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THE UTILISATION OF SAP HUMAN CAPITAL MANAGEMENT IN HUMAN RESOURCES MANAGEMENT WITHIN THE PUBLIC SERVICE COMMISSION (PSC).

BY

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A DISSERTATION SUBMITTED IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE DEGREE OF MASTERS IN PUBLIC SECTOR MANAGEMENT IN THE COLLEGE OF BUSINESS, PEACE, LEADERSHIP AND GOVERNANCE.

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Abstract

The research sought to establish how Systems Applications and Products in Data Processing (SAP) Human Capital Management is being utilised in accomplishing human resources processes at the Public Service Commission and come up with recommendations to improve its utilisation. The main objectives of the research were to evaluate the roles of employees and management in the implementation of the project, the barriers hindering implementation and factors that lead to improved utilization of SAP Human Capital Management. In order to answer all the questions of this research, the author followed a mixed methods research approach. Explanatory sequential design was used where qualitative data findings helped to clarify and explain quantitative results. This approach incorporated questionnaires to obtain qualitative and quantitative information on individuals' perspectives on the utilisation of SAP (Human Capital Management) in implementing human resources processes at the Public Service Commission. The research targeted a population of 450 employees stationed at the Public Service Commission Head Office who are responsible for implementing SAP Human Capital Management. Stratified sampling technique was used to select a sample of 90 participants proportionally from the ten (10) departments at the Public Service Commission Head Office, which is a 20% representation of the Head Office population. The research revealed that lack of employee involvement from planning stage, decision making and identifying training needs is contributing immensely to non-utilisation of SAP Human Capital Management. The research concluded that top management should play a leading role in encouraging maximum participation of employees by involving them in decision making, responding positively to change, continuous training and monitoring for successful implementation of SAP Human Capital Management. This research will impact on future projects at the Public Service Commission to come up with well-coordinated Project Management Policies. The research recommended that further research should be carried out on how to successfully implement other SAP modules such as SAP Financial Accounting for Public Service Commission pay and benefits branch to improve efficiency and accountability for the organisation as a whole.

Key words: employee involvement, information systems utilisation, effective implementation, training needs.

Declaration

I declare that this research is my original work except where sources have been cited and acknowledged. The work has never been submitted, nor will it ever be submitted to another university for award of a degree.
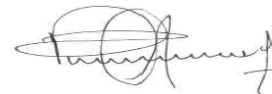
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Special thanks go to my supervisor, Mr. A. Kandiero for his commitment and guidance for the research to be a success.

Finally, I would like to extend my gratitude to my family for their unwavering support financially and socially during my studies.

Dedication

This research is a special dedication to my last-born son, Devon Tanaka Chawarura who bore the brunt of his mother's absence from the age of two (2) weeks.

List of acronyms and abbreviations

SAP   Systems Application and Products in Data Processing

PSC   Public Service Commission

SSB   Salary Service Bureau

HCM   Human Capital Management

HRMIS   Human Resources Management Information System

ERP   Enterprise Resource Planning

IT   Information Technology

HR   Human Resources

UNDP   United Nations Development Program

PMBOK   Project Management Board of Knowledge

HPO   High Performing Organisation

Definition of Key terms

E-governance, use of Information Communication Technology to improve public sector activities and processes in terms of responsiveness and accountability (Heeks,

Enterprise Resource Planning, a term used for management software that automate, controls and integrates the whole organisation different functions and departments (Ahmed, 2019)

Human Resources Management Information Systems, use of information technology software for easy management of human resources (Kulik & Perry, 2008).

Human Resources processes, appointment of members, transfer and regrading, advancement and promotion (Public Service Act, Chapter 16:04 Act 1995, 2002)

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CHAPTER 1 INTRODUCTION

1.1   Introduction

Wright and Barney (1997) estimate that the majority Human Resources departments spent approximately 65% to 75% on transactional activities, 15% to 30% on traditional activities and 5% to fifteen on transformational activities. The need for change from transactional activities which are routine activities to transformational activities which add value to the organisational goal is needed. The use of technology such as Systems Application and Products in Data Processing (SAP) Human Capital Management enhances transactional activities to attain them more efficiently so that human resources employees can have more time for transformational activities. In implementing new strategies such as SAP (Human Capital Management), employees are important participants whose presence within the whole process is important. Involvement helps to cement employees-relationship with new philosophy and would harmonise employees with the envisioned change aspects to their work and new ways of labour performance (Vance, 2006). The perceived benefits are employee buy-in and ownership of the program as they consider themselves part and parcel of the subsequent implementation (Cummings & Worley, 2005). In this regard communication channels are an important vehicle that ought to be clearly spelt out and maintained. The research sought to assess how of SAP (Human Capital Management) is being utilised in human resources management within the Public Service Commission (PSC) Secretariat. The research analysed the uptake of SAP (Human Capital Management) system at Public Service Commission Head Office since the software was pioneered at Head Office and most of resources for the project were channelled at Public Service Commission Head Office.

The underlying theories which were utilised by the research to understand challenges in the implementation of SAP Human Capital Management are the Micknsey 7-S model, Kurt Lewin 3-Stages model and Path-goal theory. The theories helped the researcher in analysing what hinders or what motivates employees to accept change within an organisation.

In order to answer all the questions of this dissertation, the author followed a mixed methods research approach. This approach incorporated questionnaires to determine and understand the utilisation of SAP (Human Capital Management) in implementing human resources processes at the Public Service Commission. Secondary sources of knowledge which include reports, internet, published journals and other books were also utilised.

The research used stratified sampling technique to select 90 participants at Public Service Commission Head Office.

1.2   Background to the Study

The Human Resources function is the core business of the Public Service Commission as outlined in Section 203(1) of the Constitution of Zimbabwe Amendment (No.20) Act 2013 (2018), as read with Public Service Act, Chapter 16:04 Act 1995 (2002) which outlines the functions of the Public Service Commission. The functions include appointment of qualified and competent persons to fill critical posts, regulating conditions of service and other incentives of members, exercising disciplinary powers, instituting grievance procedure when need arises and putting in place measures to make sure that members are motivated to perform their duties efficiently and effectively. The Public Service Commission is also answerable

to the President and ensures that principles and values set out in the constitution are adhered to.

The Public Service Commission secretariat relies principally on manual system to perform the human resources functions like recruitment and selection, transfers and regrading and promotions. The manual system involves a lot of paper work which is difficult to consolidate as a lot of information is generated from three separate cites, at the Public Service Commission head office, Salary Service Bureau and the Ministries. This has resulted in delays and duplicating of duties in performing the human resources functions.

The Secretary to the Public Service Commission Secretariat in consultation with the Office of the President and Cabinet, Department of Policy Implementation in 2013 engaged Twenty Third Consultancy, an IT consultancy firm with the view of implementing the Systems Applications and Products in data processing (SAP) (Human Capital Management Module) so as to integrate human resources processes to enhance efficiency and effectiveness in work processes.

SAP (Human Capital Management) is a component of the Human Resource Management Information Systems (HRIMS) initiative. The Zimbabwe Public Service Commission Human Resources Management Information System has its origin in a Project by the Ministry of Public Service, Labour and Social Welfare to computerize its personnel records. The 1989 Public Service Review Commission Kavran Report had revealed inter alia a bureaucracy characterized by lack of performance management culture, arrogance and poor attitude to work, high staff turnover, and a bloated, centralized and secretive bureaucracy that was non transparent, suffered poor communication of decisions and was inaccessible to the public (GOZ,1998). These characteristics led to delays in service delivery and in

responding promptly to public needs. This led to a different round of managerial reforms in the public service.

The project was incorporated into the UNDP Civil Service Reform Programme under the Economic Management Concentration Area of the Third UNDP/Zimbabwe Country programme for the period 1992-6 (World Bank [WB], 2012). External consultants worked in the Civil Service Commission on the project from the spring of 1993.The project saw difficulties, counterparts were not assigned with the relevant technical skills to supervise the consultants or set appropriate performance benchmark. On the other hand the consultancy suffered a rapid turnover of staff, including three replacements of team leader. As a consequence the team lost its understanding of the project objectives and user needs and the project lost direction (WB, 2012). By 1996 the work of the consultants was deemed unsatisfactory and the contract terminated. Following the failure of this project another HRMIS project was launched in 2004-2008 and it also suffered the same stillbirth (United Nations Development Programme [UNDP], 2000). The implementation of SAP Human Capital Management was commenced in 2013 as part of Civil service reforms with the view of improving human resources management as one of its main aims.

1.3   Statement of the Problem

According to Manenji and Marufu (2016), increased bureaucracy efficiency and better management are some of the benefits of adopting e-governance. Dunleavy (2006) corroborates that the public sector is under increased pressure for digital transformation for easy access to information and efficient decision making. As an e-governance initiative, the Public Service Commission commenced the implementation of the SAP Human Capital management in 2013 so as to integrate

human resources processes for efficient and effective processing of work at the Public Service Commission. However, five years down the line, the human resources processes such as transfers, regrading and recruitment are still being done the old way and SAP Human Capital Management has become more like a database for record keeping. Instead of improved effectiveness and efficiency, the Human Resources Department is burdened with paperwork as well as updating records in SAP Human Capital Management system. The research sought to establish how SAP Human Capital Management is being utilised in accomplishing human resources processes at the Public Service Commission and come up with recommendations to improve its utilization because this could not ascertained precisely using existing research and literature.

1.4   Research Objectives

This study focuses on evaluating whether the implementation of the SAP Human Capital Management system within the Public Service Commission from 2013 to 2019 has achieved the desired results. The objectives are given below:

I.   Evaluate the role of employees and management in the implementation of SAP Human Capital Management system at the Public Service Commission.

II.   Identify barriers to the efficient implementation of SAP Human Capital Management system.

III.   Determine the factors that lead to improved utilisation of SAP Human Capital Management system in the Commission.

1.5   Research Questions

The research questions emerged from the objectives and assumptions laid are as follows:

I.   To what extent are employees and management involved in the implementation of SAP Human Capital Management system at the Public Service Commission?

II. What are the barriers to the efficient implementation of SAP Human Capital Management system?

III. What are the factors that lead to improved utilisation of SAP Human Capital Management system within the Commission?

1.6   Assumptions

The Study is based on the assumption that SAP Human Capital Management is not being utilised to the maximum due to lack of buy in from project team members.

1.7   Significance of the Study

(a) To the Public Service Commission secretariat

In this digital era, which involves application of new technologies to improve the way of doing business, the full utilisation of SAP Human Capital Management improved effectiveness and efficiency in human resources management within the Public Service Commission.

The suggestions proffered by this research also helped in developing or reviewing the Information Communication Technology policy framework which will serve as a guide for the existing and future ICT projects.

If the full utilisation of SAP Human Capital Management is realised, it would go a long way in cutting costs for stationery as the Commission moves towards a paperless office.

(b) To the Public

Service delivery in the public service has mainly been associated with delays. If SAP Human Capital Management is successfully implemented at the Public Service Commission, it will be rolled out to line Ministries and has the potential of improving service delivery. The delays which are caused by duplication of work and lack of information will be reduced thereby achieving a well satisfied clientele.

(c) To the researcher

Besides aiding to the existing body of knowledge, the study will be in partial fulfilment of the requirements of a Master's in Public Sector Management degree.

1.8   Delimitation of the Study

The research will only be conducted at the Public Service Commission Head Office. The results obtained can be generalised to the Public Service Commission branches and line Ministries since human resources management in the public sector is guided by similar rules, procedures and circulars.

1.9   Limitation of the Study

- Biased responses from participants is one of the limitations of the study. Information technology is one area which is associated with human resistance so there is likelihood that the responses might be influenced by pure resistance to information technology and not the actual progress of the SAP Human Capital Management project. To overcome this kind of bias, the researcher will seek views of different participants, from the super users, the end users and the top management.

- Longitudinal effects is one anticipated limitation of the study as the study is supposed to be completed in three months. However, the researcher will utilise weekends to try and complete the research on time.

- Official secret act- the author signed the official secret act which prohibits disclosure of government information to unauthorised persons. However, the researcher will seek authority to conduct the research from the Secretary to the Public Service Commission.

CHAPTER 2 REVIEW OF RELATED LITERATURE

2.1 Introduction

The purpose of this chapter is to examine existing literature and to set out definition, theoretical and conceptual framework of SAP Human Capital Management. The chapter also seeks to explain how human resources management has evolved in utilising Information Technology systems. Theories will be used understand factors that hinders or enhances change when implementation projects. The study is organised into four main themes to ascertain how employee involvement affect the implementation of Information Technology projects, barriers to effective implementation of SAP Human Capital Management, factors that lead to successful implementation of Enterprise Resource Planning (ERP) projects as well a review of studies related to Enterprise Resource Planning (ERP) implementation so as to come with notable recommendations on the successful implementation of SAP Human Capital Management.

2.2 Theoretical framework

The research was guided by theories that explain variables which influence change in an organization such as the organization as a whole, organizational culture and leadership behavior. These theories include the Mckinsey 7-S Model, Kurt Lewin three stage model of change and the goal path theory of leadership.

Analysis of an organisation

The McKinsey 7-S Model starts on the premise that an organisation is not just structure, but consists of seven elements (Dagmar, 2014). The model is given below.
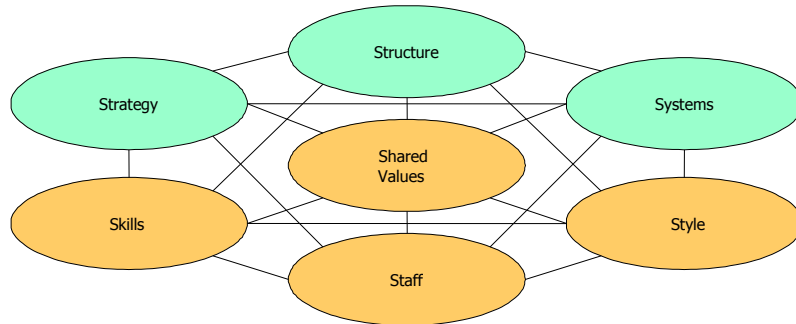
Figure 2. 1   The McKinsey 7-S Model (Dagmar, 2014)

The seven elements are distinguished into two the hard S's and soft S's. The hard elements can be found in strategy statements, corporate plans, organisational charts and other documentations. The four soft S's are highly determined by the people at work in the organization (Dagmar, 2014). The soft factors can have a great impact on the hard S's; structures, strategies and systems of the organisation. Effective organisations achieve a fit between these seven elements. If one element changes, would affect all other elements. However, most organisations focus on the hard S's and ignore the soft S's. Peters and Waterman (1982) in 'In Search of Excellence' commented that most successful organisations work hard at these soft S's.

Organisational culture

The three-stage model of change that was postulated by Kurt Lewin known as unfreezing-change-refreeze model requires prior learning to be rejected and replaced (Hartzell, 2003). Unfreezing involves finding methods to make it possible for people to let go of old method that was somehow unproductive. The change stage which is also called "moving to new level" involves process of change in thoughts, feeling and behaviour. The unfreezing stage is establishing the change as the new habit, so that it now becomes the standard operating procedure.

Leadership behaviour

The path-goal theory of leadership suggests that the primary functions of a leader are to make valued or desired rewards available in the workplace and to clarify for the subordinates the kinds of behaviour that will lead to goal accomplishment and valued rewards – that is, the leader should clarify the paths to goal attainment (Griffins, 2000). The goal-path theory assumes that leaders can change their style or behaviour to meet the demands of a particular situation. When encountering a new project, for example, the leader may be directive in establishing work procedures and in outlining what needs to be done.

2.3 Relevance of the theoretical framework to the study

a) **The Mckinsey 7-S Model**

Many organisations especially the in the Public Sector usually focus on the structure, the strategy and system when implementing change. However, the soft S's such skills, shared values, style and staff equally have an impact on successful implementation of change. For the Public Service Commission to successfully implement Sap Human Capital Management, in as much as there is need to come up with a strategy, possible restructuring and putting up of systems to enhance change, there is also need to complement the change by making sure that the organization is adequately staffed with employees who have relevant skills and share common values of the desired change.

b) **Kurt Lewin three stage model of change**

For a project to be successfully implemented, it is inevitable that there are some old methods of doing business that have to be changed (Richman, 2015). There is serious need for the Public Service Commission to make employees understand how desirable is the need for change from doing human resources processes manually to automated way of doing things. Public Service Commission employees need to understand the benefits of using SAP Human Capital Management for them to appreciate change. When employees now have an understanding and are moving forward to new way of doing business, ways to establish the new way of doing business have to be developed and implemented.

c) Goal path theory of leadership

The involvement and commitment of leadership bears impact on the successful implementation of a project (Chan & Mills, 2002). If top management at the Public Service Commission is committed to the success of SAP Human Capital Management, there is high likelihood that they will motivate the project team members to achieve the desired goal of successful implementation of SAP Human Capital Management.

2.4 Historical evolution of Human Resources Management and Human Resources Information System

One can analyse the historical trends of the Human Resources function from different perspectives, the evolution can be analysed as a profession and a science, as an aid to management, as a conflicting political and economic diversities between management and employees, and from the perspective of the development of employee involvement enhanced by developments in industrial, organizational, and psychology.

Wright and Barney (1997) analysed how with time HRM role has changed from worrying with routine transactional and traditional human resources processes to managing transformational human resources activities. Transactional activities are mostly routine—for example, changing an employee's home address or health care provider. Traditional HR activities are focused on HR programs like selection, compensation, and performance appraisal. However, transformational HR activities

are those actions of a corporation that "add value" to the consumption of the firm's product or service. An example of a transformational HR activity would be retail clerks educational program to improve customer service interaction which would also aid to the strategic goals of an organisation. Thus, transformational activities have redefined the role and strategic importance of human resource function within the firm.

Wright and Barney (1997) estimate that the majority HR departments spent approximately 65% to 75% on transactional activities, 15% to 30% on traditional activities and 5% to fifteen on transformational activities. One among the main purposes of the planning, development, and implementation of an HRIS is to scale back the quantity of time HR employees need to spend on transactional activities, allowing the staff to spend longer on traditional and transformational activities. This notion of using technology to enhance transactional activities and attain them more efficiently is the central theme of this research and provides one among the justifications for a computer-based system.

In terms of the broad roles of HR, Ulrich (1998) identifies four main roles, namely, strategic business partner, administrative expert, employee champion, and an agent of change. Ulrich, Younger, and Brockbank (2008) stress that, within the 21st century, the HR organization should function as a business within a business, shifting its focus from activities to outcomes and capabilities and its structure so that it mirrors that of the business.

Along with the upsurge of computerized management information systems (MIS) in industrialized countries' enterprises within the 1980s, HR functions increasingly began to deploy human resource information systems in their daily work. HRIS were primarily seen as MIS sub functions within HR areas intended to aid human resources management in administration, planning, deciding and other control activities. During the 1990s, alongside the adoption of more complex HR practices focused on a company's overall performance goal, HRIS correspondingly evolved into more sophisticated information expert systems featuring analytical tools to support decision-making in managing human capital (Ostermann, Staudinger & Staudinger, 2009). Information technology within the past decade drastically changed the human resources function. Providing support for mainly administrative activities like payroll and attendance management in the beginning, information technology today enhances many of the recruitment function's sub processes like long and short-term candidate attraction, the generation, pre-screening, and processing of applications or the contracting and on boarding of latest hires. Online job advertisements on corporate internet sites and internet job boards, online CV databases, different sorts of electronic applications, applicant management systems, corporate skill databases, and information systems(IS) supported workflows for the contracting phase are only samples of the varied ways by which information systems today support recruitment processes (Kulik & Perry, 2008).

The increased use of web technology to deliver HR will leave HR specialists more space for strategic decisions to do with outsourcing of people-management activities and will also liberate HR specialists to perform more strategic activities (Kulik & Perry, 2008). Consistent with Ulrich (2007; 2009), the HR Manager derives strategic

partner benefit from HRIS, to disseminate and execute the strategy within the organization. These systems enable employees to manage much of their own HR administrative work. They can take care of many routine transactions whenever they want, because automated systems don't keep office hours. Additionally to their former operational role, HR professionals can also act as a competency manager by arranging the right people to the right positions in the right time with their new strategic architecture role (Gürol, Wolff & Ertemsir, 2010). HRIS is thought to contribute to overall business performance by fulfilling or at least supporting the tasks of data storage and retrieval, of serving as primary administrative support tools, of reporting and statistics as well as of program monitoring (Ostermann, Staudinger & Staudinger, 2009). HRIS plays an important role for any organisation to effectively manage its human assets. Many organizations have adopted HRIS to assist their daily human resources operations. HRIS must align and satisfy the needs of the organization and its users in order to be successful (Noor & Razali, 2011).

Indeed the adoption Information Technology in managing human resources processes such as the SAP Human Resources Capital Management has potential of redefining the human resources function by moving from routine work to policy issues to make the work environment a better place.

HRMIS Modules

The growth in HRM increased the demand for useful information about HR and HRIS played a major role in bridging the gap for decision making. Few functions of various modules in HRIS are explained below (Houtzagers, 1998)

☐**Payroll Module:** This module of HRIS focuses on automating the pay process by collecting the attendance and time log in-out and calculating the taxes, deductions and generating tax reports.

☐**Work time Module:** This module collects the data which is time related. The number of hours logged in by an employee is calculated. The output of this module becomes an input for the Payroll Module

☐**Benefits Module:** This module helps gather information for administrating and tracking employee participation in various programs of benefits. This module is also made up of insurance, compensation, profit sharing and post retirement

☐**Recruiting Module:** This module helps in analysing potential applicants and recruiting

through online job portals and publications.

☐**Training Module:** The training module helps develop various learning programs for employees. It also helps generate reports on performance after training.

According to Robert Schultheis etal (1999), a recent addition to HRIS is the Leave Management System. At the beginning, if an employee needed to take a leave, the process was an employee needed to take a leave, the process was manually carried out where the employee would write a letter to the reporting manager and the HR stating the number of days of leave required and the reason for the same.

2.4.1 Factors affecting the adoption of Human Resources Information Systems

There are several internal and external factors that effect the adoption of Human Resources Information Systems. Zu'bi (2013) outlines some internal factors which include the organizational competences and readiness, demographic characteristics and leadership support and external factors which include the competitive pressure and government policies.

The readiness and competences of an organization to adopt HRIS is determined by the availability of technical support, the information technology infrastructure as well as availability of financial resources (Zu'bi, 2013). Zu'bi further argue that an organization will readily adopt new technology systems depending on the level of sophistication in the management and usage of information technology. Bakker (2010) adds that the readiness of human resources, in particular their skills and willingness has positive influence on furthering information technology usage. The availability of relevant infrastructure, skills and competencies in an organization will impact positively on the adoption of new technology.

Lai and Gynes (2001) argue that the structure of an organization also determines the adoption of HRIS whereby formal and centralized organizations are more rigid and less likely to accept change than flat organizations which are more autonomous to implement change. However, Eder and Igbaris (2001), argue that there is no relationship between the structure of an organization and its readiness to accept new technology as there are more overpowering factors which determine change. Nevertheless, decentralized organizations are more likely to adopt HRIS than centralized organizations since decentralized organization have the autonomy to make decisions and come up with innovative ideas.

The support and commitment of the top management also influence on how early an organization will adopt HRIS or hinder its adoption (Chan & Mills, 2002). Chan and Mills further argue that top management can influence the adoption of HRIS through verbal support and their usage of the new systems. Ang (2001) corroborates that the support and commitment of top management has greater influence of adoption of HRIS than technical factors as top managers also control the resources as well as corporate culture. If top management lead in the adoption of HRIS, their confidence in the new technology motivates the subordinates to accept change thereby furthering the adoption of HRIS.

External factors such as the competitive environment influence the adoption of HRIS. In the current competitive global environment, organization thrust to remain relevant can influence the decision to adopt HRIS (Zu'bi, 2013). Wong and Zhou (2006), add that the assistance, expertise and skills of I.T experts, consultants and vendors affects HRIS adoption decisions. Government actions and regulations, economic regulations, employee relations policies also impact either positively or negatively on the adoption of HRIS (Cui, 2008). External factors can either present threats or opportunities to the adoption of HRIS and the threats and opportunities have to anticipated or utilised in adopting HRIS.

2.5 Systems Application and Products in Data Processing (SAP)

SAP is an acronym for Systems Application and Products in Data Processing and is a business software that can be customised according to the user requirements (Helo, 2011). The SAP application has its origins in 1972 when it was first implemented to bring automation of business enterprise (Okungbowa, 2015). SAP developed software has the ability of processing business information in real time. SAP was implemented in 1973 to develop first financial accounting software (RI), R standing for Real time processing. SAP was also implemented in 1980 to develop the second business application proficient in processing business transactions in diverse languages and transactions. SAP then upgraded to R/3 in 1990 and the version served as a database with client-server architecture and Graphical Interface User (GUI). The new version supported 3-tier architecture by integrating database applications, business applications and user interface (Ahmed, 2019). SAP technologies have continuously changed over time with the intent to integrate many people, information and processes (Ahmed, 2019).

SAP implementation as an ERP application

SAP technology provides SAP solutions that include SAP Enterprise Resource Planning (ERP) which supports business operations (Huang, 2017). Enterprise Resource Planning is a term used for software that controls the whole organisation different departments. ERP products includes SAP, Oracle and Microsoft among others (Ahmed, 2019). ERP controls operation such as human resources, inventory control, manufacturing scheduling and production, financial and cost accounting and

any other data focused management process (Huang, 2017). ERP has a lot of functions to facilitate organizational management and has a lot of potential in increasing productivity depending with the number of data modules (Huang, 2017). SAP is the world's largest ERP software with 91, 500 installations, 82, 000 customers and 12 million users in 120 countries (SAP United States, 2009). The implementation of SAP Enterprise Resource Planning (ERP) can improve data collection, receiving and transfer of information and improving accuracy in the processing of work. The software basically increase operating efficiency by improving business processes at reduced costs (Ahmed, 2019). The benefits of SAP Enterprise Resource Planning (ERP) includes:

- Aligning strategies with operations by planning and utilising business resources across various departmental functions.

- Reducing business risks through provision of seamless data and knowledge relevant to the organisation

- Improving management and enforcing controls by integrating all transactions which makes information easily available and accessible.

- Benchmark and measure operational performance parameters which ends up in improved efficiency at reduced costs (Huang, 2017).

2.6 Conceptual framework

2.6.1 A literature review of SAP Human Capital Management implementation and Employee involvement

Numerous researches consider employee involvement to be key in the successful implementation of organisational change. People are not always ready to accept change hence employee involvement is important to the achievement of change

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management (Tushman, 1995). Employee involvement increases ownership and commitment (Business dictionaries online, 2019). Employees can be involved into the decision making process through suggestion systems, manufacturing cells, work teams, continuous improvement meetings, kaizen (continuous improvement) events, corrective action processes and periodic discussions with the supervisor (Apostolou, 2000). In most organisations employee involvement practices have become more common (Lawler, 2001). Employee involvement has the goal of increasing employee participation in making decisions. Organisations often attempt to increase involvement by providing employees with more authority and information, by providing adequate training and development, and by rewarding employees for organisational involvement (Cummings & Worley, 2005).

Research Findings on Employee Involvement

Employee involvement is an old idea constantly being revitalized by organizations and new generations of practitioners throughout the world. For instance, the oldest documented system of formal employee involvement is a document called "employee suggestion system", established by Eastman Kodak in 1898.

Debates and discussion about these topics are not new. The first century Roman farmer Columella consulted his slaves because "they are more willing to set about a piece of work on which they think that their opinions have been asked and their advice followed" (Vance, 2006). However, employee involvement was revolutionized when McGregor (1957) and Hertzberg (1966) first started writing about the topic in their articles *"The Human Side of Enterprise"* and *"Work and the Nature of Man"*.

Greenfield (2004) noted that within organizations who value employee's participation consider listening to what employees have to say as important as setting goals. Listening is always the first step. Employees want to know that not only are they listened to, but also that ideas are acted upon where feasible and their participation becomes a staple of the organisation's culture. Research by McGungale (2011) indicates that employees with a high level of commitment perform 20% better and are 87% less likely to leave the organization.

In their research Sun, Hui, Tam & Frick (2000) find that employee involvement is positively correlated with improvements in business performance. Research has demonstrated that employee involvement is related to improved communication, improved motivation and improved capabilities (Lawler, 2001). The active involvement of programme beneficiaries leads to better development decisions, better development programs and more sustained results (Canadian International Developmental Agency (CIDA), 2008). They further suggest it is important to identify beneficiaries of a development investment, good HRMIS practice dictates that they, alongside other stakeholders, be consulted and involved in program design, planning, implementation and assessment. Involving programme beneficiaries in development decision-making through participatory approaches may initially require additional time and resource investments in a program; they generally lead to more sustainable results and greater efficiency in the long run.

Frohlich and Kreiger (1990) in Mullins (1999) in a European study emphasise the successes of employee participation and conclude that worker participation contributes to mutual understanding. They comment that employees' opposition slows down the process of --implementation, and leads to losses due to friction and to inefficiency. The research findings at General Electric in 2002, reveal that a high

number of employees who participated in the goal setting had a positive attitude towards the appraisal system compared to employees whose performance goals were set by their managers (Taylor, 2002).

However, some researchers do not agree any positive benefits results from employee involvement initiatives (Vance,2006). In a review of relevant literature on employee involvement and worker participation, Tesluk et al.(1999), suggested that any positive relationship between employee participation and enhanced work attitudes and behaviours is relatively small.

Reasons for Employee Involvement

Sandino and Li (2017), opine that employees have ideas which can be useful. They may accept decisions better if they are involved and if they participate in them. They may work harder and more intelligently if they are better informed and share in decisions that affect them. Employee participation my foster a more co-operative attitude amongst themselves and management, thus, raising efficiency by improving team work and reducing the loss of efficiency arising from disputes. They conclude by recommending that effective communication upwards is essential to sound decision making at the top.

2.6.2 A literature review of barriers to effective implementation of Information Systems

Khaparde (2012) identifies various reasons that hinders the effective implementation of Information Technology projects such as SAP Human Capital Management. These include, poor planning or management, lack of top management commitment, lack of proper education and training and unclear strategic goals and performance measures and lack of communication.

Doina, Logica and Mirela (2010) discusses of what is referred to as 'user-design communication gap' which hinders effective implementation of information systems. This arises when users of the system and information system specialists tend to have conflicting goals, priorities and interests since they are coming from different backgrounds (Doina, Logica & Mirela, 2010). An example is when information system specialists come up with applications that are highly technical to solve problems where hardware and software efficiency is prioritized at the expense of organizational goals and easy to use system which hinders effective implementation of the project.

Gary and Faruk (2015), argue that the challenges to implementation of information systems are magnified when there is lack of proper planning and organization of the project. Kirkman and Rosen (1999) assert that proper planning involves training of users of the systems to improve awareness and buy in. Gary and Faruk (2015) further argue that if information system projects lack proper planning and management, unnecessary costs in terms of time and resources will be incurred.

Sanchez, Aragon and Valle (2013) assert that organizations rarely invest in training because they do not evaluate the effects of training on performance of individuals. The human element is one of the organization's most important resource because of the skills, knowledge and attitudes (Wright & Barney, 1997). Training is the most important aspect to prepare and qualify employees for project implementation as well as making them flexible to adapt to the changes (Bartel, 1994). Lack of consistent and continuous training also implies lack of essential knowledge for project procedures and implementation which consequently leads to waste of organizational resources (Sanchez, Aragon & Valle, 2013). With the ever changing and competitive business environment, lack of continuous training will hinder successful implementation of a project because of failure to keep up will current technological trends (Richman, 2015).

The role of senior management in the implementation of a project is very important in aligning the corporate culture to goals and objectives of the project (Mullins, 1999). Management plays an important role in ensuring that the organization's management culture motivates employees to be part and parcel of the project thereby enhancing successful implementation of the project (Maclean, 2005).Lack of buy in from top management hinders successful implementation of a project as it destroys a sense of involvement and satisfaction of the stakeholders of the project (Toor & Ofori, 2008). Tepper (2000) asserts that if leaders fail to take the leading role in implementation of the project, the followers develop lack of interest in the project, low self-confidence and poor job performance and eventually the whole project fails to achieve intended results.

Gary and Faruk (2015) argue that unclear objectives means that there is no clear method of operation and no clear yardstick to measure the performance. As a result of unclear goals and objectives, team members cannot perform to the maximum as they are unaware of the purpose of their work and how well they are performing (Archibald, 2003). Clearly defined goals and objectives empower members to be committed to project implementation as their roles are clearly defined and conflict of team members is reduced (Kirkman & Rosen, 1999). Unclear goals and objectives hinders effective implementation of the project as team members lose focus, become confused and frustrated (Gladstein,1984). Richardson (2010) further argues that shared goals and objectives provides criteria for measuring the performance of team members as well as the success of the project.

2.6.3 A literature review of factors that lead to successful implementation of Information Technology applications

According to Doina, Logica and Mirela (2010), the success of Information System projects is in the accuracy, reliability, being able to be used for the intended work and its wide usage. Doina, Logica and Mirela further assert that the system should be able to meet the following criteria:-

- Achieve the goals intended by the organization
- Operate at reasonable and acceptable cost which justifies the need to adopt the new system
- Meet clearly defined performance standards paying regard to time and availability of the system.
- Ability to produce accurate and reliable outputs
- Flexible
- Easy to learn and use

Khaparde (2012) outline factors that lead to successful implementation of Information systems which include buy in from top management, effective communication, involvement of system users at all stages, effective training of those involved in the implementation, clearly defined goals and objectives of the system and organized and proper maintenance of the system.

Involvement of users at all stages of the system helps the users to understand and accept the change. Johnson and Scholes (1999) argue that since people are perhaps the most important resource of an organisation, so how people are organised is crucial to the effectiveness of strategy. In managing strategic change, it is important to get the logic of the strategy right and then persuade people of that logic; design structures and control systems appropriate to the strategy; and use them as mechanisms of change. The ultimate success of strategic change in an organisation depends on the extent to which people change the beliefs and assumptions that they hold and their behaviour in the organisational lives (Johnson & Scholes, 1999). A new management strategy would call for change from old strategies. It is then important to create a plan for involving as many people as possible, as early as possible, in the change process. All stakeholders should be involved, and employees who will feel the impact of the changes, as much as possible, in the learning, planning, decisions, and implementation of the change (Heathfield, 2008). Mclean, 2005 says one can never expect one hundred percent support from any individual who was not personally involved in devising a change which had an impact on his work.

Continuous training must become institutionalised as a managerial strategy for a project to be a success. Hansen (2000) say individuals change through education and experience. However, individual learning does not necessarily lead to organisational learning. Organisational learning takes place when renewal and improvement processes are widespread and have become part of 'the way we do things around here'. New norms must be communicated and understood throughout the organisation. Hansen (2000) says 'If new knowledge is to be truly institutionalised, truly organisational rather than individual, then others beside the inventor must use it, and change it to suit new organisational realities.' Hansen (2000) add that this happens when new approaches become an integral part of the basic planning and control process; that is, when strategy formulation or job design or quality circles become connected to the overall managerial system. Pearce ll and Robinson JR (2009) further argue that continuous training of team members increases their commitment to accomplish organizational goals as they feel that the organization values them by being concerned in their continuous improvement.

Buy in from top management also leads to successful implementation of a project. According to Moon (2007), buy in from top management is evidenced by participating in the project, employee recognition and incentivising and financial support of the project. Pearce ll and Robinson JR (2009) say leadership, while seemingly vague and esoteric, is an essential element in effective strategy implementation. The Chief Executive Officer's (CEO) role is both symbolic and substantive in strategy implementation. The CEO's actions and perceived seriousness of his/her commitment to a chosen strategy, particularly if the strategy represents a major change, exert a significant influence on the intensity of subordinate managers' commitment to implementation, to the extent that the CEO invests time and personal

values in the chosen strategy, he/she represents an important source of clarification, guidance, and adjustment during implementation. Hofer (1980) says successful turnaround strategy will require almost without exception either a change in top management or a substantial change in the behaviour of the existing management team.

Maximum participation of top management in project implementation coupled with effective communication leads to successful implementation of the project. Effective Communication cuts across team members, interdepartmental and among all project stakeholders (Moon, 2007).

According to Richman, 2015, leaders in High Performing Organisations (HPO) live by integrity, lead by example, apply decisive and action focused decision making. Leadership style practised in HPO is supportive, coaching and inspiring people to achieve extraordinary results while holding people accountable for their results. Other requisite leadership skills are objective setting, performance assessment skills, delegating skills and communication skills (Armstrong, 1992). As well as demonstrable words and actions, confidence and involving employees in the brainstorming and decision making (Hale & Whitlam, 2000).

Clearly defined goals and objectives are one of the project's critical success factors. According to Marco (2016), a project should have goals and objectives which outline the targets and desired outcome of the project as well as describing what the project is trying to achieve. Marco (2016) further asserts that properly designed goals and objectives should be in line with the overall organizational goals and objectives and not conflict with the bigger picture. The involvement of the project team members in formulating the goals and objectives as well as effective communication to make

sure that the team members understand the goals and objectives is critical for the success of the project (Archibald, 2003).

Implementation of Information Technology projects calls for proper maintenance of the software and system to ensure improved performance, adaptability to ever changing environment and correcting faults (Khaparde, 2012). The maintenance of a system does not have to wait until there is a fault, it should be for continuous improvement as well as attending to faults (Boehm, 1976). System maintenance also ensures that there are no disruptions in the implementation of a project and also ensures that computer operational system is aligned with the needs of the end users (Mohapatra, 2009). The organization should also be clear from the beginning on whether maintenance services are going to be outsourced or if there is capacity in terms of skills from within the organisation (Khaparde, 2012). Proper maintenance of the system ensures that a project is sustained to completion (Boehm, 1976).

2.6.4   A literature review of related studies on implementation of ERP projects

Carton, Adam and Samson (2007) carried out a study on the factors that lead to successful implementation of ERP project. In their study, they argued that readymade solutions to not work when it comes to implementation of ERP projects. When a consultant recommends a particular software and technical architecture, there is a risk of overlooking important aspects of the project which directly apply to the organization such as stakeholder's identified and unidentified needs (Sauer 2002).

Carton, Adam and Samson (2007) presented a case study Pharma Inc which successfully implemented an ERP project between 2003 and 2004. Pharma is an American multinational pharmaceutical firm which successfully consolidated its operations in different subsidiaries worldwide using SAP system. The scope of the

SAP system was so broad integrating modules such as warehouse, engineering, finance, production planning and execution, quality, sales and distribution. According to Carton, Adam and Samson (2007), Pharma Inc ERP project was a success because it was implemented using Project Management Board of Knowledge (PMBOK) guidelines as a benchmark. Project Management Board of Knowledge (PMBOK) was set as guidelines for successful implementation of Information Systems projects by a board of world-wide professionals called Project Management Institute (PMI). Project Management Board of Knowledge (PMBOK) guidelines sets nine knowledge areas that benchmark the success of a project which are as follows:-

- **Integration management-proper coordination of various elements of the project.**

Pharma increment was able to successfully change the way business operations were conducted and designed by making sure that the need for change was understood and accepted by the managers and employees through their participation in outlining clear and unambiguous goals and objectives.

- **Scope management- all the work required for successful implementation of the project has to be included.**

The scope of the project was so broad integrating modules such as warehouse, engineering, finance, production planning and execution, quality, sales and distribution. This necessitated the need to outsource an expert with advanced SAP knowledge so as manage broad scope of the project.

- **Time management- project tasks should be timebound.**

In as much as meeting deadlines is of paramount importance, Pharma Inc realised that all the important tasks should not be sacrificed at the expense of meeting

deadlines. Therefore, the project was implemented successfully although there were some delays.

- **Cost management- project should be within the limits of approved budget.**

In the case study of Pharma Inc, costs of data migration, modification of existing systems and overhauling hardware and network infrastructure were taken into consideration. The budget of training was reduced by training super users within the organisation.

- **Quality management-project should satisfy the needs of the relevant stakeholders.**

The need to integrate organizational needs with technological necessities of the system was recognised for Pharma Inc project to be a success. Before the implementation of any technological necessities, the organisation made it clear that the primary objective of the project was process compliance to avoid breaking any laws of the pharmaceutical regulatory board.

- **Human resources management-effective utilisation of project team members.**

Pharma increment assigned committed full-time members to plan, execute and control the project. With a site manager who was encouraging team spirit and continuously monitoring the team members formally and informally, the project became a success.

- **Communications management-all project information should be timeously and appropriately generated, disseminated, collected, stored and disposed.**

Effective communication contributed to the success of Pharma Inc ERP project. During the project preparation phase, team members were educated on the background of ERP projects, the anticipated risks and proper channels of communication during the implementation of the project. Direct communication was also open between the project team members and the top management.

- **Risk management-risks associated with the project should be identified, analysed and come up with contingent measures to mitigate risks.**

The greatest risk that Pharma Inc anticipated was of training their employees in SAP and subsequently lose them to another organisation because the SAP qualification is on demand. To minimise this risk, SAP consultants were hired into the team on contract basis to avoid the exorbitant daily rates of hiring consultants.

- **Procurement management -all goods and services for the project should be procured.**

Pharma Inc realised that risks means more money and time hence procurement of team members has to managed by hiring external consultants to avoid constant loss of trained employees.

In their conclusion in the case study of Pharma Inc, Carton, Adam and Samson (2007) recommend Project Management Board of Knowledge (PMBOK) to be the best practice in implementation of ERP projects.

In their investigation of a production and service company in Iran named Khuzestan Water and Sewage, Goni and Chofreh (2011) recommends that the implementation of ERP should be processed based on Management Board of Knowledge (PMBOK) five phases of project cycle which are initiating, planning, executing, controlling and closing. Khuzestan Water and Sewage company has 49 branches where there were challenges in consolidating financial, production, logistics and sales reports so as to facilitate timeous decision making. In their investigation, Iran, Goni and Chofreh, concluded that utilisation of Management Board of Knowledge (PMBOK) five phases of project cycle was ideal to handle information from different branches and improve time for decision making.

Khoualdi and Basahel (2014) studied the implementation of SAP Human Resources module at Saudi Electricity Company (SECO). SECO implemented SAP Human Resources to standardise business procedures in power companies across the country. Khoualdi and Basahel noted that the project was a success since the paperwork was reduced thereby cutting of the cost of stationery, decreased need to hire more employees, timeous processing of work, increased work output, standardised procedures company-wide, increased customer satisfaction and unified information thereby facilitating easy access to information. However, Khoualdi and Basahel recommended the following to Saudi Electricity Company (SECO) so as to successfully implement other SAP modules:-

-more training to staff in the use of SAP and information technology in general

-trainers must communicate effectively with trainees to cover the knowledge gap between them.

-organising sessions between staff and SAP consultants to relations and general understating of SAP.

2.7 Literature review and research questions

research questions	Key literature review findings
IV. To what extent are employees and management involved in the implementation of SAP Human Capital Management system at the Public Service Commission?	- employees can be involved in change through providing all necessary information, effective communication (Lawler, 2001), adequate training and development, listening to them (Greenfield, 2004), involving them in making decisions and rewarding them (Cummings & Worley, 2005).
	-if employees are involved in implementing change, it encourages mutual understanding, helps them to accept decisions better (Mullins, 1999), reduces conflict and increases their performance (Flohlich & Kreiger, 1990).
	-ultimately employee involvement increases the commitment of team members and ownership of the project for success of the project (Mullins,

		2011).
V.	What are the barriers to the efficient implementation of SAP Human Capital Management system?	The barriers to effective implementation of information systems projects include:- -user information gap where the technological advances fail to accomodate the needs of the system user (Doina, Logica & Mirella, 2010). -lack of proper planning and organization of the project (Gary & Faruk, 2015) -lack of consistent and continuous training (Bartel, 1994) -lack of buy in from senior management which destroys a sense of involvement from stakeholders (Toor & Ofori, 2008).
VI.	What are the factors that can lead to improved utilisation of SAP Human Capital Management system in the Commission?	Factors that lead to success of a project include:- -involvement of all team members to help them understand the need for change (Johnson & Scholes, 1999).

	-continuous training to establish and understand change (Hansen, 2000).
	-effective communication across all levels (Archibald, 2003).
	-clearly defined goals and objectives to reduce conflicting goals (Marco, 2016).
	-proper maintenance of system to ensure continuity (Khapharde, 2012).

2.8 Summary

In this chapter, literature on effective utilisation and implementation of SAP Human Capital Management was reviewed. It was noted that, while SAP Human Capital Management is an effective application in integrating human resources information and processes, the system cannot be implemented successfully without maximum involvement and participation of top managers and team members as well as continuous development of appropriate skills. Having reviewed literature on the implementation of SAP Human Capital Management, the next chapter will explain the methodology and methods used in conducting the research as well as providing a justification of how the sample of the survey was chosen and the type of instruments used in analysis.

CHAPTER 3 METHODOLOGY

3.1 Introduction

This chapter explains the methodology and methods on how the study was conducted. The research design is explained giving details on what instruments and techniques were used to gather data. The chapter also explains how data was analyzed and the limitations encountered during the research on the utilization of SAP Human Capital Management within the Public Service Commission Secretariat.

3.2 The Research Design

Research design refers to the planning of the approaches to solve a research problem, it is a master plan specifying the procedures and methods for collecting and analysing data or information (Bless, Smith & Kagee, 2006). In addition, Bless, Smith and Kagee (2006), highlighted that it gives a framework of the research plan of action and it can also be defined as a blue print or an explicit map that can be used in conducting a study and exerts maximum control over factors that can hinder the validity of the findings, all procedures selected by the researcher to answer the research questions.

In order to answer all the questions of this dissertation, the author followed a mixed methods research approach. Explanatory sequential design was used where qualitative data findings helped to clarify and explain quantitative results. The advantage of mixed method approach is that it provides a wider perspective by offsetting the disadvantages of using a single research method. The quantitative results of a research provide a general picture whilst qualitative results help to refine and explain the quantitative results thereby providing in-depth and holistic view of the research problem (Creswell, 2007).

This approach incorporated questionnaires to obtain qualitative and quantitative information on individuals' perspectives on the utilisation of SAP (Human Capital Management) in implementing human resources processes at the Public Service Commission. Questionnaires uses a series of questions to obtain detailed information within a limited space of time since there is no need for the researcher to be present (Creswell & Stick, 2006). Data obtained from questionnaires is comprehensive enough to cover every aspect of the research problem and data generated can be easily compared and analysed (Onwuegbuzie & Leech 2006). Using responses on the likert scale, the researcher was be able to group and quantify different views on organisational culture, employee involvement and leadership style. Further explanations from respondents provided qualitative information to explain the quantitative results. Secondary sources of data such as reports, internet, published journals and any other books were also utilised to support primary data on the implementation and utilisation of SAP system in Human Resources Management.

3.3 Population and Sampling

According to Shields (2010), target population is any group of individuals that have one or more characteristic in common that is of interest to the researcher. The group should meet the criteria that the researcher is interested in studying. The total population which the researcher used for this study are from Public Service Commission Head Office which according to the Public Service Commission 2018 annual report, had 450 employees at Head Office as at 31 December 2018. Public Service Commission Head Office pioneered the SAP project and is responsible for rolling out the project to other provinces and Ministries. Some of the Public Service Commission provincial and district offices are not yet linked to the SAP system

hence targeting them as a population would not yield a fair assessment on the uptake of SAP system in Human Resources Management.

The research specifically targeted employees who uses SAP system at the Public Service Commission who include Human Resources Assistants, Executive Assistants, Deputy Managers, Managers and General Managers and equivalent grades, who are 410 in total according to the PSC Internal Human Resources Management Database. The study excluded general staff at the Public Service Commission who include Office Assistants, General Hands and Duplicating and Photocopying Assistants since they do not use SAP system and have not been given rights to access the system.

Sampling methods

The research used stratified sampling technique which is a method where the population is divided into subgroups (strata) who share the same characteristics to ensure representation from all subgroups (Public Health Action Support Team, 2017). The population at PSC Head Office was divided according to ten (10) departments within the Commission so that all departments were represented and a sample of 90 members was proportionally selected from the departments to respond to questionnaires.

According to Lincoln and Guba (2010), the sample size should be adequate enough to give rich information on the study area. A representation of ten (10) members from each department was deemed adequate to provide rich information that can be generalised to the Public Service Commission secretariat on the utilisation of SAP Human Capital Management. The sample for the research comprised of 90 male and female participants, from the Public Service Commission Head Office. The

participants were be proportionally selected from the 10 departments at the Public Service Commission Head Office which means 9 participants represented each department. The age range of participants was from 18 to 70 years according to the Public Service Act, Chapter 16:04, the Public Service Commission is mandated to employ workers between the ages of 18 and 70 years. The researcher did not offer any payment to participants except for verbal appreciation for the participants' commitment of their effort and time.

3.4 Data Collection Instruments

According to Onwuegbuzie and Leech (2006), research questions determine the appropriateness of data collection method. A questionnaire can be used to collect qualitative information on perceptions as well as quantify people's behaviours and attitudes (Creswell, 2007). The research sought to answer questions on what is happening in the utilisation of SAP Human Capital Management and why is it happening. To depict a contextual quantitative and qualitative understanding of the research problem, a questionnaire with both closed and open-ended questions was used to obtain both quantitative and qualitative data on the utilisation of SAP in human resources management.

The questionnaire was structured in such a way to answer each research question as well as the objectives of the research so as to get detailed information on each objective.

To determine the extent of employees and management involvement in the implementation of SAP Human Capital Management system at the Public Service Commission, respondents were asked if they received training and have an understanding of SAP Human Capital Management system. Respondents were also

asked if management takes the project seriously, effectively monitor the project, empowers team members to make decisions and positive responds to feedback to determine if management is playing an effective role in the implementation of the project. The question on the frequency of utilising SAP Human Capital Management was also asked to ascertain the commitment of team members to the success of the project.

To evaluate the barriers to the efficient implementation of SAP Human Capital Management system, respondents where asked questions focusing on whether the corporate culture, including relationships between management and subordinates at the Public Service Commission supports successful implementation of projects. The attitudes of team members towards successful implementation of the project were also assessed by asking if participants have clarity of roles and how they view SAP Human Capital Management.

To determine factors that can lead to improved utilisation of SAP Human Capital Management system at the Commission, most questions focused on policy issues since policy deliberate principles of action to achieve tangible outcomes. The questions asked sought to establish whether SAP Human Capital Management policy is clearly defined through wide consultation and is line with other policies and procedures to ensure the successful implementation of SAP Human Capital Management project. The respondents were also asked to proffer suggestions on successful implementation of SAP Human Capital Management so as to come up with recommendations.

The questionnaires targeted managers, super users and the end users who are responsible for implementing the SAP Human Capital Management system. The desk research was adopted to analyse primary and secondary sources on implementation of SAP system to determine its success in consolidating human resources processes in the public sector.

3.5 Data Collection Procedure

The researcher was first granted authority to conduct the research after satisfying the ethical requirements of AUREC. The Researcher then proceeded to seek authority from the Secretary to the Public Service Commission to conduct the research. Since participating in the research might make participants release information that has to do with day to day work experience. Participants might end up revealing confidential information about your work. Therefore, the researcher was granted authority to conduct the research and the results obtained were sorely used for academic purposes. Before distributing the questionnaire, the researcher briefly explained to each participant the purpose of the research as well as general information on how to complete questionnaires. The researcher used thematic analysis to analyse the themes emerging from the data collected.

3.6 Analysis and Organization of Data

According to Sridhar (2018), data analysis is the process of evaluating data using analytical and statistical tools to discover useful information and aid in decision making. Data presentation and analysis is necessary to make use of collected data, which is considered as raw data which must be processed to put for any application (planningtank.com). To understand the results of the research, data from questionnaires was reduced to come up with themes. The themes were then presented

on graphs, tables and charts. Microsoft excel package was used as a major tool for data presentation in tables, graphs and figures. Content analysis was employed to analyse qualitative data, in which themes emerging from open ended questionnaires were noted and analysed and a report was compiled.

3.7 Ethical Considerations

Ethics can be defined as a code of behaviour considered correct (Pera and Van Tonder, 2006). It was crucial for the researcher to be aware of research ethics of this study. Ethics are concerned about two groups of people, those being researched upon whose rights have to be under protection, and the researchers whose obligations, responsibilities and basic rights should be protected also. Therefore, the study was conducted with uttermost fairness and justice by eliminating all potential risks. The participants were made aware of their rights. This study observed ethical issues which include informed consent, right to anonymity and confidentiality, right to privacy, justice, beneficence and respect for a person.

Participants as autonomous individuals have the right to choose to either participate or not in the research. In this study anonymity was achieved by not putting names on the questionnaires, but instead code numbers were used, and at the end even the researcher was not be able to link any information to any subject. The researcher was also given consent to conduct the research at the Public Service Commission and the data collected was sorely used for research purposes.

3.8 Summary

The chapter discussed research methodology and methods adopted by the study where a mixed research method was adopted. The population for the study was

identified where a total of 450 employees at the Public Service Commission Head Office were targeted for the research. Stratified sampling technique was used to select a sample 90 participants proportionally from the 10 departments within the Public Service Commission. The chapter further presented how data was collected using a questionnaire and analysed through content analysis of emerging themes. The chapter also outlined ethical measures taken where participants had informed consent to participate in the research and participants right to confidentiality and anonymity was guaranteed.

The next chapter will present quantitative and qualitative data collected from both primary and secondary sources and provide a qualitative analysis.

CHAPTER 4 DATA PRESENTATION, ANALYSIS AND INTERPRETATION

4.1 Introduction

The research findings are structured in such a way to answer the three research objectives in the questionnaire. The objectives are to ascertain how employee involvement is affecting the implementation of SAP Human Capital Management at the Public Service Commission, barriers to effective implementation of SAP Human Capital Management, factors that lead to successful implementation of SAP Human Capital Management projects as well as determining if recommendations from related studies can aid to the successful implementation of SAP Human Capital Management at the Public Service Commission. The ultimate goal is to determine whether SAP Human Capital Management is being utilised to the maximum to effectively and efficiently accomplish human resources processes at the Public Service Commission.

4.2 Response Rate

A total of ninety (90) questionnaires were distributed proportionally to the ten departments within the Public Service Commission, and sixty (60) of the participants responded to the questionnaires. There was a response rate of 64% which is a good response rate to establish how SAP Human Capital Management is being utilised at the Public Service Commission. According to Baxter (2009), a response rate of 50% or more is good enough in decision making and coming up with conclusions.

Out of the six (6) questionnaires distributed to General Managers, only two (2) questionnaires were responded to which was a 33% response rate. The low response rate can be attributed to the busy schedules of top managers who were almost always

out of the office attending one meeting or another. However, the structure of the Public Service Commission is narrow at the top, and responses of the of the two (2) General Managers will be quite sufficient to obtain the views of top management on the implementation of SAP Human Capital Management.

The response rate of Managers was quite high with a response rate of 80%, out of the fifteen (15) questionnaires distributed, twelve (12) responses were received. The follows ups made with the managers contributed to the high response rate. The response rate might also point to the zeal that the middle management has in the SAP Human Capital Management project.

The response rate of Deputy Managers was also very high with a response rate of 73%, out the fifty-five (55) questionnaires distributed, forty (40) questionnaires were responded to. The researcher shares the same grade with the Deputy Managers and probably the same enthusiasm for the SAP Human Capital Management project, so it was easy to make follow ups.

For the Human Resources/ Executive Assistant or equivalent grades out of sixteen (16) questionnaires distributed, six (6) questionnaires were received which is a response rate of 38%. As the questionnaires were being distributed, this group of people expressed reservations on filling in the questionnaires as they were not sure of their capabilities in terms of skills. However, the researcher managed to convince some of them by giving them general knowledge on completing questionnaires.

Below is a summary of respondence

Table 4. 1.   Response rate

Target Group	Questionnaires administered	Number of respondents	% of response rate
General Managers	6	2	33%
Managers	15	12	80%
Deputy Managers	55	40	73%
Human Resources/ Executive Assistants or equivalent	16	6	38%
Total	**90**	**60**	**64%**

It is important to note the responses from different categories of employees so as to come up with conclusions on where specific action is required for the successful implementation of SAP Human Capital Management.

4.3 Demographic Information

4.3.1   Gender profile

It is pertinent to note the sex of the respondents for the purpose of generalisation of the responses to the population in terms of gender balance. Thirty-one (31) of the respondents were male and twenty-nine (29) were female which is a ratio of 52%: 48%. There was generally a gender balance in the response rate as shown below:-
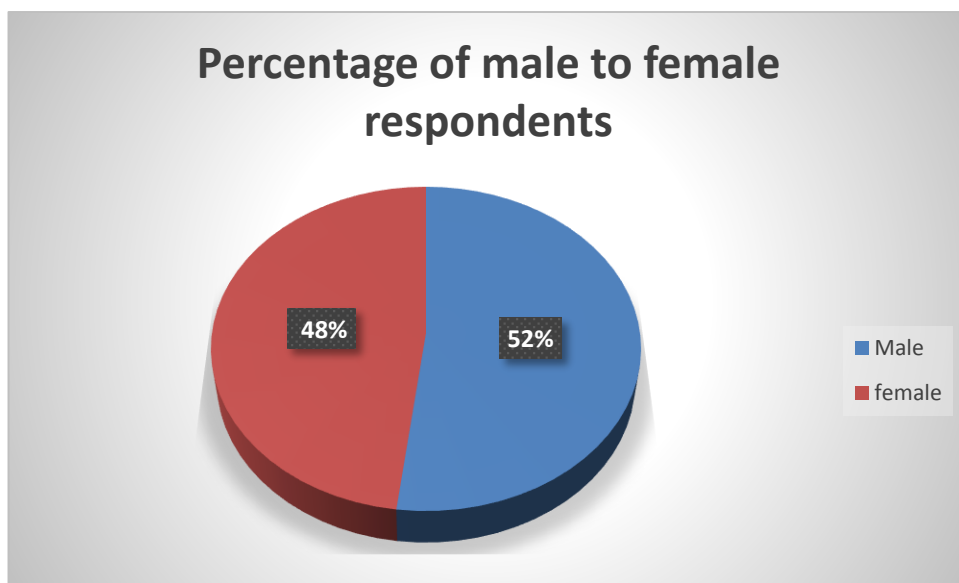
Figure 4. 1   Gender Distribution

4.3.2 Age distribution

According to Paul and Stegbauer (2005), age cannot be ignored as it contributes to diffusion and acceptance of technology. Although the acceptance of technology is slowly improving among the elderly, the effect of information gap cannot be ignored when analysing information technology projects. The age distribution is shown in chart below.
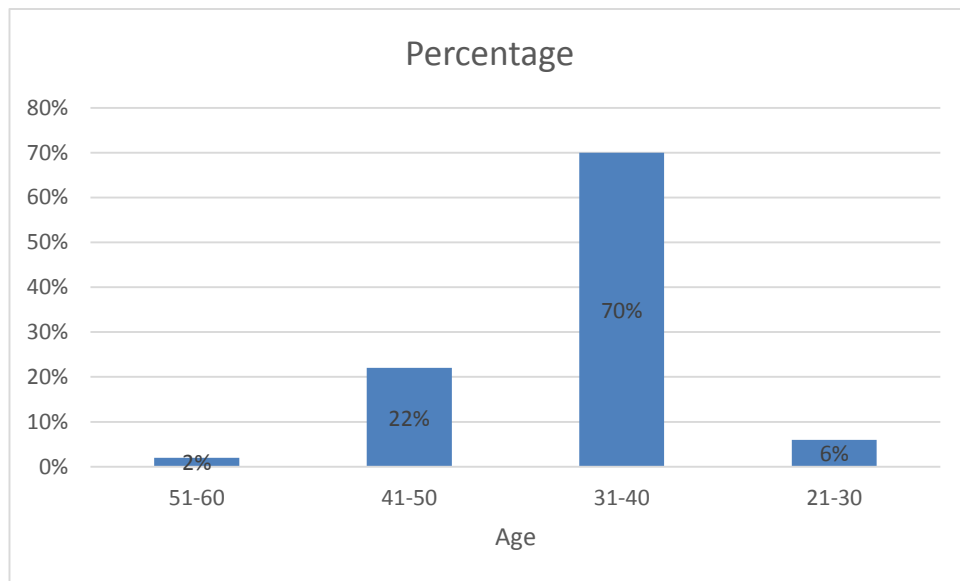
Figure 4. 2   Age distribution

4.3.3 Level of education

As individuals advance in educational level in this digital era, they also improve in their appreciation of information systems hence the education level has to be noted when analysing the utilisation of SAP Human Capital Management. Fourteen (14) of the respondence hold a Master's degree as their highest qualification, thirty-six (36) are at degree level, seven (7) are at Higher National Diploma level and three (3) are at Diploma level. The percentages in terms of qualifications are as presented overleaf:-
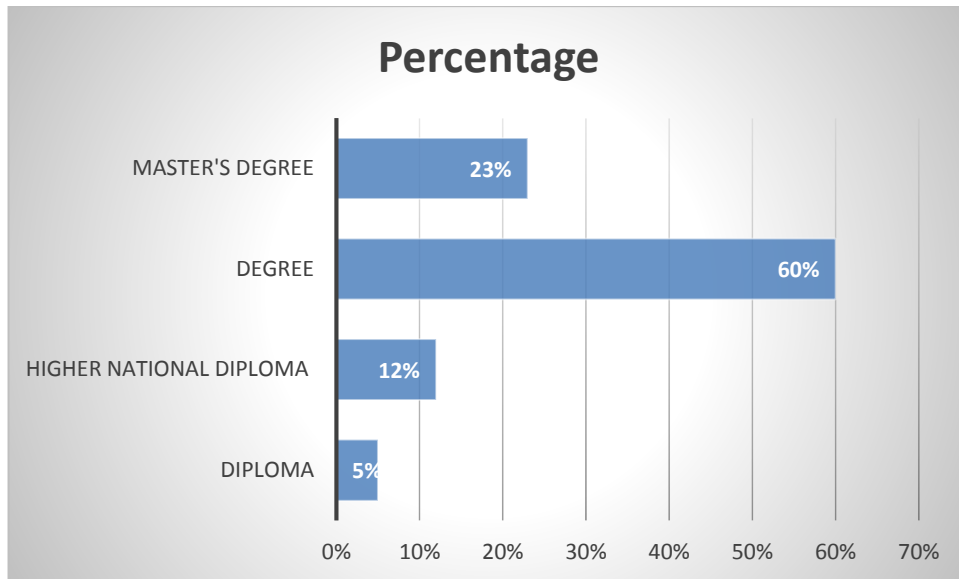
Figure 4. 3   level of education

4.4 Research findings according to objectives

4.4.1   To identify barriers to the efficient implementation of SAP system

To answer the question about barriers to effective implementation of SAP Human Capital Management the respondents responses to six (6) statements are presented below:-

Table 4. 2   PSC usually implements projects to completion

	Frequency	Percent	Valid Percent	Cumulative Percent
Strongly disagree	12	20	20	20
Disagree	21	35	35	55
Neutral	17	28.33333333	28.3	83.33333333
Agree	8	13.33333333	13.3	96.66666667
Strongly Agree	2	3.333333333	3.3	100
Total	60	100	100	100

3.3% of the respondents strongly agreed that the Public Service Commission usually implements projects to completion, 13. 3% of the participants agreed, 28. 3% were neutral, 35% disagreed and 20 % strongly disagreed.

Table 4. 3.   The PSC has established Key Performance Indicators in the
               implementation of SAP to ensure its success

	Frequency	Percent	Valid Percent	Cumulative Percent
Strongly disagree	10	16.66666667	16.7	16.66666667
Disagree	18	30	30	46.66666667
Neutral	22	36.66666667	36.7	83.33333333
Agree	6	10	10	93.33333333
Strongly Agree	4	6.666666667	6.7	100
Total	60	100	100	100

6.7% of the respondents strongly agreed that some Key Performance Indicators have been established to ensure the success of SAP Human Capital Management, 10% of the participants agreed, 36. 7% were neutral, 30% disagreed and 16.7% strongly disagreed.

Table 4. 4.   There is clarity of roles on utilisation SAP system in Human

Resources Management.

	Frequency	Percent	Valid Percent	Cumulative Percent
Strongly disagree	10	16.66666667	16.7	16.66666667
Disagree	22	36.66666667	36.7	53.33333333
Neutral	18	30	30	83.33333333
Agree	6	10	10	93.33333333
Strongly Agree	4	6.666666667	6.7	100
Total	60	100	100	100

6.7% of the respondents strongly agreed that there is clarity of roles on the utilisation

of SAP Human Capital Management, 10% of the participants agreed, 30% were

neutral, 36. 7% disagreed and 16. 7% strongly disagreed.

Table 4. 5.   The SAP system is an ideal application for conducting Human

Resources Processes

	Frequency	Percent	Valid Percent	Cumulative Percent
Strongly disagree	10	16.66666667	16.7	16.66666667
Disagree	10	16.66666667	16.7	33.33333333
Neutral	30	50	50	83.33333333
Agree	8	13.33333333	13.3	96.66666667
Strongly Agree	2	3.333333333	3.3	100
Total	60	100	100	100

3.3% of the respondents strongly agreed that SAP Human Capital Management system is ideal for conducting human resources processes, 13. 3% of the participants agreed, 50% were neutral, 16. 7% disagreed and 16. 7% strongly disagreed.

Table 4. 6.   The I.T infrastructure is conducive for the implementation of SAP

	Frequency	Percent	Valid Percent	Cumulative Percent
Strongly disagree	10	16.66666667	16.7	16.66666667
Disagree	10	16.66666667	16.7	33.33333333
Neutral	30	50	50	83.33333333
Agree	8	13.33333333	13.3	96.66666667
Strongly Agree	2	3.333333333	3.3	100
Total	60	100	100	100

3.3% of the respondents strongly agreed that the information technology infrastructure is conducive for implementation of SAP Human Capital Management, 13. 3% of the participants agreed, 50% were neutral, 16. 7% disagreed and 16. 7% strongly disagreed.

Table 4. 7.   I have a positive relationship with my boss or supervisor.

	Frequency	Percent	Valid Percent	Cumulative Percent
Strongly disagree	0	0	0	0
Disagree	0	0	0	0
Neutral	10	16.66666667	16.7	16.66666667
Agree	29	48.33333333	48.3	65
Strongly Agree	21	35	35	100
Total	60	100	100	100

35% of the respondents strongly agreed that they have a positive relationship with their supervisor, 48% of the participants agreed and 16.7% were neutral. None of the participants disagreed or strongly disagreed that they have a positive relationship with their supervisors.

The responses on the barriers to effective implementation of SAP Human capital Management are summarised below:-
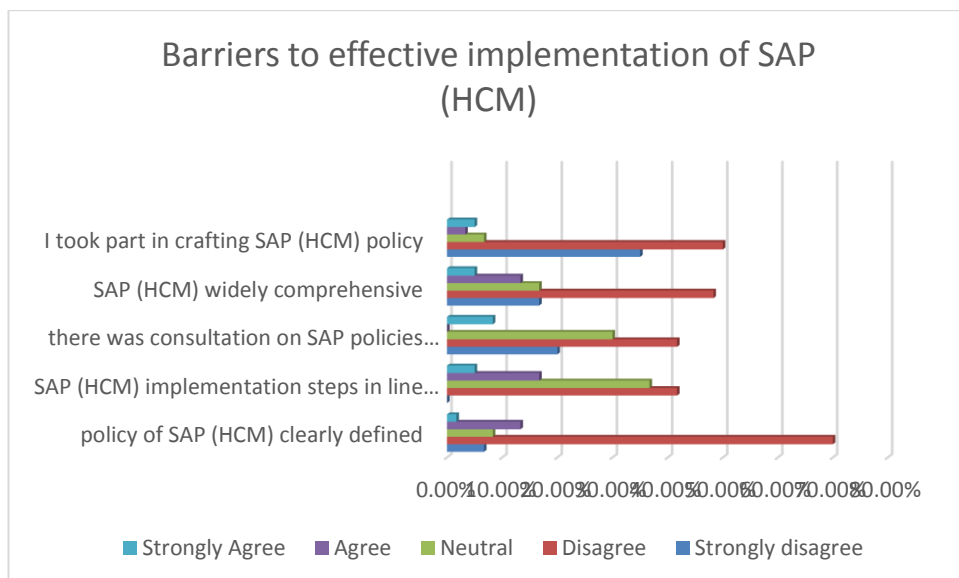
Figure 4. 4   Barriers to effective implementation

Responding to a follow up question on whether the corporate culture at the Public Service Commission is supportive of the SAP Human Capital initiatives, 86% of the responds disagreed that the corporate culture is supportive and 14% agreed as presented overleaf:-
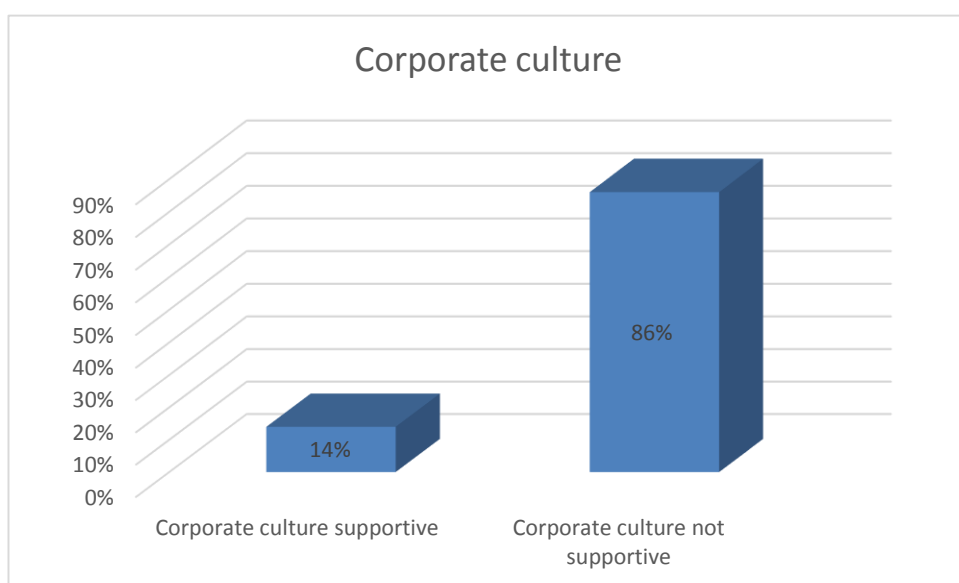
Figure 4. 5   Corporate Culture at the Public Service Commission

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Those who responded that the corporate culture is not supportive reiterated that the Public Service Commission is supposed to instil a culture of effective communication across all levels for SAP Human Capital Management to be a success. They further explained that effective communication would give room to end users to make suggestion to improve the implementation of the project.

Respondents also suggested that the corporate culture should embrace change and move away from the old way of doing business. One respondent explained that, for SAP Human Capital Management is to become a success, then some laid down processes and procedures have to be amended to embrace the new way of doing business.

Respondents also pointed out that the aspect on monitoring the utilisation of SAP Human Capital Management is totally ignored. A culture of involvement and constant monitoring by the top management was suggested as a way of cultivating the new way of doing business using SAP Human Capital Management.

4.4.2 To determine the factors that lead to improved utilisation of SAP system in the Commission

To determine factors that lead to improved utilisation of SAP Human Capital Management, the respondents responded as presented below to the five (5) statement asked:-

Table 4. 8.   The PSC policy on SAP implementation is clearly defined

	Frequency	Percent	Valid Percent	Cumulative Percent
Strongly disagree	4	6.666666667	6.7	6.666666667
Disagree	42	70	70	76.66666667
Neutral	5	8.333333333	8.3	85
Agree	8	13.33333333	13.3	98.33333333
Strongly Agree	1	1.666666667	1.7	100
Total	60	100	100	100

1.7% of the respondents strongly agreed that the Public Service Commission has a clear policy on SAP Human Capital Management, 13.3% of the participants agreed and 8.3% were neutral, 70 disagreed and 6.7% strongly disagreed.

Table 4. 9.   The steps taken in implementing SAP are in line with PSC Human

Resources policies, guidelines and procedures.

	Frequency	Percent	Valid Percent	Cumulative Percent
Strongly disagree	0	0	0	0
Disagree	25	41.66666667	41.7	41.66666667
Neutral	22	36.66666667	36.7	78.33333333
Agree	10	16.66666667	16.7	95
Strongly Agree	3	5	5	100
Total	60	100	100	100

5% of the respondents strongly agreed that steps taken in implementing SAP are in line with PSC Human Resources policies, guidelines and procedures, 16. 7% of the participants agreed and 36.7% were neutral and 41.7 disagreed. None of the participants strongly disagreed that steps taken in implementing SAP are in line with PSC Human Resources policies, guidelines and procedures.

Table 4. 10.   policies and procedures in respects to SAP have been formulated in consultation with all departments.

	Frequency	Percent	Valid Percent	Cumulative Percent
Strongly disagree	12	20	20	20
Disagree	25	41.6667	41.7	61.6666667
Neutral	18	30	30	91.6666667
Agree	0	0	0	91.6666667
Strongly Agree	5	8.33333	8.3	100
Total	60	100	100	100

8.3% of the respondents strongly agreed that policies and procedures in respects to SAP have been formulated in consultation with all departments, 30% were neutral, 41.7% disagreed and 20% strongly disagrees. None of the participants agreed that policies and procedures in respects to SAP have been formulated in consultation with all departments.

Table 4. 11.   The SAP policy is widely comprehensive to cover all Human

Resources processes

	Frequency	Percent	Valid Percent	Cumulative Percent
Strongly disagree	10	16.6667	16.7	16.6666667
Disagree	29	48.3333	48.3	65
Neutral	10	16.6667	16.7	81.6666667
Agree	8	13.3333	13.3	95
Strongly Agree	3	5	5	100
Total	60	100	100	100

5% of the respondents strongly agreed that SAP Human Capital Management policy is widely comprehensive to cover all Human Resources processes, 13.3% of the participants agreed and 16.7% were neutral, 48.3% disagreed and 16.7% strongly disagreed.

Table 4. 12   I took part in the crafting of the SAP policy

	Frequency	Percent	Valid Percent	Cumulative Percent
Strongly disagree	21	35	35	35
Disagree	30	50	50	85
Neutral	4	6.66667	6.7	91.6666667
Agree	2	3.33333	3.3	95
Strongly Agree	3	5	5	100
Total	60	100	100	100

5% of the respondents strongly agreed that they took part in crafting of SAP Human Capital Management policy, 3.3% of the participants agreed and 6.7% were neutral, 50% disagreed and 35% strongly disagreed.

The summary of the responses to the factors that can lead to improved utilisation of SAP Human Capital Management are detailed in the diagram overleaf.
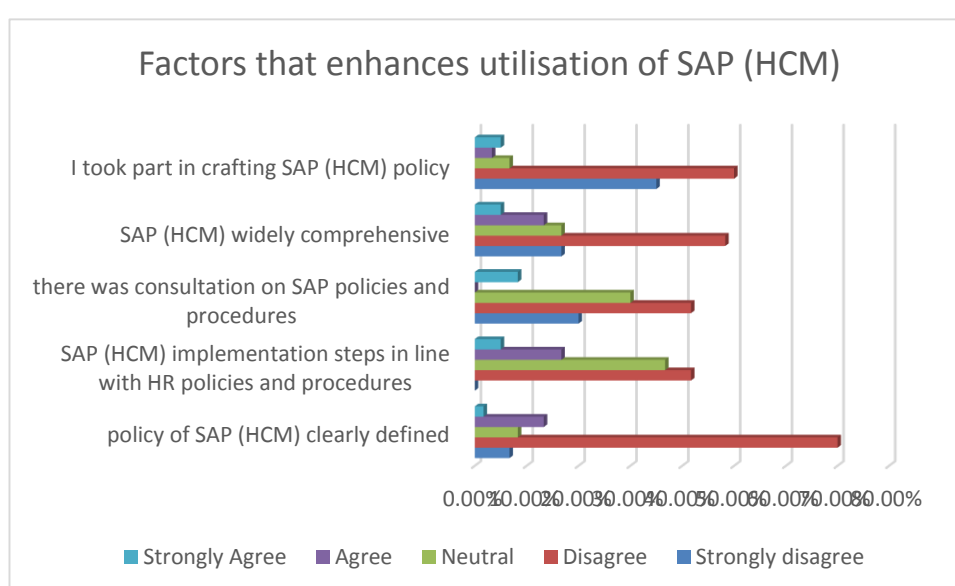
Figure 4. 6   Factors that lead to improved utilisation of SAP (HCM)

As a follow up question to determine factors that enhance effective utilisation of SAP Human Capital Management at the Public Service Commission, respondents were asked if they have ever come across the Public Service Commission policy on SAP Human Capital Management. 95% responded that they have never seen the policy and 5% agreed that they saw the policy. The responses are as presented below.
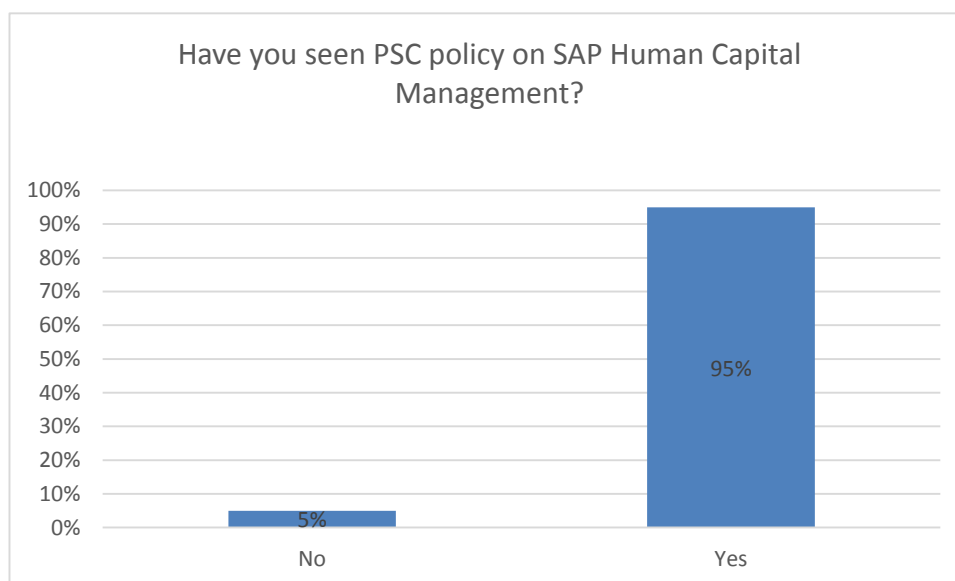
Figure 4. 7   PSC policy of SAP Human Capital Management

The respondents suggested that an all-inclusive approach should be adopted on issues related to policy so that stakeholders can proffer suggestions that can make the SAP Human Capital Management user friendly. Some of the respondents reserved to comment on aspects that the PSC policy should cover as they did not know if any policy on SAP Human Capital Management ever existed.

The respondents also recommended that the Public Service Commission policy on SAP Human Capital Management should emphasise on continuous training as a mechanism to sustain the project. Furthermore, continuous monitoring was suggested

as a way to ensure that the project is being implemented according to the set goals and objectives and that the implementation of the project is within timelines.

4.4.3 To recommend, based on the findings, sustainable and effective ways for the PSC to achieve greater effectiveness in delivering Human Resources processes using SAP

To recommend ways of effectively implementing SAP Human capital management in the processing of human resources functions, the respondents were asked a number of questions so as to determine those areas which need improvement. The findings are as detailed below.

To find out if training was lacking for employees to effectively utilise SAP Human Capital Management, participants were asked if they have received training during the past twelve (12) months, 46% responded that they received training and 54% responded that they never received the training. The responses are presented below:-

During the last twelve months I received training on SAP (HCM) system by the PSC.

46%

54%

■ Yes ■ No
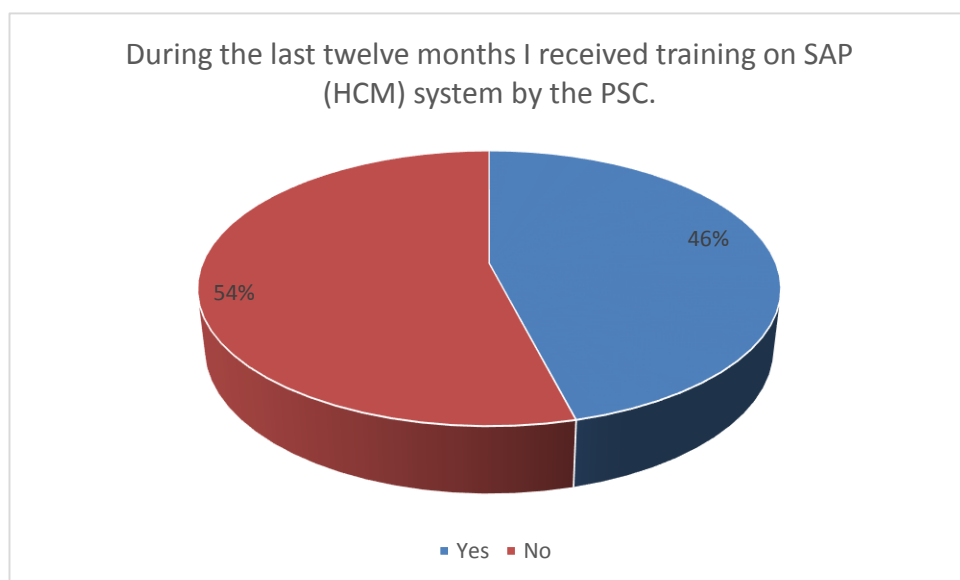
Figure 4. 8   Training on SAP Human Capital Management

Those participants who received training in the past twelve months commented that they received the training not more than three (3) times in the past twelve (12) months. The participants explained that training is on needs basis, so individual employees or departments have to identify their training needs and invite the super users to cover the training needs. It therefore, means that if individuals of departments do not initiate the need for training, they will not be trained. This explains why some individuals have been receiving training whilst some have not received training in the past twelve (12) months.

One super user commented that although she is responsible for initiating training programs to ensure continuous utilisation of the system, lack of time to conduct the training was one of the challenges. The super user explained that, there was need to appoint super users on full time basis so that they are fully committed to the utilisation of the system. However, the super users are expected to so their day to day duties and also expected to help other employees of SAP Human Capital Management system. As a result of this arrangement, training is now considered as a something that is done during spare time.

Respondents were also asked if the SAP Human Capital Management system is easy and convenient learn. 38% of the participants responded that the system is easy and convenient to learn and 62% responded that the system was not easy. The responses are as presented below:
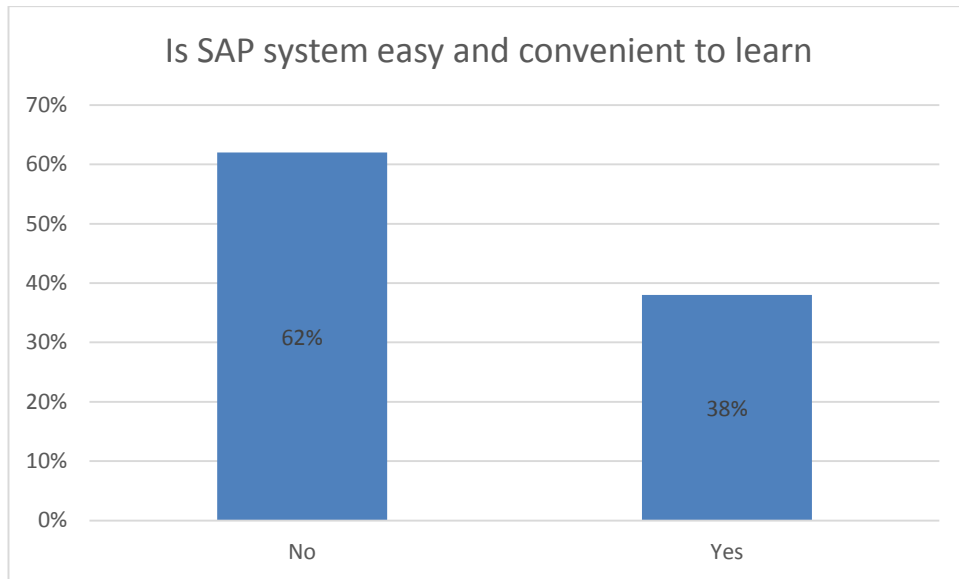
Figure 4. 9   Is SAP (HCM) easy and convenient to learn

Most of the participants who commented that the system is not easy and convenient to learn reiterated that they just have basic knowledge of how the system works, but some modules in the system seemed a mountainous task for them. The respondents recommended that more training was needed to demystify the complexities of using SAP Human Capital Management in their day to day work.

One super user commented that when there is constant practice and continuous use of The SAP Human Capital Management, the system becomes easy and convenient to learn. This motion was supported by another user who commented that the system has been easy and convenient for him to learn since he has been in constant touch with the super users asking for help and clarification on how to use the system. A problem however arises when the users are not self- motivated to constantly utilise the system and ask for help when the need arise.

To determine if the implementation of SAP Human Capital Management was improving on the job effectiveness, the participants were asked if the system was

enhancing their effectiveness on the job. 30% responded that the system was enhancing their effectiveness of the job, 70% responded that the system was not enhancing their effectiveness. The responses are as presented below :-
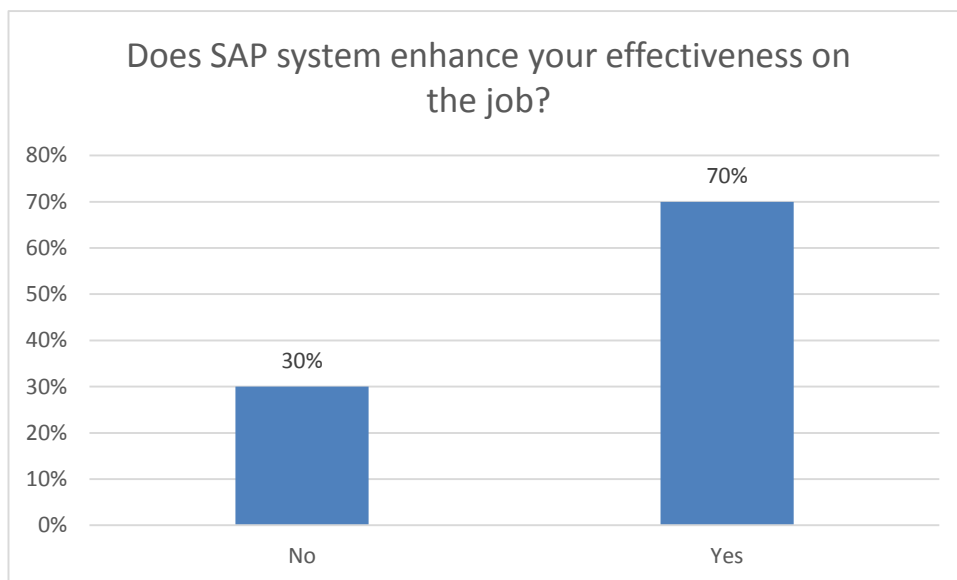
Figure 4. 10   on the job effectiveness using SAP (HCM)

Those who commented that the SAP Human Capital Management system improve their effectiveness on the job explained that the system reduces human error and bias. The system is also reliable in generating comprehensive reports timeously. One respondent explained that doing all work manually is time consuming, so using SAP Human Capital Management makes it easier and faster to perform duties. One manager commented that issues of transparency and accountability are enhanced when using SAP Human Capital Management as every work in the system can easily be traced.

However, those who commented that the system does not enhance their effectiveness commented that the implementation of the system has become more of a burden. They explained that they were made to understand that every work process is to be done using the new system but it seemed that the management is not ready to

embrace the new way of doing business. Employees' work still involves a lot of paper work rather than going digital. As a result, work is done manually and the outcomes are then uploaded in the SAP Human Capital Management system which reduces the system to a database rather than a work platform.

Respondents were asked if they would like to use SAP Human Capital Management on a day to day basis, all of them responded that they were willing to do so. All of them were further asked if they viewed SAP Human capital Management as an effective tool in human resources processes, all the respondents agreed 100% that they viewed the system as an effective tool. The responses are presented overleaf:-

Employees' view towards SAP (HCM) system
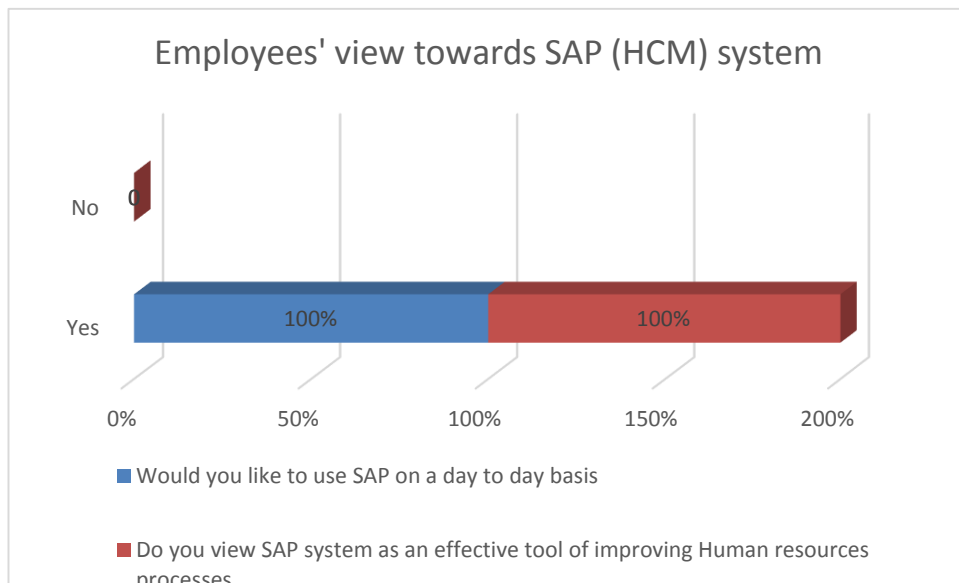
Figure 4. 11   Employees' view towards SAP (HCM) system

Respondents further explained their willingness to use SAP Human Capital Management, they felt that if properly trained the system would make their work easier and fast to process. They also expressed their need to keep up with modern trends of high performing organizations which are going digital. Some respondents even pointed out to the advantages of using SAP Human Capital Management where the organisation can cut on the cost of stationary by going paperless.

Finally, the respondents were asked if the Public Service Commission has clear guidelines that guide employees when using SAP Human Capital Management. 40% of the participants responded that the guidelines are clear and 60% of the respondents responded that they are no clear guidelines. The responses are as presented overleaf.

PSC has clear procedures that guide employees' work when using SAP (HCM)
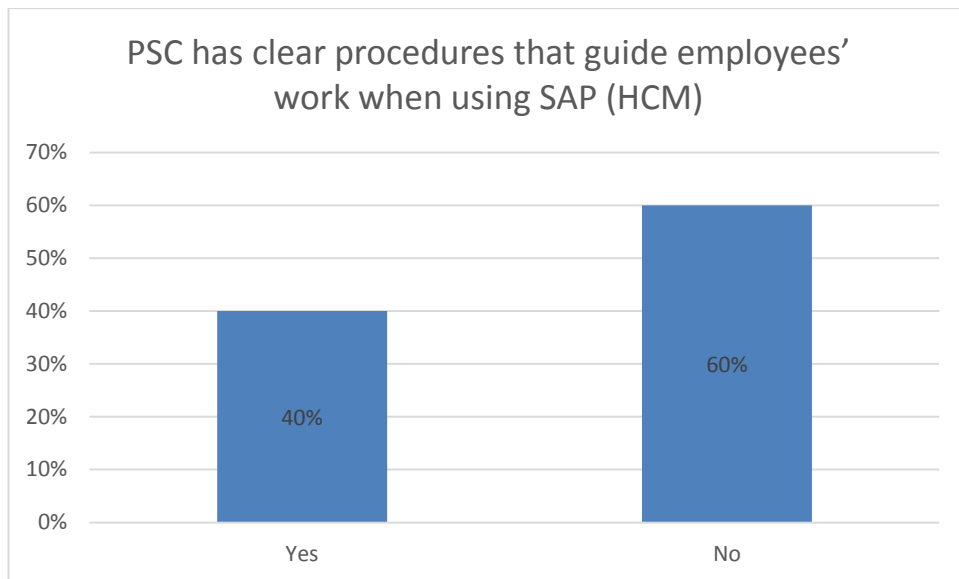
Figure 4. 12   PSC guidelines on using SAP (HCM)

Respondents explained that in as much as they are willing to use SAP Human capital Management, there was need for clear guidelines which emphasise on how the implementation of the project is to be monitored. They expressed that there was no clear monitoring mechanism on the implementation of SAP Human Capital Management. Respondents also explained that monitoring ensures that there is maximum participation in the implementation of SAP.

Respondents also recommended that clear guidelines should be set on timelines for performing specific tasks. A number of respondents explained that they expected the project to have been rolled out to line Ministries but it seemed that there were no clear timelines on the implementation of the project. One interesting comment was that meeting set deadlines motivates employees to do more for the success of the project.

4.4.4 The role of employees in the implementation of SAP Human Capital Management

The extent of employees' involvement in the implementation of SAP Human Capital Management was covered by questioning the roles of employees and management in the implementation of SAP Human Capital Management. Respondents were asked questions which were rated using 5 likert scale which varies from strongly disagree to strongly agree as illustrated below:-

Strongly disagree	Disagree	Neutral	Agree	Strongly Agree
1	2	3	4	5

The statements which were used to measure the extent of employee involvement in the implementation of SAP Human Capital Management and the responses are presented overleaf:-

Table 4. 13   The purpose of SAP Human Capital Management is understood at the

Public Service Commission:-

	Frequency	Percent	Valid Percent	Cumulative Percent
Strongly disagree	10	16.66667	16.7	16.66667
Disagree	28	46.66667	46.7	63.33334
Neutral	10	16.66667	16.7	80.00001
Agree	12	20	20	100.00001
Strongly Agree	0	0	0	0
Total	**60**	**100**	**100**	**100**

20% of the participants agreed that the purpose of SAP Human Capital Management is understood at the Public Service Commission, another 16.7% were neutral, 46.7% disagreed and 16.7 % strongly disagreed. None of the participants strongly agreed that SAP Human capital Management is understood.

Table 4. 14   The Public Service Commission did necessary training on the
implementation of SAP Human Capital Management

	Frequency	Percent	Valid Percent	Cumulative Percent
Strongly disagree	10	16.66667	16.7	16.66666667
Disagree	30	50	50	66.66666667
Neutral	5	8.333333	8.3	75
Agree	15	25	25	100
Strongly Agree	0	0	0	100
Total	**60**	**100**	**100**	**100**

25% of the participants agreed that necessary training on implementation of SAP
Human Capital Management was done, 8.3 % were neutral, 50% disagreed and 16.7
% strongly disagreed. None of the participants strongly agreed that SAP Human
capital Management training was done at the Public Service Commission.

Table 4. 15   The Public Service Commission management takes SAP utilisation
seriously.

	Frequency	Percent	Valid Percent	Cumulative Percent
Strongly disagree	27	45	45	45
Disagree	11	18.33333	18.3	63.33333333
Neutral	7	11.66667	11.7	75
Agree	13	21.66667	21.7	96.66666667
Strongly Agree	2	3.333333	3.3	100
Total	60	100	100	100

3.3% of the respondents strongly agreed that management takes the implementation
of SAP Human Capital Management seriously, 21.7% of the participants agreed,
11.7 % were neutral, 18. 3% disagreed and 45 % strongly disagreed.

Table 4. 16   The Public Service Commission actively keeps track on the utilisation of SAP system.

	Frequency	Percent	Valid Percent	Cumulative Percent
Strongly disagree	15	25	25	25
Disagree	27	45	45	70
Neutral	10	16.66667	16.7	86.66666667
Agree	8	13.33333	13.3	100
Strongly Agree	0	0	0	100
Total	60	100	100	100

13.3% of the participants agreed that the Public Service Commission actively keeps track of utilisation of SAP Human Capital Management system, 16. 7 % were neutral, 45% disagreed and 25 % strongly disagreed. None of the participants strongly agreed that the Public Service Commission actively keeps track of the utilisation of SAP Human capital Management system.

Table 4. 17   The Public Service Commission actively engages end users on the implementation of SAP.

	Frequency	Percent	Valid Percent	Cumulative Percent
Strongly disagree	10	16.66667	16.7	16.66666667
Disagree	29	48.33333	48.3	65
Neutral	11	18.33333	18.3	83.33333333
Agree	10	16.66667	16.7	100
Strongly Agree	0	0	0	100
Total	60	100	100	100

16. 7% of the participants agreed that the Public Service Commission actively engages end users on implementation of SAP Human Capital Management, 18. 3 % were neutral, 48. 3% disagreed and 16. 7 % strongly disagreed. None of the participants strongly agreed that Public Service Commission actively engages end users on implementation of SAP Human Capital Management.

Table 4. 18   The PSC management responds positively to suggestions on utilisation of SAP system

	Frequency	Percent	Valid Percent	Cumulative Percent
Strongly disagree	10	16.66667	16.7	16.66666667
Disagree	27	45	45	61.66666667
Neutral	15	25	25	86.66666667
Agree	8	13.33333	13.3	100
Strongly Agree	0	0	0	100
Total	60	100	100	100

13.3 % of the participants agreed that the Public Service Commission management responds positively to suggestions on utilisation of SAP Human Capital Management, 25 % were neutral, 45% disagreed and 16. 7 % strongly disagreed. None of the participants strongly agreed that Public Service Commission management responds positively to suggestions on utilisation of SAP Human Capital Management.

The responses on the extent of employees' involvement in the implementation of SAP Human Capital Management are summarised in the diagram oveleaf:-
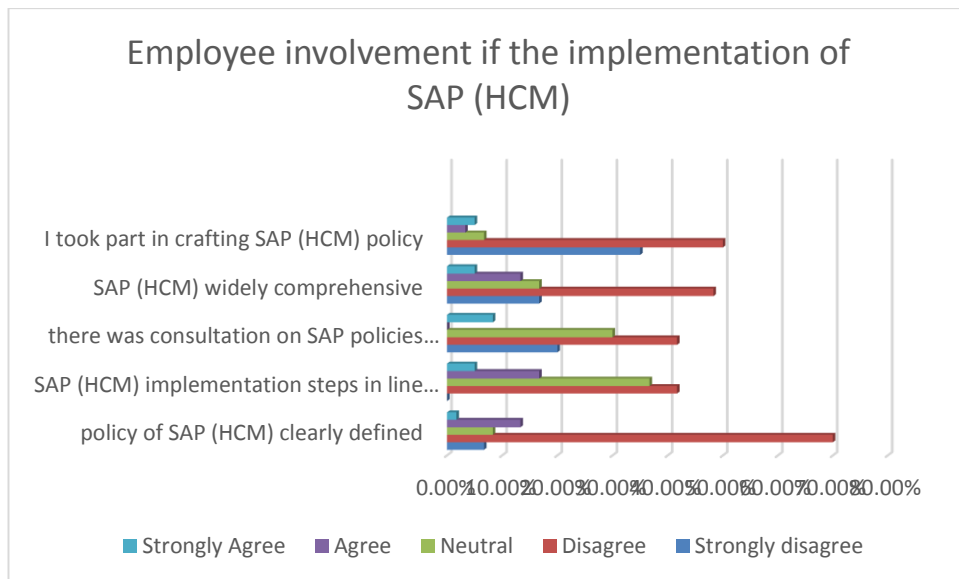
Figure 4. 13   Summary of employee involvement in implementation

Respondents were further asked to rate their frequency of using SAP Human Capital Management in accomplishing their day to day work. 20% of respondents responded that they never use the SAP Human Capital Management system, 65% indicated that they rarely use the system and 15% indicated that they frequently used the system. The frequency of using the SAP Human Capital Management is presented overleaf.
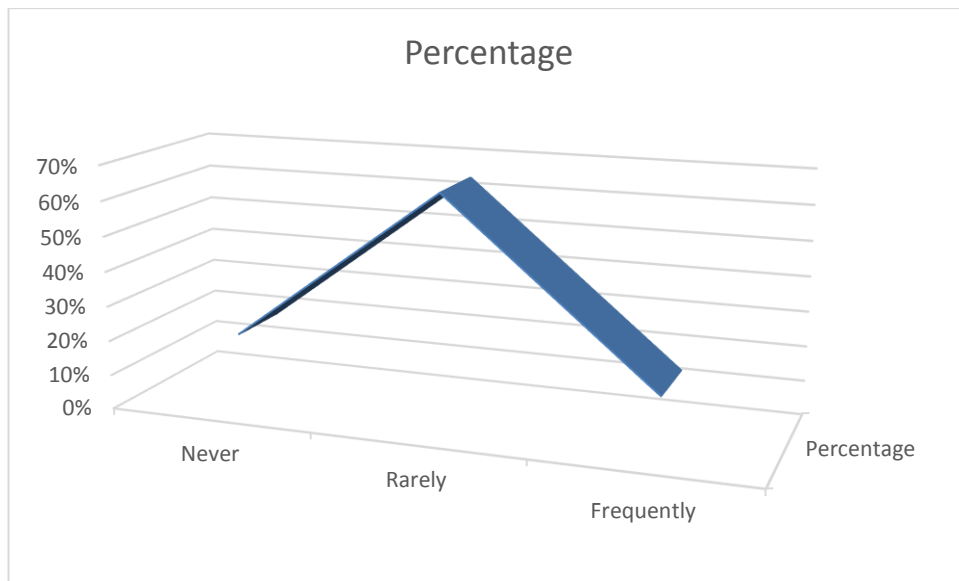
Figure 4. 14   Frequency of using SAP Human Capital Management

As respondents responded to follow up comments on their frequency of utilising SAP Human Capital Management, most of the respondents cited lack of adequate training as the main reason why they never or rarely utilise SAP Human Capital Management in their day to day work. Of particular to note is one Deputy Manager who explained that she joined the Public Service Commission, after two (2) years of commencement of the SAP Human Capital Management project but she was not inducted about the SAP Human Capital Management, she was just expected to flow with others which brought about a lot of frustration.

Some of the respondents also explained that some of the information necessary for them to perform their functions in the SAP Human Capital Management was missing hence they rarely use the system. Research showed that at the Public Service Commission, there is one department (Corporate Strategy and Salaries Administration) responsible for coming up with the organisational structure in the SAP Human Capital Management system. Another department (Human Resources Coordination) is responsible for inputting names of incumbents in the structure

within SAP Human Capital Management system. A problem however arises when there is no coordination among departments. When those responsible for creating structures in the system do not do their part, it automatically means that those responsible for inputting names will not do their work either.

Some of the respondents felt that their line of work cannot be done using SAP system as there is need for documented evidence. An example is cases with legal implications where tangible evidence may be needed. The respondents were not sure if SAP Human Capital Management would offer them tangible evidence if there are any legal implications in line of their work

However, those who responded that they frequently use SAP Human Capital Management explained that all their line of work depends of the SAP Human Capital Management. An example is of Executive Assistants who are only responsible for registering of candidates for employment using the SAP Human Capital Management. The responses were a clear evidence that the SAP Human Capital Management system has been successful in implementing clerical duties. Other respondents explained that they have been appointed as super users responsible for training other users so they frequently use the system.

In responding to the follow question about if management is good at empowering individuals in making decisions about SAP Human Capital Management system. 90% percent of the respondents responded that they are not empowered, only 10% responded that they are empowered. The responses about being empowered to make decision about SAP Human Capital Management are as presented below:-
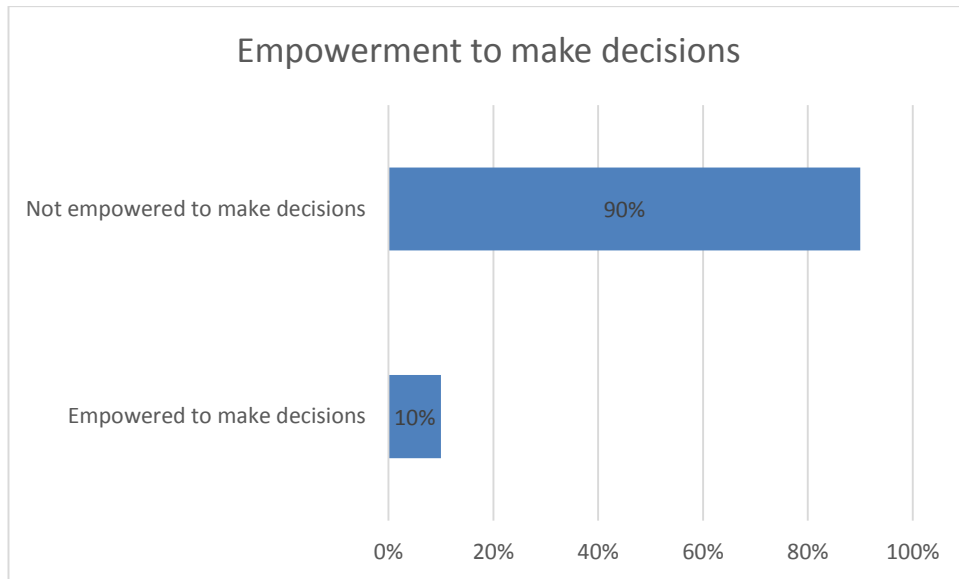
Figure 4. 15   Empowerment to make decisions

Respondents commented that Management should include them step by step during the implementation of SAP so as to empower them to make decisions. One super user commented there is too much limitation in terms of rights to access different work areas of the system hence staff feels that they are limited in terms of making decisions. The super user suggested that there was need for certification of staff so that they can access different work areas of the system.

4.5 Discussion

The research sought to establish the extent of employees and management involvement in the implementation of SAP Human Capital Management. According to the research, the top management has not been taking an active in involving employees in the implementation of SAP Human Capital Management System. This is evidenced by a response rate of 35% of participants who commented that they do not understand the role of SAP Human Capital Management, 63% of the participants were of the view that management does not take the implementation of the project

seriously and 59%-61% of the respondents commented that management does not actively engage them in implementation process nor respond positively to suggestions for successful implementation of SAP Human capital Management. Failure to actively involve employees affects the utilisation of SAP Human Capital Management as 65% of the participants commented that they rarely use the system.

In an effort to establish the barriers to effective implementation of SAP Human Capital Management, the research established that the corporate culture at the Public Service Commission has not yet embraced SAP Human Capital Management as the new way of doing business. 57% of respondents were not are aware of established Key Performance Indicators on the implementation of SAP Human Capital Management. Key Performance Indicators are used to measure the success of a project, however if there are no Key Performance indicators it becomes difficult to measure and monitor the success of a project. The research also established that lack of clarity role was also a hinderance to effective implementation of the system as pointed out by 53% of the respondents. There is so much confusion and frustration when employees have no clarity of roles therefore hindering effective implementation of the project.

According to the research the Public Service Commission has no clear policies and guidelines on the implementation of SAP Human Capital Management. The research therefore revealed that there is need to come up with clear policies and guidelines on the implementation of SAP Human Capital Management. Consultation of all stakeholders in coming with the SAP Human Capital Management policy has to be key as 95% of the participants were not are of the existence of any polices and

guidelines on SAP Human Capital Management. Policies and guidelines set principles of action which guide team members to implement the project effectively.

The research established that continuous training has the potential to improve the utilisation of SAP Human Capital Management as most participants commented that issues of effective training should be covered when coming up with policies. The research also revealed that most members are willing to utilise the SAP in their day to day work but they need continuous training so that they appreciate some grey areas and improve their confidence in the new system. The research eliminated lack of interest in utilising SAP Human Capital Management as a barrier to effective implementation of the project as 100% of the participants were of the view that SAP Human Capital Management is easy and convenient to learn. In as much as respondents have a positive view of the system, the research concluded that SAP Human Capital Management thrives of continuous training and practice.

4.6 Summary

This chapter detailed report of research findings on how employees are involved in the implementation of SAP Human Capital Management, barriers and factors that improve effective utilisation of SAP Human Capital Management system and recommendations to enhance the effective utilisation of SAP Human Capital Management. The responses pointed out that management is not playing an active role in motivating employees to utilise the system to its maximum. Effective training and monitoring of employees were identified as some measures to enhance the effective utilisation of SAP Human Capital Management.

CHAPTER 5 SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter gave a summary of the research from the five chapters. The chapter also came up with conclusion on the extent of employees' involvement in the implementation of SAP Human Capital Management, the barriers to effective implementation of SAP Human Capital Management and factors that enhance the utilisation of the system. Basing on findings, recommendations to improve the effective utilisation of SAP Human Capital Management have also been outlined.

5.2 Research Summary

This section gives a summary of the research from chapter 1 to chapter 5. Chapter one introduced the research with background to the study highlighting how Human Resource Management Information Systems (HRIMS) initiatives have progressed since the 1990s in the government of Zimbabwe. The problem statement outlined the main challenge which triggered the research whereby the benefits of SAP Human Capital Management are still to be realised in Human Resources Management after five years of commencing the project. The objectives, research questions, significance of the study, delimitation and limitation were clearly outlined. The research aimed at assessing the applicability of SAP in implementing human resources processes in the public sector.

Chapter 2 is a literature review to come up with scholarly views on each research objective. The guiding theories explained how change should be inculcated to ensure success of a project. Various literature emphasised on employee involvement as one way of improving the utilisation of information technology projects. Lack of clear

goals and objectives and lack of commitment from senior management are some of the barriers to effective implementation of SAP Human capital Management. Recommendations from related studies suggested that information technology projects should be benchmarked by Management Board of Knowledge (PMBOK) guidelines which include integration management, time management, cost management, quality management, scope management, procurement management, human resources management, communication management and risk management.

Chapter 3 describes the methodology and methods of collecting and analysing data. The mixed method research design was adopted. A mixed method approach was adopted whereby qualitative results were used to explain quantitative data. The population under study is the Public Service Commission and stratified sampling technique was used to come up with a sample of 90 participants.

Chapter 4 detailed the findings of the research according to the research objectives. Data was presented in form of tables, bar graphs and pie charts. The responses pointed out that management is not playing an active role in motivating employees to utilise the system to its maximum. Effective training and monitoring of employees were identified as some measures to enhance the effective utilisation of SAP Human Capital Management.

Chapter 5 analyses the research findings so as come up with recommendations for effective utilisation of SAP Human Capital Management. The research revealed that employees are not involved to the maximum in the implementation of SAP Human Capital Management. The responses from the participants showed that the

management is not playing an active role in involving employees in the implementation of SAP Human Capital Management. The research recommended effective Human Resources Management as one way of ensuring that those involved in project implementation are well managed for the success of the project. Keeping the lines of communication is also key in human resources management to ensure that to ensure that constructed feedback is harnessed for the success of the project. The research also recommended continuous training of all project members so as to address some of barriers to effective implementation of the project by information sharing. Employee involvement was also recommended as key to effective implementation of SAP Human Capital Management whereby the top management should play an active role in ensuring that every team member is involved at every stage of the project.

5.3 Conclusions

The research sought to assess the applicability of SAP Human Capital Management in implementing human resources processes in the public sector. The main objectives of the research were to :-

- To evaluate the role of employees and management in the implementation of SAP Human Capital Management system at the Public Service Commission.

- To identify barriers to the efficient implementation of SAP Human Capital Management system.

- To determine the factors that lead to improved utilisation of SAP Human Capital Management system in the Commission.

The research concluded that employees are not being involved in the implementation of SAP Human Capital Management and therefore do not have an understanding of the goals and objectives of the project. This is having a negative effect on project buy in and the performance of the project. Lack of employee involvement in project implementation has a negative effect on commitment of the employees to the success of the project. This is corroborated by a research conducted by Sun, Hui, Tam and Frick (2000) which revealed that employee involvement is positively correlated with improvements in business performance. Research has demonstrated that employee involvement is related to improved communication, improved motivation and improved capabilities (Lawler, 2001).

Lack of clearly defined roles and Key Performance Indicators is hindering effective implementation of SAP Human Capital Management the Public Service Commission. Key Performance Indicators sets a measure of the project basing on key objectives to be achieved. Clearly defined roles defines where each member fit for a project to be a success. If there are no clearly defined roles and Key Performance Indicators, it becomes difficult to measure the success of the project and hold team members accountable for its success or failure. This is corroborated by Gary and Faruk (2015), who argue that unclear objectives means that there is no clear method of operation and no clear yardstick to measure the performance. Richardson (2010) further argue that, unclear goals and objectives hinders effective implementation of the project as team members lose focus, become confused and frustrated.

The research also concluded that lack of consultation of project team members in coming up with policies and guidelines is affecting the effective implementation of SAP Human Capital Management. Policies and guidelines outlines the procedure to implement the project timeously and efficiently. Coupled with that, continuous

training should be a culture to enhance the utilisation of the project. Pearce ll and Robinson JR (2009) support this motion by corroborating that continuous training of team members increases their commitment to accomplish organizational goals as they feel that the organization values them by being concerned in their continuous improvement.

The research also concluded that the role of top management in the training, monitoring, motivation of employees and well as consultation of all project members will impact on the successful implementation of SAP Human Capital Management. The commitment of top management project implementation will also increase commitment of all team members thereby yield positive results from team members. Tepper (2000) asserts that if leaders fail to take the leading role in implementation of the project, the followers develop lack of interest in the project, low self-confidence and poor job performance and eventually the whole project fails to achieve intended results.

5.4 Implications

This research will impact on future projects at the Public Service Commission to come up with well-coordinated Project Management Policies. This will ensure that projects have guidelines to be completed timely and efficiently. Better Project Management Polices will also cover issues of employee involvement, effective training and monitoring so as to come up with effectively and efficiently managed projects.

The research will also aid to numerous researches on e- governance as a public sector reform. E- governance is one of the public sector reforms which has the potential to change the way government operates in terms of timeous processing of work,

accountability, transparency and responsiveness. The barriers and factors that lead to improved utilisation of SAP Human Capital Management identified by this research, will shed more light on some of the factors that should be considered for e-governance to transform the way government operates.

5.5 Recommendations

In order to ensure effective utilisation of SAP (Human Capital Management) in Human

resource processes, the research recommended the following basing on findings from the research questions:-

a) To enhance employees and management involvement in the implementation of SAP Human Capital Management system at the Public Service Commission, effective Human resources management would be recommended for successful implementation of SAP Human Capital Management. The complaint raised by one super user that they have not been assigned as full-time super users to help end users with the training and consultation services negatively impacts on the project as the project is now being taken as a spare time activity. There is therefore need to appoint super users of full-time basis so that they encourage a team spirit by monitoring and motivating other team members to frequently utilise the system. If super users are appointed on full time basis, they also get time to initiate training programs rather than come up with reactive training programs.

The organisation should also improve on communication management so as to enhance maximum participation of all members in the implementation of

the project. Most of the research participants were of the view that top management does not respond positively to suggestions of improving the system. Proper channels of communication should be established so that the top management can get constant negative or positive feedback from end users so that corrective measures can be taken for the project to be a success. The use of a suggestion box can be a starting point where end users can be encouraged to make use of suggestions boxes for any feedback. Direct communication between top management and end users should also be open through quarterly meeting just to give feedback.

b) The barriers to the efficient implementation of SAP Human Capital Management system also need to be addressed by ensuring that the corporate culture embraces SAP Human Capital Management as the new way of doing business. This can be done through information sharing whereby constant trainings are conducted to ensure that team members understand their roles in the implementation of SAP Human Capital Management as well as the Key Performance Indicators to measure the success of the project.

The senior management should ensure quality management to so that the project satisfy the needs of specific departments. One interesting issue discussed before in the findings is of a respondent who was not sure whether the system would be reliable in processing cases with legal implications which need documented evidence. All the users concern such as this need to be listened to and ensure that there is integration of SAP Human Capital

Management technological necessities and organisational needs for the project to be a success.

c) To improve the utilisation of SAP Human Capital Management system in the Commission, basing on one of the principles of Project Management Board of Knowledge (PMBOK) and research findings, integration management should be ensured by coordinating various elements of SAP Human Capital Management. There is need to come up with clear and unambiguous goals and objectives with the participation of all team members to make sure that change is understood and accepted. It is an unhealthy situation for project members to be unaware of the reasons for the implementation of SAP Human Capital Management. This points out that management did not do enough ground work, hence the need for top management to ensure that the goals and objectives of the project are tabled with the maximum participation of every team member.

In coming up with clear goals and objectives, time management is also an important aspect as the success of the project is measured with the ability to meet timelines. The responses of the participants showed that most of the users rarely use SAP Human Capital Management as they are not guided by any timeline. The respondents also commented on how they expected the project to have been rolled out to other Ministries but it seemed that there is too much lip service. For SAP Human Capital Management to be a success, project tasks should be timebound. This will also make it easy to monitor how the project is progressing.

5.6   Suggestions for Further Research

Basing on this research, I suggest that another research should be carried out on how to successfully implement other SAP modules such as SAP Financial Accounting for Public Service Commission pay and benefits branch. Cases of manipulation of government financial statements are usually the order of the day. Since Enterprise Resource Planning (ERP) projects enhances accountability and transparency by eliminating human error, the research can be a welcome move in line with e-governance initiatives.

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Appendix 1 Survey questionnaire

<div style="border:2px solid black; text-align:center;">

SURVEY QUESTIONNAIRE

</div>

SECTION A: DEMOGRAPHICS.

1. POSITION HELD

   General Manager/equivalent grade: ☐

   Manager/ equivalent grade: ☐

   Deputy Manager/ equivalent grade: ☐

   Executive/ Human Resources Assistant/equivalent: ☐

2. NUMBER OF YEARS IN POSITION: ☐

3. <u>GENDER</u>

   Male   ☐

   Female   ☐

4. <u>AGE</u>

   Below 20 years   ☐

   21 – 30 years   ☐

31 – 40 years ☐

41 – 50 years ☐

51- 60 years ☐

61 and above ☐

5. What is your highest educational qualification?
☐ O'Level ☐ A' Level ☐ Diploma ☐ Higher National Diploma

☐ Degree ☐ Masters ☐ PhD

Section B: Data Gathering

All the sections relate to your work experience with the Public Service Commission. Please place a tick in the box which best describes your feelings and attitudes about the statement indicated against it.For your answers make use of the five (5) Likert's scale which varies from 'Strongly Disagree to strongly Agree (5) as illustrated below:-

Strongly disagree **Disagree** **Neutral** **Agree** **Strongly Agree**

1 **2** **3** **4** **5**

6. Objective 1: To evaluate the role of employees and management in the implementation of SAP system at PSC?

For the following questions please make use of the Likert 5 Point Scale Statement.

LIKERT STATEMENTS	1	2	3	4	5
1.1. The purpose of SAP system is understood in the Commission.					

1.2. The PSC has done necessary trainings on the implementation of SAP system					
1.3. The Public Service Commission management takes SAP utilisation seriously.					
1.4. The Public Service Commission actively keeps track on the utilisation of SAP system.					
1.5. The Public Service Commission actively engages end users on the implementation of SAP.					
1.6. The PSC management responds positively to suggestions on utilisation of SAP system					

1.7. How would you rate your frequency of using SAP in accomplishing your day to today work?

☐Never   ☐rarely   ☐frequently

1.8. Provide comments below on your response in 1.7

1.9. The PSC is good at empowering you to make decisions on SAP?

☐Yes   ☐ No

1.10. If your answer to 1.9 above is 'no' state what needs to be done to improve the situation.

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7. **Objective 2**: **To identify barriers to the efficient implementation of SAP system.**

LIKERT STATEMENTS	1	2	3	4	5
2.2. PSC usually implements projects to completion					
2.3. The PSC has established Key Performance Indicators on the implementation SAP to ensure its success					
2.4. There is clarity of roles on utilisation SAP system in Human Resources Management.					
2.4. The SAP system is an ideal application for conducting Human Resources Processes					
2.5. The I.T infrastructure is conducive for the implementation of SAP					
2.6. I have a positive relationship with my boss or supervisor.					

2.7.   Is the corporate culture of the PSC supportive of the SAP system initiatives?

☐Yes   ☐ No

2.8.   If your answer to 2.7 above is 'no' suggest what needs to be done in the
        space provided below.

....
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....

8. **Objective 3**: **To determine the factors that lead to improved utilisation of
SAP system in the Commission.**

LIKERT STATEMENTS	1	2	3	4	5
3.1. the PSC policy on SAP implementation is clearly defined					
3.2. The steps taken in implementing SAP are in line with PSC Human Resources policies, guidelines and procedures.					
3.3. policies and procedures in respects to SAP have been formulated in consultation with all departments					
3.4. The SAP policy is widely comprehensive to cover all Human Resources					

processes					
3.5. I took part in the crafting of the SAP policy					

3.6. Have you seen the PSC policy on SAP system?

☐ Yes   ☐ No

3.7. If your answer to 4.6 above is 'no' what aspects should the underlying policies and procedures embrace to improve utilisation of SAP in Human Resources Management

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9. **Objective 4: To recommend, based on the findings, sustainable and effective ways for the PSC to achieve greater effectiveness in delivering Human Resources processes using SAP**

4.1. During the last twelve months I received training on SAP system by the PSC.

☐ Yes   ☐No

4.2. If your response in 4.1. is Yes, state how often have you been receiving the training

----

4.3. Is SAP system easy and convenient to learn

☐ Yes   ☐No

4.4. Explain your response in 4.3

4.5. Does SAP system enhance your effectiveness on the job?

☐ Yes   ☐No

4.6. Explain your response in 4.5

4.7. Would you like to use SAP on a day to day basis

☐ Yes   ☐No

4.8. Explain your response in 4.7

4.8. Do you view SAP system as an effective tool of improving Human resources processes.

☐ Yes   ☐No

4.9. If your answer to 4.8 above is 'no' then recommend the best intervention, according to your best understanding

----

4.10.   The PSC has clear procedures that guide employees' work when using SAP.

☐ Yes   ☐No

4.11. If your response in 4.10 is no, suggest aspects that should be covered in the procedures that guide employees' work when using SAP

Thank you for participating in this survey by taking time to complete this questionnaire!

Appendix 2 Africa University Research Ethics Committee (AUREC) approval:-

AFRICA UNIVERSITY
RESEARCH ETHICS
COMMITTEE (AUREC)

Ref: AU1110//19

2 December, 2019

Vimbai Chawarura Mudzonga
C/O CBPLG
Africa University
Box 1320
Mutare

RE: THE UPTAKE OF SYSTEMS APPLICATIONS AND PRODUCTS IN DATA
      PROCESSING (SAP) IN HUMAN RESOURCES MANAGEMENT WITHIN
      THE PUBLIC SERVICE COMMISSION SECRETARIAT (PSC).

Thank you for the above titled proposal that you submitted to the Africa University Research Ethics
Committee for review. Please be advised that AUREC has reviewed and approved your application to
conduct the above research.

The approval is based on the following.
   a) Research proposal
   b) Questionnaires
   c) Informed consent form
   - **APPROVAL NUMBER**   AUREC1110/19
This number should be used on all correspondences, consent forms, and appropriate documents.
   - **AUREC MEETING DATE**   NA
   - **APPROVAL DATE**   December 2, 2019
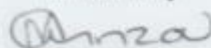   - **EXPIRATION DATE**   December 2, 2020
   - **TYPE OF MEETING**   Expedited

AFRICA UNIVERSITY
RESEARCH ETHICS COMMITTEE (AUREC)

0 3 DEC 2019

APPROVED
P.O. BOX 1320, MUTARE, ZIMBABWE

After the expiration date this research may only continue upon renewal. For purposes of renewal, a
progress report on a standard AUREC form should be submitted a month before expiration date.
   - **SERIOUS ADVERSE EVENTS** All serious problems having to do with subject safety must be
     reported to AUREC within 3 working days on standard AUREC form.
   - **MODIFICATIONS** Prior AUREC approval is required before implementing any changes in the
     proposal (including changes in the consent documents)
   - **TERMINATION OF STUDY** Upon termination of the study a report has to be submitted to
     AUREC.

Yours Faithfully

MARY CHINZOU – A/AUREC ADMINISTRATOR
FOR CHAIRPERSON, AFRICA UNIVERSITY RESEARCH ETHICS COMMITTEE

Urkund Analysis Result

Analysed Document: Vimbai Chawarura.docx (D66169733)
Submitted: 3/23/2020 9:44:00 AM
Submitted By: djeranyama@africau.edu
Significance: 2 %

Sources included in the report:

B.SANKARNAIK_MBA.pdf (D48241660)
B.SANKARNAIK_MBA.pdf (D48471332)