

THE EFFECT OF CHANGE MANAGEMENT PRACTICES ON THE
IMPLEMENTATION OF ENTERPRISE RESOURCE PLANNING AT THE UNITED
NATIONS OFFICE, NAIROBI

By

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DECLARATION

This thesis is my original work and has not been presented for a degree or any other award in any other University.

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DEDICATION

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ABSTRACT

Application of change management practices to strategy implementation processes has become critical to achieve success. Enterprise Resource Planning (ERP) implementation results in major changes in the organization, which touch on the strategy, structure, systems, software, skills, style and shared values of the organization. Empirical studies have exposed conceptual gaps in that whereas they acknowledge that change management practices are vital for strategy implementation, few studies have researched on the effect of change management practices on ERP implementation. Moreover, the context of non-governmental organizations in relation to change management and ERP has not been sufficiently researched. Existing studies have small sample sizes, hence limiting the inferences made by the researchers, considering that ERP touches across the entire organization. These gaps necessitated the current study which sought to answer the question: “what is the effect of change management practices on the implementation of ERP at the United Nations Office at Nairobi (UNON)?” The study was anchored on three change management theoretical frameworks namely: the Kurt Lewin’s theory of change management; McKinsey’s Seven ‘S’ framework and Kotter’s eight (8) step change management theory. The broad objective of the study was to determine the effect of change management practices on ERP implementation at UNON. Primary data was collected through a census, by sending questionnaires electronically to 146 staff of the division of conference services in UNON. There was a response rate of 87% and the collected data was summarized using the mean and standard deviation as the descriptive statistics. For inferential statistics, Pearson’s correlation and regression analysis were used. The findings indicate a significant statistical relationship between the independent and dependent variables. This study therefore concluded that strategic vision, strategic leadership, communication and staff empowerment all have positive significant relationships with ERP implementation. It was further found that staff empowerment had the strongest positive correlation with ERP implementation. The findings of the study are expected to guide both managers in their day to day operations and policy makers to make more informed decisions. They are also expected to build on the body of knowledge in relation to the concepts of change management practices and ERP implementation. This study recommended that future studies could seek to examine change management from the perspective of staff empowerment to understand how various measures of staff empowerment can affect the success of ERP implementation.

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ABBREVIATIONS AND ACRONYMS

ERP:	Enterprise Resource Planning
ICT:	Information Communications Technology
ILO:	International Labour Organization
IT:	Information Technology
SAP:	Systems Applications and Products
SPSS:	Statistical Package for Social Sciences
UN:	United Nations
UNEP:	United Nations Environment
UNGA:	United Nations General Assembly
UNHABITAT:	United Nations Human Settlements Programme
UNON:	United Nations Office at Nairobi
USAID:	United States Agency for International Development

DEFINITION OF TERMS

Change Management: Working with all the stakeholders of an organisation to help them understand what the change means for them, helping them make and sustain the transition and working to overcome any challenges involved.

Change Management Practices: Activities carried out by the organization towards managing change.

Communication: The effective flow of information from one individual or group to another individual or group

ERP: A software package that improves organizational performance by providing an enterprise view of data, processing data in real-time, standardizing business processes and implementing leading business practices

Leadership: The ability of top leadership and change management leadership to influence others towards the desired future state.

Staff Empowerment: giving employees a certain degree of autonomy and responsibility for decision-making regarding their specific organizational tasks, if the employees have been well equipped for these tasks.

Strategic Vision: The ability of strategic leaders to articulate the desired state that will come about in the future because of the change

Umoja: The ERP Implemented by UNON.

CHAPTER ONE

INTRODUCTION AND BACKGROUND TO THE STUDY

Background of the Study

Like any other change initiative, implementation of enterprise resource planning (ERP) systems requires the incorporation of change management practices for it to be a success (Muma, 2016). This study is anchored on three theoretical frameworks that can be applied for implementing and managing change. Lewin (1951) suggested a three-stage approach to change which includes unfreezing, changing and refreezing. Peters, Waterman and Philips (1980) developed the McKinsey's seven "s" framework which identifies seven elements of a company that must be aligned together to achieve effectiveness. On his part, Kotter (1996) identified eight overlapping steps for successful implementation of change.

Empirical studies show that there is no single approach to managing change. The current study has compared change management practices recommended in the theoretical frameworks upon which this study is grounded, and those from empirical studies. Thereafter, the study narrows down to four best practices that are common to both the theoretical and empirical literature. These are strategic vision, leadership, communication and staff empowerment. Strategic Vision is the ability of strategic leaders to articulate a desired future state (Reh, 2017) while leadership is the ability to influence others (Gilley, McMillan and Gilley 2009). Communication can be described as the effective flow of information from one individual or group to another individual or group (Sirkin, Keenan and Jackson, 2005). Staff Empowerment relates to equipping employees to empower them to make decisions to a given extent (Murthy 2007).

The United Nations Office, Nairobi (UNON) introduced a new ERP in the recent past. The ERP was intended to provide a streamlined approach to the core functions of the organization by replacing numerous legacy systems. These systems included various software programs that had been developed to handle the numerous administrative functions within the different UN Secretariat offices globally (Umoja, 2015). The UN Secretary General described the ERP as a tool designed to help harmonize the way the UN works, providing one data platform within which information can be retrieved real-time from any of the UN secretariat offices dispersed across the globe (UNGA, 2006).

Change Management Practices

According to Murthy (2007), change is an alteration in the way things are done for improved organizational performance. Change management can be described as an organizational process aimed at helping stakeholders accept and embrace changes in their operating environment. It involves the application of a set of tools, processes, skills, and principles for managing the ‘people’ side of change to achieve the desired outcomes of a project or initiative. A best practice refers to the most efficient and effective way of handling a task, based upon a repeatable process that has been proven over time for many people (Kritsonis, 2005). Emphasizing on the importance of managing people while implementing change, By, Ford and Julian (2017) suggest that leaders who neglect the people they seek to lead will pay a price in losing support for the proposed change.

There is documented research evidence that there are best practices that have been tested and found to produce better results, if applied during implementation of change initiatives. USAID (2015), suggest seven best practices for change management. They include establishing a vision for change; involving senior management; developing a

change management plan; engaging stakeholders; communicating at all levels; creating infrastructure to support adoption of change; and measuring progress. Lewis (2014) recommends seven best practices namely careful planning; defining governance; assigning leadership roles; communicating to stakeholders; identifying and supporting change advocates; constantly assessing and reviewing progress and addressing workforce concerns.

In this study, the researcher reviewed steps for change management recommended in the theoretical frameworks together with suggested best practices from empirical studies. Thereafter, the researcher narrowed down to the following four best practices that cut across the board: establishing the right vision; having in place a team fully supported by top management and which includes key stakeholders to champion the change; effective communication before, during and after change initiative; and empowering employees to function in the new environment. These four practices form the independent variable of the study and will be described in detail in the next chapter.

ERP Implementation

Seo (2013) describes ERP as a software solution that brings together business functions and data into a single system to be shared within an organization. Shang and Seddon (2000) researched on the benefits of using ERP systems. They grouped these benefits into several categories namely operational, managerial, strategic, IT infrastructure and organizational benefits. Operational benefits as those that touch on cost reduction and improvement of products and services. Managerial benefits enable management to make decisions, to plan and to manage resources. Strategic benefits support business growth by building cost leadership, generating product differentiation and creating linkages with

suppliers and customers. IT infrastructure provides flexibility as the operations of the organization change over time. Finally, organizational benefits support these changes and enable for new knowledge to be acquired hence empowering staff within the organization.

Past research has indicated that ERP implementation quite often fails, and in many cases this failure seriously hinders the activities of the organization (Shi-Ming, Chang, Li & Lin, 2004). More recently, there seems to be improvement in the success rates of ERP implementation, together with a reduction in the amount of financial investment directed towards the ERP. These improvements have largely been attributed to adoption of change management practices and business process re-engineering efforts (Muma, 2016). The duration taken to implement ERP has increased, owing to improved strategic planning by management. Organizations also appear to have more realistic expectations regarding what it takes to successfully implement ERP.

Since ERP implementation affects all the operations of an organization, every department must be closely involved, before, during and after the implementation to ensure that responsibility is taken for every choice that is made. Barker and Frolick (2003) emphasized on the need to involve employees in ERP implementation. They found that if employees understand and accept the need for change, then ERP implementation is almost always successful. Successful implementation requires that staff who have been part of the implementation process be not only retained but also recognized. Management should ensure that the ERP implementation is supported and accepted by every stakeholder to the highest extent possible.

The United Nations Office at Nairobi

UNON, the African headquarters of the United Nations, was founded in 1996 by the UN General Assembly. The office is headed by a Director-General, who serves as the representative official of the Secretary-General in Nairobi. UNON exists to provide administrative and other support services to the UN programmes in Kenya including the United Nations Human Settlements Programme (UN HABITAT) and UN Environment (UNEP). These services include Human Resources, Finance, Budget, Procurement, logistics, Conference Services, ICT services and provision of security and safety services (UNON, 2017).

In recognizing the need for an overhaul in the way business is conducted at the United Nations (UN), the Secretary General (2006) stated the need for a change in the structure, systems and culture of the UN. He observed that the activities of the organization had greatly changed since its inception, with the structure, systems and culture remaining almost static. He described the then existing IT system as fragmented, outdated and lacking integration and capability to store, search and retrieve information. Numerous instances of duplication of duties led to increased staffing costs and reduced efficiency in service delivery. The Secretary General tasked the IT department to come up with an information management strategy that would seek to increase efficiency and improve knowledge sharing by increasing visibility and accessibility of information across the globally dispersed offices of the UN. The information management strategy would also support management decision making by increasing access to information (UNGA, 2006).

Consequently, an ICT strategy was formulated and ERP software purchased. The software was intended to meet the specific needs of the UN, ensuring integration between all the business functions namely finance and budget, payroll management, human resources management and logistics management. This integration was intended to be implemented across all the global locations where the UN has presence, but in several clusters and at different timelines. UNON fell in cluster three, being the third phase of implementation. The SAP was named “Umoja”, which is Swahili for unity, to symbolize the integrated nature of the software which was intended to replace numerous stand-alone legacy applications (Umoja, 2017).

Statement of the Problem

There are three types of gaps existing in previous studies that motivated this study. These are conceptual, contextual and methodological gaps. Conceptually, studies that have focused on change management practices have not related these practices to ERP implementation. Nkari (2014) studied change management practices adopted by the independent electoral and boundaries commission of Kenya. Hossan (2015) researched on the applicability of Lewin’s change management theory in Australian local government. However, the changes implemented in these studies did not relate to ERP.

Munyoroku (2014) researched on factors influencing implementation of ERP in the mobile communications sector in Kenya. In her findings, the factors include both change management and project management factors. Wanjohi (2016) assessed ERP systems post implementation success in Kenyan corporates. Being a computer science student, his study focused on the technical factors that lead to success of ERP systems. Although

change management was found to affect ERP implementation, these studies do not provide in-depth insight on the concept of change management practices.

Regarding the context of non-governmental bodies and specifically the United Nations, Mulwa (2015) studied strategic change management at UNON. However, since the UNON ERP was implemented in June 2015, this study was conducted at a very early stage of the ERP implementation process. His study therefore does not identify the change management practices that continued to be applied both during and after the implementation. Methodologically, Mulwa (2015) collected data by interviewing twelve key staff at UNON involved in ERP implementation. His study did not consider the views of staff who perform their daily operations within the ERP.

The desire to bridge the above contextual, conceptual and methodological gaps therefore necessitated this study. The study sought to answer the question, what is the effect of change management practices on the implementation of ERP at UNON?

Objectives of the Study

The broad objective of this study was to establish the effect of change management practices on the implementation of ERP at UNON. Specific objectives were:

- a) To determine the effect of strategic vision on ERP implementation at UNON.
- b) To establish the effect of leadership on ERP implementation at UNON.
- c) To identify the effect of communication on ERP implementation at UNON.
- d) To determine the effect of staff empowerment on ERP implementation at UNON.

Hypotheses

H₀; Strategic vision, leadership, communication and staff empowerment have no significant joint effect on ERP implementation at UNON

H₀₁; Strategic vision has no significant effect on ERP implementation at UNON.

H₀₂; Leadership has no significant effect ERP implementation at UNON.

H₀₃; Communication has no significant effect ERP implementation at UNON.

H₀₄; Staff empowerment has no significant effect ERP implementation at UNON.

Assumptions of the Study

This study assumed that the respondents provided honest feedback in the questionnaires that were administered to them. To enhance this, respondents were assured that their responses would be treated with utmost confidentiality. They were not required to provide their names in the research instrument, hence providing anonymity to the responses.

The study also assumed that respondents would be willing, both to give their time and to share the information they have regarding the concepts being covered in the study. In addition, although the data collection took a census approach, not all expected responses were received. The study therefore assumed that responses received are representative of the views of the entire target population.

Justification of the Study

Several studies have been conducted on the concept of change management (Nkari, 2014; Hossan, 2015). There have also been studies investigating ERP implementation

(Munyoroku, 2014; Wanjohi, 2016). However, few studies have combined these two concepts to research on change management practices applied during ERP implementation. This is more so in the context of non-governmental organizations. Mulwa (2015) researched on strategic change management during ERP implementation at UNON, but he collected data primarily from selected senior management. This left out the end users of the ERP. This study will specifically explore the effect of change management practices on the implementation of ERP at UNON and will take a census approach.

Significance of the Study

The findings of this study are intended to help improve the researcher's strategic management skills as far as change management and strategy implementation is concerned. In understanding the extent to which the change management practices that were applied by UNON affected implementation of the ERP, the study will provide useful knowledge towards managerial practice.

The study will also assist managers and policy makers in the UN and other organizations to make decisions regarding change management and strategy implementation. Finally, the study will contribute to the understanding of existing theories of change management and specifically regarding ERP implementation. It will also contribute to the body of knowledge for researchers and scholars interested in change management practices and their effect on ERP implementation.

Scope of the Study

The study was based at the United Nations Office, Nairobi. The target population consisted of members of staff from the division of conference services. The study focused on change management practices and their effect on successful ERP implementation. Primary data was collected during the eight-month period between January and August 2017.

Limitations and delimitations of the Study

One of the limitations to the study was the response rate of the questionnaires. Not everyone, to whom the research instrument was administered, returned their responses. The researcher used emails to ensure fast administration of the questionnaires and follow up to endeavour to have as many as possible filled and returned via email.

Another limitation was time constraints. The concepts in this study are vast and time did not allow comprehensive research into every change management practice, and every element of successful ERP implementation. In this regard, the researcher narrowed down to selected factors which form the objectives of this study. The researcher also tried to limit the amount of questions in the questionnaire, to enable respondents to spend minimal time while at the same time comprehensively addressing the study concepts.

There is documented research evidence of the existence of several change management practices which can be applied during implementation of change initiatives. This study however touches on only four change management practices which form the objectives. Time did not allow for research into all the existing change management practices documented in literature. Additionally, the UN implemented the new ERP across several

globally dispersed duty stations of the UN secretariat. This study was however restricted to the Nairobi Office, which formed part of the third phase of the UN secretariats' global implementation of the ERP.

Chapter Summary

This chapter gives a background of the study and breaks down the statement of the problem into conceptual, contextual and methodological gaps identified by empirical studies. It also outlines the broad objective of the study being to establish the effect of change management practices on the implementation of ERP at UNON. The chapter then defines the specific objectives of the study, out of which the hypotheses are derived. These hypotheses were tested and presented in chapter four of this thesis. In addition, assumptions made and the justification for the study are identified in this chapter. It further highlights the significance as well as the scope of the research including both the limitations and delimitations of the study.

CHAPTER TWO

LITERATURE REVIEW

Change Management Practices

Change management is not an exact science; hence there are no right or wrong approaches to it. As studies continue to be undertaken by experts and academicians, clearer and more effective approaches for managing change emerge (Kritsonis, 2005). In this regard, different groups have come up with different approaches they recommend as best practices in managing change. USAID (2015) recommend that to manage change effectively, there are seven steps that must be followed. These steps require that top leadership are at the centre of the change initiative with a clear vision for change. There should be an implementation plan in place and stakeholders must be fully engaged with clear communication at all levels. In addition, there should be infrastructure both to support the adoption of change and to measure progress. Lewis (2014) outlines seven practices which entail careful planning; defining governance; assigning leadership roles; communicating to stakeholders; identifying and supporting change advocates; constantly assessing and reviewing progress and addressing workforce concerns.

For purposes of this study, the researcher compared the change management practices recommended in the theoretical frameworks upon which this study was grounded, and the suggested best practices from empirical studies. The researcher then narrowed down to the following four best practices that cut across the board: establishing the right vision; having in place a team fully supported by top management and which includes key stakeholders to champion the change; effective communication before, during and after change implementation; and empowering employees to function in the new environment.

Strategic Vision

Muchemi (2014) describes unclear strategies and conflicting priorities as one of the major causes of failure for strategy implementation. The purpose of the proposed change must be clear to all staff in the organization to enable them to buy-in to the change. Sirkin et al. (2005) emphasize that for transformation to take place, visionary leadership is critical. According to USAID (2015), staff must fully understand the current problems that the change is intended to solve, for them to support the change process. All staff within the organization, together with other stakeholders, must understand how they will be impacted by the change, and accept it, regardless of the changes in workloads or behavioural changes that will be expected of them. Wong, Scarbrough, Chau and Davison (2005) suggest that when there is clarity regarding strategic vision, there is limited resistance from stakeholders.

Sirkin et al. (2005) suggest three indicators of strategic vision in an organization. All employees in the organization need to have clarity of the mission; clarity of goals and how they relate to the mission; and a sense of purpose. Conflicting priorities and unclear strategies indicate that there is lack of strategic vision in the organization. Employees must not only understand the impact of the change on their individual functions, but most importantly they should understand how it supports the vision of the organization.

ERP implementation comes with incredible increases in work load of concerned staff and can be easily resisted (Mulwa 2015). For the implementation process to be a success, staff members must clearly have strategic vision of the desired future state, understand it, and accept it. This enables the staff to buy into the planned change and reduce resistance. Employee support to the ERP implementation process will be further enhanced if all

priorities of the organization are geared towards the ERP, and there are no conflicting priorities that compete for the limited human, financial and other organizational resources.

Leadership

For any strategy to be successfully implemented, senior management must avoid being complacent, ineffective and uncoordinated in their approach. They must therefore be equipped to drive the change process both in terms of knowledge and skills (Muchemi, 2014). Gilley, McMillan and Gilley (2009) suggest that certain behaviours are required for leadership to be effective during the change management process. These behaviours include communication skills, leaders' ability to motivate staff and their ability to build effective teams. Leadership in the context of this study is twofold. It not only relates to the top management of the organization but also the team selected by this top management, to champion the change initiative.

According to UNSAID (2015), top management must support the change initiative by first establishing the right strategy and vision that will trickle down to the entire organization. In addition, they are expected to provide the necessary financial, human and other resources to ensure successful change implementation. When the senior leadership of the organization gives priority to the change initiative, it provides legitimacy for the change and encourages the rest of the organization to participate. On the contrary, when top leadership lacks commitment, it is unlikely that the change implementation will be a success. According to Lewis (2014), for change initiatives to be successful, they must have well defined systems of governance which consist of different structures, roles and responsibilities at all levels within the organization.

For change initiatives to succeed, there must be a team in place to champion the change. This team should consist of staff members at all levels in the organization, to ensure that there is input from across the board. This encourages ownership of the project and reduces chances of failure of the change initiative. Sirkin et al. (2005) suggest that change initiatives are bound to succeed when they are led by a skilled, cohesive and motivated team who are implementing change in a department that is receptive to the change process. There are several indicators of good leadership as outlined in empirical studies that are applicable to ERP implementation. They include the ability to provide direction; ability to delegate; constituting a competent team to drive change initiative; ability to motivate; participating in the change process; showing equal support for all entities within the organization; and ensuring that all stakeholders are satisfied with the change.

In relation to ERP, the leadership of the organization play a major role in ensuring success of the system. Since ERP is a major financial investment, top management must ensure that the technology required together with human resources is sufficient to support implementation. As key staff divert their time to ERP implementation, they may need to be relieved of some of their day to day functions or else they may end up with burnout and resist the change altogether. The leadership of the organization need to mitigate against this as change is implemented.

Communication

Communication cuts across all the change management practices discussed in this study. It can be described as the effective flow of information from one individual or group to another individual or group (Sirkin et al., 2005). It is a key element of change and it promotes success of change initiatives since it facilitates transparency and openness.

Muchemi (2014) suggests that ineffective vertical, horizontal and diagonal communication is a leading cause of failure of strategy implementation. Vertical communication relates to the flow of information from the managers to subordinates and vice versa. Horizontal communication is the exchange of information between peers in an organization while diagonal communication relates to exchange of information between managers of one department and subordinates of another department.

According to Sirkin et al. (2005), leadership must communicate effectively at every stage of the transformation process. There are several indicators of effective communication during change management initiatives. They include conveying the vision, objectives and motivation for the proposed change initiative; providing stakeholders with details about the importance, timeframe and nature of the change; addressing workforce concerns about the proposed change and promoting a support system among the stakeholders; encouraging stakeholder participation and providing feedback. This feedback is both to the employees regarding their performance, and to the management regarding the impact of the change (USAID, 2015). Communication is the responsibility of everyone involved in the change, from top management, to the champions of the change and also employees and other stakeholders.

Communication is essential to ERP implementation and it ensures that vital information regarding the implementation process is conveyed to all stakeholders. Concerns of the stakeholders are also aired and addressed using communication channels, hence minimizing the reasons for resistance to the ERP.

Staff Empowerment

In his fifth step for leading change, Kotter (1996) suggests that employees and the organization at large should be enabled to transition into the desired state of change. This entails removing any barriers to change implementation. Such barriers may be system related, structural or knowledge related. System barriers may include processes that are no longer working and these needs to be reviewed to ensure that employees are working in an enabled environment. Structural barriers relate to reporting channels and organizations are forced to review their structures once change has been effected (Peters et al., 1980). Knowledge barriers refer to employees lacking the necessary skills to perform their new duties. These barriers are overcome by staff training, provision of documentation on new processes, encouraging staff to be creative and come up with practices and applying procedures that lead to higher efficiency.

Linhuan (2010) grouped the indicators of staff empowerment into two namely competence and control. Competence relates to the level of skill possessed by the employee to perform his duties. The higher the employee's level of skills, the higher he or she is considered empowered. Employee competence is enhanced by training, coaching and provision of job aids. Well laid out policies and procedures also improve employee competence. In addition to being competent, employees are not fully empowered if they lack a reasonable level of autonomy to perform their duties. This autonomy is reflected in how much control the employees have over how they carry out their roles. Employees feel empowered if they can find creative ways of performing their duties effectively, within the rules and regulations of the organization.

Highly empowered staff will be motivated to ensure that ERP is successfully implemented. This is even more enhanced by introduction of reward systems for desired behaviour. Organizational leadership should ensure to incorporate rewards into the ERP implementation process. Rewards can be both monetary and non-monetary. In addition, the reward system should be both individual and at team level to encourage and appreciate both individual and team effort. In his sixth step, Kotter (1996) suggests reward systems as part of celebrating success.

ERP Implementation

Like any other strategy implementation, successful implementation of ERP is a difficult yet crucial part of strategy (Hrebiniak, 2008). Successful strategy implementation involves institutionalization and operationalization of the organization's activities. The structure, systems, style, skills, shared values and staff of the organization, must fit into strategy. This fit can be achieved through management and employee training to enhance the skills within the organization. The structure of the organization also changes with different strategies, to ensure elimination of redundant processes and conflicting roles. The result of establishing this fit is that it facilitates a change in the culture of the organization and enables the new change to be cemented into the day to day activities. Strategy implementation cannot be considered a success, if the firm does not attain the operational reality of intended strategy (Muchemi, 2014).

Once the users of the ERP have become comfortable with the system and no longer need coaching, then institutionalization is said to have taken place. The stakeholders of the organization begin to take the system for granted in terms of value contribution, as it is no longer a challenge. ERP institutionalisation, therefore, occurs when its usage becomes

stable, routinized and embedded within the organisation's work processes and value chain activities. The employees of the organisation get to a point where they could not think about doing their day-to-day job responsibilities without using the ERP (Pishdad and Haider, 2013). At this point, the entire environment of the organization in technical, cultural, social, and economic aspects has been aligned with the new technology.

Operationalization in relation to strategy entails ensuring that the long-term strategy is broken down into short term objectives. These objectives must be SMART, meaning specific; measurable, attainable; relevant and timely. Activities towards strategy operationalization include creating job descriptions with clear responsibilities, set timelines and clear job outputs (Njoroge, 2015). Successful operationalization of strategy leads to improved efficiency and improved organizational performance. ERP operationalization involves ensuring that all the modules of the ERP that were intended to function are utilized by the respective staff of the organization, in the intended manner.

Change Management Practices and ERP implementation

The adoption of ERP is a huge financial investment and management can only recoup a return on the investment by ensuring that the implementation is a success. According to Munyoroku (2014), the major causes of ERP implementation failure are attributed to project management practices and change management practices. While project management practices concentrate on managing the technical side of change, change management practices address the people side of change (Wanjohi, 2016). Change management practices include having the right vision and strategy in place; the skill, style and involvement of top leadership; effective communication; and staff empowerment. Muma (2016) established an improvement in success rates of ERP implementation in the

recent past. These improvements have largely been attributed to adoption of change management practice. Because of the adoption of change management practices in ERP implementation, organizations can achieve returns on the heavy financial investment in ERP.

Theoretical Framework

This study was anchored on three theoretical frameworks that can be applied for implementing and managing change namely: Lewin's change management theory; McKinsey's 7s change framework and Kotter's change management theory.

Kurt Lewin's Change Management Theory

Lewin (1951) suggested a three-stage approach to change. The first stage in changing behaviour is unfreezing the status quo. This is a preparatory phase where individuals are prepared for change, and the organization also prepares to move from the current state to the desired one. The more the need for change is recognized, the more urgent the change and consequently the more motivated individuals and organizations are for change. Once a deadline for change implementation is set, with rewards and punishments attached to it, there is a higher likelihood of change being effectively implemented (Muma, 2016). At this stage therefore, there is problem identification, data collection on how to resolve the problem, support from senior management, development of action plans on the way forward and then communication regarding the proposed change and actions to be taken. Staff concerns should also be addressed at this stage.

The second stage, change, is where the actual transition happens. New attitudes and behaviours are developed to promote change implementation. At this stage, training of

staff to empower them to acquire new ways of doing things and rewarding the same staff for compliance is crucial. For change to be successful, employees must be persuaded that the old ways are no longer beneficial. They must be convinced to work together in implementing the change, and be supported by strong leadership. The change is then implemented, follow up done and consequences assessed. Refreezing is the final stage, where the new situation is stabilized and consolidated, preventing individuals from going back to the old way of doing things. This can be achieved by use of policies and procedures. Reward systems also encourage the change to be cemented. Continuous monitoring and subsequently learning better ways of doing business should also happen at this stage (Kritsonis, 2005).

Lewin's approach to change has attracted major criticism in the recent past. It has been perceived that his work assumed that organizations operate in a stable state and ignores organizational power and politics. Further, some critics suggest that his approach is top-down, hence ignoring employee input (Burnes, 2004). However, the approach has been found to work in various organizations that have implemented change, as indicated by Hossan (2015). It is probable that the critics did not realize that Lewin was addressing the forces that drive or resist change. In fact, this theory is arguably the simplest, yet most practical approach to manage change, and subsequent theories on change management have built on the foundation laid by Lewin. The five change management practices discussed in this study have been drawn from an understanding of this theory.

McKinsey's Seven Ss' Framework

Peters, Waterman and Philips (1980) developed the McKinsey's 7s framework which identifies seven elements of a firm that must be aligned together to achieve effectiveness.

These are Strategy, structure, systems, shared values, style, staff and skills. This framework is useful both for strategy implementation and for change management. The framework suggests that the seven elements are interconnected, and a change in one element requires a change in the rest of the elements, for the organization to function effectively. The seven elements in this framework can be divided into hard elements and soft elements. The hard elements are easier to identify and manage, and they consist of strategy, structure and systems. Strategy relates to the direction and scope of the organization, while structure refers to the way the organization hierarchy and functions are laid out. Structure includes the reporting channels and responsibilities, the departments and how all these relate with each other. Systems are both the formal and informal ways in which procedures are carried out daily.

The soft factors are the shared values, style, staff and skills. These soft factors are more likely to create competitive advantage, although they are harder to manage. Shared values are the beliefs and values that the organization holds, and they guide employees towards acceptable behaviour. Style refers to the leadership approach applied by senior management which forms the overall approach taken by the entire organization. Staff members are the employees of the organization and how they are developed, trained and motivated. Skills relates to the capabilities and competencies held by the organization that set it apart from the other firms (Ravanfar, 2015). Although ERP falls under systems, as seen in this framework, it cannot be implemented without the strategy, structure, shared values, style, staff and skills of the organization, being all aligned together.

Kotter's Eight Step Change Management Theory

Kotter (1996) identified eight overlapping steps for successful implementation of change. The first three steps focus on creating a climate for change, the next three steps relate to engaging and enabling the organization and the final two steps relate to implementing and sustaining the change.

The first step, creating a sense of urgency, means to enable others to see the need for change through communication and getting the team to urgently want to move from the current status quo to a new state. Building a guiding coalition entails putting together a team that will champion the change in terms of project management, coordination and communication. The third step, forming a strategic vision, requires that the guiding team be clear on where they want to take the organization, in comparison to their current state, and the initiatives to be taken to reach there.

Enlisting a volunteer army is getting a large group of people who have bought into the idea of change, and are willing to play their part in implementing the change. The fifth step entails removing any barriers that may hinder change from taking place, for instance, removing inefficient processes. Generating short term wins motivates employees by recognizing and communicating positive results. The seventh step, sustaining acceleration, is about ensuring there is continuous improvement of systems, structures and policies once initial success has been achieved. The final step, instituting change, relates to incorporating the change into organizational culture, and making sure that the change becomes a permanent state (Kotter, 1996). Kotter's approach appears to build on Lewin's three stage theory. The change management practices discussed in this study are

also drawn from this theory, and they indicate that the eight steps are interconnected and cannot be considered individually.

Summary of Knowledge Gaps

Empirical studies have revealed three categories of gaps namely conceptual, contextual and methodological gaps. Conceptual gaps relate to the relationship between the concepts of change management and ERP implementation. Contextual gaps focus on the context of the study, in this case the context of non-governmental organizations. Methodological gaps on the other hand relate to population, sample size and research design. Table 2.1 summarizes the different gaps identified during literature review.

Table 2.1: *Summary of Knowledge Gaps*

Researcher(s)	Title of Study	Key Findings	Key Gaps	How current study addresses the gaps
Hossan (2015)	Applicability of Lewin's change management theory in Australian local government	Lewin's theory was found to be relevant in organizational change management	The study focused on general change management in a public-sector context. The change was not related to ERP	This study introduced the context of a non-governmental body and specifically looked at change management during ERP implementation
Muchemi (2014)	Strategy implementation practices at the Kenya post savings bank.	Factors that promote successful implementation were found to include leadership involvement, employee attitudes and overall communication	The study highlighted the practices that promote institutionalization of strategy in the context of corporate sector. The strategy did not relate to ERP	The current study sought to bring in the context of a non-governmental body and it specifically addressed change management during ERP implementation.

Researcher(s)	Title of Study	Key Findings	Key Gaps	How current study addresses the gaps
Mulwa (2015)	Strategic change management: A case Study of United Nations Office, Nairobi, Kenya.	Resistance to change was found to be the major obstacle of the ERP implementation	The study was conducted when the ERP was in its early stages of implementation. Additionally, primary data was obtained by interviewing twelve senior management staff only. Staff members who use the ERP were not interviewed.	The current study targeted all the staff of the organization who actively use the ERP daily. This ensured that respondents were drawn from the entire organization hence the findings being more representative of the entire organization.
Muma (2016)	The influence of change management in ERP systems implementation: A case of IFMIS of Kenya.	Top leadership participation and preparation for change were found to have a high impact on institutionalization of ERP	The study was conducted from an IT perspective, and not from a strategic management perspective. Hence the findings took a project management approach to address the technical side of the change. It did not concentrate on the people side of change.	The current study approached ERP implementation from a strategic management perspective and focused on managing the people side as opposed to the technical side of ERP implementation.

Researcher(s)	Title of Study	Key Findings	Key Gaps	How current study addresses the gaps
Munyoroku (2014)	Factors influencing implementation of enterprise resource planning in the mobile communications sector in Kenya.	The study established a strong positive correlation between employee knowledge and skills; top management support; skills of the project team and ERP implementation	The study was focused on change management practices in ERP implementation of the private sector. It did not extend to the non-governmental bodies.	The current study sought to introduce the context of a non-governmental organization.
Nkari (2014)	Change management practices adopted by the independent electoral and boundaries commission of Kenya	The study found that successful implementation of change was enhanced by use of technology, adequate staffing, training of staff and clear communication.	The study focused on general change management in a governmental organization. The change was not related to ERP	The current study was contextualized on a non- governmental body and it specifically researched on change management during ERP implementation
Wanjohi (2016)	Assessing ERP systems post implementation success in Kenyan corporates.	The study found that successful implementation ERP was enhanced by organizational, technological and environmental factors.	The study was conducted from an IT perspective, and not from a strategic management perspective. Hence the findings took a project management approach to address the technical side of the change. It did not concentrate on the people side of change.	The current study approached ERP implementation from a strategic management perspective and focused on managing the people side as opposed to the technical side of ERP implementation.

Source: Developed from the reviewed literature by author (2017)

Operationalization of Study Variables

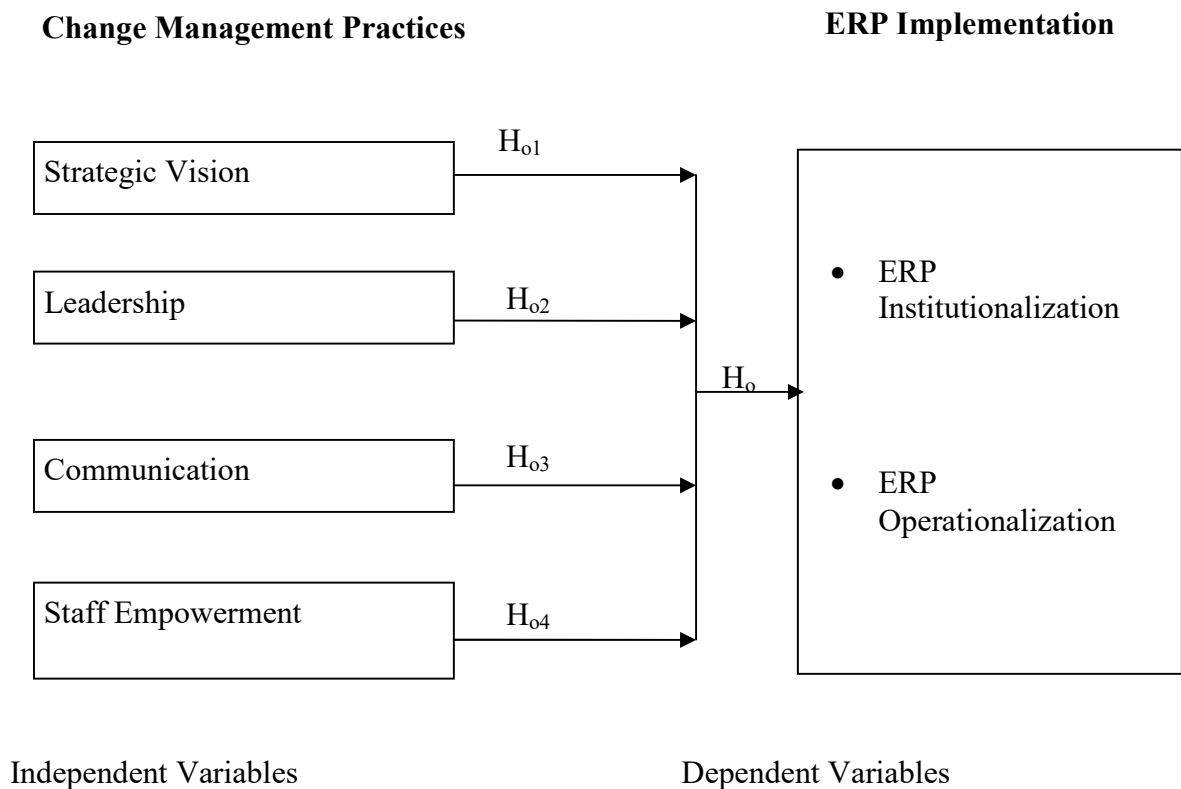
Operationalization of variables refers to the process of defining the variables to remove ambiguity. These variables must be defined in such a way that they can be measured either quantitatively or qualitatively. In this study, the independent variable is change management practices while the dependent variable is ERP implementation. Table 2.2 presents a summary of the operationalized variables in this study.

Table 2.2: *Operationalization of Study Variables*

Variable	Operational Indicators	Supporting Literature	Measurement Scale	Questionnaire Items
Change Management Practices (Independent)	Strategic Vision: Mission, Goals, purpose Leadership: Direction, Participation, Delegation, Support, Motivation of staff, Stakeholder Satisfaction Communication: Convey information about vision, objectives, time frame and nature of change; encourage participation; address concerns; receive feedback Staff Empowerment: Training, Coaching, User Manuals, policies, operating procedures, autonomy	Sirkin et al. (2005), Linjuan (2010), USAID (2015), Lewis (2014) Paton, R., and McCalman (2008) Peus et al (2009) Peus et al (2009)	5 point Likert Scale	Question 5, 6, 7 and 8
ERP Implementation (Dependent)	Institutionalization: Taken-for-grantedness, stability, routine use Operationalization: clear job descriptions, organizational structure, clear timelines, clear outputs	Colyvas and Powell (2006) Pishdad and Haider (2013) Helo et al. (2008)	5 point Likert Scale	Question 9

Conceptual Framework

From the review of existing theoretical and empirical knowledge, it is evident that change management practices affect the outcome of change initiatives, in this case ERP implementation. The framework in figure 2.1 shows how each practice affects ERP implementation at UNON.



Source: Developed from the reviewed literature by author (2017)

Figure 0.1: *Conceptual Framework*

Chapter Summary

This chapter reviews the available literature on the concepts covered in this study namely change management practices and ERP implementation. It details empirical literature on these two concepts and describes the three theoretical frameworks upon which the study

is founded which include Lewin's change management theory, McKinsey's seven "s" framework and Kotter's eight step change management theory. The chapter then summarizes the reviewed literature into knowledge gaps that were identified in terms of the concepts, context and methodological gaps. Further, the conceptual framework is revealed, with the independent variable being change management practices and the dependent variable being ERP implementation.

CHAPTER THREE

RESEARCH METHODOLOGY

Research Design

The study adopted a case study approach which sought to understand the organization in detail, in context and holistically. This approach allowed for the collection of in depth information and hence provided insight into the effect of change management practices on ERP implementation at UNON. Having obtained a deeper understanding of the concepts of change management and ERP implementation, the findings are expected to be applied to other organizations during implementation of ERP strategies. Kombo and Tromp (2006) justify the use of case studies by researchers, to collect data that enables them to study the phenomenon extensively.

Population of the Study

Considering that ERP cuts across the different departments of the organization, great diversity and differences are expected from the information collected. In such a case, the sample size should be large to get more accurate and more representative findings (Kombo and Tromp, 2006). This study took a census approach, where 146 staff members of the organization who actively use the ERP software in their daily functions were approached for data collection. Table 3.1 indicates the target population.

Table 3.1: *Population of the Study*

Department	Number of Staff
Division of conference services	146
TOTAL	146

Source: Field data (2017)

Data Collection

In this study, a structured questionnaire with a Likert scale was selected as the research instrument for collecting primary data. The questionnaire was selected for its numerous benefits. It was viewed as cost effective and selected for its ability to reach respondents who are widely dispersed. The questionnaire was also considered because it could uphold confidentiality of respondents, while at the same time allowing them sufficient time to answer the questions. The data collected was also viewed as easy to analyse with this type of research instrument (Kombo and Tromp, 2006).

The researcher contacted staff members of the division of conference services of UNON via email and requested them to participate in the studies. Those willing to participate responded. Once soft copies of the questionnaires were circulated on email, follow up phone calls were made to encourage high response rates. The questionnaire consisted of three parts. Part one sought to collect general information on the respondents. Part two focused on the change management practices of strategic vision, leadership, communication and staff empowerment. Part three collected information on ERP institutionalization and ERP operationalization.

Validity Testing

Although the researcher may not control the responses in terms of objectivity of the respondents, the way a research instrument is formulated can result in inaccurate responses. To mitigate this, the questionnaire was tested by measuring its validity and reliability. Validity is a test of how well the research instrument measures what it is intended to measure (Kombo and Tromp, 2006).

To test validity, the research instrument was reviewed by the supervisors and a few members of staff of the business department at Pan Africa Christian University. It was also pilot tested by administering it to six (6) respondents, two (2) from finance, two (2) from human resources and two (2) from the IT department. The six respondents were then excluded from the population of the study. This enabled the researcher to identify and rectify any errors or misconceptions. It was also done to ensure that questions are clear and well understood by the respondents, in the manner intended by the researcher.

Reliability Testing

Reliability is a measure of how consistent the results from a test are (Kombo and Tromp, 2006). To test reliability, Cronbach's alpha was used to test internal consistency of the data. Cronbach's alpha is expressed as a number between 0 and 1 and it describes the extent to which all the items in a test measure the same concept. This measure indicates the inter-relatedness of the items within the test and shows the amount of measurement error in a test (Ritter, 2010). A low value of alpha could be due to a low number of questions, poor interrelatedness between items or heterogeneous constructs. If a low alpha is due to poor correlation between items, then some should be revised or discarded. These items can be identified by computing the correlation of each test item with the total score test and items with low correlations deleted. An alpha value of between 0.8 and 0.9 communicates that the research instrument has excellent internal consistency. If alpha is above 0.9, it may suggest that some items are testing the same indicators hence redundant (Tavakol and Dennick, 2008).

There has been debate about the lowest acceptable value of alpha. Manerikar and Manerikar (2015) argued that although a value below 0.5 is unacceptable, the rule should

be used with caution since the value of alpha can be inflated or deflated depending on the number of items used in the test. In this study, an alpha value above 0.5 was considered as acceptable.

A reliability analysis test was carried out on 37 questions that represented the measures for the different independent and dependent variables in the data. The findings are as shown in table 3.2.

Table 3.2: *Reliability Statistics*

Cronbach's Alpha	N of Items
.874	37

The findings of the reliability test as seen in table 3.2 indicate that the Cronbach's alpha value was 0.874. This indicates that the scale showed a high level of internal consistency and hence relevant for use in this study.

Data Analysis

Data collected was sorted, checked for completeness, coded and analysed using IBM SPSS Version 23. Descriptive statistics that were computed to summarize the findings of the independent and dependent variables in the study are the mean and standard deviation. The Pearson correlation and regression analysis were then applied to identify the relationship between the dependent and independent variables. The regression model was also used to test the hypothesis.

Ethical Considerations

For a research to be considered as having been conducted in an ethical manner, it should ensure quality, transparency and integrity. Respondents must be fully aware of the purpose of the research, and its intended use (Bryman, 2012). The researcher is expected to uphold confidentiality of the information collected and maintain anonymity of respondents. Moreover, respondents must participate voluntarily and without any coercion.

During this study, ethical considerations were made. The research instrument clearly stated that the data was being sought solely for academic purposes and would be treated with strict confidence. Respondents participated willingly and they were not required to disclose their identities, hence guaranteeing them of confidentiality throughout the research process. Only the researcher had access to the completed questionnaires.

Chapter Summary

This chapter focuses on the research methodology employed in the study. It details the research design used, target population, data collection procedures and how the collected data was analysed. It also describes how the data collection instrument was tested for validity and reliability before distribution. Data analysis methods that were used in the study are also outlined, and these are discussed in detail in chapter four.

CHAPTER FOUR

RESULTS AND DISCUSSIONS

Response Rate

The total sample population was 146 participants. However, during the process of data collection, out of the 146 respondents to whom the questionnaire was administered, only 127 filled and returned it. This was a response rate of 87%. This rate of response compares well with similar studies. Muchemi (2014) had a 75% response rate in his study on strategy implementation practices at the Kenya post office savings bank. Munyoroku (2014), while studying the factors influencing implementation of ERP in the mobile sector of Kenya had a response rate of 83% while Njoroge (2015) had a response rate of 88% in his study on strategy implementation in Kenyan state corporations.

Mugenda and Mugenda (2003) describe a response rate of 50% as adequate, 60% as good and above 70% as very good for data analysis and reporting. Factors that led to a high response rate include a letter of introduction from Pan Africa Christian (PAC) University and a research clearance permit from the National Commission for Science, Technology and Innovation. These are attached as appendices II and III.

Demographic Information

The study collected data on various demographics in the organization. These included gender, age of the respondent and number of years worked in the organization. The question on gender was an important measure to assess the gender balance within the organization. Age of respondents was included to understand the age distribution of staff members within the organization. Additionally, age may influence an individual's ability

to embrace technological change. This was considered an important measure, depending on the degree of successful implementation of the ERP.

The question on number of years worked in the organization was also an important measure. For staff members who have been in the organization for a long time, the assumption is that they have seen several change initiatives being implemented. They are therefore better placed to give their observations over a long duration regarding how the organization manages change. Since the ERP was implemented in UNON in 2015, it is also assumed that staff members who have worked in the organization for more than 3 years were in the organization during the preparation stage of the ERP implementation, and hence were involved in the change management process during the pre-implementation period.

Table 4.1 presents the findings of the demographic information of gender, age and years worked in the organization.

Table 4.1: *Demographic Information*

Gender of Respondents					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	42	33.1	33.1	33.1
	Female	85	66.9	66.9	100.0
	Total	127	100.0	100.0	
Age of Respondents					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	31-40	50	39.4	39.4	39.4
	41-50	73	57.5	57.5	96.9
	51-60	4	3.1	3.1	100.0
	Total	127	100.0	100.0	

Number of Years Worked in the Organization					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Below 3	3	2.4	2.4	2.4
	3-10	64	50.4	50.4	52.8
	Over 10	60	47.2	47.2	100.0
	Total	127	100.0	100.0	

Source: Field data (2017)

The findings show that there were 67 percent of females in the study sample, compared to 33 percent of males. Thus, there was a higher number of female respondents than males. This could likely imply that over time, the organization has recruited more females than males. Regarding the age of the participants, 58 percent of the participants were aged between 41 and 50, 40 percent were aged between 31 and 40 and only 3 percent were aged between 51 and 60. Therefore, most the employees in the sample are aged between 41 and 50 years of age. The study also sought to establish the number of years that the respondents have worked in the organization. The findings indicate that 50 percent have worked at the organization for between 3 and 10 years, 47 percent have worked for over 10 years and only 2 percent have worked for below 3 years. Therefore, a significant percentage of those sampled had worked for more than 3 years at the organization.

Change Management Practices

Change management practice was the independent variable of the study. To obtain data on change management practices, descriptive statements were presented on a five point Likert scale. Respondents were asked to indicate the extent to which they agreed with the presented statements. Table 4.2 presents the findings of the mean and standard deviation for the change management practices.

Table 4.2: *Descriptive Statistics - Change Management Practices*

	N	Mean	Std. Deviation
Statement on Strategic Vision			
I understand the mission of the organization	127	3.063	.8975
I understand the goals of the organization	127	3.039	.9378
I am clear on how my roles support the mission and goals of the organization	127	3.197	.9681
Management appear to have a strategy on how change initiatives are implemented	127	3.118	1.0360
The vision of change initiatives is clearly conveyed to all staff within the organization	127	2.874	1.1478
Statement on Leadership			
Top leadership explain the need for change initiatives	127	3.220	.7337
Top leadership participate in change initiatives within the organization	127	3.394	.9690
Top leadership show support to all entities within the organization during change initiatives	127	3.181	1.1847
Top leadership delegate change initiatives to smaller teams to implement change	127	3.512	.9666
Top leadership generally provide direction in the organization	127	4.370	.4847
Change management teams consist of staff at different levels in the organization	127	4.370	.4847
Top leadership encourage staff to participate in change initiatives	127	4.370	.4847
Top leadership ensure that all the members of the organization are satisfied with change initiatives	127	4.370	.4847
Statement on Communication			
The objective of change initiatives is clearly conveyed to all staff within the organization	127	4.362	.4825
The timeframe of change initiatives is clearly conveyed to all staff within the organization	127	2.850	1.0471
Key stakeholders are informed of change initiatives within the organization	127	2.921	1.1241
Representatives of staff members at different job grades are involved in change initiatives	127	2.598	.7374
All staff within the organization are clear on where the organization is heading regarding change initiatives within the organization	127	3.252	.8726
Statement on Staff Empowerment			
Staff feedback is encouraged during change initiatives within the organization	127	3.811	.5305
I am ready for change by the time change initiatives are implemented	127	2.575	.8118

I feel competent to perform the tasks required for my position	127	3.000	.7346
I feel adequately trained to perform my job	127	3.331	.6431
My manager trusts me to make the appropriate decisions in my job	127	3.402	1.0784
I have significant autonomy in determining how I do my job	127	2.984	1.0837
I had an idea of what to expect whenever change initiatives are implemented	127	2.976	1.1510
I have access to job aids and manuals to help in performing my job	127	3.197	.9762
	127		

The results of the table show an average of above 3.0 for the mean score on change management practices. This implies that most of the respondents agree to the presence of change management practices within the organization. Most of the questions had large deviations from the mean, except those specific to strategic leadership. This may imply that the outlier responses are largely from staff members who have been in the organization for less than three years and therefore were not part of the organization during the pre-implementation phase. It may also imply that since strategic leadership is an ongoing practice, the staff members who have been in the organization for a shorter duration have seen this practice at play.

ERP Implementation

ERP implementation was the dependent variable of the study. To obtain data on ERP implementation, descriptive statements were presented on a five point Likert scale. Respondents were asked to indicate the extent to which they agreed with the presented statements. Table 4.3 presents the findings of the mean and standard deviation for ERP implementation.

Table 4.3: *Descriptive Statistics - ERP Implementation*

	N	Mean	Std. Deviation
My job description in relation to my functions in the Umoja ERP is clear	127	3.299	.9785
All the Umoja ERP modules that were intended for my department are in operation	127	3.433	.9888
I do not need to consult job aids as I perform my daily duties in Umoja ERP today	127	3.646	.9882
I have new skills because of Umoja	127	2.921	1.4939
Umoja ERP implementation led to changes in the structure of the organization	127	4.094	1.0870
Umoja ERP implementation led to changes in the culture of the organization	127	4.654	.4777
The time it takes me to process one transaction in Umoja ERP today is shorter than when the ERP was first implemented	127	4.654	.4777
The number of transactions I process daily with the Umoja ERP are more than the number I used to process daily before its implementation	127	4.654	.4777
My daily routine has stabilized since implementation of Umoja ERP	127	4.654	.4777
Umoja ERP has contributed to me performing my job better	127	4.654	.4777
Umoja ERP is no longer a new thing in the organization	127	4.654	.4777
	127		

The results presented in table 4.3 show an average of above 4.0 for the mean score on ERP implementation. This implies that most of the respondents agree to the successful implementation of ERP, based on the indicators of the study variable. Most of the questions had small deviations from the mean, indicated by a standard deviation of 0.4777, which may imply that most respondents leaned towards strongly agreeing with the statements presented. The question regarding the ERP system providing new skills had the highest standard deviation at 1.0870, probably implying that there were mixed

reactions from the new employees and the older ones in the organization, regarding the ERP being a source of new skills.

Test of Hypotheses

This section of the study sought to understand the different relationships that exist among the different variables. Inferential statistics was used to test and verify the different hypotheses in line with the study objectives. In this section, the focus was majorly on the use of correlation analysis and regression analysis to understand the different relationships that exist among the different variables.

Strategic Vision and ERP Implementation

H_{01} ; Strategic vision has no significant effect on ERP implementation at UNON.

The aim of the first hypothesis was to understand whether strategic vision had a significant effect on ERP implementation in the organization. To conduct this analysis, a regression analysis was used as the statistical test to understand the relationship. The findings of the regression analysis are indicated in table 4.4

Table 4.4: *Strategic Vision Regression Analysis*

Model Summary							
Model 1	R	R Square	Adjusted R Square	Std. Error of the Estimate			
1	.200 ^a	.040	.032	5.41652			
ANOVA							
Model		Sum of Squares	Df	Mean Square	F	Sig.	
1	Regression	152.059	1	152.059	5.183	.025 ^b	
	Residual	3667.343	125	29.339			
	Total	3819.402	126				
Coefficients							
Model 1	Unstandardized Coefficients			Standardized Coefficients		t	Sig.

	B		Std. Error	Beta		
1	(Constant)	38.916	2.852		13.646	.000
	Strategic Vision	.418	.184	.200	2.277	.025
a. Predictors: (Constant), Strategic Vision b. Dependent Variable: ERP Implementation						

Source: Field data (2017)

A simple linear regression analysis was conducted to test the effect of strategic vision on ERP implementation at UNON. The findings indicate a weak positive relationship ($R=0.200$) between strategic vision and ERP implementation. They further show that strategic vision explained 4.0 percent ($R^2=0.40$) of ERP implementation. The regression model was significant at F ratio = 5.183 with $p<0.05$. Based on these results H_{1a} is rejected. This relationship was represented by the following equation:

$$E = 38.916 + 0.418 \text{ SV} \quad \text{Where } E = \text{ERP implementation, SV} = \text{Strategic Vision}$$

This is a positive effect and it means that a unit change in strategic vision causes 0.418 change in ERP implementation.

Leadership and ERP Implementation

H_{02} ; Leadership has no significant effect on ERP implementation at UNON.

The aim of the second hypothesis was to understand whether strategic leadership had a significant effect on ERP implementation in the organization. To conduct this analysis, regression analysis was used as the statistical test to understand this relationship. The findings of the analysis are indicated in table 4.5

Table 4.5: *Strategic Leadership Regression Analysis*

Model Summary						
Model	R	R Square	Adjusted R Square		Std. Error of the Estimate	
1	.316 ^a	.100	.093		5.24435	
ANOVA						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	381.496	1	381.496	13.871	.000 ^b
	Residual	3437.906	125	27.503		
	Total	3819.402	126			
Coefficients						
Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	30.912	3.895		7.936	.000
	Leadership	.468	.126	.316	3.724	.000
a. Predictors: (Constant), Leadership b. Dependent Variable: Erp Implementation						

a. Predictors: (Constant), Leadership b. Dependent Variable: Erp Implementation

Source: Field data (2017)

A simple linear regression analysis was conducted to test the influence of leadership on ERP implementation at UNON. The findings indicate a moderately weak positive relationship ($R=0.316$) between leadership and ERP implementation. They further show that leadership explained 10.0 percent ($R^2=0.100$) of ERP implementation. The regression model was significant at F ratio = 13.871 with $p<0.05$. Based on these results H_{02} is rejected. This relationship was represented in the following equation:

$$E = 30.912 + 0.468 L \text{ Where } E = \text{ERP implementation, } L = \text{Leadership}$$

This is a positive effect and it means that a unit change in leadership causes 0.468 change in ERP implementation.

Communication and ERP Implementation

H₀₃; Communication has no significant effect on ERP implementation at UNON.

The aim of the third hypothesis was to understand whether communication had a significant effect on ERP implementation in the organization. To conduct this analysis, regression analysis was used as the statistical test to understand this relationship. The findings of the analysis are indicated in table 4.6

Table 4.6: *Communication Regression Analysis*

Model Summary							
Model	R		R Square	Adjusted R Square	Std. Error of the Estimate		
1	.217 ^a		.047	.040	5.39559		
ANOVA							
Model		Sum of Squares		Df	Mean Square	F	Sig.
1	Regression	180.352		1	180.352	6.195	.014 ^b
	Residual	3639.050		125	29.112		
	Total	3819.402		126			
Coefficients							
Model		Unstandardized Coefficients		Standardized Coefficients		T	Sig.
		B	Std. Error	Beta			
1	(Constant)	35.825	3.843			9.322	.000
	Communication	.479	.193	.217		2.489	.014
a. Predictors: (Constant), Communication b. Dependent Variable: Erp Implementation							

Source: Field data (2017)

A simple linear regression analysis was conducted to test the influence of communication on ERP implementation at UNON. The findings indicate a weak positive relationship (R=0.217) between communication and ERP implementation. They further show that communication explained 4.7 percent (R²=0.047) of ERP implementation. The regression model was significant at F ratio = 6.195 with p<0.05. Based on these results H₀₃ is rejected. This relationship was represented in the following equation:

$$E = 35.825 + 0.479 C$$

Where E= ERP implementation, C= Communication

This is a positive effect and it means that a unit change in communication causes 0.479 change in ERP implementation.

Staff Empowerment and ERP Implementation

H_{o4}; Staff Empowerment has no significant effect on ERP implementation at UNON.

The aim of the fourth hypothesis was to understand whether staff empowerment had a significant effect on ERP implementation in the organization. To conduct this analysis, regression analysis was used as the statistical test to understand this relationship. The findings of the analysis are indicated in table 4.7

Table 4.7: *Staff Empowerment Regression Analysis*

Model Summary						
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate		
1	.486 ^a	.236	.230	4.83128		
ANOVA						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	901.745	1	901.745	38.633	.000 ^b
	Residual	2917.657	125	23.341		
	Total	3819.402	126			
Coefficients						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	32.276	2.141		15.074	.000
	Staff Empowerment	.607	.098	.486	6.216	.000
a. Predictors: (Constant), Staff Empowerment b. Dependent Variable: Erp Implementation						

Source: Field data (2017)

A simple linear regression analysis was conducted to test the influence of staff empowerment on ERP implementation at UNON. The findings indicate a positive relationship ($R=0.486$) between staff empowerment and ERP implementation. They further show that staff empowerment explained 23.6 percent ($R^2=0.236$) of ERP

implementation. The regression model was significant at F ratio = 38.633 with $p < 0.05$. Based on these results H_{4a} is rejected. This relationship was represented in the following equation:

$$E = 32.276 + 0.607 SE \quad \text{Where } E = \text{ERP implementation, } SE = \text{Staff Empowerment}$$

This is a positive effect and it means that a unit change in staff empowerment causes 0.607 change in ERP implementation.

Change Management Practices and ERP Implementation

In the context of this study, there was need to understand whether the four measures of change management at the organization: strategic vision, strategic leadership, communication and staff empowerment were all predictors of ERP implementation success at the organization. To do this, a regression analysis was carried out to understand whether the utilization of all the four change management practices would predict change management success at UNON. The findings of the analysis are indicated in table 4.8

Table 4.8: *Regression Analysis for Change Management Practices*

Model Summary						
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate		
1	.495 ^a	.245	.221	4.86088		
ANOVA						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	936.769	4	234.192	9.912	.000 ^b
	Residual	2882.633	122	23.628		
	Total	3819.402	126			
Coefficients						
Model		Unstandardized Coefficients	Standardized Coefficients	T	Sig.	

		B	Std. Error	Beta		
1	(Constant)	31.254	4.121		7.584	.000
	Strategic Vision	-.201	.198	-.096	-1.019	.310
	Leadership	.085	.164	.057	.516	.607
	Communication	.064	.216	.029	.298	.766
	Staff Empowerment	.617	.131	.494	4.728	.000
a. Dependent Variable: ERP Implementation b. Predictors: (Constant), Staff Empowerment, Communication, Strategic Vision, Leadership						

Source: Field data (2017)

A multiple regression analysis was conducted to test the joint influence of staff empowerment, communication, strategic vision and leadership on ERP implementation at UNON. The findings indicate that the joint effect of strategic vision, leadership and communication on ERP implementation are statistically not significant ($p > 0.05$), while the effect of staff empowerment on ERP implementation is statistically significant ($p < 0.05$). Overall, the four change management practices have a moderate positive relationship with ERP implementation ($R = 0.495$) and explain 24.5 percent variance in ERP implementation. They further show that staff empowerment explained 23.6 percent ($R^2 = 0.236$) of ERP implementation. The regression model was significant at F ratio = 38.633 with $p < 0.05$. Based on these results H_A is rejected. These relationships were represented in the following equation:

$$\text{ERP Implementation} = 31.254 - 0.201 \text{ Strategic Vision} + 0.085 \text{ Leadership} + 0.064 \text{ Communication} + 0.617 \text{ Staff Empowerment}$$

The results show that all change management practices have positive effects on ERP implementation except for strategic vision. A unit change in leadership, communication and staff empowerment yields 0.085, 0.064 and 0.617 positive change in ERP implementation respectively.

Discussion of Findings

Change remains an inevitable aspect of organizations. The challenges faced by organizations in the contemporary business environment demand that organizations should consistently change to gain competitive advantage. Change initiatives in organizations can be not only expensive but they can also disrupt operations. For this reason, it is important that proper change management practices are implemented to enhance success of change initiatives. In examining the relationship between change management practices and ERP implementation in the context of UNON, four hypotheses were developed and analysed.

Demographic Information

Demographic information of the respondents was collected and the results presented in section 4.3. This information consisted of gender, age and the number of years worked in the organization. The findings show that there were 67 percent of females in the study sample, compared to 33 percent of males. Due to competing demands of balancing careers and family life, women have been under-represented in stable and high paying jobs, and particularly so in the developing world (ILO, 2017). The study findings imply that UNON is committed to provide equal opportunities to women.

The research instrument also sought to establish the age of respondents. The findings indicate that 58 percent of the participants were aged between 41 and 50, 40 percent were aged between 31 and 40 and only 3 percent were aged between 51 and 60. Therefore, most the employees in the sample are aged between 41 and 50 years of age. There is documented evidence that older adults are less likely to embrace technology than younger adults. Czaja et al. (2006) found that adoption of technology is influenced by

sociodemographic factors, attitudes and cognitive abilities. In the case of UNON, although most respondents are aged between 41 and 50 years old, there seems to be successful implementation of the ERP. This is evidenced by an average mean score of above 4.0 for the questions under ERP implementation. This could imply positive attitudes and high cognitive skills among the respondents.

The study also collected information on the number of years that respondents have worked in the organization. The findings indicate that 50 percent have worked at the organization for between 3 and 10 years, 47 percent have worked for over 10 years and only 2 percent have worked for below 3 years. Therefore, a significant percentage of those sampled had worked for more than 3 years at the organization. It is likely that most of the older employees have worked in the organization for over 10 years. This would imply that these employees have been part of previous change initiatives within the organization and therefore have not struggled with the implementation of the ERP, hence the successful outcome.

Strategic Vision and ERP Implementation

In the first hypothesis, regression analysis was carried out to examine whether there existed a relationship between strategic vision and ERP implementation at UNON. The outcomes of the regression analysis showed a correlation coefficient of 0.200 with the overall model predicting that 4 percent of the variance in ERP implementation was explained by strategic vision. This means that there was a weak positive significant relationship between strategic vision and ERP implementation at UNON.

The results of these findings agree with previous findings relating to application of change management practices during the implementation of any strategic initiative. In Kotter's eight step change model, strategic vision is identified as important in helping to signal the need for change (Kotter, 1996). Other studies also indicate that strategic vision is important in helping to drive the change process. Mulwa (2015) found that the change management process at UNON required that all the employees of the organization be conversant with the mission and vision of the organization to implement change successfully. This means that the organization's management understands where they want the organization to be in future, and the employees understand where the organization is heading to (Farmer & Seers, 2004). Overall, the findings of this study are thus supported in previous studies that have examined this relationship.

The relationship between strategic vision and ERP implementation was found to be weak for the case of UNON and only 4.0 percent of ERP implementation was explained by strategic vision. This implies that regardless of whether the staff members were aware of the vision of the organization or not, ERP was successfully implemented. This success was therefore not attributed to understanding of the strategic vision of the organization, but to other change management practices, for instance, staff empowerment.

Leadership and ERP Implementation

In the second hypothesis, regression analysis was carried out to examine whether there existed a statistical relationship between strategic leadership and ERP implementation at UNON. The outcomes of the regression analysis showed a correlation coefficient of 0.316 with the overall model predicting that 10 percent of the variance in ERP

implementation was explained by strategic leadership. This means that there was a weak positive significant relationship between strategic leadership and ERP implementation at UNON. Stronger involvement of the strategic leadership would have resulted in higher ERP implementation success at the organization.

This is driven by the argument that change in many firms is a strategic endeavour and hence proper leadership is required to enhance change management success (Farmer & Seers, 2004). According to Sirkin et al. (2005), for change to be successful, it must be driven by a skilled, cohesive and motivated team who are implementing change in a department that is receptive to the change process. USAID (2015) found that when the senior leadership of the organization gives priority to the change initiative, it provides legitimacy for the change and encourages the rest of the organization to participate. In his study on strategy implementation practices at the Kenya Post and Savings Bank, Muchemi (2014) found that for successful strategy implementation, senior management must be fully committed to the change process. The findings of this study therefore mirror what has been found in other studies and hence there is consistency in the study findings.

Communication and ERP Implementation

In the third hypothesis, regression analysis was carried out to examine whether there existed a statistical relationship between communication and ERP implementation at UNON. The outcomes of the regression analysis showed a correlation coefficient of 0.217 with the overall model predicting that 4.7 percent of the variance in ERP implementation was explained by communication. This means that there was a weak positive significant relationship between communication and ERP implementation at

UNON. Stronger communication would have resulted in higher ERP implementation success at the organization.

Communication has been identified as a crucial factor that influences change management success (Gkorezis, 2012). Specifically, studies have found that proper communication is needful to ensure that the employees are aware of the change and the effects that the change has on them and the organization. Sirkin et al. (2005) found that it is the responsibility of leadership to communicate effectively at every stage of the transformation process, and to encourage communication among the employees. It also helps to reduce uncertainty during the process of change management which has been identified in many studies as a critical factor that leads to failure in change management (USAID, 2015). In his study on change management and IFMIS in the Government of Kenya, Muma (2016) found that communication had a significant positive relationship with IFMIS implementation.

The current study has also established that communication had a positive significant relationship with ERP implementation success at UNON. The weakness in prediction between communication and ERP implementation indicates that although ERP implementation was a success, communication to stakeholders was not effective. This is evidenced by a mean score of below 3.0 on the questions regarding communication. This could imply that there are other change management practices that were employed by UNON that largely contributed to the successful implementation of ERP.

Staff Empowerment and ERP Implementation

In the last hypothesis, regression analysis was carried out to examine whether there existed a statistical relationship between staff empowerment and ERP implementation at UNON. The outcomes of the regression analysis showed a correlation coefficient of 0.486 with the overall model predicting that 23.6 percent of the variance in ERP implementation was explained by staff empowerment. This means that there was a moderate positive significant relationship between staff empowerment and ERP implementation at UNON. Stronger levels of staff empowerment would have resulted in higher ERP implementation success at the organization.

Staff empowerment has been at the centre of many studies on ERP implementation and change management. Previous findings have noted that change management effectiveness can be achieved when employees are properly empowered to make decisions with regards to different aspects of the change process. Muma (2016) found a positive significant relationship between staff empowerment and ERP implementation in the Government of Kenya. On his part, Mulwa (2015) while studying on ERP implementation at UNON during the pre-implementation phase found that there was a great need for staff empowerment as the organization prepared to implement the ERP. Staff empowerment ranges from training employees, providing them with support during and after the changes have been made, working along with them to facilitate decision making among others (Gkorezis, 2012). Staff empowerment ensures that the employees are in a better position to enhance their performance after change both in the short term and the long term (Farmer & Seers, 2004).

In this study, the question that had the highest mean (3.811) in the staff empowerment category sought to find out if staff feedback is encouraged during change initiatives within the organization. This implies that most respondents agreed that their feedback was encouraged during change initiatives in the organization. The next high ranking mean (3.402) was recorded on the question that sought to find out if managers trust their juniors to make the appropriate decisions in their jobs. The indicators of staff empowerment were found to be either in terms of competence where staff skills are recognized and enhanced, or in terms of control where staff have a considerable degree of trust and autonomy in performing their functions.

This study found a moderate correlation between staff empowerment and ERP implementation success. This can only mean that a stronger focus on employees can help to enhance change management success in organizations implementing change initiatives. For the case on UNON, it is likely that the moderate correlation between staff empowerment and ERP implementation is caused by the organization having put in place measures to ensure that staff continuously feel empowered to perform their duties within the ERP.

Change Management Practices and ERP Implementation

Lastly, a regression analysis was carried out to understand whether a combination of all the four change management practices predicted ERP implementation success. The findings indicated that 24.5 percent of the variance in ERP implementation was explained by staff empowerment, strategic leadership, communication and strategic vision.

Analysis of the variance (ANOVA) established that the variance in ERP implementation was significant ($F = 9.912$ and $p < .001$). This meant that there was a significant association between change management practices implemented in the organization and ERP implementation success. Lastly, the coefficient analysis found that only staff empowerment was a significant predictor of ERP implementation success. The other three variables were not found to be significant predictors of ERP implementation success. Therefore, higher levels of staff empowerment would lead to higher levels of ERP implementation success. These findings have been supported in previous studies that have found a positive association between staff empowerment and change management success (Mulwa 2015, Muma 2016). However, these findings also mean that staff empowerment is one of the most important change management practices that ought to be considered most during change management (Kotter, 1996). Therefore, these findings mirror what has been established in this study and help to show the important role played by employees during change management processes.

Chapter Summary

This chapter presents the findings of the data collection process. These are grouped into descriptive statistics and inferential statistics. Data was collected using a closed-ended questionnaire comprising of 40 questions. IBM SPSS Version 23 was used to carry out the analysis. In conducting this analysis, the key assumption in the chapter was the p value that is assumed to be at 0.05. The study made use of the Pearson correlation and regression analysis together with the regression model to analyse correlations between the dependent and independent variables.

The hypotheses tests resulted into each of the null hypotheses being rejected, indicating that a change in the independent variables resulted in a change in the dependent variable. Staff empowerment was found to have the greatest effect on ERP implementation at UNON, with 23.6 per cent of ERP implementation being explained by staff empowerment. In the chapter, these findings have been discussed and compared with theory and previous studies. The findings of the study agreed with both theory and previous studies.

CHAPTER FIVE

SUMMARY OF FINDINGS, RECCOMENDATIONS AND CONCLUSIONS

Summary of the Findings

The broad objective of the study was to establish the effect of change management practices on the implementation of ERP at UNON. These were then broken down into four specific objectives, out of which four hypotheses were derived and tested. The findings of the hypothesis testing are summarized in table 5.1

Table 5.1: Summary of Findings

Objectives	Hypotheses	Decision
Objective one: To determine the effect of strategic vision on ERP implementation at UNON	H ₀ 1: Strategic vision has no significant effect on ERP implementation at UNON	Rejected
Objective two: To establish the effect of leadership on ERP implementation at UNON	H ₀ 2: Leadership has no significant effect on ERP implementation at UNON	Rejected
Objective three: To identify the effect of communication on ERP implementation at UNON	H ₀ 3: Communication has no significant effect on ERP implementation at UNON	Rejected
Objective four: To determine the effect of staff empowerment on ERP implementation at UNON	H ₀ 4: Staff empowerment has no significant effect on ERP implementation at UNON	Rejected

Source: Field data (2017)

Recommendations

There are several recommendations that would be important in the context of this study as discussed below. The first recommendation would be to ensure the involvement of strategic leadership during ERP implementation to achieve successful implementation.

The top leadership of the organization must provide direction and fully support the change initiative in terms of providing the required resources. They should also appoint a team to drive the change initiative. The leadership should also focus on employee motivation and involvement to achieve success.

The second recommendation is to ensure effective communication during the process of change to enhance successful implementation of change initiatives. This communication should be vertical, horizontal and even diagonal such that there is exchange of information between management and subordinates, between team members and across departments. Communication needs to focus on creating awareness of the need for change, informing employees about the change while eliminating doubts and misinformation which could lead to staff resistance and consequently failure of ERP implementation.

The third recommendation is to focus on staff empowerment which is crucial in enhancing change management success. Staff empowerment should be focused on helping the employees in the organization to understand and learn about the change and to effectively use ERP within the organization. Most respondents agreed that their feedback was encouraged during change initiatives in the organization. Additionally, many respondents felt that managers trust their juniors to make the appropriate decisions in their jobs. The indicators of staff empowerment were found to be either in terms of competence where staff skills are recognized and enhanced, or in terms of control where staff have a considerable degree of trust and autonomy in performing their functions. This combination of competence and control should be the focus for staff empowerment during change initiatives.

Future studies

This study focused on four change management practices namely strategic vision, strategic leadership, communication and staff empowerment. Most studies have examined individual factors and hence this study's focus on a range of change management practices helped to show the role that is played by these practices on ERP implementation. However, given the findings that staff empowerment is key, future studies should seek to examine change management from this perspective to understand how various measures of staff empowerment can affect ERP implementation success.

Conclusions

Change management remains a critical aspect of any successful organizations because changes are inevitable. However, effective change management is an aspect that needs to be ensured in organizations to enhance change management success. This study sought to test empirically the relationship between change management practices and ERP implementation success at UNON. The findings show significant association between change management practices and ERP implementation success at UNON. Strategic vision, strategic leadership, communication and staff empowerment were all significantly correlated with ERP implementation success. However, the regression model identified staff empowerment as the key change management practice that impacted significantly on ERP implementation success. This could therefore mean that the approaches to change management were effective in enhancing change management success at UNON. Staff empowerment as an approach to change management should be considered immensely to enhance change management success during ERP implementation.

Chapter Summary

The aim of this chapter is to summarize the findings of the previous chapter and to draw conclusions from the findings. The findings are tabulated as the objectives, the hypotheses and the decisions on the results of the hypotheses tests. The chapter also provides recommendations in line with the findings of this study to help guide future implementation of ERP in organizations. It recommends that for successful implementation of ERP, information should flow effectively within the organization and top leadership must fully support the initiative. Most importantly, staff empowerment should be given great emphasis to achieve successful ERP implementation. The chapter then suggests that future studies should focus on an in-depth understanding of how staff empowerment affects ERP implementation. The study therefore concludes that change management practices have a significant effect on ERP implementation, with staff empowerment having the most significant effect on ERP implementation.

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APPENDIX I: RESEARCH QUESTIONNAIRE

Dear Respondent,

This questionnaire is aimed at collecting information on the effect of change management practices on ERP implementation at UNON. The information is being sought solely for academic purposes and will be treated with strict confidence. Kindly answer the questions by ticking the boxes provided as applicable.

PART I

Demographic Information

1. Gender

Male [] Female []

2. Age

Below 30 [] 31-40 [] 41-50 [] 51-60 [] Above 60 []

3. Years worked in the organization

0-3 [] 3-10 [] Above 10 []

PART II

Change Management Practices

4. The following statements relate to change management practices within the organization. Please indicate the extent to which you agree/disagree with the statements.

Key: 1= Strongly Disagree; 2= Disagree; 3= Not Sure; 4= Agree;

5= Strongly agree

	Statement on Change Management Practices	1	2	3	4	5
1.	I understand the mission of the organization					
2.	I understand the goals of the organization					
3.	I am clear on how my roles support the mission and goals of the organization					
4.	Management appear to have a strategy on how change initiatives are implemented					
5.	The vision of change initiatives is clearly conveyed to all staff within the organization					
6.	Top leadership explain the need for change initiatives					
7.	Top leadership participate in change initiatives within the organization					
8.	Top leadership show support to all entities within the organization during change initiatives					
9.	Top leadership delegate change initiatives to smaller teams to implement change					
10.	Top leadership generally provide direction in the organization					
11.	Change management teams consist of staff at different levels in the organization					
12.	Top leadership encourage staff to participate in change initiatives					
13.	Top leadership ensure that all the members of the organization are satisfied with change initiatives					
14.	The objective of change initiatives is clearly conveyed to all staff within the organization					
15.	The timeframe of change initiatives is clearly conveyed to all staff within the organization					

	Statement on Change Management Practices	1	2	3	4	5
16.	Key stakeholders are informed of change initiatives within the organization					
17.	Representatives of staff members at different job grades are involved in change initiatives					
18.	All staff within the organization are clear on where the organization is heading regarding change initiatives within the organization					
19.	Staff feedback is encouraged during change initiatives within the organization					
20.	I am ready for change by the time change initiatives are implemented					
21.	I feel competent to perform the tasks required for my position					
22.	I feel adequately trained to perform my job					
23.	My manager trusts me to make the appropriate decisions in my job					
24.	I have significant autonomy in determining how I do my job					
25.	I had an idea of what to expect whenever change initiatives are implemented					
26.	I have access to job aids and manuals to help in performing my job					

PART III

ERP Implementation

6. The following statements relate to ERP implementation within the organization. Please indicate the extent to which you agree/disagree with the statements.

Key: 1= Strongly Disagree; 2= Disagree; 3= Not Sure; 4= Agree;

5= Strongly agree

	Statement on ERP Implementation	1	2	3	4	5
1.	My job description in relation to my functions in the Umoja ERP is clear					
2.	All the Umoja ERP modules that were intended for my department are in operation					
3.	I do not need to consult job aids as I perform my daily duties in Umoja ERP today					
4.	I have new skills because of Umoja					
5.	Umoja ERP implementation led to changes in the structure of the organization					
6.	Umoja ERP implementation led to changes in the culture of the organization					
7.	The time it takes me to process one transaction in Umoja ERP today is shorter than when the ERP was first implemented					
8.	The number of transactions I process daily with the Umoja ERP are more than the number I used to process daily before its implementation					
9.	My daily routine has stabilized since implementation of Umoja ERP					
10.	Umoja ERP has contributed to me performing my job better					
11.	Umoja ERP is no longer a new thing in the organization					

THANK YOU FOR YOUR PARTICIPATION IN THIS STUDY

APPENDIX II: RESEARCH AUTHORIZATION LETTER



NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY AND INNOVATION

Telephone: +254-20-7211471,
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Fax: +254-20-318245, 319209
Email: dg@nacosti.go.ke
Website: www.nacosti.go.ke
When replying please quote

9th Floor, Uta H House
Uhuru Highway
P.O. Box 31023 00109
NAIROBI-KENYA

Ref No. **NACOSTI/P/17/97554/18456**

Date: **31st July, 2017**

Flevian Iganza Mudanya
Pan Africa Christian University
P.O. Box 56875-00200
NAIROBI.

RE: RESEARCH AUTHORIZATION

Following your application for authority to carry out research on *"The effect of change management practices on the implementation of ERP at the United Nations Office, Nairobi,"* I am pleased to inform you that you have been authorized to undertake research in **Nairobi County** for the period ending **28th July, 2018.**

You are advised to report to **the County Commissioner and the County Director of Education, Nairobi County** before embarking on the research project.

Kindly note that, as an applicant who has been licensed under the Science, Technology and Innovation Act, 2013 to conduct research in Kenya, you shall deposit a **copy** of the final research report to the Commission within **one year** of completion. The soft copy of the same should be submitted through the Online Research Information System.

GODFREY P. KALERWA MSc., MBA, MKIM
FOR: DIRECTOR-GENERAL/CEO

Copy to:

The County Commissioner
Nairobi County.

The County Director of Education
Nairobi County.

APPENDIX III: RESEARCH PERMIT FROM THE NATIONAL COUNCIL FOR
SCIENCE, TECHNOLOGY AND INNOVATION

NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY AND INNOVATION	
CONDITIONS 1. The License is valid for the proposed research, research site specified period. 2. Both the Licensee and any rights thereunder are non-transferable. 3. Upon request of the Commission, the Licensee shall submit a progress report. 4. The Licensee shall report to the County Director of Education and County Governor in the area of research before commencement of the research. 5. Excavation, filming and collection of specimens are subject to further permissions from relevant Government agencies. 6. This License does not give authority to transfer research materials. 7. The Licensee shall submit two (2) hard copies and upload a soft copy of their final report. 8. The Commission reserves the right to modify the conditions of this License including its cancellation without prior notice.	 REPUBLIC OF KENYA  National Commission for Science, Technology and Innovation RESEARCH CLEARANCE PERMIT Serial No.A 15213 CONDITIONS: see back page

APPENDIX IV: LETTER OF INTRODUCTION FROM THE UNIVERSITY



P.O. Box 56875, 00200 Nairobi, Kenya

+254 721 932050, +254 734 400694

enquiries@pacuniversity.ac.ke,
admissions@pacuniversity.ac.ke

TO WHOM IT MAY CONCERN

Dear Sir/Madam,

REF: FLEVIAN MUDANYA REG NO. MBAD/7169/16

Greetings! This is an introduction letter for the above named person a final year student in Pan Africa Christian University (PAC University), pursuing a Master of Business Administration.

She is at the final stage of the programme and she is preparing to collect data to enable her finalize on her thesis. The thesis title is "The effects of change management practices on the implementation of Enterprise Resource Planning (ERP) at the UN office in Nairobi.

We therefore kindly request that you allow her conduct research at your organization.

Warm regards,

Liliana

Dr. Lilian Vikiru
University Registrar

Where Leaders are made