place that indicated the need for change. These changes are occurring so fast that people say 'in this rapidly changing world change is the only constant'".

Hiatt (2003)'s definition of change management is: "the application of the set of tools, processes, skills and principles for managing the people side of change to achieve the required outcomes of a change project or initiative."

In adopting Enterprise Resource Planning (ERP), Al-Mashari (2003) identified change management as “activities, processes and methodologies that support employee understanding and organisational shifts during the implementation of ERP systems and reengineering initiatives”. They observed that implementing an ERP system may force the re-engineering of key business processes and/ or development of new processes to support the organisational goals since the ERP imposes its own logic on a company, organisation and culture.

1.3.2. Enterprise Resource Planning implementation

Boykin (2001), Chen (2001) and Yen, Hsiuju and Sheu (2002) defined Enterprise Resource Planning (ERP) system as a “business management system that comprises integrated sets of comprehensive software which can be used and when successfully implemented, used to manage and integrate all the business functions within an organisation. These sets usually include a set of mature business applications and tools for financial and cost accounting, sales and distribution, materials management, human resources, production planning and computer integrated manufacturing, supply chains and customer information”.

Rosemann (1999) defines an ERP system as “customisable”, standard application software which includes integrated business solutions for the core processes (e.g. production planning and control, warehouse management) and the main administrative functions (e.g., accounting, human resource management) of an enterprise. Gable (1998), however, defines it as a comprehensive software package. The solutions seek to integrate the complete range of business processes and functions in order to present a holistic view

of the business from a single IT architecture. The key word in the definition is the issue of integration which is central to ERP and therefore indicates that an ERP system has the potential to integrate processes and functions of an organisation.

According to Al-Mashari (2003a), these packages have the ability to facilitate the flow of information between all supply chain processes (internal and external) in an organisation. Adopting an ERP system is dependent on the industry and size of the organisation. According to a survey cited in Al-Mashari (2001), identified standardisation of processes and systems are the common reasons for implementing an ERP system. Another reason cited was the integration benefits of the system. An ERP allows companies to integrate various departmental activities and it has evolved from a human resource management application to a tool that spans Information Technology management.

For many users, an ERP is a “*do it all*” system that performs everything and they are built around the strong boundaries of specific functions that a specific application is meant to cater for. Gupta (2000) argues that ERP “stops treating these transactions separately as stand-alone activities and considers them to be a part of interlinked processes that make up the business”.

1.4. MVA Fund’s ERP/ORACLE System

ORACLE has become one of the largest software companies in the world. ORACLE’s Annual Report (2002) reported that the ORACLE sales increased from less than \$800 million in 1992 to approximately \$9.4 billion in 2002. ORACLE as with any other ERP packages comes with industry-specific solutions and templates that enhance

the standard system by addressing key issues or business processes within an industry group hence the use of ERP has become a source of competitive advantage.

In light of the challenges that it faced in the past with regard to its non-integrated system, the MVA Fund, with the assistance of external consultants, found a solution which deploys and implements an integrated system, namely, ORACLE which is customised and aligned to the MVA Fund operational and system needs. It has several modules:

- (i) Claims Management- SIEBEL: Automated Crash, Claims and Rehabilitation Management to ensure greater efficiency in claims handling,
- (ii) A Performance Management which is a comprehensive workflow management system.
- (iii) A Financial Management package Electronic Business Suite (EBS) for faster processing of accounts and other payments.
- (iv) A Human Resources and Payroll Management package inclusive of Performance Management, still on a comprehensive EBS Module.
- (v) An interactive Document Storage package which allows for easy scanning and access to electronic documents.

It is therefore the MVA Fund's management hope for the said ERP implementation to succeed in order to realise the return on investment and to reap the benefits of an integrated system.

There is various literature dealing with the subject of ERP and most of the literature presents the benefits and the critical success factors of the ERP projects.

Davenport (1998) pointed out that it is worth noting that the success factors were identified only in few firms that successfully implemented an ERP system in the 1990s. Interestingly, Davenport (1998) has identified change management as one of the critical success factors.

In Chapter Two, issues will be discussed that could influence the success and failure of the ERP projects. Markus, Sarker, and Sarker (2000) and Rossemann (1999) cautioned that major problems in most implementations can arise from the social or cultural barriers and user resistance especially where significant levels of integration and coordination are required among business strategies, software configuration, technical platform and management execution.

1.5. Research Problem

Due to the forces of technology affecting the world, most organisations are constantly in search of ways to achieve better business performance and sustain competitive advantages through effective information system for the deployment of their resources and business processes. Information Technology project failures are often attributed to poor project management practices and change management. Change management has been identified as a critical resource within organisations and therefore management can be a contributor to project success.

Stratman (2005) argued that companies come to reach a decision to implement ERP solutions for different reasons:

- (i) The need to improve the performance of current operations,
- (ii) The need to integrate data and systems, and

(iii) The need to prevent a competitive disadvantage or a business risk from becoming critical.

This research centres its focus on the uncertainties of how to form a framework for the successful implementation of an ERP project.

It is important to know why most ERP implementation fails, if there are maps to managing change in place. Michael (2007) pointed out that most change initiatives fail because management may not be engaging employees in the process towards change and do not allow sufficient time for change to set. He further emphasised that it is important to implement change in a series of phases that will engage employees and to allow sufficient length of time for each phase to become institutionalised within the organisation. “The leader must work at getting large numbers of people in the organisation involved in the process, to avoid cynicism and strong resistance from key constituents, which is a sure-fire route to failure (Michael, 2007).

McHugh (1997) further contributed to the argument of Michael (2007) by suggesting that “ignoring employee needs constitutes a serious mistake and the organisation may not perform at optimal levels, if employees are neglected in the planning and implementation of organisational change, it is likely that the entire process will be extremely stressful for individuals, the adverse effects of which will manifest themselves in a variety of ways which are costly to the organisation” (p. 344).

Drawing from McHugh (1997) and Michael (2007), it can be interpreted that, whilst programs of change may hold the key to organisational survival and success, management within organisations should not only focus on the needs of the organisation but also looking at the needs of employees, otherwise they may not accept changes. There

has to be a formal change management process to address issues of perceptions, fears, attitudes and resistance towards change or the new system, to eliminate the chances of negative perceptions towards the transformation. Most importantly, the organisation's leadership, climate and environment has to be right for the employees to gain a deeper understanding of the critical step and to digest the new vision and so be empowered to drive the process.

1.6. Aims and objectives of the study

The aim of the study is to establish the impact of change management on the successful implementation of the Enterprise Resource Planning (ERP) and to recommend actions that the MVA Fund in particular and other Namibian companies can adopt to successfully implement ERP projects in the future.

The objectives of this study are:

- (a) To identify the change management process used to implement an ERP project at the MVA Fund and assess its effectiveness.
- (b) To examine the role of communication, training and support in ensuring effective ERP implementation.
- (c) To ascertain whether the MVA Fund employed change management strategies in implementing its ERP project.
- (d) To identify employees' understanding of the benefits and challenges of implementing an ERP.

After the study, the findings will be used to formulate practical recommendations for the successful implementation of ERP projects in other organisations to be used as a

benchmark and to recommend actions that the MVA Fund must adopt in future to improve on when implementing ERP projects.

The implementation of the ORACLE system at the MVA Fund will be used as a case study to explore the processes followed and the impact of change management interventions, if they were present, during the implementation of the new system.

1.7. Main research question

The study will seek to identify the factors that need to be considered by focusing on effective change management processes useful in implementing an ERP system successfully.

The following main research questions will be answered:

1.7.1. How effective are change management strategies as applied in the MVAF in implementing an ERP system?

1.7.2. Research sub-questions

The following research sub-questions will be answered:

- (a) What is the importance and impact of change management in the implementation of an ERP system in the MVA Fund?*
- (b) What are the benefits and challenges experienced during the implementation of the ERP system in the MVA Fund?*
- (c) What is the role of leadership in ensuring effective implementation of an ERP system?*

1.8. Significance of the study

ERP implementation involves significant changes across the organisation in the areas of business structure, culture, information strategy and information system strategy. The significance of the study is to contribute to a general view of how to form a framework for implementing and managing a successful ERP project designed to be used by employees within an organisation.

The study will guide the MVA Fund and other Namibian companies to create environments of commitment to underpin the change process by making change management strategies a truly management endeavour when implementing ERP projects, because neither the sheer force of executive nor the organisation's processes will be substantial enough to implement change.

From a theoretical perspective, this study may potentially advance research in both the ERP project implementation and change management areas because it addresses and discusses present issues pertinent in this area in times of an organisation's transformation and or ERP project implementation. It should assist managers in any organisations to effectively implement change initiatives, by applying a multi-step process to guide, engage, empower, enlist and motivate all employees during organisational change at a rate at which it can thrive.

At a personal level, the study will further broaden the researcher's understanding on practical issues of ERP implementation, develop skills and equip the researcher with a powerful understanding on the appropriateness and effectiveness of change management strategies for purposes of Information System implementation.

1.9. Limitations

This study is limited to MAAF Namibia. By limiting the subject area, there is a better chance of conducting focused research which it is hoped will elicit tangible outcomes. It should also give direction with regard to recommending practical strategies for MAAF's Senior Management to harmonise leadership with change management interventions thus increasing or improving the success of implementing its ERP projects in future.

1.10. Outline of the research

This research is divided into five main parts. The topic is introduced in Chapter One which covers the background of the MVA Fund, definition of key word and the research problems. The aims and objectives of the research as well as the research questions are also presented in this chapter.

In the second chapter, the existing literature on the subject is reviewed. Existing theories about change management in general as well as theories within ERP systems are discussed in order to gain an understanding of what differentiates them from other business projects. The most common reasons for implementing the ERP systems are also reviewed, as well as the strategies and tools that could be used to manage the implementation of the projects. The third chapter presents the methodology used to carry out this research. Data gathering and analysis are also found in this chapter. Chapter four deals with data analysis and the final chapter discusses the findings and proposes recommendations.

CHAPTER 2 LITERATURE REVIEW

Chapter one has provided an orientation and background to a number of issues relevant to this research. In this chapter these issues will be interrogated in order to further unravel the underlying complexity of the research issues and at the same time establish a meaningful business case for this study.

The study will be guided by various change models and the ERP implementation framework as presented later in this chapter. According to Garvin and Roberto (2005), in their research of organisational transformation into various multinational corporations, government agencies, non-profit organisation and high performing teams; “what makes change to stick, is the leader’s ability to design and rollout an effective persuasion campaign, weeks and months ahead of the implementation plan”. Hence, it can be concluded that managers need to prepare significantly and present something challenging to employees who will actually make them listen to touch messages, question old assumptions and consider adopting new ways of thinking. The last part of the chapter reviews the literature in the fields of change management, ERP implementation as well as the benefits and challenges associated with the ERP implementation process. The chapter reviews the various theories of change as well as the inhibitors of ERP implementation and why people may resist change and finally, communication, training and education as an enabler in ERP implementation.

2.1. Introduction

ERP systems seem to have taken the world by storm and therefore more and more organisations are implementing ERP systems to improve their competitive advantage. Management of these projects and how they affect people within organisations has become very important. Strong emphasis is put on the “soft side” of projects i.e. the human factor and the problems that are commonly faced in implementing these systems.

For this study, the existing literature on change management and ERP implementation is reviewed in order to gain an insight into the impact of change management on implementing an ERP project from diverse view-points. Jorgesen et al. (2009, p.38) stated that “for most organisations, formal change management has not yet permeated business or project operations to a significant degree. Today’s change management, if explicitly performed at all, often occurs in the form of improvised solutions, but a consistent and structured change management approach yielded tangible benefits for most organisations”.

Studies have illustrated that an ERP system is not just a pure software package to be tailored to an organisation, but an organisational infrastructure that affects how people work and that it “imposes its own logic on a company’s strategy, organisation, and culture” as stated by (Davenport,1998, and Lee and Lee, 2004).

The ORACLE system at MVA Fund is an excellent example of a wide scale change since it involves a very large group of people within the organisation, and it virtually affects all employees, hence change management was chosen as an issue in dealing with the ERP system. Managing the implementation of ERP systems has been a widely researched topic for many years and many studies, including the work of

Davenport (1998), Lee and Lee (2004) revealed that the implementation of such a system is highly complex.

2.2. Change management and ERP

When studying literature relating to the introduction of change in organisations, it can be seen that change management refers to all activities associated with the interaction between processes and people. Communication is essential throughout the project and as such it is the highest and the first priority for every organisational change. People respond to change more positively when they have an understanding of its purpose and consequences (Williams & Williams, 2007). ERP implementation therefore requires a massive change to the organisational structure and affects the way people used to do their work and their interaction hence it is necessary that there has to be a strategy, methodology as well as the processes of implementation (Al-Mashari & Zairi, 2003).

2.3. Impact of Change

Senge (1990, p.102) argued that *“failure to sustain change recurs again and again, despite substantial resources committed to the change effort, many of which are bankrolled by top management, talented and committed people driving the change, and high stakes. Executives feeling urgency for change are right; however, organisations that fail to sustain significant change end up facing crises. By then, their options are greatly reduced and even after heroic effort they often decline”*. Senge’s (1990) argument is in correlation with Kotter’s (1995) approach to change management. Kotter (1995) emphasised that if managers fail to create a sense of urgency about the need for change and follow through the steps, the change might fail. Schiavone (2012) observed that

change management often neglects the “people” aspect of change and this affects the ability to change.

Aloini, Bozarth and Van de ven (2007) agreed with Schiavone (2012) and advised that underestimating the effort involved in change management may result in project failure. In addition to that, conflict arising due to the differing needs of stakeholders in the project also needs to be addressed as and when it arises rather than in a collective way. It is therefore critical that the congruence between ERP systems and organisational culture is the prerequisite to successful ERP implementation as stated by (Hong and Kim, 2002, Gallagher and Gallagher, 2012).

Hong and Kim (2002) further argued that change can be uncomfortable, unsettling, intimidating and sometimes downright frightening. Depending on the individual, change in the workplace can also be challenging, such as when job functions are changed, departments are re-organized or a new manager takes over.

According to Pansiri (2005) adaptation to change has predictable psychological stages that resemble the grieving process and describe normal reactions to change. The article observed that organisations need to understand and be aware of these stages which are; shock, defensive retreat, acknowledgement, acceptance and adaptation, in order to help employees deal with change. It is further argued that it has to be acknowledged that people go through each stage at their own individual pace and it is important for employees’ needs to be supported throughout the change process to assist them to adapt to change, by controlling and effecting change through a supportive work environment.

On the importance of communication, Kotter (1995) argued that communication is important to assist employees to move through stages so that they understand the

benefits of the change for the organisation and particularly what's in it for them as individuals.

Change management entails thoughtful planning and sensitive implementation, and above all, consultation with, and involvement of, all the people affected by the changes. The role of executive and management team (leadership) is to show staff the reasons for change and the benefits associated with it.

Garvin and Roberto (2005) focused on the importance of the transition state through which the organisation must navigate in order to evolve from its current state to its desired state. Managing change has been the most desirable management skill since the 1990's. Millis and Merken (2008), maintained that organisations can successfully manage change if they support employees in relation to their day to day activities within the organisation. Employees need to be supported throughout the change process to assist them to adapt to change, controlling and effecting change through a supportive work environment with their leadership. Millis and Merken (2008) stressed that it is therefore critical for the leadership of any organisation to ensure that employees need to be taken step by step through the change process. They further argue that the leadership also has the responsibility to facilitate and enable change and to help employees to understand the reasons, aims and ways of responding positively according to employee's own situation and capabilities.

2.4. Challenges of implementing ERP

Many researchers have tried to identify the factors leading to the successful implementation of ERP. In recent surveys carried out by several researchers, as cited in the work of Al-Mashari, Zairi and Okazawa (2006); Kumar, Maheshwari and Kumar

(2002); Kim et al (2005); Nah, Lau and Kuang (2001), (2004) and Zhang, Lee and Zhang (2007), it was reported that up to seventy-five (75%) of organisational change efforts do not yield the promised results “*the change efforts fail to produce what had been hoped for and yet always produce a stream of unintended and unhelpful consequences. These authors consider several factors, including organisational, user, and technical or cultural factors. They argued that the main challenge of implementations of ERP is to manage the elements of change in the organisation so that the intended, desired changes are implemented successfully and the unintended surprises that could lead to failures are avoided*”.

There is still no simplified model to be used for the successful implementation of ERP projects. This is mainly because it deals with issues relating to employees within an organisation and its impact on the employees which differ from one organisation to the other. Umble and Umble (2003), listed three main factors that can be held responsible for the failure of an ERP system as:

- ✓ Poor planning or poor management;
- ✓ Change in business goals during the project; and
- ✓ Lack of business management support.

Various authors cited the following factors as main challenges in implementing ERP projects:

2.4.1. Cultural issues

Markus et al. (2000) and Ross (1999) point out that the implementation of the ERP often has a huge impact on the people through the standardisation of processes and

usually involves a large cultural change. It often acts against the existing culture and ultimately may result in change of responsibilities, roles and work routines. One of the basic problems is related to the adoption of new strategies with the older format of work culture which could lead to resistance to change and a lack of acceptance to the new system. It can be argued that change management requires a plan for managing resistance to change. Implementation of an ERP could also result in user resistance especially where there is insufficient understanding of the need to change among the employees.

2.4.2. Software configuration

According to Dimitrios, Charalampos and Dimitrios (2010) another possible setback associated with the ERP implementation is the software configuration and the ability to integrate with other systems. This means that components of the system which are often referred to as modules and their parameters are chosen and are set up accordingly. An ERP system integration may be lost if departments within an organisation are allowed to use different systems.

2.4.3 Software integration

Dimitrios et al. (2010) state that another challenge could be that not all ERP packages are designed according to what the organisation needs. Hence, the organisation would be forced to change its processes to suit the package or change the package to suit its needs which may ultimately increase costs and time of implementation, maintenance. Overall the support becomes costly.

2.4.4 User resistance

Dimitrios et al. (2010) further argued that ERP projects are known to require extensive resources in managing them and such resources are frequently not managed effectively. In addition to that, many ERP failures were often due to the negligence of tacit factors such as user resistance and social issues. Robbins (2004) argued that one of the most well documented findings from studies of individuals and organisational behaviour is that both organisations and their members resist change.

Most of the authors who have contributed to organisational change literature have placed more emphasis on the importance of human factors to the success of organisational change. Millis & Merken (2008) identified three reasons for resistance to change, namely:

- Technical barriers: habit and inertia
- Political reasons: threat to coalitions which may signal leadership problems and
- Cultural reasons: lack of a climate support of change, regressing to old ways of operations

Whilst there is recognition of the need to change, human beings have a natural resistance to change and the acknowledgement of the most difficult aspect of change i.e. people factor is believed to be one of the success factors.

Umble and Umble (2003), realised that although there are many factors that influence the success of the ERP project environment, change management has been identified as one of the critical success factors even though implementing a change management process seems to be a challenge for most business entities as it is often the most neglected or has least effort put into it.

Improvement strategies, such as ERP implementation involve change hence the responsiveness to internal customers is critical for an organisation to avoid the difficulties associated with this change as stated by (Al-Mashari and Zairi (2000a), and Aladwani 2001). Lee and Lee (2004) submitted that the implementation of the ERP usually leads to significant changes in an organisation and expected returns cannot be realised from their ERP investments unless these changes are managed effectively. It is therefore critical to examine the general impact of change in an organisation and then examine its impact on the ERP implementation.

Millis and Merken (2008) explained that to reduce resistance, future new users of a system must be involved in the early phases of the project in order to create a sense of ownership and commitment to the project. The involvement of future users in the early phases of the project, has advantages because it defines the starting point to address uncertainty and insecurity in an organisation because of the possible need to comply with new performance standards brought about by the change. From the individual perspective, their response to the change is critical for an organisation to avoid difficulties associated with this change (Al Mashari and Zairi, 2000a; Aladwani, 2001). It follows, therefore that the introduction of any change will require a strategy on how to include all employees and communicate to them the need to change as well as the benefits associated with it in order to effectively realise it.

Lee and Lee (2004) highlighted that many ERP implementations have been considered as significant failures. They cited the following companies as examples of ERP projects failures and among them they included:

- *Avis Europe Limited*' which ended up abandoning its ERP implementation project in 2004 (at a cost of \$54.5 million)
- *Ford Motors*' ERP purchasing system which was also abandoned in 2004, (after spending approximately \$200 million)
- *FoxMeyer Drugs* failed ERP implementation in 1995 which was believed to have led to the collapse of the pharmaceutical giant
- *Levi Strauss & Company (2008)*: after the system went live the company's shipping was halted for one week and the problems that arose related to the SAP system integration issues. Levi Strauss worked through challenges and resolved the implementation issues and the system started running smoothly.
- *Chevron Corporation*: experienced a drop in purchase cost by 15% with the hopes for a further 10% (Technology Strategies 1998).

Lessons can be drawn from the ERP implementation failures of these companies.

Many ERP projects end up not achieving the set goals that they were introduced for or even fail dismally. These failures are attributable to a variety of reasons; it is surprising that even though these factors have been identified and documented, most of the organisations implementing ERP systems are still experiencing the same or similar problems. The most common reasons will be discussed in order to illustrate the importance of change management in solving the problematic situations related to ERP projects.

The area of change management has been commented on by McAdam and Galloway (2007), Yusuf, Gunasekaran, and Althorpe (2004), Hong and Kim (2007), Al-Mashari (2003), Worley, Sambamurthy and Kirsch (2005), Huang, Thong and Chen

(2004), Aloini et al. (2007) and Shin (2008) who are in agreement that lack of change management is one of the major causes of ERP implementation failures. McAdam and Galloway (2007) observed that change management was one of the major causes of implementation failures. Lee and Lee (2004) submitted that it is essential to manage successful ERP implementations as a program of wide-ranging organisational change initiatives rather than as a software installation effort. The authors argued that this approach involves intertwining technology, task, people, structure and culture which results in a transparent implementation process. It also enables the easy identification, avoidance and mitigation of risks. In addition to the aforementioned, other areas are addressed as part of the implementation hence resistance to change is reduced and in some cases is eliminated.

Hong and Kim (2007) identified organisational resistance to change as a critical success factor to an ERP project while McAdam and Galloway (2007) submitted that cultural readiness for an ERP implementation must be carefully planned. Aloini et al. (2007) advised that the underestimation of the effort involved in change management may also result in project failure.

Additionally, Hong and Kim (2007) and Markus and Tanis (2000) are in agreement that conflicts arising due to the differing needs of stakeholders must be addressed as and when it arises rather than in a collective manner. The authors emphasise the congruence between ERP systems and organisational culture as a prerequisite to successful ERP implementation.

Al-Mashari (2003) and Shin (2008) have both identified several common problems associated with ERP implementation. Among these are:

(i) **Resistance to change:** factors such as; top management support, assignment of the best people to implementation teams, and strong involvement of people from the field are important in reducing the resistance to changes involved in ERP implementation.

(ii) **Unplanned cost** associated with new requirements emerging after the freezing stage.

(iii) **End- users' poor training:** it becomes problematic for end-users when the system is "up and running" and they do not know how to use it and/or maintain it continually.

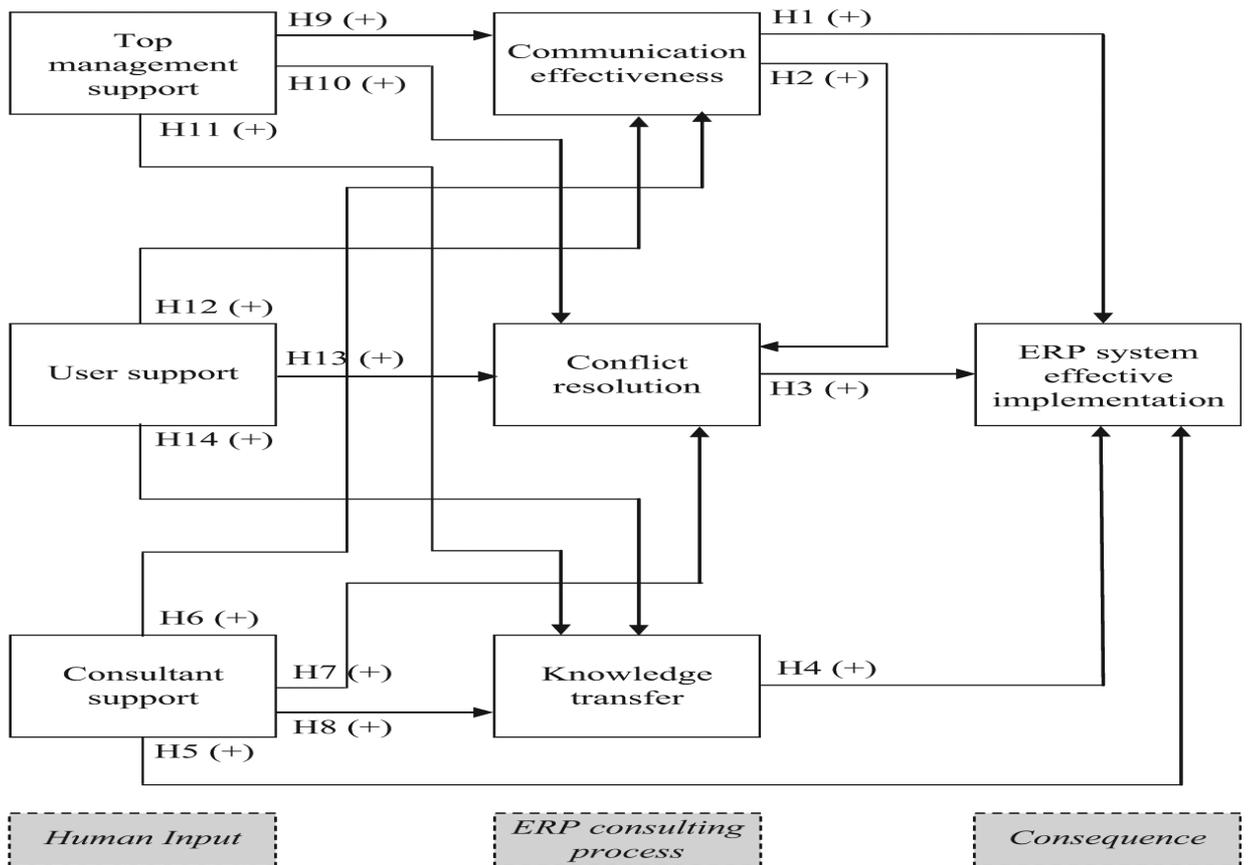
Koh, Nah, Lau and Kuang (2006) have illustrated the above facts amongst other arguments, by conducting a case study on six manufacturing companies of different sizes. The authors reported that human factors constituted a major problem especially for small- and medium-sized companies. Their findings highlighted the fact that many employees were not trained to use the systems and many were unfamiliar with computers and as a result a number of issues arose. Erroneous data input, poor use of the systems, increasing costs of training services offered by the vendors, employee resistance to integration of the ERP system into the business process and the need to hire information technology personnel all contributed to the difficulties of implementation.

Although an extensive training and education is considered as a critical success factor by most authors, Worley, Sambamurthy and Kirsch (2005), stated that the adoption of the system after it is implemented does not only depend on training. They argued that it also requires how the information system and the users will be mutually adapted to each other in terms of the level of the position of a person within the company and of his knowledge and competency. Worley et al. (2005), further arrived at this inference after conducting a university case study where PeopleSoft was implemented. The essence of the case study was to illustrate how ERP is optimised by adapting business processes to

human factors by explicitly taking into account, the role, competence and knowledge of human resources.

2.5. ERP implementation process model

Figure 1: ERP Implementation Framework



Source: Adapted from “Factors affecting ERP system implementation and effectiveness”, Dimitrios et al. (2010, p.12).

ERP system acquisition and implementation generally enhance productivity and working quality, since the system offers standardisation and simplification in multiple, complicated operational procedures across the company (Dimitrios et al., 2010).

Moreover, information can easily be transferred, shared and exchanged among users who are working in different business divisions (Amoako-Gyampah, 2007; Kemp and Low, 2008). In general, the literature has identified the following potential benefits of ERP system implementation (Al-Mashari et al., 2003; Amoako-Gyampah, 2007; Chang, 2004; King, 2005; Scott and Kaindl, 2000; Umble and Umble, 2003):

- ✓ improved coordination across functional departments;
- ✓ increased efficiency in doing business;
- ✓ reduced operating costs (lower inventory control cost, lower production costs, lower marketing costs, lower help desk support costs);
- ✓ facilitation of day-to-day management;
- ✓ rapid access to information for decision making and managerial control; and
- ✓ Support of strategic planning (through the planning of available resources).

Despite the attributes and major advantages provided by ERP systems, the implementation of such systems is not always effective. Most enterprises are not able to fully justify their investments in ERP software, since the bulk of ERP benefits remain hidden. In their survey, Marnewick and Labuschagne (2006) reported that 25 percent of ERP installations exceed the initial cost and about 20 percent cannot be completed.

Moreover, ERP systems often fail to meet organisational goals soon after their implementation. The cause of the general disappointment regarding ERP system effectiveness lies in a number of reasons, including a failure to properly enact change management strategies in rolling out the implementation (Bradford & Florin, 2003; Hong & Kim, 2007; Marnewick & Labuschagne, 2006).

More analytically, the proposed “ERP implementation process model” investigates whether external and internal human inputs affect the consulting implementation process related to effective communication, conflict resolution and knowledge transfer and whether these factors lead to the effective implementation of an ERP system. Such an integrative approach has never been attempted in the literature before and is expected to yield significant findings for companies that are about to adopt ERP systems. In general, it is argued that the proposed conceptual framework adopts a holistic approach to an ERP system implementation, sheds light in areas rarely investigated and leads to interesting practical implications.

2.6. Change management strategies and processes

Within the literature on change management, there is no prescribed standard for creating a change management strategy that can apply to all firms. Hughes (2007) argues that often, these change management strategies, tools and processes terms are used interchangeably.

However, the most relevant issue is not what the tool is called but the importance of knowing its strengths and weaknesses; if it can be used effectively, then it is the best tool for the job. Adapting tools to fit the organisation is of equal importance.

Sherwin (2009) identified that the Strengths, Weakness, Opportunities and Threats (SWOT) analysis is one of the tools that can be used in change management. This tool is used to evaluate weaknesses, strengths, opportunities and threats which include the environmental factors such as the magnitude, duration and the importance of change as well as the organisational size, its culture and the make-up (i.e. gender, age group, educational background of the employees) of the organisation. The author argued that

evaluating these factors will go a long way in determining the change management framework of the any organisation. When implementing ERP systems, it is important to adopt appropriate and effective change management interventions.

The fact that there may be many different conceptual models of change process that could be useful in understanding the dynamics of change and how they can be approached, has been considered and the following models or approaches will be discussed. These frameworks will be used to provide useful perspectives on the nature of organisational change, ways to approach change that works and pointers to where the pitfalls, if there are any, may lay.

- i. Prosci (2002) Change Model
- ii. John Kotter's (1995, 1996) eight-steps approach
- iii. Price & Chahal (2005) six- steps framework
- iv. Doppelt's (2003) "Wheels of Change"

2.6.1. Prosci's ADKAR Change Model

Prosci (2002) developed a system called the Awareness Desire Knowledge Ability and Reinforcement Model (ADKAR). The ADKAR model proposes that employees must go through five stages in order to change. The model examines the inclination of the employees at each step and enables managers to develop a plan in order to induce willingness to accept the change. The figure below is an illustration of the five key phases that form the basis of the ADKAR Model and management activities that can be undertaken to enable employees to move from one phase to another.

Table 1: ADKAR model

Stages	Enablers
<i>Awareness for the need of Change</i>	<i>Management communications Ready-Access to information</i>
<i>Desire to participate and support the change</i>	<i>Discontent with current state Career advancement Trust and respect for leadership Hope in future state</i>
<i>Knowledge on how to change</i>	<i>Training and education Information access</i>
<i>Ability to implement required skills and behaviours</i>	<i>Practice applying new skills or new processes and tools Coaching Mentoring Removal of barriers</i>
<i>Reinforcement to sustain the change</i>	<i>Incentives and rewards Compensation changes Celebrations Personal recognition</i>

Source: Adapted from the ADKAR: A Model for change in Business. (Hiatt, 2006, p.67)

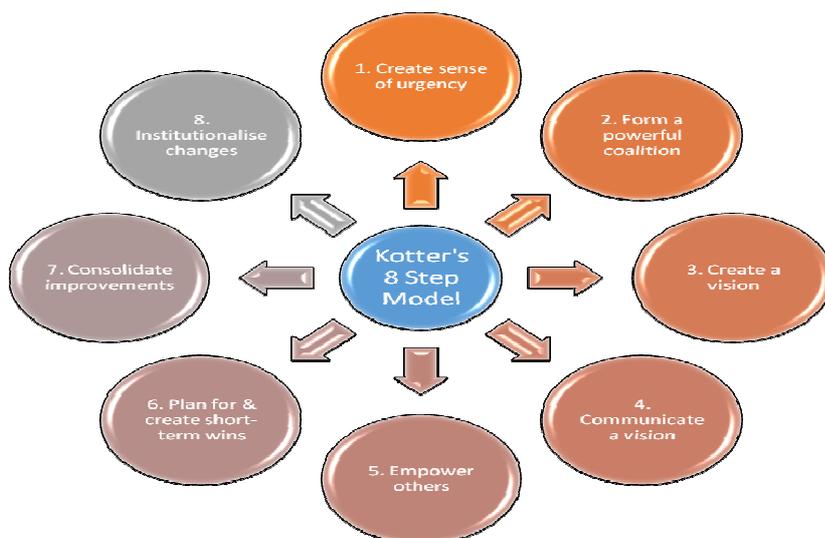
The ADKAR model is founded on two basic principles: one, successful change occurs when individuals have also changed and two; that it happens to an organisation and its people. Therefore organisational change can only happen when the employees themselves have accepted the change by going through the ADKAR stages. It can be seen that communication plays a large role in the five stages, as clearly outlined in the table. Communication plays a major role in change management in order to inform employees on how the change will take place. If there will be any specialised training or skills that might be required it must be provided prior to implementing the change. Once the change is implemented, it is important that communication is sustained.

The ADKAR model focuses more on the individual change and can be used as a checklist because the individual forms part of the organisation which can also be affected by the complexity and the priority of change. In reviewing the ADKAR model, it was noted that this model fails to take into account the fact that the process should encompass change and transition, as argued by (Bridges, 2003).

2.6.2. Kotter's eight's step change model

Kotter (1995, 1996) argued that organisational change is not an easy task hence it needs careful planning, motivation and professional execution. He maintains that transformation is a process, not an event and it advances through stages that build on each other and also require a considerable length of time. He maintained the need to recognise the importance of stages and their sequence in order to look out for and correct the pitfalls that accompany each of these stages of change. Below is a graphical presentation of Kotter's 8 steps Change Model:

Figure 2: Kotter's Eight Steps Model



Source: Adapted from *The Heart of Change*. Kotter and Cohen (2002, p. 77).

Kotter and Cohen (2002) argued that the above steps need to be considered before implementing any change in an organisation. They also argued that the human side of change should be taken into account and that change begins from top to the bottom. They also maintained that it is necessary to create a sense of ownership spirit within employees, and it is necessary to address and adopt the relevant culture.

The main weaknesses with the Kotter's Model are that the steps have to be followed sequentially and that no stage can be skipped because it will create further challenges. It may also prove difficult to change the direction once the process has started. The model can also lead to deep frustrations among employees if the stages of grief and individual needs are not taken into consideration. The Kotter's model is almost similar to the views of Price and Chahal (2006) framework which was developed as a strategy for change management based on literature review, case studies, interviews, and their personal experience.

2.6.3 Price & Chahal's six steps framework

The Price and Chahal (2006) framework has six steps, however, it does not provide specific tools for managing change but rather gives a good outline for managing the overall process.

(1) Prepare the organisation: this step includes communicating the forth-coming change to the organisation and listening to the workforce and their concerns. It is believed that paying attention to the workforce demonstrates a respect that can be used during and after the implementation of the project.

(2) *Develop the vision and implementation plan:* the feedback from the previous stage has to be analysed first, a project team formed and a change vision to be created.

(3) *Check or review:* at this stage plans and feedback from the previous stages are reviewed and time taken to check that everyone is “*on board*”. This is normally done before the implementation of the project.

(4) *Communicate and build workforce engagement:* the primary reason for this step is to ensure that everyone has an understanding of the effects the change has on each employee within the organisation.

(5) *Implement:* the actual implementation of the project where users are constantly involved to eliminate issues of resistance.

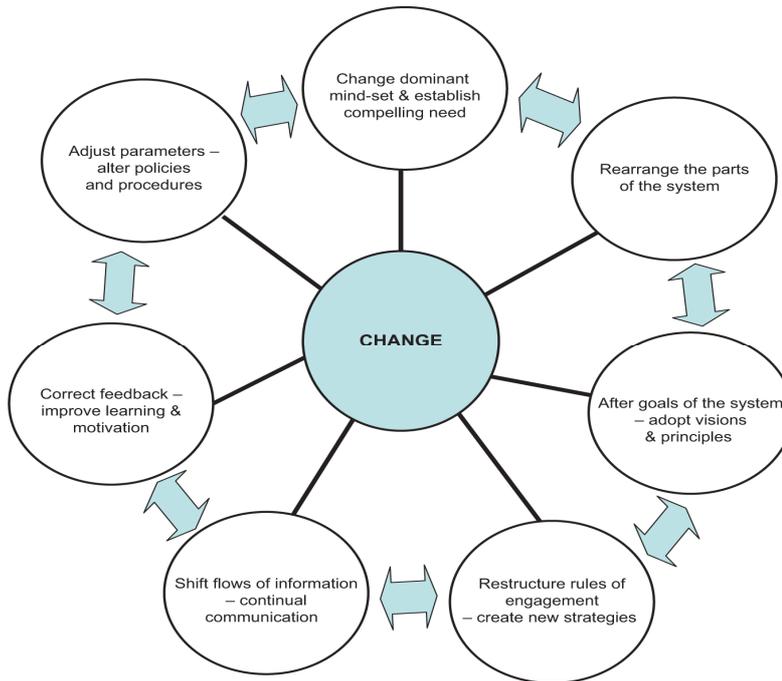
(6) *Evaluate:* this has to be done after time has passed to evaluate the success of the change.

The authors recognised that the process may need adjustment and feel that adjustment can occur at a local level. They also see the whole process as a continuing circle which consequently becomes the driver for a new change.

2.6.4. Doppelt’s Wheel of Change

Doppelt’s (2003) framework provides a less popular methodology to understanding and approaching organisational change where the primary focus is to achieve organisational change in the context of ensuring environmental sustainability. Doppelt (2003) views the process of change as a cycle or wheel and he articulates seven points at which interventions may be made or leverage applied to effect change. The following is a graphical presentation of Doppelt’s (2003) Wheel of Change:

Figure 3: Doppelt’s Wheel of Change



Source: Adapted from: Leading Change toward Sustainability: A Change-Management Guide for Business (Doppelt, 2003, p.56).

Kotter (1996) and Doppelt (2003) emphasised the same point, that the change process takes time to achieve success and that for change to be effective all elements in the framework must be implemented. However, they have different opinions on when the interventions may be made, Doppelt (2003) argued that they may be made at any point in the cycle provided that all steps are carried through, while Kotter (1996) maintains the strict order of sequential steps in the process of change.

Kotter (1996) and Prosci's (2002) both agree and highlight the need for effective positive communication to achieve employee buy-in to any change initiative. The change frameworks presented above are among the many listings of the phases in a change management process. Some phases are similar to other frameworks; differences are

mainly in how certain specific steps are described and whether they concentrate on the process or individual tasks.

Due to the differences in the concepts highlighted above, a further investigation was done to establish the tools appropriate in ERP implementation such as change management activities and other tools such as leadership, communication, training, planning and the rewards system. Al-Mashari and Zairi (2000 b) and Kotter (1996) have highlighted that for an effective ERP implementation, change management tools, methods and processes used depend on the needs of an organisation and its culture.

2.7. Benefits of change management in an ERP project

According to Dimitrios et al. (2010), ERP has largely influenced how organisations work in the 21st century since it plays an important role in enabling organisational functions to deal with strategic consequences at a system output level. ERP has become part of the business as it drives the competitive advantage such that its implementation has largely shifted from the technical side of IT, and more to the managerial side. Organisations invest in technology in order to improve their productivity, cost and quality of their products and services. It is therefore critical that a huge investment in ERP yields big returns because it plays such a big role in the day to day running of the business to the extent that if it fails, the organisation as a whole is affected detrimentally (Dimitrios et al. 2010).

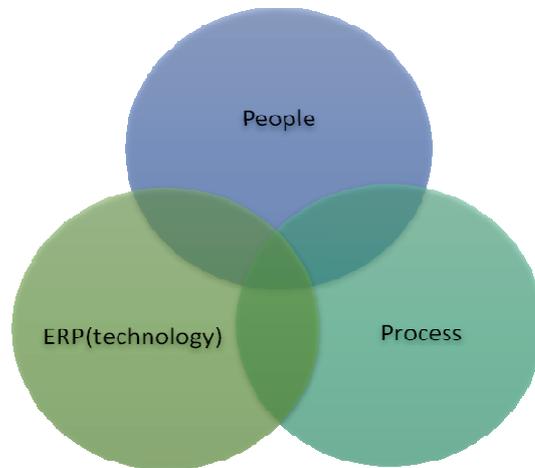
Kemp and Low (2008) discussed the issues faced during the ERP implementations and how many organisations have underestimated the effort in change management. The authors maintain that change management is important in all stages of adoption, adaptation and acceptance of the ERP implementation.

Authors like Helo, Annussornnitisam and Phusavat (2008), Motwani, Mirchandani, Madan and Gunasekaran (2002) and Hammond (2010) attribute most of the failure of ERP projects to the lack of links between people, processes and technology. When it comes to change management, people are the most important factor but it does not necessarily mean that the other factors must be ignored. This is due to the fact that most of technology art can be introduced within an organisation, processes will have to be changed to suit its business needs and culture, and certainly, the benefits would not be realised if people do not accept the change.

In the same vein, Dimitrios et al. (2010) added that the implementation of a new system alone is not enough, since every change in the processes or operations will also require the retraining of the employees, which will consequently require the employees to change their old ways of working and adopt the new working style.

In the above inference, it is clear that these factors have to be considered for the successful implementation of the ERP system and cannot be divorced from each other, as depicted below:

Figure 4: Change management strategies for effective ERP implementation



Source: Adapted from Change Management Strategies for Effective ERP implementation, (McCarthy & Eastman, 2010).

McCarthy and Eastman (2010) submitted that the primary purpose of change management is to *accelerate the speed at which people move successfully through the change process so that anticipated benefits are achieved faster.*

Additional benefits to change management were identified by the McCarthy & Eastman (2010), as:

- Improved organisational outcomes and performance through the effective use of the system, generates value to customers and the organisation.
- Enhanced employee satisfaction, morale, and engagement: when people learn new skills they meet performance expectations, contribute to a greater goal and they feel pride in their accomplishments.
- Improved service quality: users feel valued and supported by an organisation that investment in them; this positively impacts how they treat customers.

The authors argue that change should be well-designed, integrated, and people-focused so that over time it becomes logical in a way that makes sense to the users, thus bringing users along, guiding and supporting them so they arrive at the desired state. McCarthy and Eastman (2010) further argued that implementation of the technology is not just the first but a crucial step because it not only generates value but influences realisation of the system implementation to occur. For the technology to create value, it requires people to realise its benefits.

CHAPTER 3 RESEARCH METHODOLOGY

3.1. Research design

The MVA Fund was chosen as a case study based on two primary reasons. The first reason was that it has undergone and experienced other Information Systems (IS) projects in the past years and the second reason is that it has finalised the implementation of a new system, ORACLE project in the past year. A large group of people within the Fund have experienced working in the ORACLE implementation project and were affected by the implementation of the system. This makes accurate gathering of data from various parts and levels of the organisation much easier.

Based on the research questions, the objectives of the research were related to perspectives of change within the MVA Fund, and the impacts and implications of organisational change brought about by the implementation of the ORACLE system.

The objective of this study is to address a gap in the change management literature and the studies that have already been conducted. The research will also be geared towards exploring people related issues by identifying how change affects the organisation, its employees and other factors in the successful implementation of ERP system.

The research is an exploratory type, understanding the problem which is clarified as change management as a tool of managing ERP system implementation. Since the research is aimed at finding out the impact of change management within the MVA Fund, the study will be conducted using mixed research i.e. both qualitative and quantitative data collection methods as suggested by Saunders, Lewis and Thornhill (2007) since data will be collected and analysed separately.

The qualitative study will be used to gain an understanding of how the ERP projects are managed in real-life and to what level does change management feature in the process. This will be achieved through interviewing the people who have been in the employ of the MVA Fund, especially those who took part in the implementation of the ORACLE project within the MVA Fund in order to gather empirical data through these interviews.

Interviewing people will provide diversity of opinions as these individuals were affected differently by the system implementation. The MVA Fund falls in the category of a small to medium company and currently has a staff complement of 130 employees; the majority of staff members have “hands on” experience of the ORACLE system. The gathering of information will be done at various levels of the organisation. These will include:

- Management
- Project Team
- End users

Three different interview questionnaires will be used for the above mentioned interviewees. They will have few different questions for each group of interviewees and will also have open-ended questions.

On the other hand, quantitative methods will also be used to obtain numeric data as the “qualitative questionnaire” is dealing mainly with people’s opinions. This method will assist and enable the study to get the feel of the impact of change management and how it has affected the business operation within the Fund.

The concepts of change management and ERP projects are both studied quite extensively in the existing literature. They have also been combined in some studies but with very few clear results of how to successfully implement them. The concept of an ERP implementation project and change management is mostly based on individual's reaction to any particular situation. It is therefore hard to provide any specific data that could be applied to every situation.

This study will be undertaken using interpretive approach. Research strategy will be using a case study involving the MVA Fund. Through a middle management level there will be easier access to respondents and other project related information.

3.2. Data collection method

The data for this study will be collected from various sources. The empirical data i.e. primary data will be gathered through an online survey to enable respondents to provide a wide variety of facts, perceptions, feelings and opinions that a researcher is unable to gather by any other method. The survey will be conducted through individualised online links and the respondents will be anonymous. Three sets of questions will be used in the interviews (as discussed in the research method) and these will be dispatched through a dedicated online survey (Lime Survey) to respondents' emails and upon completion will be automatically sent back through to the database where information will be extracted for analysis.

The study will be conducted within the MVA Fund and the results thereof shall be applicable to the Fund only. A self-administered questionnaire will be conducted selectively and in all seven offices of the MVA Fund respectively. The Chiefs as officials

of several units in the organisation will be excluded from the interviews, since they are the sponsors of all projects within the Fund.

3.3. Design of the questionnaire

A questionnaire will consist of closed and probing questions based on the two constructs to measure the practical aspects of what employees actually experienced and were exposed to during the change enactment at MVAF. Some of the questions that will be used in this study's questionnaires are adapted from a study of Dimitrios et al. (2010) on the effective implementation of an ERP and from a study of Al-Mashari (2003), on the effective implementation of ERP/SAP.

Section A will contain demographic information about the respondent. The category of information relates to age, gender, position held at the Fund, tenure of service and office location.

Section B of the questionnaire will assess employees' involvement in the project, whilst section C contains a list of neutral statements to depict various positions. Employees will be required to respond to each statement by providing one response that indicates how strongly they agree or disagree with the statement on the presumed benefits of the system.

Section D will focus on the challenges and technical changes experienced during the project implementation and section F will focus on change management interventions from an angle of communication and support provided during the process.

3.4. Research population and Sampling

The population of employees at the MVAF according to latest Human Resources report of 31 January 2013 is 130 employees, 72 females and 58 males, all permanent employees. Five percent (5%) of the total number rests at the Executive Management level with only one female executive member. Nine percent (9%) constitutes the Senior Management level whilst twelve percent (12%) represents the middle management of the organisation. Eighty (80) employees' makes up the Operations Unit of the organisation, Thirty-two (32) employees are classified as Corporate Services, whilst ten (10) form part of Technical Services and eight (8) make up the Human Resources team.

Forty-three percent (43%) of the employees have obtained Degrees in various fields of study; forty percent (40%) are in possession of Diplomas whilst thirteen percent (13%) of the employee population have Grade 12 certificates and four percent (4%) have obtained a Masters Degree in different fields of studies.

To avoid desirability on responses to eliminate fear of discrimination, employees will not be informed about the specific focus and outcome of the study, requests for names and employee numbers will be prohibited; however, employees will be required to indicate the position they hold. Surveys responses will not be seen by anyone other than the participant once they are completed. The questionnaires will be automatically redirected to a data base, where they will be stored until the deadline of the survey.

Since the MVA Fund is a small organisation, a purposive sampling technique was used by including all (N=70) employees were in the employment of the Fund between 2009 and 2012, the time the MVAF started with the ERP/ORACLE project. However,

only thirty-nine employees responded to the survey, some employees were out of office on annual and study leave. Therefore participants were all employees who joined the MVAF during that period and are still working for the MVAF today. The selected population excluded executive (Chiefs of units) employees.

3.5 Data analysis and Techniques

Data analysis is when the non-standardised and complex data that is collected needs to be condensed, summarised, grouped or categorised or restructured in order to become meaningful information(Saunders, Lewis & Thornhill, 2009). Data analysis is the process of bringing order, structure and meaning to the mass of data that is collected in the field (Mouton, 2004). Data was collected by means of computer aided data analysis software called Lime-survey. The programme sorts the data into categories and locates subsets of these data according to the criteria that was specified in accordance to the research objectives. Data will be analysed quantitatively and is herein presented (in Chapter 4) in frequencies and percentages. As Hair (1995) pointed out, there is no method of dealing with missing data that is free of disadvantages. If at any time missing data is inputted there is a risk of the results being biased (e.g. distributions, or correlation). After the survey link closes, the IT unit will run the report on the responses for each group of respondents.

3.6. Validity and Reliability

Reliability refers to the extent to which the data collection techniques employed or data analysis procedures used will yield consistent results. There are three questions to testing reliability:

- Will the measures yield the same results on other occasions?
- Will similar observations be reached by other observers?
- Is there transparency on how sense was made from the raw data? (Wimmer & Dominick 2003).

Whilst, validity refers to whether the findings are really about what they appear to be about, external validity is about ensuring that you have built into the research sufficient robustness to be confident enough to make generalisations across populations, various settings and over time (Hart, 2005; Wimmer & Dominick, 2003). A researcher should have control over the research conditions in order to enable them to rule out commendable results that may at times be incorrect.

In order to ensure validity and reliability of the findings, six people were selected to pilot the questionnaires; two for each questionnaire. After the questionnaire was finalised, it was forwarded to the Information and Technology Unit to be uploaded into the software that enabled the electronic survey. No challenges were noted.

Since the survey only sampled ORACLE end users and project team members, reliability is guaranteed, because these would be the same people who would participate in the survey should it be repeated.

The fact that employees will have access to the survey link will provide more freedom in expressing their honest opinions on the matter, without fear of victimisation. Colough and Nutbrown, (2007) argued that the questionnaire is a standardised measuring instrument which provides specific answers to the questionnaire in order to arrive at an informed decision in terms of data interpretation, thus it makes the instrument reliable.

3.7. Ethical Issues

Research ethics refers to the appropriateness of the researcher's behaviour in relation to the rights of the subjects of the research or how they are affected by it. It relates to questions about how a research topic is formulated and clarified the design of the research and how access will be gained. It also refers to the collection of data; processing, storing and analysing it, as well as the writing-up of research findings. (Saunders, Lewis & Thornhill, 2009). This research paid special attention to the following ethical issues and problems:

- Confidentiality to subjects and protection of their identities;
- Confidentiality in dealing with important information of the Motor Vehicle Accident Fund and their trade secrets;
- Maintaining independence from possible bias by the organisation or other interested parties to bias results;
- Ensuring security of data during and after completion of the research.

All these issues were addressed by complying with the university's formal procedures in terms of acquiring letters of consent on confidentiality and abiding to the organisations policies and procedures on confidentiality.

3.8. Permission to conduct the study

The Motor Vehicle Accident Fund was approached prior to conducting the survey by way of a written letter to request permission for the Fund employees to be surveyed.

The purpose of the study was explained in the letter. A written acceptance of this request was received from the Acting Chief Executive of the MVA Fund.

3.9. Summary of Chapter Three

This chapter dealt with the research methodology that guided the research. The study used a quantitative method and data was collected using a total of 80 questions for all three questionnaires. These were structured, closed ended questionnaires which were designed in English and administered via computer aided software, namely Lime-survey. Out of a total of 70 of the targeted sample 39 respondents (13 project core team, 17 management and 40 end users), a total of (13 project core team, 13 management and 13 end users) participated in the survey. In order to ensure validity and reliability a pilot study of the questionnaire was conducted and no challenges were noted. Ethical considerations were taken and permission was sought from the MVA Acting Fund Chief Executive Officer. The next chapter presents the results of the study.

CHAPTER 4 RESEARCH FINDINGS

4.1. Introduction

Chapter four presents the findings and the interpretation of data collected through the survey. This data is presented through figures, tables and graphs. The results are presented under respective group of respondents as per the questionnaires, namely, the project core team, management and end users and under headings which were designed to guide the survey and are in line with the research objectives.

The interpreted data formed the basis of discussion upon which recommendations and conclusions were drawn and are presented in chapter 5. The results are discussed further in context of the literature review as well as the conceptual framework guiding this research to compare to what extent the findings align with the various theories presented in the literature. The objectives of the research were:

- (a) To identify the change management process used to implement an ERP system at the MVA Fund and assess its effectiveness.
- (b) Examine the role of communication, training and support in ensuring effective ERP implementation.
- (c) To ascertain whether the MVA Fund employed change management strategies in implementing its ERP project.
- (d) To identify employees' understanding on the benefits and challenges of implementing an ERP

The data will be analysed per respondents groups, namely; Project core team, Management and end users. Sub headings will be used to provide coherence and flow in the analysing of the data.

PROJECT CORE TEAM RESPONSES

4.2. Demographics of project core team respondents

The questionnaire consisted of 26 questions and was administered to 13 respondents from the sample of employees who formed part of the project core team during the system implementation. Out of the 13 respondents 76.92 % (N=10) were females and the remaining 23.08 % (N=3) were males.

The survey also sought to know, how long the respective employees have been employed by the Fund. 30.77 % (N=4) have been with the Fund for two to five years, while a significant 61.54 % (N=8) have been with the Fund for six to ten years. In addition, 7.69 % (N= 1) have served the Fund for eleven and fifteen years. The table below presents of these results.

- *How long have you worked for MVA Fund?*

The table below presents the various years of service the respective individuals worked for MVA Fund.

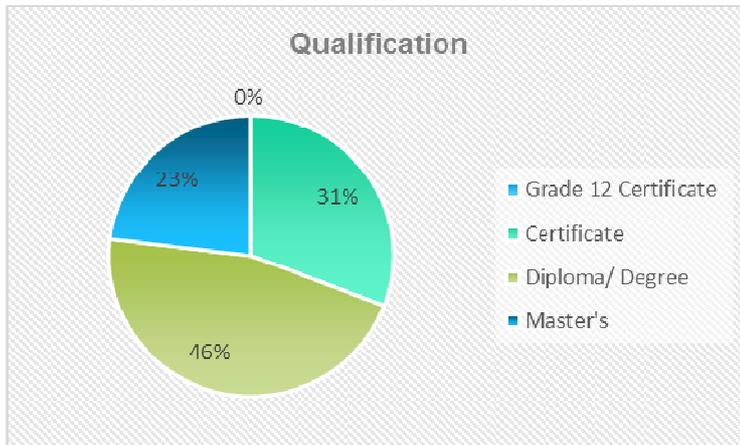
Table 2: The years of service at MVA Fund

Response	Frequency	Percentage
0-1 Years	0	0.00%
2-5 Years	4	30.77%
6-10 Years	8	61.54%
11-15 Years	1	7.69%
15 or above	0	0.00%

- *What are your qualifications?*

The respondents were further asked to indicate their level of education by choosing their highest qualifications obtained. In response to this question 30.77 % (N=4) indicated that they have Certificates, 46.15% (N=6) are holders of Diplomas/Degrees, and 23.08 % (N=3) have Masters Degrees. The figure below illustrates these results:

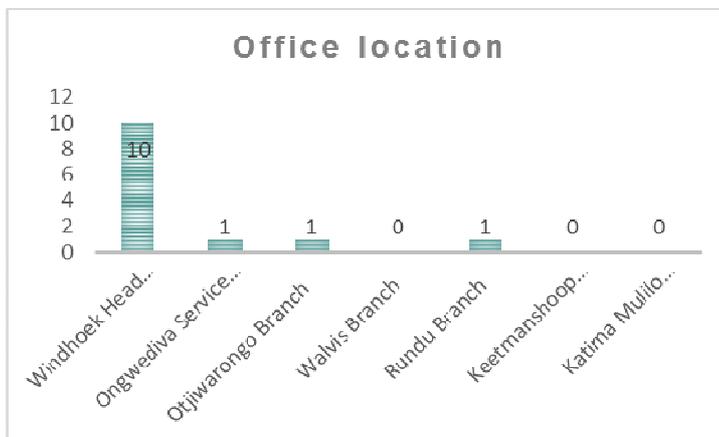
Figure 5: Qualification



- *At which office are you located?*

Before getting into the substance of the survey, the individual's office location was required. The respondents were asked to indicate their current office location. In response to this question a significant number 76.92% (N=10) indicated that they are at the Windhoek Head Office, while 7.69% (N=1) indicated Ongwediva Service Centre, another 7.69% (N=1) at the Otjiwarongo Branch and 7.69 (N=1) at the Rundu Branch respectively. The figure below illustrates these results:

Figure 6: Office Location



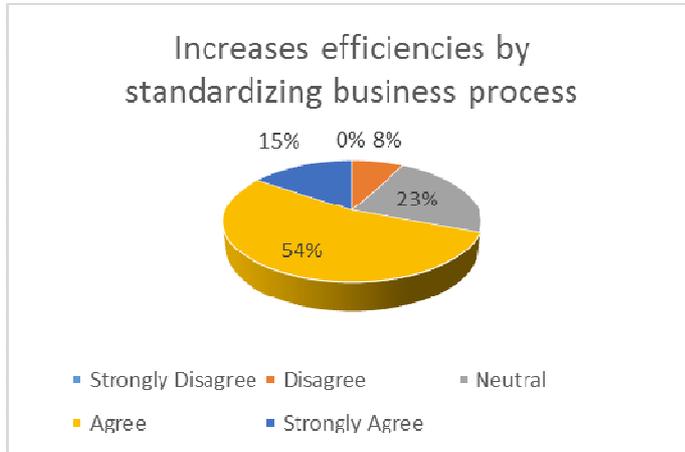
4.3. Benefits of Oracle

The first objective of the study was to identify employees' understanding on the benefits and challenges of implementing an ERP. This section aimed to measure the project core team's views on the benefits of implementing the ORACLE system within the MVA Fund. In order to achieve this objective, eleven statements were designed. Respondents were asked to indicate their level of agreement or disagreement with each statement on a 5 point Lickert scale.

- *Increases efficiencies by standardising business process*

The results revealed that 7.69 % (N=1) disagreed with the statement, 23.08% (N=3) were neutral, a significant number 53.85 % (N=7) agreed that the new system increases efficiencies by standardising the business process, and 15.38% (N=2) strongly agreed with the statement. The figure below is a graphic depiction of these results.

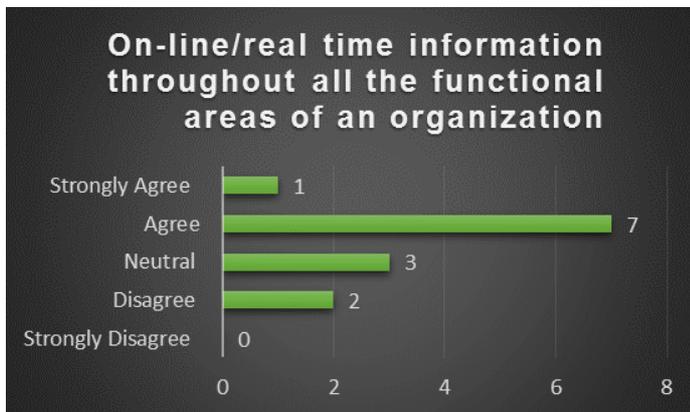
Figure 7: Increases efficiencies by standardizing business process



- *On-line/real time information throughout all the functional areas of an organization*

The results revealed that 15.38 % (N=2) disagreed with the statement, 23.08% (N=3) were neutral, a significant number 53.85 % (N=7) agreed, and 7.69% (N=1) strongly agreed with the statement. The figure below is a graphic depiction of these results:

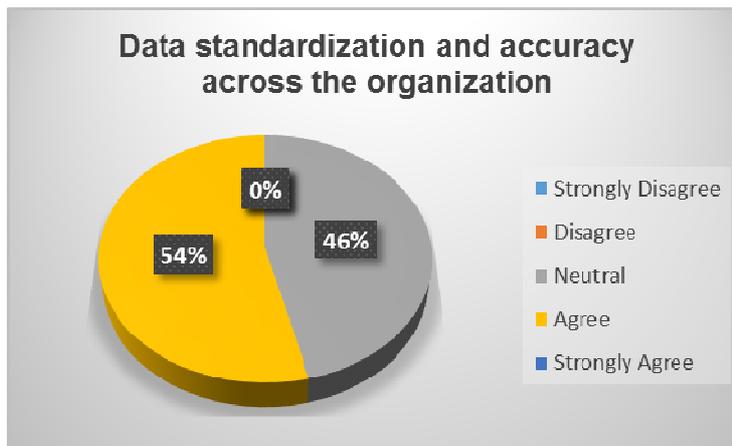
Figure 8: On-line/real time information throughout all the functional areas of an organization



- *Data standardisation and accuracy across the organisation*

The results revealed that 46.15% (N=6) were neutral, while a significant number 53.85 % (N=7) agreed. The figure below depicts these results:

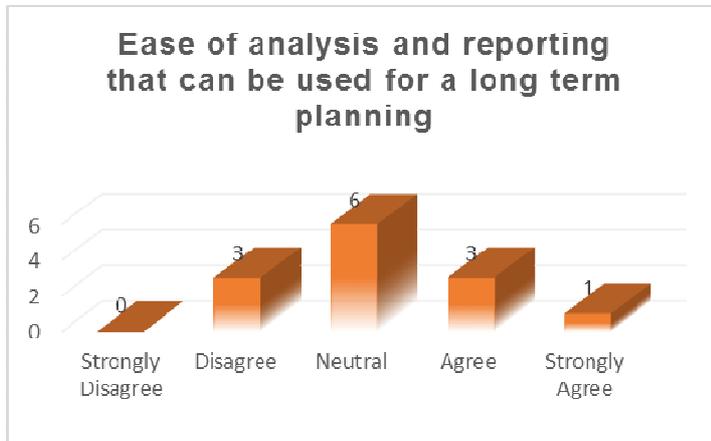
Figure 9: Data standardization and accuracy across the organization



- *Ease of analysis and reporting that can be used for long term planning*

The results revealed that 23.08 % (N=3) disagreed with the statement, a significant number 46.15% (N=6) were neutral, while 23.08% (N=3) agreed, and another 23.08% (N=1) strongly agreed with the statement. The figure represents the results:

Figure 10: Ease of analysis and reporting that can be used for long term planning



- *Reduces organisation's expenses*

The results revealed that 15.38 % (N=2) disagreed with the statement, 38.46% (N=5) were neutral, while 38.46% (N=5) agreed, and the remainder 7.69% (N=1) strongly agreed with the statement. The figure represents the results:

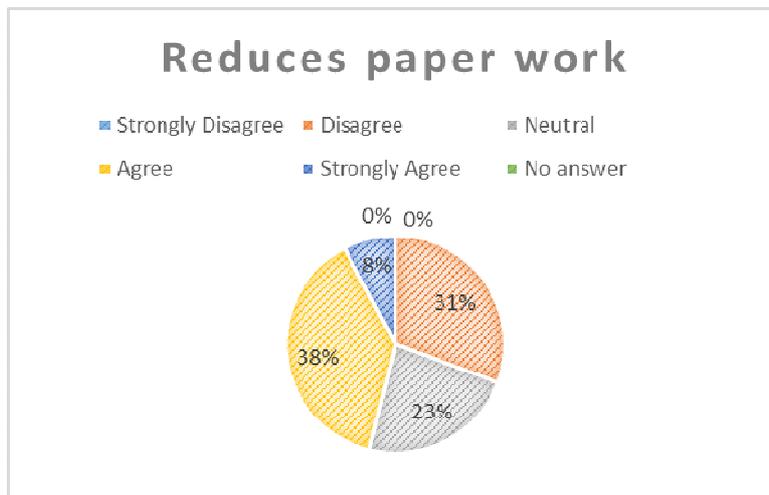
Figure 11: Reduces organization's expenses



- *Reduces paperwork*

The results revealed that 23.08 % (N=3) disagreed with the statement, 30.77% (N=4) were neutral, while 30.77% (N=4) agreed, and the remainder 15.38% (N=2) strongly agreed with the statement. The pie chart below represents the results:

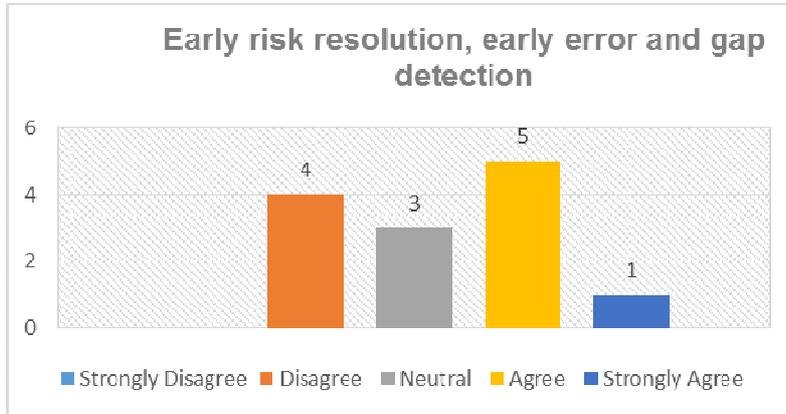
Figure 12: Reduces paper work



- *Early risk resolution, early error and gap detection*

The results revealed that 30.77 % (N=4) disagreed with the statement, 23.08% (N=3) were neutral, a significant number 38.46% (N=5) agreed, while 7.69% (N=1) strongly agreed with the statement. The graphic below represents the results:

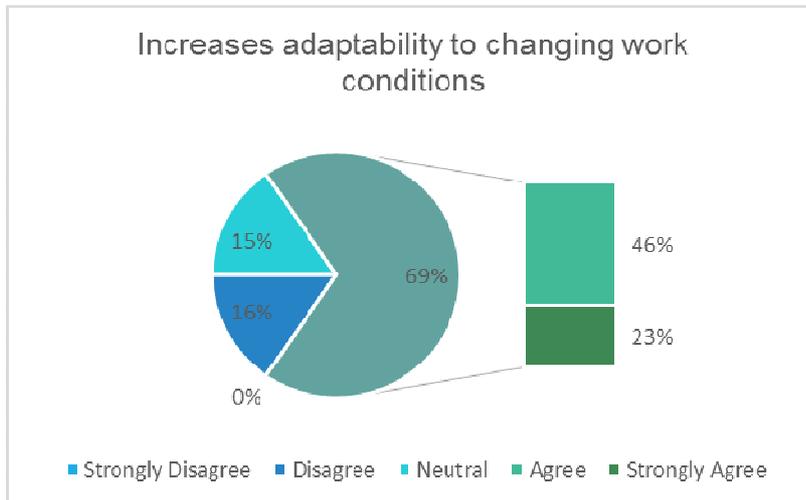
Figure 13: Early risk resolution, early error and gap detection



- *Increase adaptability to changing work conditions*

The results revealed that 15.38 % (N=2) disagreed with the statement, 15.38% (N=2) were neutral, a significant number 46.15% (N=6) agreed, while 23.08% (N=3) strongly agreed with the statement. The graphic below represents the results:

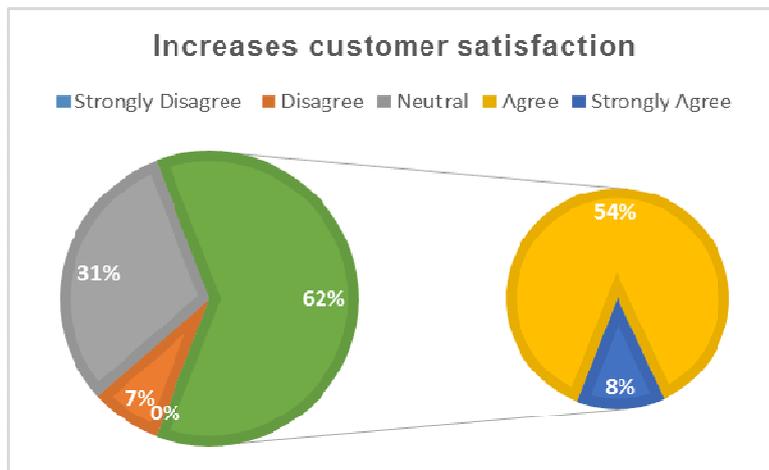
Figure 14: Increases adaptability to changing work conditions



- *Increase customer satisfaction*

The results revealed that 7.69 % (N=1) disagreed with the statement, 30.77% (N=4) were neutral, a significant number 53.85% (N=7) agreed, while 7.69% (N=1) strongly agreed with the statement. The graphic below represents the results:

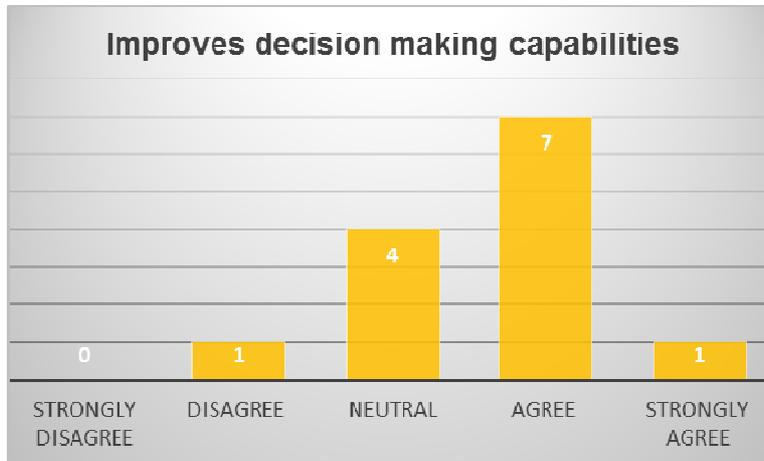
Figure 15: Increases customer satisfaction



- *Improves decision making capabilities*

The results revealed that 7.69 % (N=1) disagreed with the statement, 30.77% (N=4) were neutral, a significant number 53.85% (N=7) agreed, while 7.69% (N=1) strongly agreed with the statement. The bar graph below represents the results:

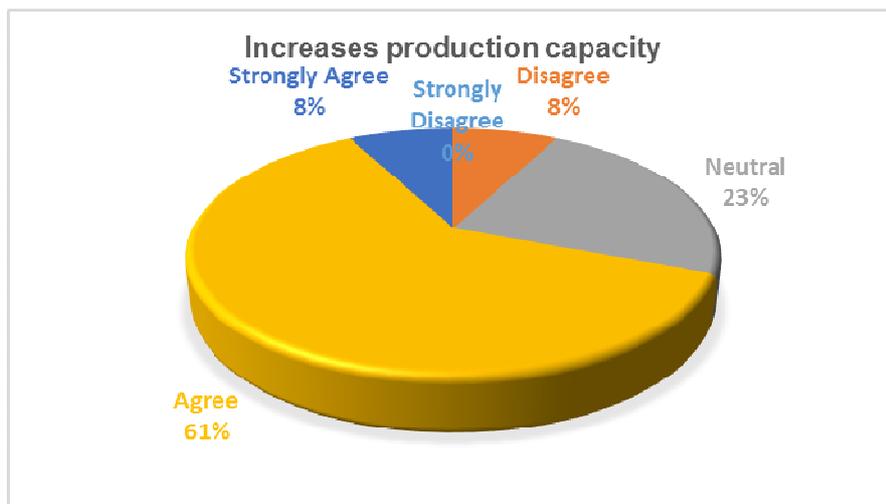
Figure 16: Improved decision making capabilities



- *Increases production capacity*

The results revealed that 7.69 % (N=1) disagreed with the statement, 23.08% (N=3) were neutral, a significant number 61.54% (N=8) agreed, while 7.69% (N=1) strongly agreed with the statement. The chart below represents the results:

Figure 17: Increases production capacity



4.4. Training and communication

The third objective of the research is to examine the role of communication, training and support in ensuring effective ERP implementation. In augmenting this objective, the researcher posed statements specific to training and communication with the project core team as well as to establish if the team was fully equipped with the necessary tools of imparting skills to others throughout the project's phases. These questions were asked specifically, because they have a bearing on the adequate understanding of the system and the reliance on the team to train the end users properly.

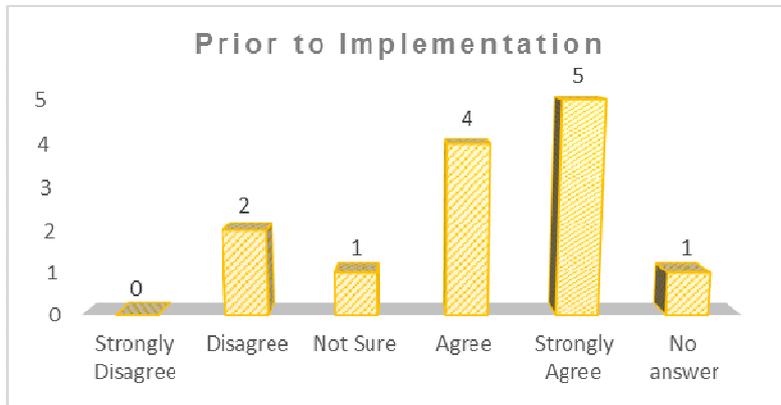
In the following section are statements specific to project core team training aspects. Respondents were asked to indicate whether training was provided in all various phases of the project.

4.4.1. When was training conducted?

- *Prior to implementation*

About 15.38% (N=2) disagreed to the statement, 7.69% (N=1) were not sure, while 30.77% (N=4) agreed with the statement. However 38.46% (N=5) strongly agreed that training was given prior to implementation, whilst 7.69% (N=1) did not give an answer to the question. These results are further exhibited in the following figure:

Figure 18: Prior to implementation



- *As part of the implementation*

About 7.69% (N=1) are not sure, while a significant number 61.54% (N=8) agreed that training was conducted as part of the implementation, about 15.38% (N=2) strongly agreed and 15.38% (N=2) gave no answer to the question. These results are in the following figure.

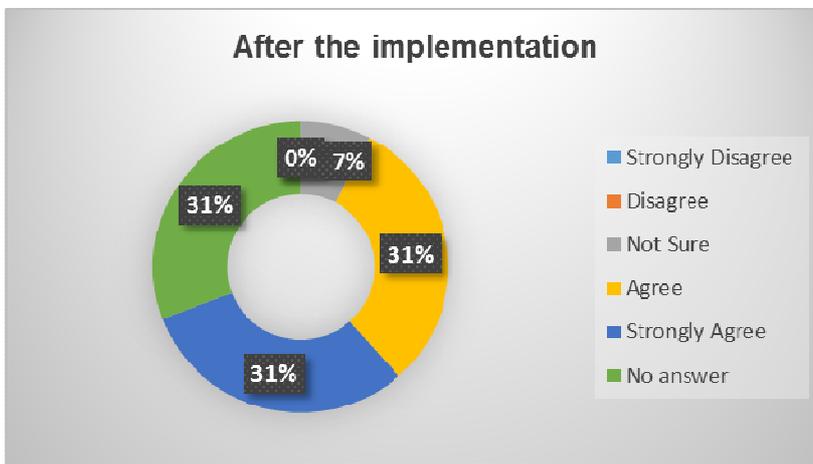
Figure 19: As part of implementation



- *After the implementation*

About 7.69% (N=1) were not sure, while 30.77% (N=4) agreed that training was conducted after implementation, another 30.77% (N=4) strongly agreed and the remainder 30.77% (N=4) gave no answer to the question. These results are further exhibited in the following figure.

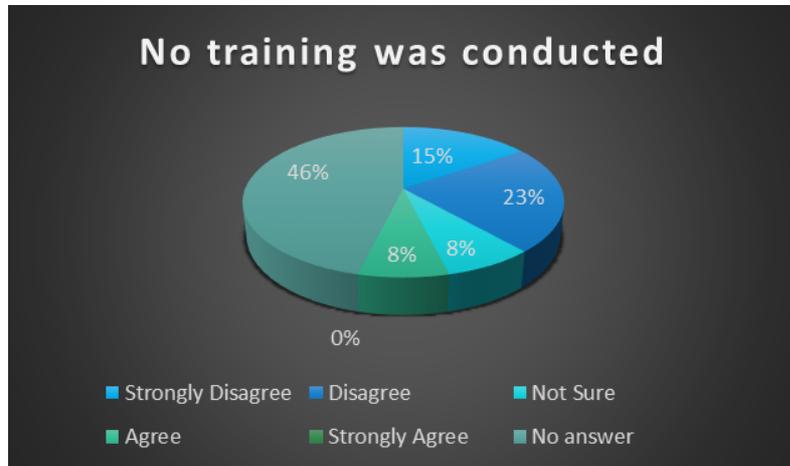
Figure 20: After the implementation



- *No training was conducted*

At least 15.38% (N=2) disagreed that training was not done, 23.08% (N=3) strongly disagree with the statement, 7.69% (N=1) were not sure, however 7.69% (N=1) agreed that no training was done, while a significant number 46.15% (N=6) had no answer to the statement. The table below represents these results.

Figure 21: No training was conducted



4.4.2. How long did it take you to learn the functionalities in the system?

The survey probed further to establish the time it took the project core team to learn the functionalities of the new system. This was also asked in the form of statements with timelines ranging from 1 week to more than 12 months to choose from. The results showed that 30.77 % (N=4) learned within 1-3 weeks, a significant 38.46% (N=5) chose 4-6 weeks, 15.38 % (N=2) learnt the functionalities within 7-9 weeks, another 15.38 (N=2) were within 10-12 months and 7.69% (N=1) took more than 12 months to learn the functionalities of the new system. The figure below depicts these results.

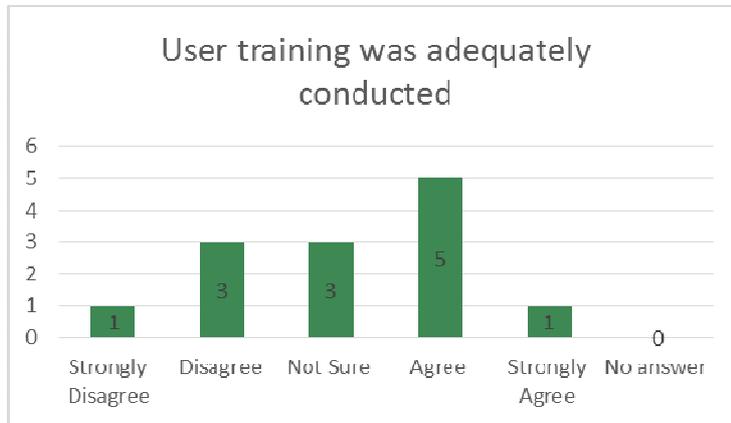
Figure 22: How long did it take you to learn the new functionalities of the system?



4.4.3. User training was adequately conducted?

The survey probed further to establish the views of the project core team on the training they received. This was also asked in the form of a statement with a 6 point Lickert scale answer to choose from. The results showed that 7.69 % (N=1) strongly disagreed that adequate user training was conducted. 23.08 % (N=3) disagreed with the statement, whilst 23.08% % (N=3) indicated not sure and a significant 38.46 % (N=5) agreed that adequate user training was conducted, the remainder 7.69% (N=1) strongly agreed. The figure below depicts these results.

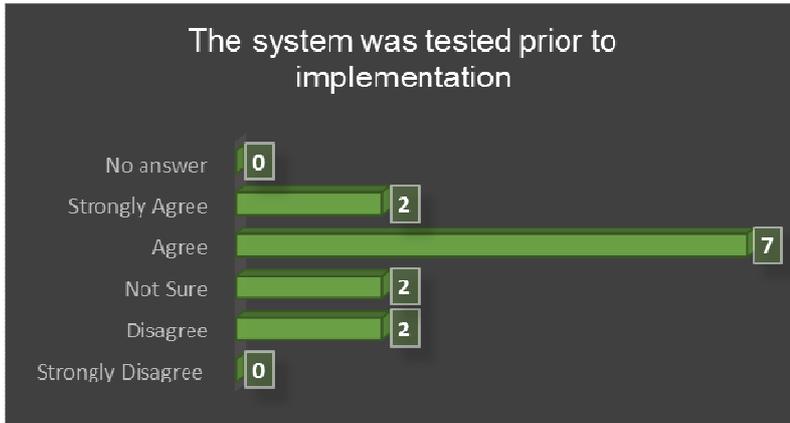
Figure 23: User training was adequately conducted



4.4.4. The system was tested prior to implementation

The respondents were asked to indicate their level of agreement or disagreement on a 6 point Lickert scale, with the statement “The system was tested prior to implementation” to which 15.38 % (N=2) of the respondents disagreed, while another 15.38 % (N=2) were not sure. However, the results show that a significant 53.85 % (N=7) agreed that the system was tested prior to implementation, while another 15.38 % (N=2) strongly agreed with the statement. For a graphic illustration, see figure below.

Figure 24: The system was tested prior to implementation



4.5. Communication and support

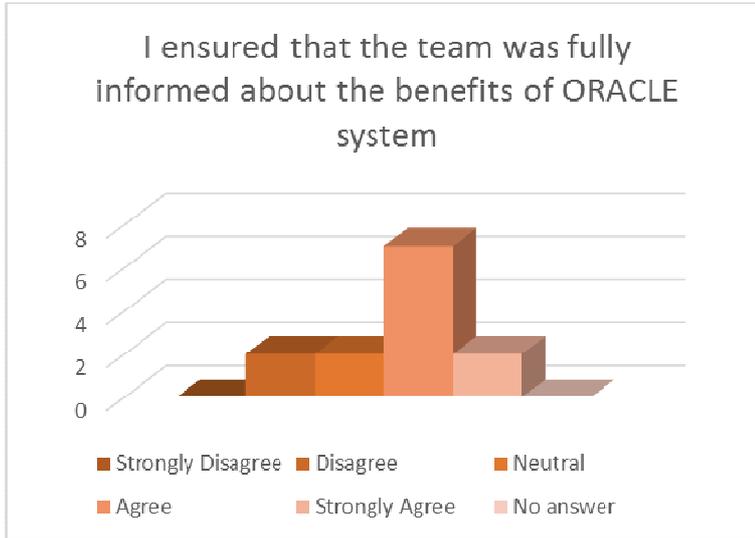
This section also falls under the third objective of the research, to examine the role of communication, training and support in ensuring effective ERP implementation. The researcher posed statements specific to communication and support rendered by the project core team.

4.5.1. Communication

- *I ensured that the team was fully informed about the benefits of ORACLE system*

Further research endeavoured to establish whether the benefits of the new system were fully understood. The results further show that 15.38% (N=2) disagreed, while another 15.38 % (N=2) were neutral to the statement. However, 53.85% (N=7) agreed that the team was fully informed about the benefits of the new system while 15.38% (N=2) strongly agreed with the statement. For a graphic illustration, see figure below.

Figure 25: I ensured that the team was fully informed about the benefits of ORACLE system



- *I had a full appreciation of my role in communicating any developments of the project with the team*

After establishing if the project core team ensured their teams were fully informed about the benefits of the new system, the research endeavoured to get the team's stance on the full appreciation of their roles as project core team members in keeping others up to date regarding any project developments.

The following statement was asked, to which respondents were given a chance to indicate their level of agreement or disagreement: "I had a full appreciation of my role in communicating any developments of the project with the team". Results indicate a distribution across the scale with 7.69 % (N=1) disagreeing, while 15.38 % (N=2) were neutral. About 46.15 % (N=6) agreed while on the same end of the scale, 30.77 % (N=4) strongly agreed. Results are presented below.

Figure 26: I had full appreciation of my role in communicating any developments of the project with the team

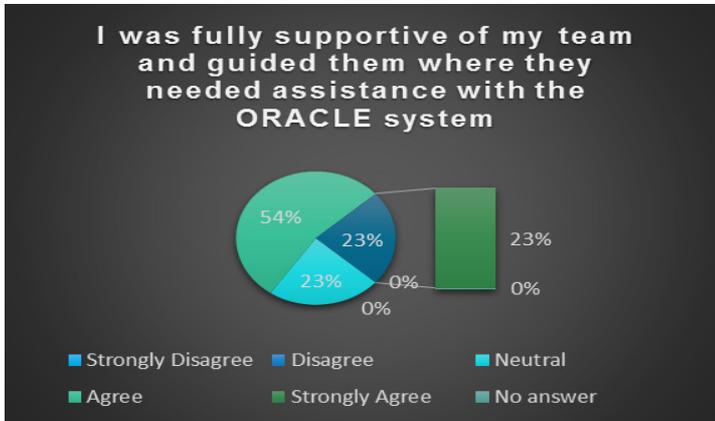


4.5.2. Support

- *I was fully supportive of my team and guided them where they needed assistance with the ORACLE system*

Further research was made into the support component by asking the project core team to indicate their level of agreement or disagreement to: “ I was fully supportive of my team and guided them where they needed assistance with the ORACLE system”. Results indicate a distribution across the scale with 23.08 % (N=3) being neutral with the statement. A significant 53.85 % (N=7) agreed while, 23.08 % (N=3) strongly agreed. Results are presented below.

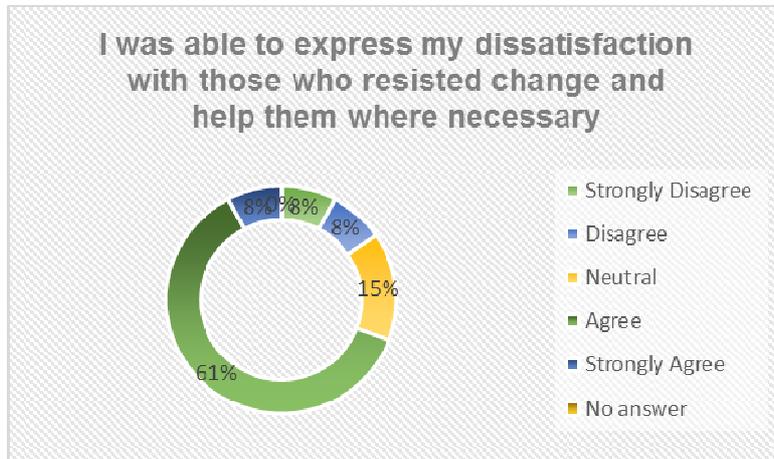
Figure 27: I was fully supportive of my team and guided them where they needed assistance with oracle system



- *I was able to express dissatisfaction with those who resisted to change and helped them where necessary*

Respondents were asked to indicate whether they were able to express dissatisfaction with those who resisted to change but helped them where necessary. Results show that 7.69 % (N=1) strongly disagreed with the statement, 7.69% (N=1) disagreed, while 15.38% (N=2) were neutral with the statement. However, a significant 61.54 % (N=8) agreed while, 7.69 % (N=1) strongly agreed that they were able to express dissatisfaction with those who resisted to change but helped them where necessary. Results are depicted below.

Figure 28: I able to express dissatisfaction with those who resisted change

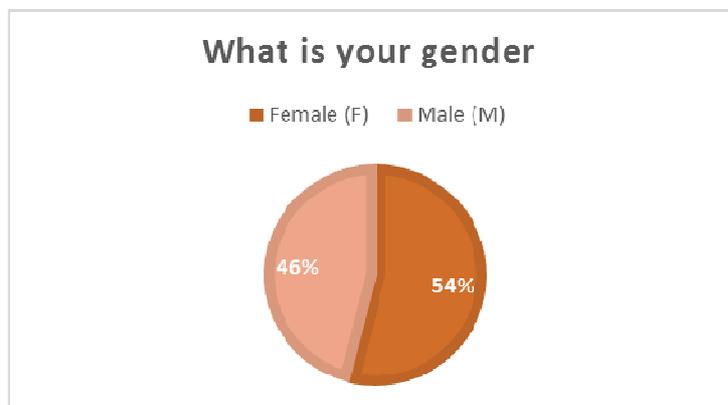


MANAGEMENT RESPONSES

4.6. Demographics of Management respondents

The questionnaire consisted of 26 questions and was administered to all 18 employees with fell within the category of Management, of which 13 responded. Out of the 13 respondents 54 % (N=7) were females and the remaining 46 % (N=6) were males. The figure below presents the gender per category.

Figure 29: Gender



- *Age Group*

The survey further asked the respondents to indicate their age group to which 7.69 % (N=1) are 26-30 years, 15.38% (N=2) are aged between 31-35 years, while 30.77% (N=4) are 36-40 years of age. However, a significant 38.46 % (N=5) are 41-45 years older, while, 7.69 % (N=1) fall within 46-50 years age category.

- *Office location*

Before getting into the substance of the survey, it was necessary to establish the distribution of Managers across the organisation. In response to this question a significant number 92.31% (N=12) indicated that they are at the Windhoek Head Office, while 7.69% (N=1) indicated Ongwediva Service Centre. The table below illustrates these results:

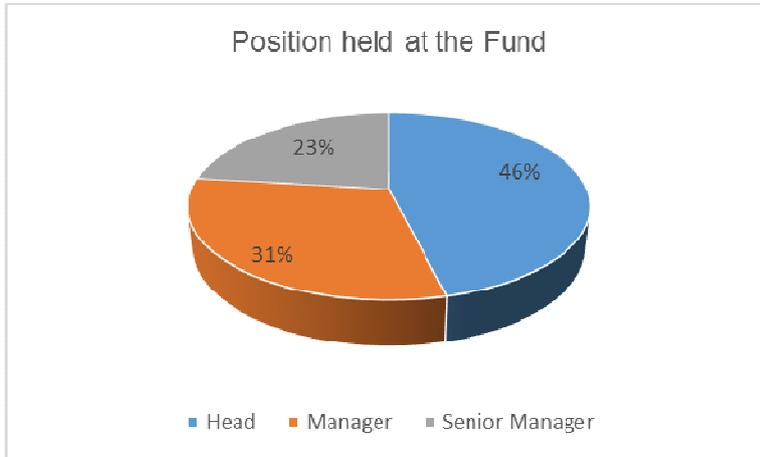
Table 3: Office location

Office	Frequency	Percentage
Windhoek Head Office	12	92.31%
Ongwediva Service Centre	1	7.69%
Otjiwarongo Branch	0	0.00%
Walvis Bay Branch	0	0.00%
Rundu Branch	0	0.00%
Keetmanshoop Branch	0	0.00%
Katima Mulilo Branch	0	0.00%

- *Position held at the Fund*

The respondents were asked to indicate the positions they currently hold at the Fund. The results show that 46.15% (N=6) are Heads at sub-units level, which is middle management, while 30.77% (N=4) are Managers, and the remainder 23.08% (N=3) are Senior Managers. The figure below illustrates these results:

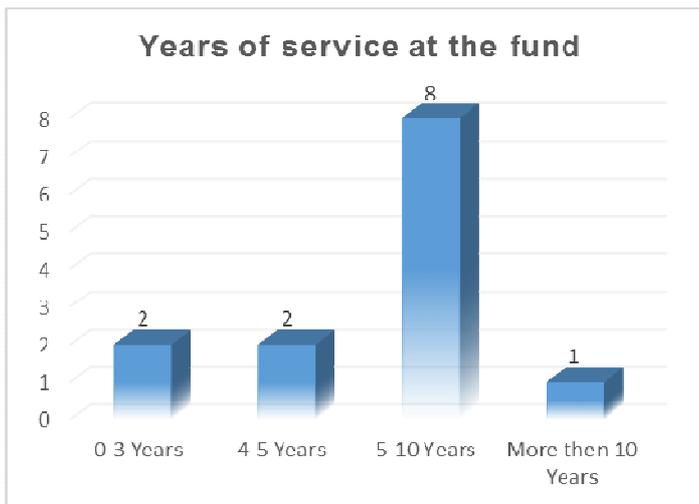
Figure 30: Position held at the Fund



- *Years of service at the Fund*

This question was just to gauge the years the respondents have been in the employ of the MVA Fund. The results show that 15.38% (N=2) have served 0-3 years, 15.38% (N=2) and a significant 61.54% (N=8) are in the 5-10 years category, 7.69% (N=1) have served the MVA Fund for more than 10 years. The figure below illustrates these results:

Figure 31: Years of service at the Fund



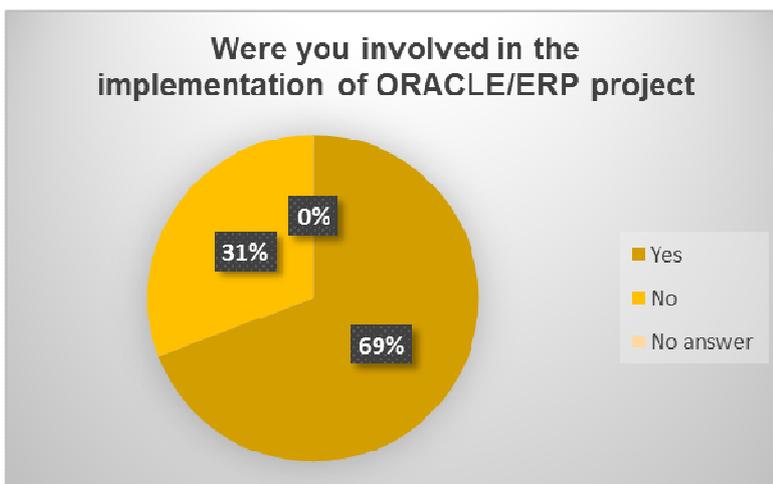
4.6.1. Management involvement

Research sought to establish Management's involvement in the project in order to assess the support and communication of relevant project changes and developments to their teams, and this ties in with the second objective of the survey which reviewed the change management process and assessed its effectiveness in implementing an ERP at the MVA Fund. Therefore a number of questions were posed to assess this objective, these are as follows:

- *Were you involved in the implementation of ORACLE/ERP project?*

In pursuit of confirming Management's involvement in the implementation of the new system, respondents were asked to indicate if they were involved in the implementation of the system. The result indicates that 69.23% (N=9) were involved whilst 30.77% (N=4) were not involved in the implementation of ORACLE/ERP project. Results are presented below:

Figure 32: Were you involved in the implementation of ORACLE?



- *Was your team involved in drawing up specifications for your respective system functionalities?*

Respondents were asked to indicate whether their teams were involved in drawing up specifications for their respective system modules. The majority of respondents 92.31% (N=1) indicated “Yes” in confirming that their team did partake in the specifications, and only 7.69% (N=1) indicated “No” to this effect. Graphical results are as follows:

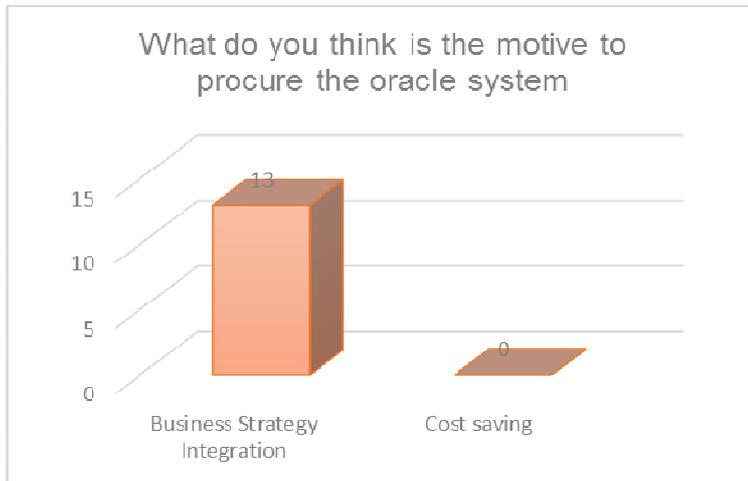
Figure 33: Was your team involved in drawing specifications?



- *What do you think was the motive to procure the ORACLE system?*

The survey further sought to know what Management think was a motive to procure the new system, and two possible answers were given to which they needed to choose one that appealed to them most; cost saving, business strategy- integration. All 100.00 % (N=13) thought it was a business strategy decision aimed at integration. Below is the representation of these results:

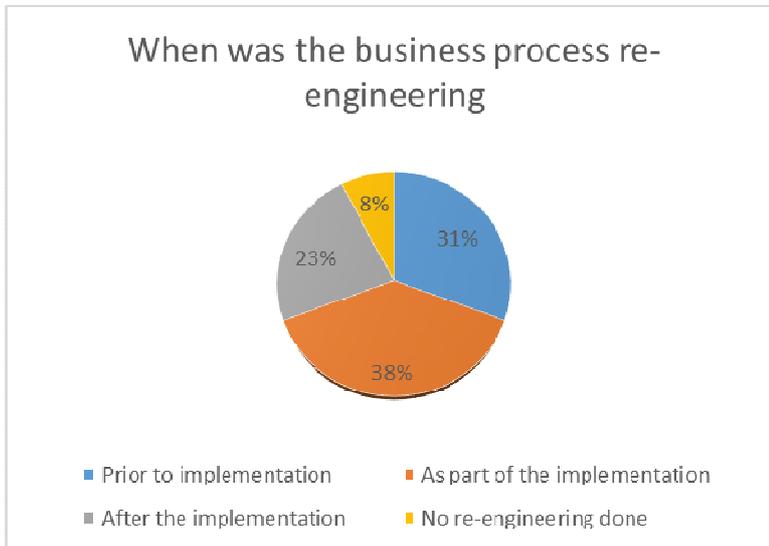
Figure 34: What do you think is the motive to procure ORACLE?



- *When was the business process re-engineered?*

The respondents were questioned to establish when the business process was re-engineered. About 30.77 % (N=4) of the respondents indicated that the business process was re-engineered prior to implementation, while 38.46% (N=5) indicated that it was re-engineered as part of the implementation. A further 23.08 % (N=3) chose “after implementation” and 7.69 % (N=1) indicated that no business process re-engineering was done. The results are presented in the figure below.

Figure 35: When was business re-engineering done



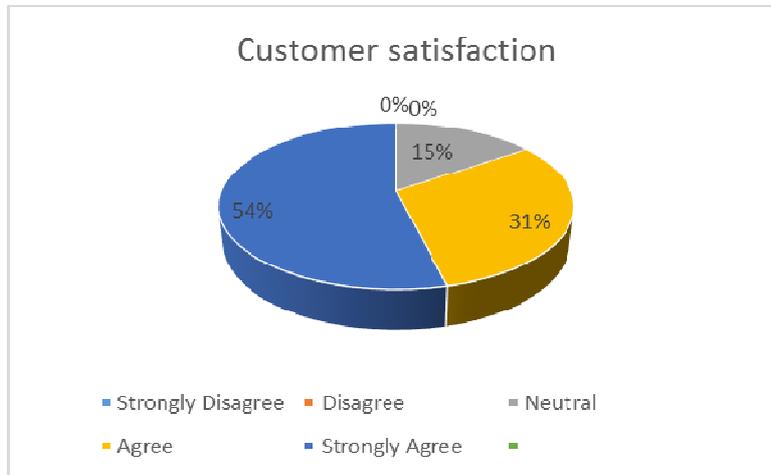
4.6.2. Benefits of ORACLE/ERP

Another objective of the survey was to identify employees' understanding of the benefits and challenges of implementing an ERP, hence, the assessment of Management's thinking and understanding of what they deemed as the benefits to the MVA Fund in implementing the ORACLE/ERP system. To this extent a variety of statements were used to which respondents indicated their level of agreement or disagreement on a 5 point scale.

- *Customer satisfaction*

The respondents were asked to indicate their level of agreement or disagreement with the statement "customer satisfaction" as one of the benefits of ORACLE/ERP. 15.38% (N=2) of the respondents were neutral with the statement, while 30.77 % (N=4) agreed that customer satisfaction is a benefit, there was however a significant 53.85 % (N=7) who strongly agreed with the statement. The results are presented in the figure below:

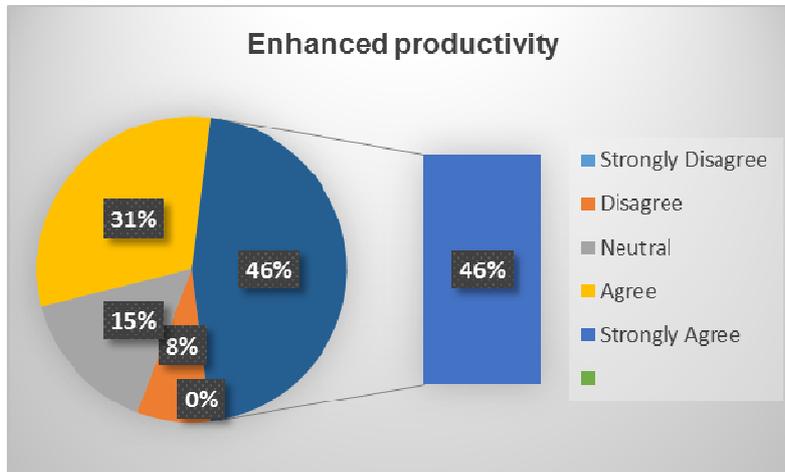
Figure 36: Customer satisfaction



- *Enhanced productivity*

The second statement was “enhanced productivity” as one of the benefits of implementing ORACLE/ERP. 7.69% (N=1) disagreed with the statement, while 15.38% (N=2) were neutral. However, 30.77% (N=4) agreed that one of the benefits is enhanced productivity, but a significant 46.15% (N=6) strongly agreed with the statement. The results are depicted in the figure below:

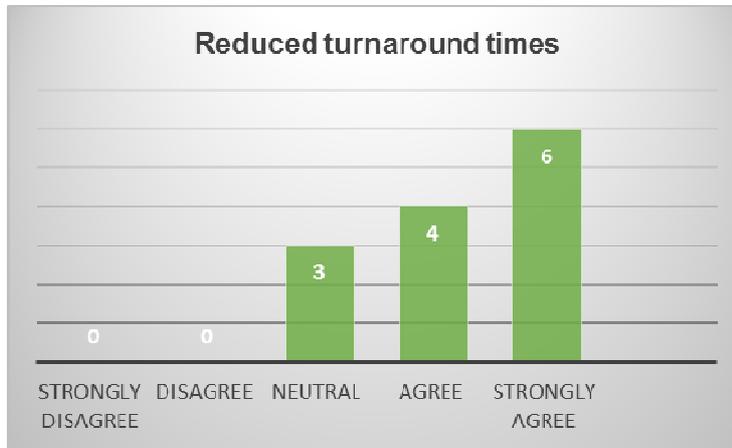
Figure 37: Enhanced productivity



- *Reduce turnaround times*

“Reduced turnaround time” was also listed as one of the benefits to which the respondents were asked to comment on. Results show that 23.08% (N=3) were neutral, while 30.77% (N=4) agreed that one of the benefits is “reduced turnaround times”, at the same time a significant 46.15% (N=6) strongly agreed with the statement. The results are depicted in the figure below:

Figure 38: Reduced turnaround times

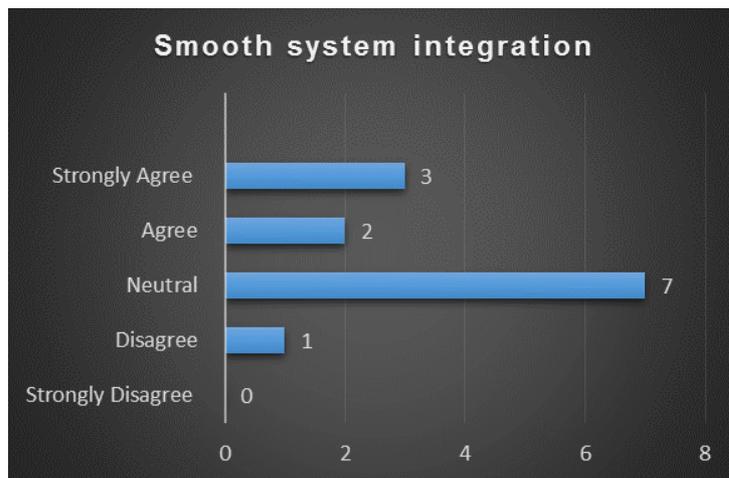


- *Smooth system integration*

The fourth statement was “smooth system integration” and the results show that 7.69% (N=1) disagreed with the statement, while a significant number 53.85% (N=7) were neutral. 15.38% (N=2) agreed, while 23.08% (N=3) strongly agreed that “smooth system integration” is one of the benefits for implementing ORACLE/ERP.

The results are depicted in the figure below:

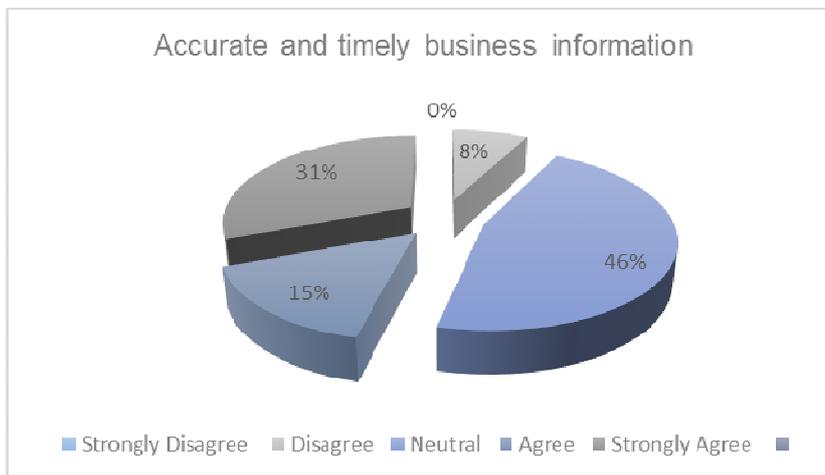
Figure 39: Smooth system integration



- *Accurate and timely business information*

The respondents had to also indicate their level of agreement or disagreement towards “accurate and timely business information” as one of benefits. The results show that 7.69% (N=1) disagreed with the statement, while the majority 46.15% (N=6) were neutral. 15.38% (N=2) agreed, while 30.77% (N=4) strongly agreed with the statement. The results are depicted in the figure below:

Figure 40: Accurate and timely business information



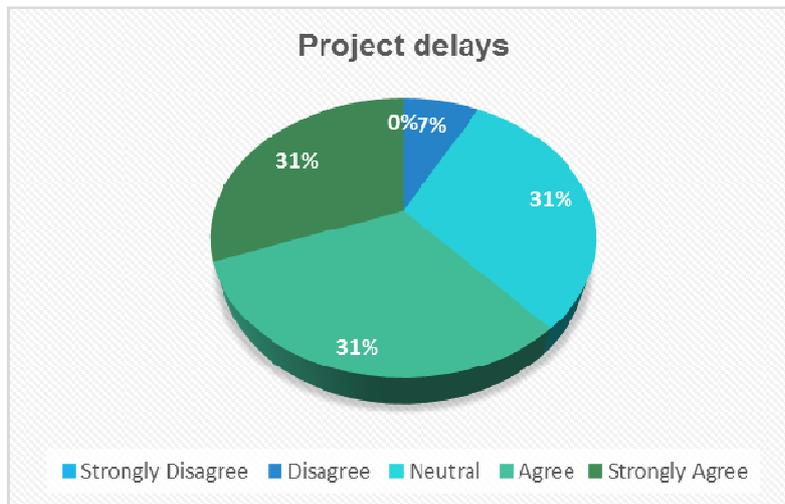
4.6.3. Challenges

The third objective of the survey was to establish from a Management’s perspective the challenges and technical problems related to implementing the ORACLE/ERP system. To this extent a variety of statements were used to which respondents indicated their level of agreement or disagreement on a 5 point scale.

- *Project delays*

On indicating whether “project delays” are one of the challenges, the respondents results shows that 7.69% (N=1) disagreed with the statement, while the majority 30.77% (N=4) were neutral. 30.77% (N=4) agreed. Another 30.77% (N=4) strongly agreed that project delays are one of the challenges. The results are depicted in the figure below:

Figure 41: Project delays



- *Employee resistance to change*

The results show that 15.38% (N=2) disagreed with the statement, while the majority 15.38% (N=1) were neutral. However, a significant 61.54% (N=8) agreed that employee resistance to change is one of the challenges, while 7.69% (N=1) strongly agreed. The results are presented in the figure below:

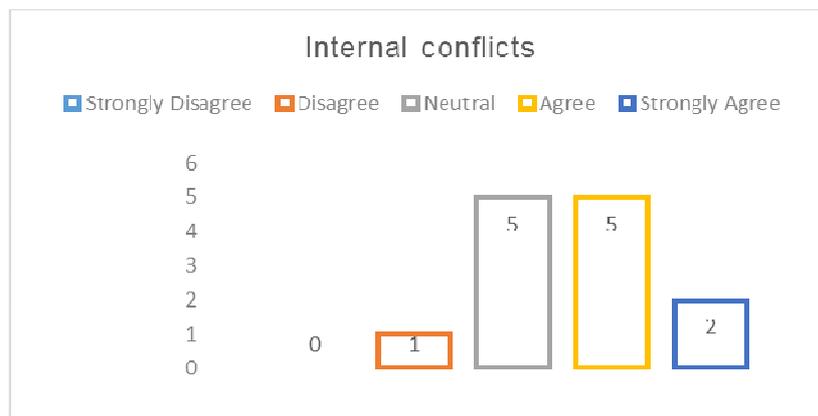
Figure 42: Employee resistance



- *Internal conflicts*

The results from Management responses shows that 7.69% (N=1) disagreed with the statement, and 38.46% (N=5) were neutral. However, 38.46% (N=5) agreed, while 15.38% (N=2) strongly agreed that internal conflict is a challenge. The results are presented in the figure below:

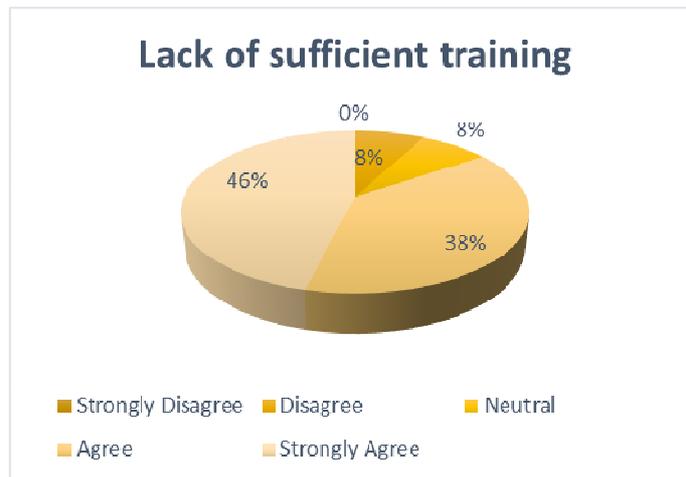
Figure 43: Internal conflicts



- *Lack of sufficient training*

The results indicated whether “lack of sufficient training” was also a challenge in implementing ORACLE/ERP at MVA Fund. They show that 7.69% (N=1) disagreed with the statement, while 7.69% (N=1) were neutral. However, 38.46% (N=5) agreed, but a significant 46.15 % (N=6) strongly agreed with the statement. The results are presented in the figure below:

Figure 44: Lack of sufficient training



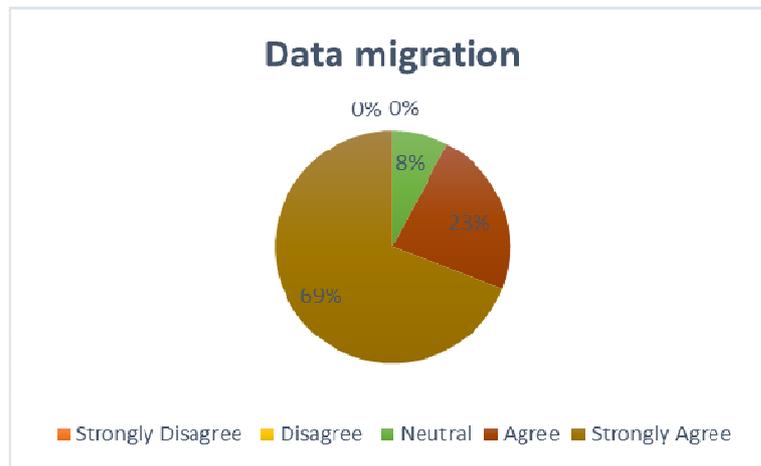
4.6.4. Technical problems

- *Data migration*

The respondents were also asked to indicate if “data migration” also surfaced as a challenge during implementation. Results show that on whether “data migration” was also a challenge in implementing ORACLE/ERP at MVA Fund shows that 7.69% (N=1) were neutral. However, 23.08% (N=3) agreed, while a significant 69.23 %

(N=9) strongly agreed that data migration was one of the technical challenges. The results are presented below:

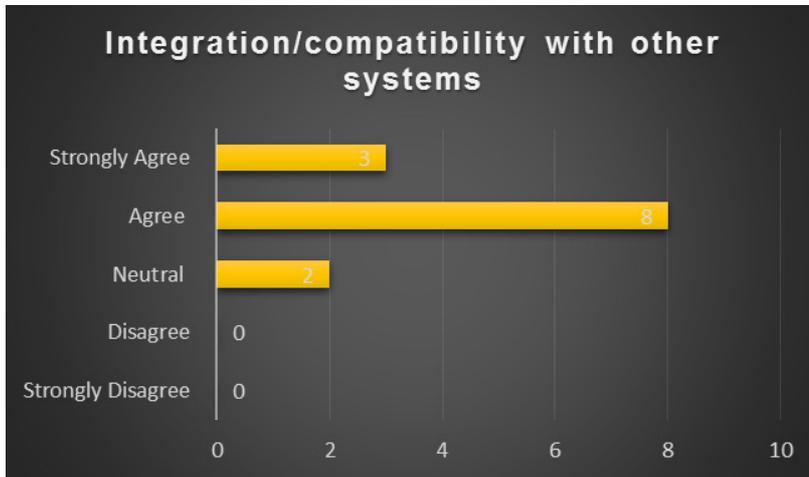
Figure 45: Data migration



- *Integration/compatibility with other systems*

The respondents were also asked to indicate if “Integration/compatibility with other systems” also surfaced as a challenge during implementation. Results shows that 15.38% (N=2) were neutral. However, a significant 61.54% (N=8) agreed that integration/compatibility with other systems was a challenge, while a further 23.08 % (N=3) strongly agreed. The results are presented below:

Figure 46: Integration with other systems

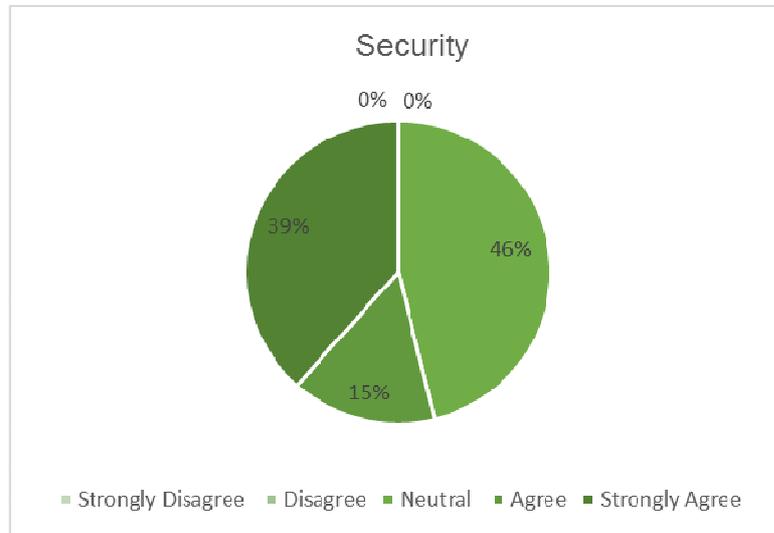


- *Security*

The respondents were further asked to indicate if “security” posed a challenge during the ERP implementation. Results shows that a significant 46.15% (N=6) were neutral, while 15.38% (N=2) agreed that security of information surfaced as a challenge. 38.46 % (N=5) strongly agreed with the statement that security was a technical problem.

The results are presented below:

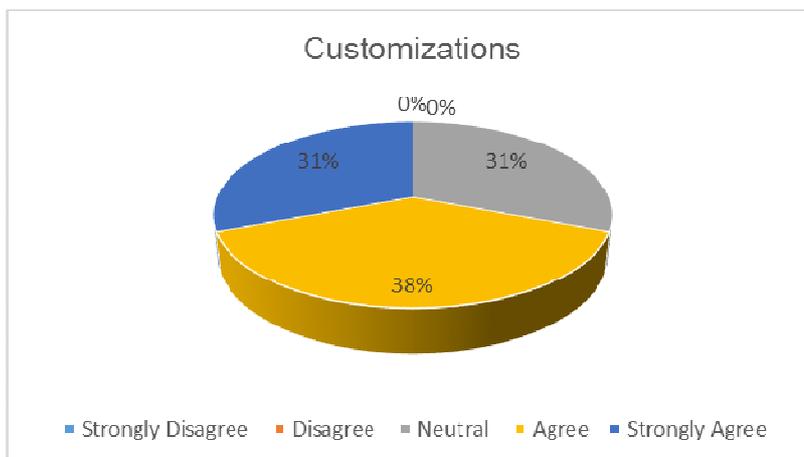
Figure 47: Security



- *Customisations*

The researcher further asked the respondents about customisations as a technical problem. Results shows that 30.77% (N=4) were neutral, while a significant 38.46% (N=5) agreed that customisations surfaced as a challenge and a further 30.77 % (N=4) strongly agreed with the statement. The results are depicted below:

Figure 48: Customizations



4.7. Communication and Support

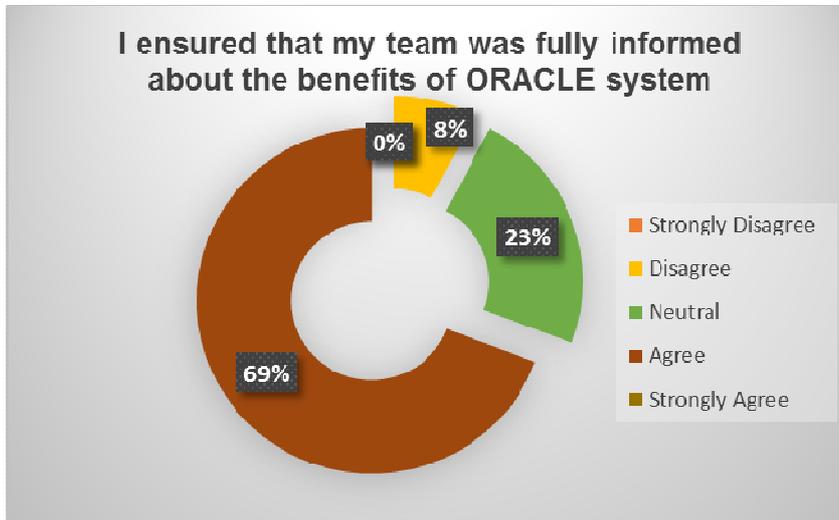
The third objective of the survey was to examine the role of communication and support in ensuring effective ERP implementation. The research further measured this from a Management's perspective i.e. the extent to which communication and support was rendered to the teams they led during the implementation of ORACLE at the MVA Fund. To this extent four statements were presented, two per sub-heading, communication and support respectively. Respondents indicated their level of agreement or disagreement on a 5 point scale.

4.7.1. Communication

- *I ensured that my team was fully informed about the benefits of ORACLE system*

The researcher sought to reaffirm Management's perception of whether communication was critical by informing their team about the benefits of ORACLE. Out of 13 respondents, 7.69% (N=1) disagreed that they informed their teams about the benefits of ORACLE, while 23.08 % (N=3) were neutral, A significant 69.23% (N=9) strongly agreed that their teams were fully informed about the benefits of the new system. This data is illustrated below as follows:

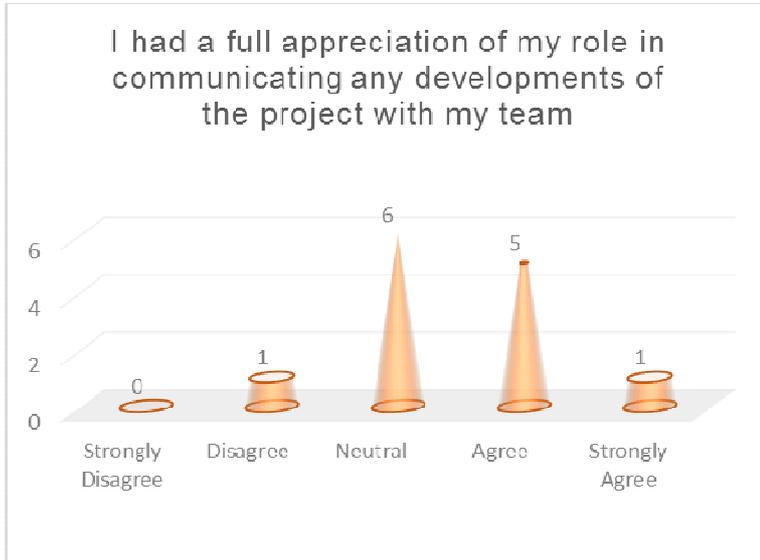
Figure 49: I ensured that my team was fully informed about the benefits of ORACLE system



- *I had a full appreciation of my role in communicating any developments of the project with my team*

The survey further strived to establish the level of Management's commitment to communicating project developments to their teams. Out of 13 respondents, 7.69% (N=1) disagreed, a significant 46.15 % (N=6) were neutral. At the other end of the scale 38.46% (N=5) agreed, while 7.69% (N=1) strongly agreed that they had a full appreciation of their role in communicating project developments with their teams. This data is illustrated below as follows:

Figure 50: I had a full appreciation of my role in communicating any developments of the project with my team

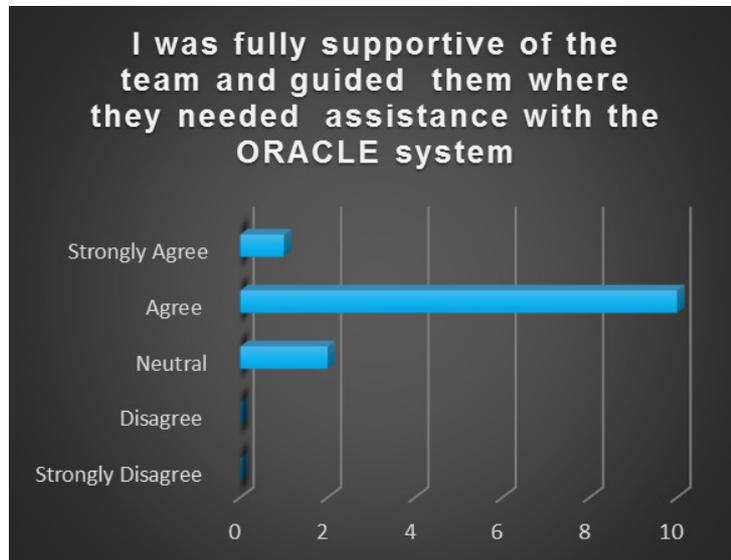


4.7.2. Support

- *I was fully supportive of the team and guided them where they needed assistance with the ORACLE system*

The survey further sought to gauge Management's level of support and guidance during the implementation. The results show that, 15.38% (N=2) were neutral, a significant 76.92 % (N=10) agreed that they were supportive and guided their teams during the process, while 7.69% (N=1) strongly agreed with the statement. This data is illustrated below as follows:

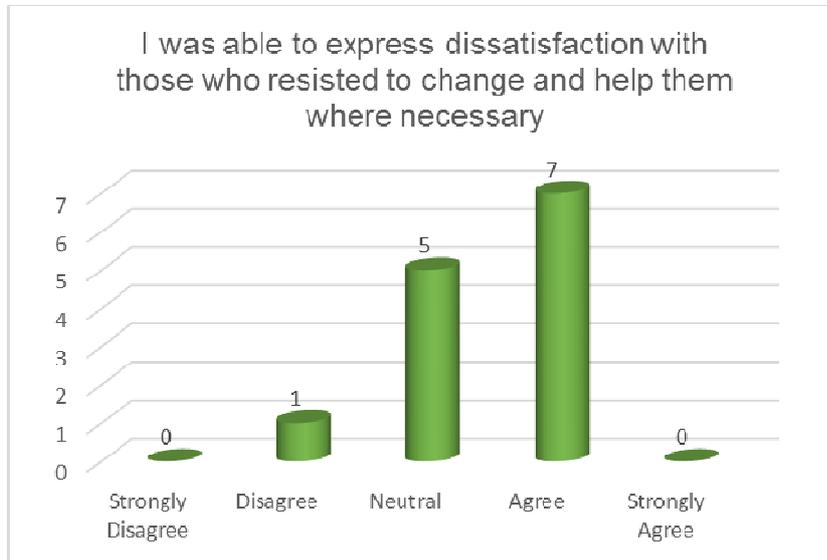
Figure 51: I was fully supportive of the team and guided them where they needed assistance with the ORACLE system



- *I was able express dissatisfaction with those who resisted change and help them where necessary*

The respondents were then asked to indicate their level of agreement or disagreement with regard to change management aspects, with particular reference to change resistance. The results show that, 7.69% (N=1) disagreed, while 38.46 % (N=5) were neutral. However, 53.85% (N=7) agreed that they were able express dissatisfaction with those who resisted change and help them where necessary. This data is illustrated below as follows:

Figure 52: I was able to express dissatisfaction with those who resisted change and help them where necessary.



END USERS RESPONSES

4.8. Demographics of end user respondents

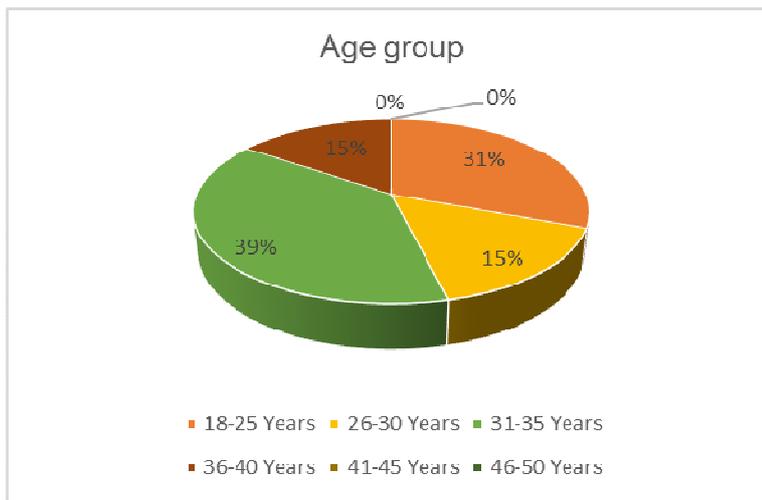
The questionnaire consisted of 18 questions and was administered to 45 respondents who met the sample of eligible end users. They were employed with the MVA Fund between 2009 and 2012 and were affected by the implementation of ORACLE. Out of the 45 eligible users, only 13 responded to the survey.

The results shows that 92.31 % (N=12) were females and the remaining 7.69 % (N=1) were males.

- *Age groups*

The figures below presents the various age groups, office location of the 13 respondents and their distribution across units within the MVA Fund.

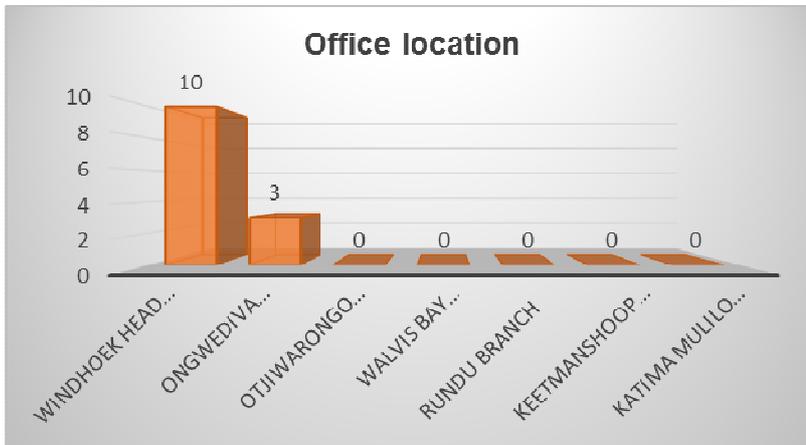
Figure 53: Age group



- *Office location*

The results shows that 76.92 % (N=10) are at Windhoek Head Office and the remaining 23.08 % (N=3) are at Ongwediva Service Centre. The figure below depicts this data:

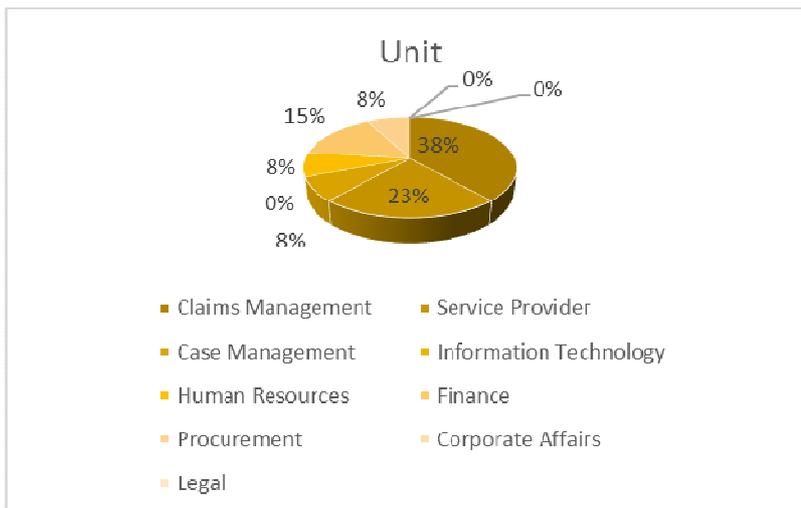
Figure 54: Office location



- *Units of respondents within the organisation*

The results show that 38.46 % (N=5) of the respondents are in Claims Management, while 23.08% (N=3) are in Service Provider, 7.69% (N=1) from Case Management, another 7.69% (N=1) from Human Resources. 15.38 % (N=2) are in Finance while the remaining 7.69% (N=1) are from the Procurement Unit. The data is presented below:

Figure 55: Units



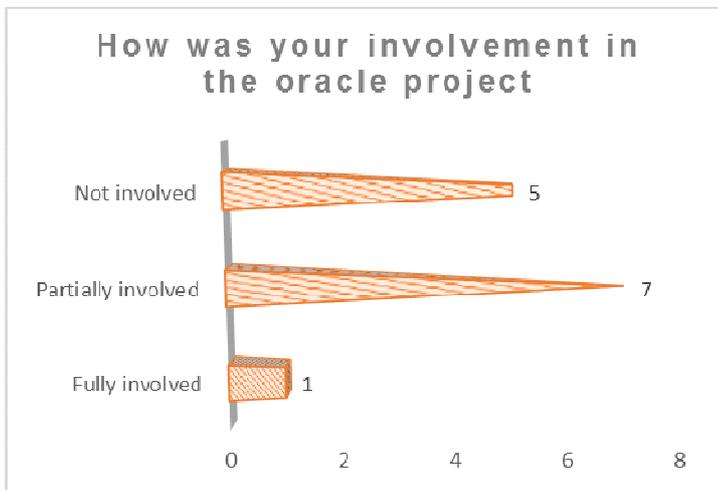
4.9. Training and communication

4.9.1. Involvement

- *What was your involvement in the ORACLE project?*

This sought to establish the level of involvement the end users of the system had during the implementation, to ascertain if they were part of the process or merely at the receiving end. Respondents were asked to indicate how involved they were in the implementation of the new system. The results show that, 7.69% (N=1) were fully involved, while 53.85 % (N=5) partially involved, but 38.46% (N=5) indicated that they were not involved in the implementation of the ORACLE system. This data is illustrated below:

Figure 56: How was your involvement in the oracle project?



4.9.2. When was training and education conducted?

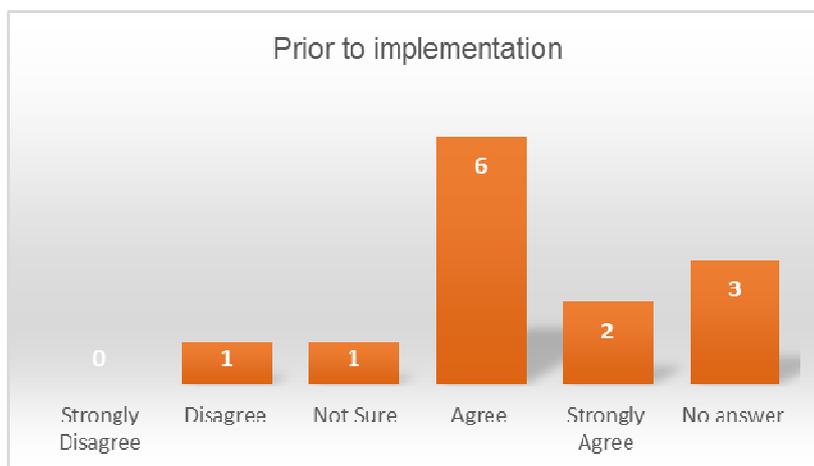
As part of the third objective which is to examine the role of communication, training and support in ensuring effective ERP implementation the survey strived to establish

when the end users' training and education was conducted. This section aimed to measure the end users experiences with training provided in light of the implementation. There were four statements to which respondents had to indicate their level of agreement or disagreement.

- *Prior to implementation*

7.69 % (N=1) disagreed, another 7.69% (N=1) were not sure if training was provided prior to implementation. A significant 46.15 % (N=6) agreed that training was provided prior to implementation, while 15.38% (N=2) strongly agreed. However 23.08% (N=3) provided no answer to this question. The Figure below presents these results:

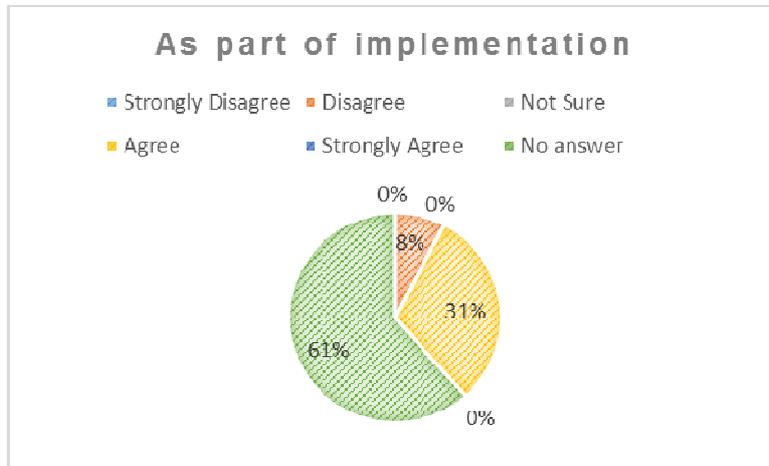
Figure 57: Prior to implementation



- *As part of the implementation*

The results show that 7.69 % (N=1) disagreed, another 30.77% (N=4) agreed that training was provided as part of the implementation. A significant 61.54 % (N=8) provided no answer to this question. The Figure below shows an exhibit of these results.

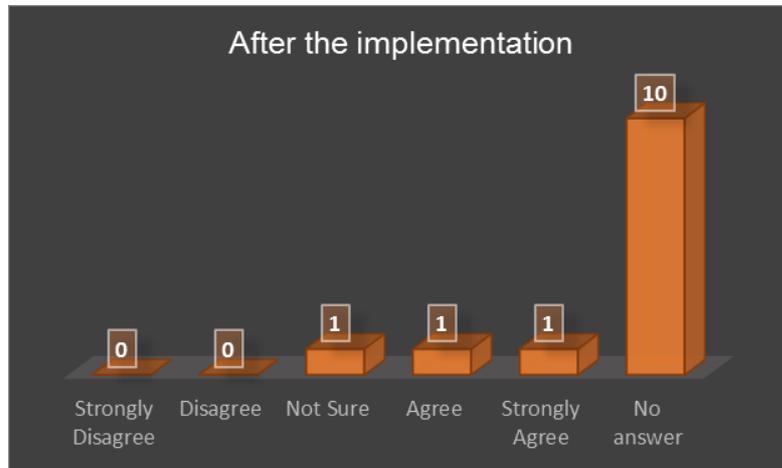
Figure 58: As part of implementation



▪ *After implementation*

The respondents were also asked to indicate if training was provided after implementation. Results show that 7.69 % (N=1) were not sure, while 7.69% (N=1) agreed that training and education was conducted after implementation. Another 7.69% (N=1) strongly agree but a significant 76.92% (N=10) provided no answer to this question. The figure below presents a graphic depiction of these results.

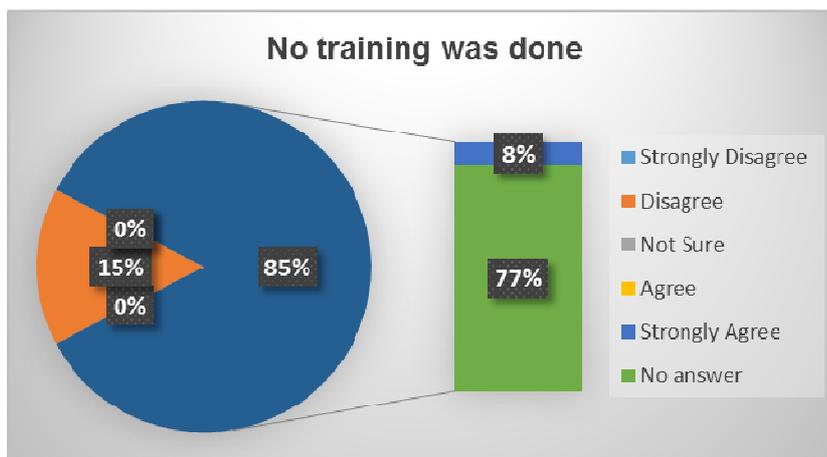
Figure 59: After the implementation



- *No training and education was conducted*

The researcher further asked the respondents if training and education was conducted at all. Results show that 15.38 % (N=2) disagreed that it did not take place, while 7.69% (N=1) strongly agreed that training and education was not done, 76.92% (N=10) provided no answer to this question. The figure below presents a graphic depict of these results.

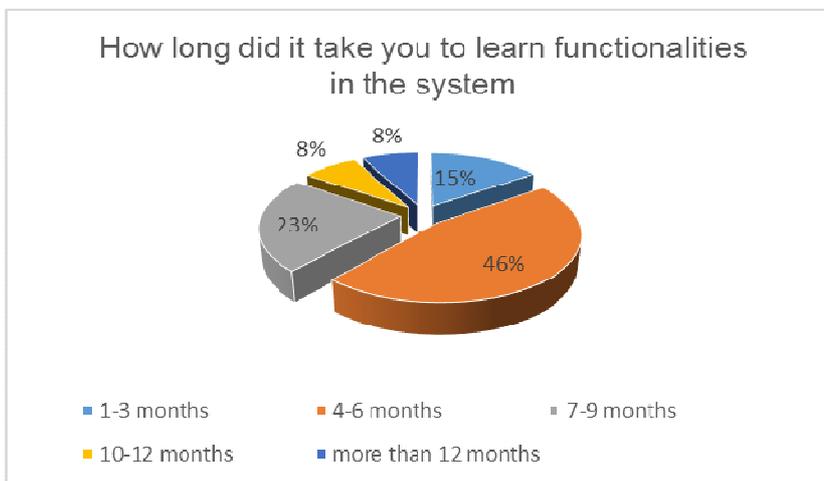
Figure 60: No training was done



4.9.3 How long did it take for you to learn all the functionalities in the system?

The respondents were asked to indicate how long it took for them to learn the system functionalities. Results show that 15% (N=2) took 1-3 months, while a significant 46% (N=6) took 4-6 months. 23% (N=3) took 7-9 months, while 8% (N=1) chose 10-12 months and the remaining 8% (N=1) took more than 12 months to learn the new system's functionalities. The figure below presents a graphic depiction of these results.

Figure 61: How long did it take you to learn functionalities in the system?



4.10. Communication and support

The third and fourth objective of the study which are to examine the role of communication and support in ensuring effective ERP implementation; and, to review the change management process and assess its effectiveness in implementing an ERP at MVA Fund. On this note, the survey then sought to establish whether the communication and support aspects were felt by the employees during the implementation of the project. These statements also required respondents to indicate on a five point Lickert scale, their level of agreement or disagreement.

4.10.1. Communication

- *I was fully informed about the benefits of the ORACLE system*

The third objective of the study is to examine the role of communication and support in ensuring effective ERP implementation. Results of the survey indicate that, 7.69% (N=1) strongly disagreed with the statement, another 7.69% (N=1) disagreed, while a significant 46.15 % (N=6) were neutral. At the other end of the scale, 23.08 % (N=3) agreed, while 23.08 % (N=2) strongly agreed that they were fully informed about the benefits of the new system. The results are depicted in the table below:

Table 4: I was fully informed about the benefits of the ORACLE system

Response	Frequency	Percentage
Strongly Disagree	1	7.69%
Disagree	1	7.69%
Neutral	6	46.15%
Agree	3	23.08%
Strongly Agree	2	15.38%

- *I had a full appreciation of the role of communication on any project changes and developments*

Results of the survey indicate that, 15.38% (N=2) strongly disagreed with the statement, 7.69% (N=1) disagreed, while 23.08 % (N=3) were neutral. At the other end of the scale, a significant 38.46 % (N=5) agreed, while 15.38 % (N=2) strongly agreed that

they had a full appreciation of the role of communication on any project changes and developments. The results are depicted in the table below:

Table 5: I had a full appreciation of the role of communication on any project changes and developments

Response	Frequency	Percentage
Strongly Disagree	2	15.38%
Disagree	1	7.69%
Neutral	3	23.08%
Agree	5	38.46%
Strongly Agree	2	15.38%

4.10.2. Support

- *I was fully supported and guided where I needed assistance with the ORACLE system*

The respondents indicated their level of satisfaction with the support and guidance they received during the implementation. The results are as follows: 23.08 % (N=3) were neutral. At the other end of the scale, a significant 53.85% (N=7) agreed, while 23.08 % (N=3) strongly agreed that they were fully supported and guided where they needed assistance with the ORACLE system. The results are depicted in the table below:

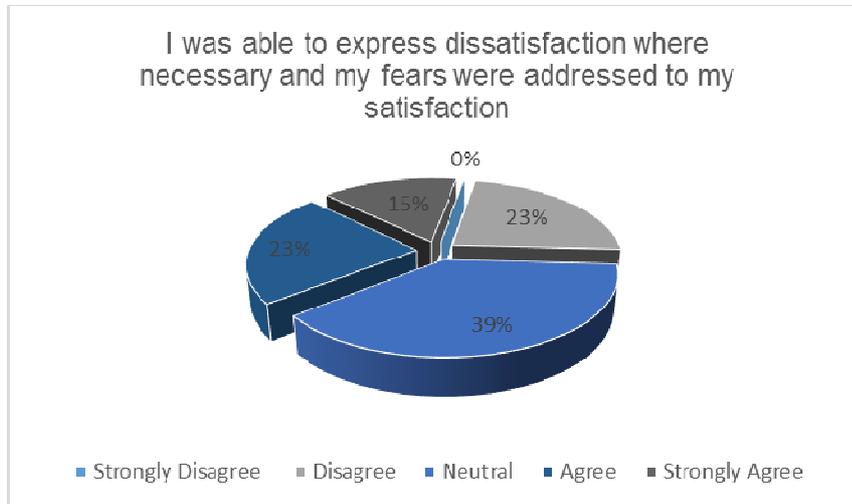
Table 6: I was fully supported and guided where I needed assistance with the ORACLE system

Response	Frequency	Percentage
Strongly Disagree	0	0.00%
Disagree	0	0.00%
Neutral	3	23.08%
Agree	7	53.85%
Strongly Agree	3	23.08%

- *I was able to express dissatisfaction where necessary and my fears were addressed to my satisfaction*

The respondents were asked to indicate if they were able to express dissatisfaction where necessary and if their fears were addressed to their satisfaction. The results are as follows: 23.08 % (N=3) disagreed, a significant 38.46% (N=5) were neutral. At the other end of the scale, 23.08% (N=3) agreed, and 15.38 % (N=2) strongly agreed with the statement. The results are depicted in the figure below:

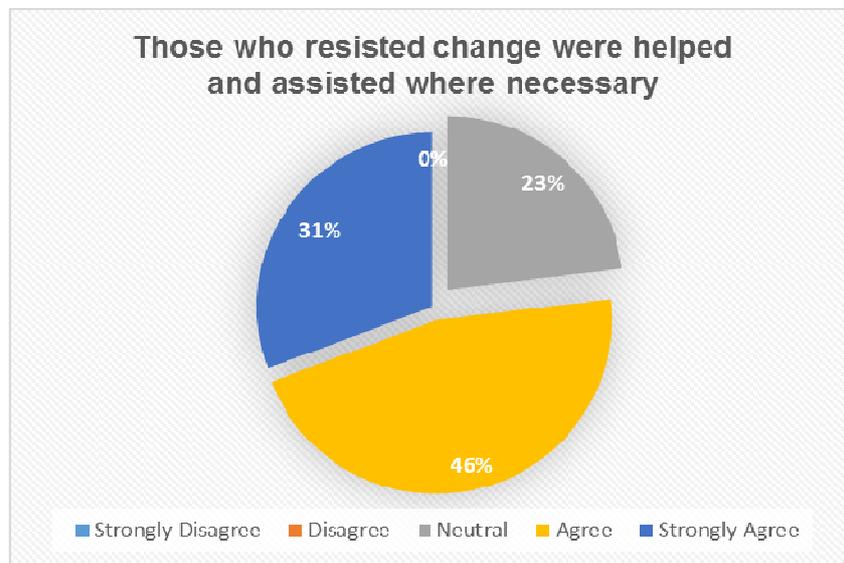
Figure 62: I was able to express dissatisfaction where necessary and my fears were addressed to my satisfaction



Those who resisted to change were helped and assisted where necessary

The effectiveness of the change management interventions was gauged by asking the respondents to indicate if there were any mechanisms in place to assist those that resisted the change. The results are as follows: 23.08 % (N=3) were neutral, while a significant 46.15% (N=6) agreed and 30.77% (N=4) strongly agreed that those who resisted change were helped and assisted where necessary. The results are depicted in the figure below:

Figure 63: Those who resisted change were helped and assisted where necessary



4.11. Summary of Chapter Four

This chapter presented the findings of the survey carried out with the target groups. Findings were presented in accordance with the objectives of the survey in order to give it structure and flow. Research findings indicate that the MVA Fund invested in change management to implement the new system, coupled with extensive communication, training and education. It further shows that in involving employees in drawing up specifications of their respective functions and appointing a project core team it created a sense of urgency to change and buy in from the employees.

The Fund further ensured that those who resisted change were assisted and employees as well as Management were able to express their dissatisfaction where necessary and the fears that come with change were addressed. As a result employees perceived the change as necessary and did not resist the new vision. Lastly, the change communication strategy in place seemed to yield positive results, as

employees were engaged in decision making and were informed on the benefits of acquiring the new system. The next chapter is a discussion of these results and the conclusions and recommendations that were drawn.

CHAPTER 5 DISCUSSION OF FINDINGS, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

Chapter five presents a discussion of the findings presented in the previous chapter. This discussion will be done in line with the research objectives as well as the conceptual framework which was presented in chapter 2 of this research paper. Conclusions will be drawn out of these discussions and relevant recommendations will be made in order to improve the change management within an ERP system implementation, within the MVA Fund environment or institutions implementing or planning to implement an ERP system.

Various headings will be identified in presenting the discussion; however these are only done so in order to achieve structure and coherence in the paper.

5.2 The change process used to implement the ERP/ORACLE project and how effectiveness was measured

Survey results are indicative that the MVA Fund used a very effective process and strategy to implement the ERP/ORACLE system. The strategy was to include employees in the process, from inception to deployment, in order for them to own the process. Firstly, the organisation ensured that a project core team consisting of members from each respective unit in the organisation was appointed. This ensured that there was ownership and a sense of buy-in from unit representatives that would influence other team members to share in the vision when implementing the new system. Secondly, employees and their respective managers also formed part of the initial stages of the

project which was drawing up specifications for their respective system functionalities, training and education. These clearly create a sense of urgency and give employees certainty over the new vision of system integration. This is confirmed by 62 % of end users and 69% from the Management who agreed that they were involved in the implementation of ORACLE.

Lessons from the conceptual framework guiding this research, shows us that phase one of the framework is human resource input, persuading people to “buy –into” realising the benefits of the new system to avoid resistance. We learn in (Millis & Merken 2008) that to reduce resistance, future new users of a system must be involved in the early phases of the project in order to create a sense of ownership and commitment to the project. This defines the starting point to address uncertainty and insecurity in an organisation because of the possible need to comply with new performance standards.

A leader should be able to convince his/her followers why the change needs to take place and how it is going to take place. Furthermore the leader needs to create a sense of urgency and create a situation where the entire company wants that change to happen. Involving system users in the early phases of the project means that the leader is able to convince the employees that the system belongs to them. According to Kotter (1996) for change to happen, it helps if the whole company really wants it. The results show that 100% of the Management respondents indicated that they knew the motive for procuring the new system and the benefits that came with it. In the same vein, 54% of the project core team’s results also show that they are aware of the benefits of ORACLE (e.g. 54% agreed to the statement “increases efficiencies by standardizing business process”). This, in essence, meant that employees were aware of the consequences of not having an

enterprise wide system that will integrate with all other standalone systems the organisation has, and this gave them an opportunity to weigh their options and be part of the change process.

Survey results also indicate that not only were the benefits known to the project core team and Management, but it was communicated to the entire organisation to reinforce the desired behaviour, as results show that over 38% of end users were fully informed about the benefits of ORACLE system.

The second part of the objective sought to find out how the effectiveness of the implementation was measured. Over 80% of the project core team took less than twelve months to master the new system. The more involved a team is in the initial stages (i.e. drawing up specifications), the less time is needed to know and learn the functionalities of the new system, as results show that over 46% of end users learnt the functionalities of the new system in one to three months.

According to the conceptual framework by McCarthy and Eastman (2010) the primary purpose of change management is to accelerate the speed at which people move successfully through the change process so that anticipated benefits are achieved faster. For instance, over 60 % of the end users indicated that it took them less than twelve months to learn all functionalities of the system. Involving employees in the initial stages of system development would accelerate the speed at which users get to know the system and would drive performance within the organisation.

Furthermore in the MVA Fund environment we learn that Management was able to express dissatisfaction with those who resisted change and helped them where

necessary, (as indicated by 54 % of the respondents). Helping those who are resistant to change is a reinforcement of the idea that the organisation wants all system users to embrace change and own the new system. This motivates employees and keeps them focused on the end result. Whilst the results are positive which is highly commendable, there is however, a concern that a 23 % of the surveyed end users disagreed that they were able to express their dissatisfaction where necessary or that their fears were addressed to their satisfaction. This may give an indication that the change management process could have been compromised on some “soft issues”.

5.3 The role of communication, training and support in ensuring effective ERP implementation

In Chapter 2, Kotter (1995) argued that communication is important to assist employees to move through stages so that they understand the benefits of change for the organization and particularly “what’s in it” for them as individuals. Hence, change management entails thoughtful planning and sensitive implementation, and above all, consultation with, and involvement of, all the people affected by the changes. The role of the management team (leadership) is to show employees the reasons for a change and the benefits associated with it. The research shows us that the ERP/ORACLE system at the MVA Fund is characterised by communication, training and support, which are the key ingredients that drive effective ERP implementation.

In addition, about 69 % of Management confirmed that they had ensured their teams were fully informed about the benefits of ORACLE system. Whilst about 46% confirmed that they had a full appreciation of their roles in communicating any

developments in the project with their teams. From the survey we can deduce that this influence is positive, because it drives results. 38% of employees confirmed that they were fully informed about the benefits of the ORACLE system, and 54% indicated that they had a full appreciation of the role of communication in any project changes and development.

The ADKAR model by Prosci (2002) described that successful change occurs when individuals have also changed and that it happens to an organisation and its people and therefore organisational change can only happen when the employees themselves have accepted the change. It follows therefore communication plays a major role in change management in order to inform employees on how the change will take place. If there is to be any specialised training or skills that might be required it must be provided prior to implementing the change. Once the change is implemented, it is important that communication is sustained.

On training and education, Koh, Nah, Lau and Kuang (2006) illustrated the importance of these by conducting a case study on six manufacturing companies of different sizes. The authors reported that human factors constituted a major problem especially for small- and medium-sized companies. Their findings highlighted the fact that many employees were not trained to use the systems and many were unfamiliar with computers and as a result a number of issues arose such as; erroneous data input, poor use of the systems, increasing costs of training services offered by the vendors, employee resistance to integration of the ERP system into the business process and the need to hire information technology personnel.

Results show that 62% of the project core team confirmed that they received training prior to the system implementation. A further 30% indicated that training was also conducted as part of the implementation. These results give a ray of hope in terms of end users training, as this is dependent on the successful training of the project core team. In the same vein, about 69% of end users confirmed that training was conducted prior to implementation; a significant 77% confirmed they had received training as part of the implementation, while 62% indicated that they had received further training after implementation.

On this theme, Dimitrios, Charalampos and Dimoitrios (2010) added that the implementation of a new system alone is not enough, since every change in processes or operations will also require the retraining of employees, which will consequently require the employees to change their old ways of working and adopt the new working style. In this inference, it is clear that these factors have to be considered for the successful implementation of the ERP project and cannot be divorced from each other.

Although an extensive communication, training and education is considered as a critical success factor by most authors, Worley, Sambamurthy and Kirsch (2005), stated that the adoption of the system after it is implemented does not only depend on training. They argued that it also requires how the information system and the users will be mutually adapted to the other in terms of the level of the position of a person within the company and to his knowledge and competency. This brings in the aspect of support. The survey results shows that 84% of Management respondents confirmed that they were fully supportive of their teams and guided them where they needed assistance with the ORACLE system. This is further supported by 80% of the project core team who

confirmed that they were also fully supportive of the teams and guided them where they needed assistance with the ORACLE system. A further 69% and 53% of the core team and Management respectively, indicated that they were able to express their dissatisfaction with those who resisted change and helped them where necessary.

The above results resonate well with the 80% of end users who confirmed that they were fully supported and guided where they needed assistance with the system. 80% also confirmed that those who resisted change were helped and assisted. Overall and above, the results indicate that the employees at the MVA Fund were fully informed about any development or changes regarding the project, were trained before, during and after the implementation on the system and had received the support and guidance they needed during the implementation.

5.4. Employees understanding on the benefits and challenges of implementing an ERP

The MVA Fund seems to have educated the employees on the benefits of implementing ORACLE as well as on the possible challenges that come with it. Results indicate that employees were aware of the benefits and challenges. In the literature review, we learn that ERP has largely influenced how organisations work in the 21st century. ERP plays an important role as an enabling function and has become part of the business as it drives the competitive advantage to an extent that its implementation has largely shifted from the technical side of IT, and more to the managerial side. Organisations invest in technology in order to improve their productivity, as well as the cost and the quality of their products and services. Dimitrios et al. (2010) pointed that it is

critical that a huge of investment in ERP yields big returns because it plays a big role in the day to day running of the business such that if it fails, the organisation as a whole is affected to its detriment.

On benefits associated with the implementation of ORACLE, in total about 58% of the respondents indicated “customer satisfaction”, 73% indicated that it will “increase efficiencies as processes will be standardised”, while 54% indicated that “accurate and timely business information” is also one of the benefits. 62% also indicated that it will benefit the MVA Fund in “real time information throughout all the functional areas of the organisation” and that it will “improve decision making capabilities”.

As discussed in the literature ERP system acquisition and implementation generally enhance productivity and working quality, since the system offers standardisation and simplification in multiple, complicated operational procedures across the company, (Dimitrios et al., 2010; Amoako-Gyampah, 2007; Kemp and Low, 2008) and information can be easily transferred, shared and exchanged among users who are working in different business divisions. The literature has identified the potential benefits of an ERP system implementation (Al-Mashari, 2003; Amoako-Gyampah, 2007; Chang, 2004; King, 2005; Scott and Kaindl, 2000; Umble and Umble, 2003), below are some of these potential benefits that correspond with the responses from the surveyed employees:

- Improved coordination across functional departments;
- Increased efficiency in doing business;
- Customer satisfaction

- Rapid access to information for decision making and managerial control

The survey results indicate that the MVA Fund employees were fully informed about the benefits of implementing ORACLE and hence it made it easy for them to accept the new system.

As argued by Marnewick and Labuschagne (2006) in the literature review, despite the attributes and major advantages provided by ERP systems, the implementation of such systems are not always effective, and there are numerous challenges to overcome. The MVA Fund also encountered challenges in its journey to ERP realisation. The results show that 62% from Management confirmed that “employee resistance to change” was one of the challenges, while 69% confirmed “project delays” was another. In the same category of respondents, “integration/compatibility with other systems” was identified as a challenge by 85%, while 80% pointed out that “data migration” and “customisations” were challenges.

In light of the above results it is worth noting that (Bradford & Florin, 2003; Hong & Kim, 2007; Marnewick & Labuschagne, 2006) warned that most ERP systems often fail to meet organisational goals soon after their implementation. The cause of the general disappointment regarding ERP system effectiveness lies in a number of reasons, including a failure to properly enact change management strategies in rolling out the implementation. The same cannot be said for the MVA Fund because the system was implemented twenty months ago but change management, training and education still remains an agenda point for the organisation as challenges keep emerging.

5.5. The effectiveness of the change management process

From the survey we can deduce that the change communication strategy used by the Fund was very effective. Firstly, there was a project core team and Management that ensured that project developments and changes were communicated to all employees and this is confirmed by 92% of the respondents who confirmed that they were fully informed of the benefits of ORACLE and had a full appreciation of the role of communication on project changes and developments. Secondly, there was a “noble” agreement that those who resisted change were supported and assisted where necessary, as confirmed by 77% of the end users. Moreover it can be seen that employees were able to express their dissatisfaction and their fears were addressed to their satisfaction. According to Kotter (1995) sometimes change fails due to under communication of the vision. He states that transformation is impossible unless people are willing to help and make sacrifices and these sacrifices will only be made if they believe that useful change is possible. All these will not be achieved without credible communication. Kotter (1995) further establishes that in a successful transformation, those leading the change use all existing channels to broadcast the vision. This view is supported by Jick (2003) that by communicating the gains, reaffirmation of the costs and implications of not changing, resistance slowly fades away, while full participation grows.

Research results earlier revealed that 62% of employees were involved in the project together with 69% from Management. A further 92% of Management confirmed that their teams were involved in the drawing of system specifications and this shows that Management used a consultative approach when taking decisions that affected employees and promoted a participatory approach to communication where employees’ ideas were

considered in decision making. The literature supports this practice by leaders as seen in Yukl (2004) who purport that it is critical that leaders at this stage of radical change reaffirm the gains of the change, by highlighting the achievements, whilst involving employees in decision making and at the same time fostering teamwork.

In step 1 of the Price and Chahal (2006) framework, literature teaches that the organisation needs to be prepared. This step includes communicating the forth-coming change to the organisation and listening to the workforce and their concerns. It is believed that paying attention to the workforce demonstrates respect that can be used during and after the implementation of the project. Results of the survey illustrate that 77 % of the end user respondents felt that were fully supported and guided where they required assistance with the new system, and 38% confirmed that they were able to express dissatisfaction where necessary and their fears were addressed to satisfaction.

5.6 Limitations

i) Demographic results show that 30.77 % of the respondents (Management) were not involved in the implementation of the ORACLE system, meaning that their units were not affected by the change in system and do not fit the sample description.

ii) The survey was administered by using computer aided software where respondents could complete the survey online at their own leisure. Whilst interpreting data it became clear that there were pockets of misunderstanding by some of the respondents and these could have been cleared up if the survey had been conducted face to face.

iii) Due to time constraints, the research employed only quantitative research methods and would have benefited a lot from qualitative data, to explain some of the outcomes in more detail.

5.7 Conclusions

This research set out to ascertain if the MVA Fund employed change management strategies in implementing its ERP/ORACLE project with an aim of assessing the effectiveness of the adopted change management process. It further looked at how the organisation managed the change process as well as the effectiveness of the communication, training and education strategy that was implemented. It specifically looked at the following objectives:

- To identify the change management process used to implement an ERP project at the MVA Fund and assess its effectiveness;
- Examine the role of communication, training and support in ensuring an effective ERP implementation;
- To ascertain whether the MVA Fund employed change management strategies in implementing its ERP project and to identify employees' understanding on the benefits and challenges of implementing an ERP.

The results of the survey portray a lot of positive outcomes in light of the main objective of ascertaining whether the MVA Fund employed change management strategies in implementing its ERP/ORACLE project. Based on the discussion of the findings above, the following conclusions have been reached. The MVA Fund used a

very effective methodology and process to implement its ERP/ORACLE system by involving appointing a project core team that steered the project, trained the end users and simultaneously imparted skills and knowledge. The organisation used a consultative and participatory approach, in which users formed a crucial part in drawing up the system specifications. There was an effective communication channel both from Management to their teams, project core team to the end users and vice versa.

Training and education was also a key component of the MVA Fund's change process, both project core team members and the end users were trained throughout the phases of the projects and as a result it took a reasonable time for all users to learn the functionalities of the new system. The leaders of the MVA Fund played a pivotal role during the change process and they positively influenced the employees to embrace change and appreciate the new system by supporting and assisting those that resisted change. Employees reacted very positively to the change; they bought into the vision, thereby receiving the change positively and with great ease. Lastly, the communication strategy, training and education tools selected by the Fund for the implementation of ERP/ORACLE system were very effective and contributed significantly to employees' "buy-in" into the vision.

5.8 Recommendations

In light of the discussion of the results and the conclusions drawn, the following recommendations are.

i) Communication is vital in any organisation that is undergoing change. It is critical in organisations undergoing change, for its employees to know what to expect, because

information empowers people and provides them with a sense of security. It is therefore recommended that the Fund continues to improve communication within the organisation as part of change management. It is worrisome that 15% of the end users did not respond positively to the statement of whether they were fully informed on the benefits of the new system; 23% did also not respond positively if they had a full appreciation of the role of communication in any project changes development. Another 23% did not indicate that they had the ability to express their dissatisfaction where necessary and that fears were addressed to their satisfaction.

ii) Secondly, it is recommended that the Fund pay special attention to training issues of the project core team as it is a concern that 15 % did not respond positively to the statement on whether training was provided prior to the implementation of the system. The project core team is the driver of the project and users rely on them for adequate training.

iii) Thirdly, it is recommended that the entire Management be engaged in the process to enable a global buy in and unity across the organisation. It is a concern that 30 % of the respondents from Management indicated that were not involved in the implementation of the new system, and 8% indicated that no business re-engineering was done. This is a major concern as Management is the pillar of the organisation.

iv) Fourthly, the leadership should continue to involve employees in decision making and continue to support, guide, train and empower them, allowing them to express their dissatisfaction where necessary and address their fears. This, as proven by the literature reviewed is also a cornerstone in successfully implementing change.

v) Finally there are implications for future research in the Fund. It would be very useful to research the implications of the implementation of a new system for other stakeholders who deal with the Fund on a daily basis. Future research could build on this study by identifying the challenges and benefits that affected the external stakeholders and study how the change affected the triple bottom line.

5.9 Summary of chapter Five

This chapter presented a discussion of the findings of the research. It presented conclusions based on the discussion as well as the limitations of the research. The chapter was concluded with recommendations to the MVA Fund on how future change could be managed as well as implications for further research within the same environment.

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APPENDICES

Sample questionnaires: ERP implementation

APPENDIX 1: PROJECT CORE TEAM QUESTIONNAIRE

Thank you for taking time to complete this questionnaire aimed at collecting data on the implementation of the new wide enterprise system at the MVA Fund, namely; ORACLE. Your input is highly valued as it will contribute to gaining a better understanding and insight of the impact of its implementation on the organization at large.

Be rest assured that you responses will be treated with the strictest confidence.

Section A

Demographic Information

1. What is your gender?

Male	
Female	

2. How long have you worked for MVA Fund?

0-1 Years	
2-5 Years	
6- 10 Years	
11 – 16 Years	
15 or above	

1. **At which office are you located?**

Windhoek Head Office	
Ongwediva Service Center	
Otjiwarongo Branch	

Walvis Bay Branch	
Rundu Branch	
Keetmanshoop Branch	
Katima Mulilo Branch	

3. What are your qualifications?

Grade 12 Certificate	
Certificate	
Diploma/ Degree	
Master's	

SECTION B: BENEFITS OF ORACLE

This section measures your views on the benefits of the implementation of the ORACLE system within the MVA Fund. **Please rate your level of agreement with each of the statements.**

Area	Strongly disagree	Disagree	Neutral	Agree	Strongly Agree
Increases efficiencies by standardizing business processes					
On-line/real time information throughout all the functional areas of an organization					
Data standardization and accuracy across the organization					
Ease of analysis and reporting that can be used for long term planning					
Reduces organization's expenses					

Reduces paper works					
Early risk resolution, early error and gap detection					
Increases adaptability to changing work conditions					
Increases customer satisfaction					
Improves decision-making capabilities					
Increases production capacity					

SECTION C: TRAINING AND COMMUNICATION

This section measures your training experiences for ORACLE implementation. **Please indicate what your experiences are by rating your level of agreement with each of the questions.**

	Strongly Disagree	Disagree	Not Sure	Agree	Strongly Agree
1. When was training conducted? Choose one answer only					
Prior to the implementation					
As part of the implementation					
After the implementation					
No training was done					
2. The User training was adequately conducted? Indicate your level of agreement					
3. The system was tested prior to implementation? Indicate your level of agreement					
4. How long did it take for you to learn the functionalities in the system? Choose one answer					
Within 1-3 weeks					
Within 4-6 weeks					

Within 7-9 weeks					
Within 10-12 months					
More than 12 months					

SECTION D: COMMUNICATION AND SUPPORT

The following statements describe the level of communication and your support provided for your team during and or after the implementation of ORACLE project. **Please indicate your level of agreement with each statement.**

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Communication					
I ensured that the team was fully informed about the benefits of ORACLE system					
I had a full appreciation of my role in communicating any developments of the project with the team					
Support	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
I was fully supportive of team and guided them where they needed assistance with the ORACLE system					
I was able to express dissatisfaction with those who resisted to change and help them where necessary					

Thank you very much for your cooperation and for taking your time to answer this questionnaire.

APPENDIX 2: MANAGEMENT QUESTIONNAIRE

Thank you for taking time to complete this questionnaire aimed at collecting data on the implementation of the new wide enterprise system at the MVA Fund, namely; ORACLE. Your input is highly valued as it will contribute to gaining a better understanding and insight of the impact of its implementation on the organization at large.

Be rest assured that you responses will be treated with the strictest confidence.

SECTION A: DEMOGRAPHIC INFORMATION

1. Gender?

Choose one of the following answers

Male	
Female	

2. Age?

Choose one of the following answers

18-25 Years	
26-30 Years	
31- 35 Years	
36 - 40 Years	
41 - 45 Years	
46- 50 Years	
51 Years - Above	

3. At which office are you located?

Windhoek Office	Head	
Ongwediva Center	Service	
Otjiwarongo Branch		
Walvis Bay Branch		
Rundu Branch		
Keetmanshoop Branch		
Katima Mulilo Branch		

4. Position held at the Fund?

Choose one of the following answers

Head	
Manager	
Senior Manager	

5. Years of Service at the Fund

Choose one of the following answers

0 - 3 years	
4- 5 Years	
5-10 Years	
More than 10 Years	

SECTION B: MANAGEMENT INVOLVEMENT

1. Where you involved in the implementation of ORACLE/ ERP project?

Yes	
No	

2. Was your Unit/ team involved in drawing up specifications for your respective system functionalities?

Yes	
No	

3. What do you think was the motive to procure the ORACLE system? Choose one answer only.

Cost saving	
Business Strategy - integration	
I don't know	

4. When was the business process re-engineered? Choose one answer only.

Prior to implementation	
As part of the implementation	
After the implementation	
No re-engineering done	

SECTION D: BENEFITS

The following could be the benefits of ORACLE implementation for MVA Fund. **Please rate your level of agreement with each of the statements**

BENEFITS	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Customer Satisfaction					
Enhanced productivity					
Reduce turnaround times					
Smooth System Integration					
Accurate and timely business information					

SECTION E: CHALLENGES AND TECHNICAL PROBLEMS

The following are the challenges and technical problems that could be faced during and/or after ORACLE Implementation. **Please rate your level of agreement with each of the statements**

1. Challenges	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Project delays					
Employee resistance to change					
Internal Conflicts					
Lack of sufficient training					
Conflicts with system service provider					
2. Technical Problems	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree

Data migration					
Customizations					
Security					
Integration/compatibility with other systems					

SECTION F: COMMUNICATION AND SUPPORT

The following statements describe the level of communication and your support provided for your team during and or after the implementation of ORACLE project.

Please rate your level of agreement with each of the statements

Communication	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
I ensured that my team was fully informed about the benefits of ORACLE system					
I had a full appreciation of my role in communicating any developments of the project with my team					
Support	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
I was fully supportive of the team and guided them where they needed assistance with the ORACLE system					
I was able to express dissatisfaction with those who resisted to change and help them where necessary					

Thank you very much for your cooperation and your responses are highly valued.

APPENDIX 3: END- USER’S QUESTIONNAIRE

Thank you for taking time to complete this questionnaire aimed at collecting data on the implementation of the new wide enterprise system at the MVA Fund, namely; ORACLE. Your input is highly valued as it will contribute to gaining a better understanding and insight of the impact of its implementation on the organization at large.

Be rest assured that you responses will be treated with the strictest confidence.

SECTION A

This section outlines Demographic Information

1. What is your gender?

Male	
Female	

2. Age?

18-25 Years	
26-30 Years	
31- 35 Years	
36 - 40 Years	
41 - 45 Years	
46- 50 Years	
51 Years- Above	

3. At which office are you located?

Windhoek Head Office	
Ongwediva Service Center	
Otjiwarongo Branch	
Walvis Bay Branch	
Rundu Branch	
Keetmanshoop Branch	
Katima Mulilo Branch	

4. Which of the following best describes your department within the organization?
(Please choose one answer only)

Claims Management	
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Service Provider	
Case Management	
Information Technology	
Human Resources	
Finance	
Procurement	
Corporate Affairs	
Legal	

SECTION B: TRAINING AND COMMUNICATION

This section outlines your views on the level of your involvement, training and education.

1. **How was your involvement** in the ORACLE project?

Fully involved	
Partially involved	
Not involved	

2. **User training and education quality.** This section measures your training experiences for ORACLE implementation. **Please indicate your level of agreement, choose one statement.**

When was training and education conducted?	Strongly Disagree	Disagree	Not Sure	Agree	Strongly Agree
Prior to the implementation					
As part of the implementation					
After the implementation					
No training was done					

3. **User satisfaction.** Please indicate your level of agreement, choose one statement.

How long did it take for you to learn all the functionalities in the system?	Strongly Disagree	Disagree	Not Sure	Agree	Strongly Agree

Within 1-3 months					
Within 4-6 months					
Within 7-9 months					
Within 10-12 months					
More than 12 months					

SECTION D: COMMUNICATION AND SUPPORT

The following statements describe the level of communication and your support provided to you/ your team during and or after the implementation of ORACLE project. **Please indicate your level of agreement with each statement.**

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Communication					
I was fully informed about the benefits of ORACLE system					
I had a full appreciation of the role of communication on any project changes and developments					
Support	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
I was fully supported and guided where I needed assistance with the ORACLE system					
I was able to express dissatisfaction where necessary and my fears were addressed to my satisfaction.					
Those who resisted to change were helped					

and assisted where necessary					
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Thank you very much for your cooperation and for taking your time to answer this questionnaire