

**ASSESSING THE EFFECTIVENESS OF THE LEAN SERVICE PRINCIPLE: A CASE
STUDY OF THE MANAGEMENT SERVICES DIVISION, SWAZILAND**

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STUDENT'S DECLARATION

I declare that this thesis was composed by myself, that the work contained herein is my own except where explicitly stated otherwise in the text, and that this work has not been submitted for any other degree or professional qualification except as specified.



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PLAGIARISM

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ABSTRACT

The Government of Swaziland (GoS) civil service wage bill has continued to rise in recent years, out-pacing the growth of government revenue. The personnel budget is still the largest single recurrent expenditure item in the budget. The underlying problem of high public sector personnel costs continues to be felt in the economy. The wage bill has been increased by 22% since the advent of the economic crisis of 2010, and is at 47% of the national budget and is the fourth highest in Africa at 14% of Gross Domestic Product (GDP) by the year 2015. This study will enable Cabinet to make the appropriate decision on the mandate and future of the Management Services Division (MSD), as there have been growing calls to disband the division due to the failure to reduce and/or control the wage bills as that is the core mandate of the division. This study will generate information on the wage bill push-factors and the shortcomings of the Lean Service Principle and Just-In-Time (JIT) Technique in the management and reduction of the GoS civil service wage bill and further indicate the relevance of these principles in the context of the GoS civil Service. The study found that the techniques used were not designed for the specific control of the wage bill, but is methods and system improvement techniques. They are designed for value creation in the delivery of goods or services to the end-user. They are customer centric techniques. To this end, the MSD has been applying the wrong methodologies in wage bill control, which has been evident by the continued yearly increase of the wage bill. In essence the division should consider the utilisation of Human Resources Forecasting and Planning (HRFP) Techniques.

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LIST OF ABBREVIATIONS

- AMA- Assistant Management Analyst
ASD- Alternative Service Delivery
BPR- Business Process Engineering
E- Emalangeni (Swaziland Currency)
ESAR- Eastern & Southern African Region
EVERS- Enhanced Voluntary Early Retirement
FDI- Foreign Direct Investment
FPE- Free Primary Education
GoS- Government of Swaziland
HoD- Head of Department
HR- Human Resource
HRFP- Human Resource Forecasting and Planning
HRMIS- Human Resource Management Information System
HRP- Human Resource Planning
HRS- Human Resource Strategy
IMF- International Monetary Fund
ISAP- Internal Structural Adjustment Programme
JIT- Just-In-Time
MA- Management Analyst
MDG- Millennium Development Goals
MoCIT- Ministry of Commerce, Industry and Trade
MoEPD- Ministry of Economic Planning and Development
MoET- Ministry of Education and Training
MoF- Ministry of Finance
MoH- Ministry of Health
MoLSS- Ministry of Labour and Social Security
MoPS- Ministry of Public Service
MSC- Management Services Certificate

MSD-Management Services Division
NGO's- Non-Governmental Organisation
NPM- New Public Management
PMA- Principal Management Analyst
PMS- Performance Management System
PS- Principal Secretary
PSMP- Public Sector Management Programme
SACU- Southern African Customs Union
SAP- Structural Adjustment Programmes
SIMPA-Swaziland Institute of Management and Public Administration
SMA- Senior Management Analyst
SoS- Schemes of Service
SPRSA- Swaziland Payroll and Skills Audit
SRA-Swaziland Revenue Authority
TOR- Terms of Reference
TPS- Total Production System
TQM-Total Quality Management

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1.1 Introduction

The Management Services Division (MSD) was created by Establishment Circular No. 8 of 1971 following a recommendation to establish such a section by Chief Udoji who was commissioned to review the training and localisation of the Swaziland Civil Service. The division was established as a unit under the then Department of Establishment and Training, which was part of the Prime Minister's Office [Government of Swaziland (GoS), 2017].

The Management Services Unit (MSU) (as it was called at establishment) was established for the purpose of obtaining data regarding the deployment and the utilisation of common cadre personnel with the objective of rationalising the arrangements for the recruitment, selection, training, deployment as well as encouragement of career development. Furthermore, the Unit was responsible for reviewing the organisation, and the procedures and programmes for Ministries/Departments and the personnel management activities in all Ministries/Departments.

The MSU changed to be MSD through a recommendation that was made by the Wamalwa Commission in 1976. The main objective for the change of the status from being a unit to a division was to widen the scope of work for the unit to cover the control of the size of the civil service which was rapidly growing.

In 1986, again the size and responsibilities of the MSD increased with the creation of the Research and Development section within the division. The main purpose for creating this section was to monitor through research and surveys, the relative position of the Government's terms and conditions of service in the economy by observing salary trends, pay rates and schemes of service in the private, and keeping various government allowances under review.

In recent years the mandate of the division has been focused on the ever increasing wage bill. This has been an item that has been a concern not only for government but also international partners and money lenders. To this end, the MSD has been requested to apply the requisite tools and techniques to monitor, control and as far as possible reduce the wage bill. This is on the backdrop of the fact that the MSD is an internal government consultancy service, staffed by officers with the appropriate skills and qualifications in management science.

1.2 Background of the Problem

There has been marginal success observed as per the mandate of the MSD. There has been a steady increase of the civil service wage bill over the years and this has resulted in about 47 % of the annual budget being channelled towards the personnel component of the budget. This has been at the expense of the capital obligations of the Government and socio-economic investment within the citizenry.

The personnel cost to GoS has increased exponentially over the years, there are currently 40 746 established posts (without factoring in the Army) an increase of 8 789 posts from 2010. The year 2010 was the beginning of the global financial crises and established posts stood at 31 957 (without factoring in the Army) Ministry of Public Service (MoPS) (2017). The MSD as an internal government consultancy on management and productivity issues, its main objective has been to implement the Lean Service Principle and utilise Just-In-Time (JIT) techniques to reduce the size of the civil service in terms of head count. This was envisaged to enable ministries/departments to achieve more with fewer personnel, which is highly trained, motivated, multitasking and multi-skilled.

The principle of Lean Service and JIT as applied by the MSD in pursuit of its mandate, are to be reviewed as to how applicable and successful they are in the reduction of the number of positions within the civil service, whilst enabling MSD to maintain high levels of productivity of the civil service and customer satisfaction. It has been noted that high personnel costs which are a large portion of the recurrent budget tend to limit resources available for the core services that governments seek to provide. Thus, the application of production methodologies that seeks to achieve maximum utilization of staff in the service delivery process.

The civil service wage bill is constituted by a wide array of pay packages that are payable to civil servants as per their contract of employment with GoS. These packages may vary between the different remuneration categories and levels tenable within the civil service. However, Madubula & Dawood (2011) highlight that there are a number of items that contribute to the wage bill annual increment. These constitute annual cost of living adjustments coupled with promotion and job regrading, the increase in employee head-count (e.g. creation of posts) and the introduction of the occupation-specific dispensation (e.g. categorised recruitment and retention

benefits). Also included are other contributory factors such as poor internal controls (e.g. poor management of the antiquated personnel salary system) and a lack of critical skills resulting in head-hunting, which is often expensive (e.g. doctors, engineers, pilots). There are also notable appointments made without proper planning and budgeting (e.g. politically influenced recruitment), and also poor organisational design (e.g. strategic plans not aligned with organograms).

The policies initiated at the national level that have insufficient regard to the enormous financial implications for line ministries (e.g. free primary education, compulsory cross-cutting subjects), have also had an impact on the affordability of the civil service. The equalisation of service conditions (e.g. salary increases for low-income earners) and the influence of trade unions on the outcome of wage-bargaining agreements, coupled with weak management, have also enormously contributed to the challenge of wage bill ballooning.

Most notably in Swaziland, the huge wage bill is a result of the continued annual creation of positions (either for current departments) or the establishment of new departments/sections. Yet the country has over the years not been able to create any new sources of government revenue to fund not only capital projects but the wage bill itself. The country is reliant on the Southern African Customs Union (SACU) receipts to fund 70% of its national budget. However, these receipts have been on a steady decline since the early part of the millennium. The remainder of the national budget is financed through national taxes and government loans. As noted the wage bill occupies 47% of the national budget [International Monetary Fund (IMF), 2015].

A number of studies on the impacts of the wage bill have been conducted by authors such as Okech & Lelegwe (2015), Poverty Reduction and Economic Management Unit (2010), Okundi (2014) and Madubula & Dawood (2011) for countries such as Kenya, Zimbabwe, and the Republic of South Africa respectively. However, none have been specific to Swaziland and most notably in review of the institution setup as a gateway to the prevention of the exceptional increase in the wage bill. This study seeks to close that gap.

1.3. Research problem

The GoS civil service wage bill has continued to rise in recent years, out-pacing the growth of government revenue. The personnel budget is still the largest single recurrent expenditure item

in the national budget. The underlying problem of high public sector personnel costs continues to be felt in the economy. The wage bill has been increased by 22% since the advent of the economic crisis of 2010, and is at 47% of the national budget. This is the fourth highest in Africa at 14% of GDP by the year 2015 (IMF, 2015). The bulk of the annual budget is being channelled towards the payment of salaries at the expense of the pursuit of capital projects to improve of the socio-economic welfare of the citizenry. GoS civil service wage bill continues to rise despite the implementation of Lean Service Principle by MSD to contain the wage bill to manageable levels. So far, there are no tangible outcomes that indicate that the principles as applied have been effective in the reduction of the wage bill. Thus, this research aims to examine the question why the Lean Service Principle failed to effectively slow the rampant growth of the civil service wage bill in Swaziland? The desired outcome for effective implementation of the Lean Service Principle is adequate performance of tasks with the utilisation of a minimal number of employees that can multitask and are multi-skilled and decelerated growth in government wage bill.

1.4. Significance of the Study

This study will enable the Cabinet of Swaziland to make the appropriate decision on the mandate and future of the MSD, as there have been growing calls to disband the division. This opinion has been fuelled by the failure of the MSD to reduce and/or control the wage bill. This in recent years has been viewed as the core mandate of the division. This study will generate information on the causes of the continued increase of the wage bill. The shortcomings of the Lean Service Principle and JIT technique in the management and reduction of the GoS civil service wage bill. Furthermore, the study will indicate the relevance of these principles in the context of the GoS civil service. This will enable the development of effective strategic pursuit by management of the MoPS in realigning the most relevant aspects of the principles, tools and techniques as pursued to the mandate of the MSD.

The applicability and relevance of the tools and techniques at the disposal of the MSD in the control of the wage bill have to date not been reviewed as to their success in implementation. It is only recently through the GoS commissioned Swaziland Pay Roll and Skills Audit (SPRSA) review process that a skills data collection exercise has been engaged into (and the relevance of those skills to the duties assigned). Not with standing that, the skills tenable to the officers of the division have not been reviewed, linked and/or synchronised to the mandate of the division. This study therefore, aims to cover the gap between the wage bill, the tools and techniques used to

manage the aforementioned and the prerequisite skills required for the application of the latter. An understanding of the causal effect of the techniques as applied on the wage bill will be elaborated on. To a much larger extent, the wage bill push factors that should have been curtailed, mitigated and/or eliminated by the adoption and application of the Lean Service Principle by MSD will be discussed. Furthermore, defects and gaps in the implementation of the Lean Service Principles and JIT technique will be identified.

This study will assist the MSD to identify if required, the relevant techniques for the determination and forecasting of required staff compliment, progression planning and effective human resources planning. This will be done in cognisance of the prevailing government fiscal conditions and levels of customer satisfaction, essential to create customer value and value for taxes as paid by the citizenry.

1.5. Research Objectives

The objectives of the study are:

- To assess the effectiveness of the Lean Service Principle on the control and maintenance of the wage bill.
- To identify wage bill push-factors that should have been curtailed and mitigated by the adoption and application of the Service Principle at the MSD in Swaziland.
- To assess the main wage bill push-factors that are causing the continued increase in the public sector wage bill.
- To identify defects and sever gaps in the implementation of the Lean Service Principle and JIT techniques by MSD.

1.6. Scope of the Study

The study was limited to only one of the three Central Agencies namely the MoPS excluding the Ministry of Finance (MoF) and Ministry of Economic Planning and Development (MoEPD). The study investigated the wage bill push-factors but did not investigated the major components of the wage bill costs i.e. salaries or allowances. The research did not investigate the MSD's other objectives such as, process reengineering, systems improvements and motivation for service delivery. The study did not have accesses to Cabinet documents to gain documented information on its perception of MSD's performance, which informed their view that it should

be disband. There was also no access granted to the study on the cost of the army's wage bill, as this information was not readily published.

1.7. Definition of Terms

Wage Bill: Constitute, annual cost of living adjustments coupled with the additional costs of promotion and job regrading; the increase in employee head-count (creation of posts); the introduction of the occupation-specific dispensation (categorised recruitment and retention benefits) (Madubula & Dawood, 2011).

Lean Service Principle: A standardisable system of service operations made up only by activities that generate value for customers, focusing on explicit tangibles and aiming to meet the customers' expectations for quality and price (Kanakana, 2013).

Just-In-Time technique (JIT): JIT as a philosophy is designed to eliminate waste from the production/value system so as to create customer satisfaction. This is a tool that is designed to address reduced lead time in customer satisfaction that results from any equipment, parts, production processes, inventory and employee's time that does not add value to the service rendered to the customer (Camel, Rosen, & Anderson, 2000).

Human Resources Forecasting and Planning techniques: these are techniques used by organisations to pre-plan personnel requirements for the achievement of organisational goals, sales forecast and natural attrition (Bulmash, 2015).

1.8. Chapter outline

Chapter one contains the introduction, background to the study, research problem, significance of the study, research objectives, scope of the study and definition of terms.

Chapter two contains literature on New Public Management, Structural Adjustment Programmes, Lean Service Principle, JIT techniques, general impact of the wage bill on Sub-Saharan Africa and the impact of the wage bill on the GoS.

Chapter three contains the research methodology which has subtopics such as research design population of the study, sampling design, data collection procedure, data analysis procedure and research ethics.

Chapter four contains the results and findings of the study and has subtopics such as Establishment Register data analysis, annual revenue and expenditure data analysis, Swaziland Pay Roll and Skills Audit data analysis, MSD questionnaire data analysis and Lean Service and JIT technique and PSMP data analysis.

Chapter five presents the conclusions and recommendations.

1.9.Chapter Summary

This research will investigate and add knowledge to the wage bill push-factors and why the tools and techniques that have been utilized by MSD have not curtailed the increase of the wage bill. However, the research will not investigate which components of the wage bill are the highest but will merely concentrate on the success of MSD on this wage bill mandate without specifying the other objectives of the division. A knowledge gap has been that there has never been a specific study into the impact of the division in wage bill control and management.

CHAPTER 2 - LITERATURE REVIEW

2.1. Introduction

This chapter provides documented information on the New Public Management (NPM) theory Lean Service Principle and JIT technique. Selected data from Sub-Saharan Africa and the impact of the wage on Swaziland is also presented.

2.2. New Public Management Paradigm and Structural Adjustment Programmes

The core paradigm which can be distinguished as influential in the development of Public Sector Reforms or Structural Adjustment Programmes (SAP) in the 1980s and 1990s (as initiated by the World Bank) emanated from the notion that the public sector was inefficient and often ineffective. This then led neither to cost containment nor to quality improvement of the citizenry's lives. With the problems so defined, the paradigm extended to a belief that the public and private sectors did not have to be organised and managed in fundamentally different ways (Economic Commission of Africa, 2015).

The SAP is defined by Corbo & Fisher (1995, as cited by Zawalinska, 2004, p.5) as "a process of market-oriented reform in policies and institutions, with the goals of restoring a sustainable balance of payments, reducing inflation, and creating the conditions for sustainable growth in per capital income". Zawalinska (2004) also hypothesises that economies going through the stages of development were forced to adopt the SAP under the rationale that the programme would remove government failures. These failures manifested themselves over the socialistic period through various economic imbalances and deficiencies. This paradigm shift gave birth to the concept of NPM.

"The dominant theme of NPM is the use of market techniques to improve the performance of the public sector. The main features of NPM include performance management, e-governance, contracting out and outsourcing, decentralisation and accountability among others" as defined by Mervis (2014, p.1). Furthermore, the author observes that NPM is commonly associated with the SAP which were initiated in the mid-1980s with the support of the Bretton Woods Institutions.

These reforms introduced a new public administration paradigm and micro economic policy framework. Their main aim was reducing the role of the state in both production and the delivery of services, as well as the deregulation of public enterprises Mervis (2014). This has been commonly coined by Osborne and Gebler as rolling back the frontiers of government in their ground break publication “The Machine that changed the World”.

In line with NPM, SAP were similar in that they too started with conventional stabilisation programmes, restoring the current account and fiscal balances. This usually required a reduction in public sector deficit (usually by cutting public expenditures on salaries and the head-count, as these were seen as an unnecessary recurrent expenditure at the cost of development) and reduction of monetary financing of the government spending which used to cause inflation.

The main doctrines of NPM are argued by Hope (2001, p.120) to have been categorised as follows:

- The adoption of private sector management practices in the public sector;
- An emphasis on efficiency;
- A movement away from input controls, rules, and procedures toward output measurement and performance targets;
- A preference for private ownership, contestable provision, and contracting out of public services; and
- The devolution of management control with improved reporting and monitoring mechanisms.

The focus of the NPM as a principle that witnessed major successes for New-Zealand, Australian and British Governments, as a philosophy therefore, was based on creating efficient public sector institutions and organisations. This was believed would transpose what is seen as critical aspects of private sector modes of organising and managing on to the public sector. This would create productivity and service delivery vis-a-via the value for money (taxes) principle.

However, there are a number of political and socio-economic policies that were adopted by many African countries (including Swaziland) that resulted in the need for the rapid expansion of the civil service as a government machinery for the delivery of services. The expansion of the civil service was also viewed by many governments as a reaffirmation of their drive and devotion to service delivery and in many cases as a means for job creation, as much of those countries private

sectors had not been well developed. These political and socio-economic policies were not in the spirit of the NPM.

2.3. Lean Service Principle and JIT technique

The application of the philosophy of Lean Service and JIT is transposed from the manufacturing sector and perfected by Toyota through its Toyota Production System (TPS) in the early 1950's. These philosophies have been pursued in an attempt to curb the ever increasing civil sector, as Madubula & Dawood (2011, p.15) rightly observe that "the public sector wage bill has consistently constituted as the largest component of the government's recurrent expenditure. Reasons for this are varied: annual cost of living adjustments coupled with promotion and job regrading, poor internal controls in wage bill monitoring, appointments made without proper planning and budgeting and poor organisational design (e.g. strategic plans not aligned with organogram)".

Camel, Rosen, & Anderson (2000) and Duclos, Siha, & Lummus (1994) all agree that the JIT technique is designed to eliminate waste from the production/value system so as to create customer satisfaction. This is a tool that is designed to address reduced lead time in customer satisfaction that results from any equipment, parts, production processes, inventory and employee's time that does not add value to the service rendered to the customer. However, organisations should be careful not to associate this technique only with cost reduction in the production/service processes but must appreciate that the customer's satisfaction is the ultimate goal of JIT.

The JIT concept is summarised by Benson (1986 as cited by Duclos et al, 1994, p.4), as:

- Total visibility – of equipment, people, material and processes;
- Synchronisation and balance – of production to sales and supply to production;
- Respect for people – frontline employees are responsible for production/services,
- Problem solving and improvement;
- Flexibility – adapt service/production to customer needs;
- Continuous improvement (Kaizen principle)– never satisfied with the process;
- Responsibility for the operation's environment – those who design;
- Manage and operate the processes are responsible for the outcome;

- Holistic approach (Total Quality Management (TQM)) – company-wide philosophy of elimination of waste.

As much as these themes are customised for the manufacturing floor, it has been argued and observed that with the required adjustments they can be transferred on to the service sector therefore resulting in “Lean Service”. The Lean manufacturing philosophy, strongly disseminated by Taiichi Ohno, is based on principles that guide “Lean thinking”. According to Womack & Jones (2003, as cited by Leite & Viena, 2013, p.15), “the principles of Lean manufacturing are five, namely: value specification, value stream mapping, flow optimisation, pull production system and perfection or continuous improvement”.

The most notable measures of the success of Lean Service Principle that have also been seen as a proper benchmark, is improved lead time in the delivery of services to customers, standardisation of the performance of a particular task, adequate performance of tasks and multi skilled personnel. Clear estimation of the requirements of equipment and machinery required to perform a task and estimation of cost per units, for the provision of a service or product are also notable measures.

Lauoie (2014, p.2) in her clarification of the similarities of Lean Service as a paradigm and its usefulness to the service sector particularly the public service, discerns that the most critical aspects of a successful Lean implementation are “organisational readiness, leadership, management commitment, workforce engagement and open communication”. The author also states that public organisations' rigid structure and top-down finance and policy driven culture make them “more inclined to use Lean to gain internal efficiency, rather than to increase end-user value” (2014, p.4).

Applications of Lean Service in public settings only use specific tools of the methodology (which may translate to partial adoption of the Lean Service Principle), as a short-term targeted approach, rather than seeing it as a continuous improvement philosophy that focuses on long-term perfection of operational excellence.

Nascimento & Francischini (2004, as cited by Leite & Viena, 2013, p.3), defined Lean Service as “a standardisable system of service operations made up only by activities that generate value for customers, focusing on explicit tangibles and aiming to meet the customers’ expectations for

quality and price”. In addition to this view Kanakana (2013, p.9) is of the opinion that “government cannot only rely on the number of civil servants in their payroll, but must also strive for excellence”. In doing so, the author also advances the use of Lean as a tool kit for service sector effectiveness and efficiency. This is mainly because most governments are the single biggest employer, especially so in the African context and Sub-Saharan Africa in particular, where it has been noted that of the largest contributions to the GDP is from the public sector.

Business Process Reengineering (BPR) has been considered as another productivity methodology, which is hoped would also address the wage bill equation. Zigiari (2000, p.1) argues that “Business Process Reengineering involves changes in structures and in processes within the business environment. The entire technological, human, and organisational dimensions may be changed in BPR”. Clearly BPR is another systems improvement tool kit that only requires a change in the human mindset in the implementation of changed organisational processes, procedures and systems.

To demonstrate that BPR is relatively new phenomenon and is not a staff complement reduction tool Kassahun (2012, p.18) positions that “the adoption of BPR in the public sector in general, and in the public sectors of developing economies in particular, is a relatively recent and little researched phenomenon”. The concept of NPM and public sector pressure for administration efficiency, transparency, good governance, accountability and e-Government are making BPR appealing to the public sector.

To amplify this, reengineering is considered a rethink and/or redesign of organisational processes to achieve dramatic improvements in critical contemporary measures of performance such as cost, quality, service and speed. The main objective of BPR is a “cultural model” Zigiari (2000, p.20), which implies an organisational culture change in redesigning the business. This aspect clearly links the model to Lean as they both require organisational change to introduce new processes and systems reconfiguration to create customer value. The change has to cascade from management (and must have support of management) to the lowest level of the organisation, so as to ensure appropriate implementation of any required organisational change. Based on this it can also be concluded that these tools are change management tools that enter the human resource function purely from an employee engagement perspective so as to have them implement the required organisational variations.

Returning to the main principles of Lean as a doctrine Lauoie (2014), Kanakana (2013) and Camel et al (2000) all agree on the principle as follows; Lean can be summarised as a customer centric approach to process improvement that focuses on the elimination of waste, waste being whatever does not bring value to the customer. Lean is a process improvement methodology relying on a set of tools and techniques used to do more with less. Lean seeks to 'design out' overburden (muri), inconsistency (mura), and waste (muda) in operational processes.

There are five principles of Lean Service that Lauoie (2014), Kanakana (2013) and Camel et al (2000) settle on:

- Value: What does the customer value? What value is created in the operational process?
- Value streams: Where is the value created for each product or service? What wasted steps can be eliminated?
- Flow: Create a continuous flow in the processes by introducing cross-functional thinking.
- Pull: Produce what is needed by the customer.
- Perfect: Employees should perform their tasks accurately the first time round.

Lean Service navigates through the improvement process using various tools, focusing on what customers value and what constitutes waste from their point of view. Value creation happens when value-adding activities are increased without raising the cost of the product or service, or when that cost can be reduced through waste elimination Radnor & Osborne (2013, as cited by Lauoie, 2014). Worth noting again is that Lauoie (2014), Kanakana (2013) and Camel et al (2000) establishes that these principles as listed above, are channelled towards organisational cost reduction, increased competitiveness, redistribution of resources (but not necessarily redistribution from the wage bill to production), and a better understanding of customer value.

Lean Service as discussed is principally for the reduction of muda, mura and muri. These three production obstacles are defined by Pienkowski (2014, p.8) as "Muda, refers to waste or redundant activities". This type of waste is characterised by using time, money and resources, while not adding any value to the customer. "Muri" is associated with waste of overloading equipment, facility or people resources beyond its capacity. The overload puts employees and machines into needless stress, reducing their ability to perform. While "Mura" refers to waste of unevenness in production volume. It may take two different forms:

- Variation in production scheduling, and

- Uneven production workload and pace of work.

Quite evidently this technique in the production process involves the human component in attempts to ensure that it is utilised cost effectively and efficiently. It seeks to ensure that any movements and decisions by the personnel component results in value creation for the customer in that the final product must meet customer expectations. It's central premise is channelling the efforts of the employee into adopting to the changed and/or redesigned work methodology by involving them in the process. This is also one of the key components of the principles of JIT techniques.

The main pillars of the JIT technique have been indicated previously in this chapter, and they are in brief as follows: Synchronisation and balance which is the creation of harmony between the business processes and customer expectations in the elimination of inventory. Total visibility of all components of the process, which emphasises that all components of the processes employed to produce a good or service should be visible to those participating in the process. Furthermore, continuous improvement of the process such that organisations must instil the habit of expecting continuous small improvements in the process over time and never accepting that a production process is perfect. A holistic approach to the elimination of waste such that every section within the organisation is fully committed to the improved production line. And finally, flexibility in the use of resources i.e. firms should have the ability to change processes rapidly to meet customer demands without wasting resources. Most importantly, the organisation should have respect for the opinions of the employees in value creation and that of the customer who pays for the product or service.

As a doctrine, JIT is a TQM tool that guarantees that systems are configured accurately to produces goods and services that meet customer satisfaction and do not deviate from the production systems calibrations. TQM stresses that quality is an organisational effort. It facilitates the solving of quality problems and also places great emphasis on teamwork. Using techniques such as brainstorming, discussion, and quality control tools, teams work regularly to correct problems.

Within the service sector, JIT is applicable in the rendering of a service and therefore it has been noted to be an intangible item. To this end, Camel et al (2000, p.3) are of the view that "JIT is more relevant in the service sector with regards to the process of delivering the service such that

it adds value to the customer". Any activity in the rendering of the service that creates waste either in monetary terms, time, personnel must be reviewed with the intention to establish an alternative with the service process. This requires simplification of the process, thus minimal inventory. However, it has been argued that elimination of inventory in the service sector is difficult as many of the services provided are based on readily available items to quickly meet the customers' needs e.g. forms, customer service agents etc.

It is noted that there is little literature on the success of JIT in the service sector as it is still a doctrine under study in service sector context. However, its applicability has not been questioned as its pillars as discussed are not readily relevant to the provision of a service. One notable relevance especially in the provision of government services is the lay out of the work area. This requires that employees whose work is interrelated be placed in close proximity to each other. This facilitates better information flows and improves turn-around times Duclos et al (1994). This is particularly important within the civil service in Africa as it has been blamed of being bottle necked.

From the Lean paradigm has emerged the Lean-Six Sigma as a combination of an engineering process variation or defect reduction tool and the generic Lean principle that seeks to reduce waste. This tool seeks to ensure a mathematical process in production yet eliminating waste at the same time. Abdern Group (2013, p.1) in its attempts to quantify the newly emerged tool kit argues that "Six Sigma is an integrated, disciplined approach reducing defects and producing measurable financial results". The authors also note that with its roots in statistical engineering, the Six Sigma concept embodies a data driven methodology focused on driving down process variation so that no more than 3.4 defects are produced per million opportunities. It has long been associated with Lean Manufacturing.

While Lean Serves is used to eliminate waste, Six Sigma reduces process variability in striving for perfection. Lean Six Sigma has emerged most recently as organisations strive to meet the quality objectives defined by their customers. It combines the principles of Lean with the best practices of Six Sigma. The result is a methodology that serves to improve processes, eliminate product or process defects and to reduce cycle times and accelerate processes.

2.4. General Impact of the Wage Bill on other Sub-Saharan African Countries

It has been noted that “many government wage bills tend to siphon off much needed financial resources for the delivery of core government services to the populace”, National Treasury, (2010, as cited by Madubula & Dawood, 2011, p.17). To demonstrate this further, Okech & Lelegwe (2015) noted that in Kenya, the maintenance of a huge wage bill as component of recurrent expenditure, domestic resources funding development is likely to be overcrowded. Available statistics show that the Kenyan government funding for development declined from a high of 7% of GDP in 2011/12 financial year to 5% in 2014/15 financial year. This decline was experienced despite the overall expenditure increment from 29% to 33% over the same period. Furthermore, in Kenya, there has been a steady increase in the share of revenue allocated to payment of salaries and wages of civil servants, which is expected to have negative impact on allocation towards development expenditures. For instance, the Kenyan wage bill was 47% in 2009/10; it increased to 48% and 55% in 2011/12, and 2012/13, respectively. These percentages are way above the internationally desirable level of 35% (Okech & Lelegwe, 2015).

Okech & Lelegwe (2015, p.6) also advance that “an enormous wage bill may contribute towards crowding out resources that could be used in other development priorities such as social and infrastructure development needed for long term growth and development”. Economically this translates to large fiscal deficits with macroeconomic instability in terms of inflation which may lead to wage-price spiral and exchange rate impact. Also, unsustainable public debt arising from high wage bill may lead to refinancing (from foreign lenders) and create sovereign risks. Furthermore, many African countries may have to borrow from international lenders which might place political reforms as a prerequisite to lending. A huge wage bill strains government budget and denies the economy of the much needed resources for socio-economic development such as infrastructure and social services like health and education.

Poverty Reduction and Economic Management Unit (2010, p.1) notes that in Zimbabwe, there is a relatively high share of the wage bill that is projected at 13% of GDP (which translates to 45% of total national revenue). This high share of the national budget is contended to be cutting into the budget allocation for non-wage operational expenditure in the social sector as well as critical capital expenditure.

To further give impetus to the negative effects of a huge wage bill, the Poverty Reduction and Economic Management Unit (2010) notes that in the context of Zimbabwe the high wage bill has cut into the budget for non-wage operational expenditure as well as capital expenditure. This has resulted in high fiscal deficit, mainly as a determinate from the prevailing political discourse. This leads to an inflexible public expenditure pattern, thus requirement for employment opportunity adjustment which is a short-term solution. "It also has the propensity in the long-term to convert Zimbabwe into a welfare state as the populace will not be in a position to afford their livelihood, therefore the government must establish relevant social security programmes" (Economic Commission of Africa, 2010, p.7).

2.5. Impact of the Wage Bill on the GoS

MoPS (1999) categorically states that the public service wage bill has continued to rise in recent years, out-pacing the growth of government revenue. The personnel budget is still the largest single recurrent expenditure item in the budget. The underlying problem of high public sector personnel costs continues to be felt in the economy.

In relation to the GoS wage bill the World Bank, (2010, p.1) concludes that "the gaping fiscal deficit of about 15% of GDP in 2010/11, and the difficulty in securing the requisite financing has precipitated the need for a rapid intervention in curtailing the wage bill". The irreversible reduction of the SACU revenue base is being addressed by earnest efforts to boost non-SACU revenue that will have an impact in the medium term, thus shifting the emphasis for expenditure restraint on an orderly roll-back of the wage bill. Moreover, a thoughtful resizing of the civil service is likely to facilitate private sector-led growth, since its expansion has most likely come at the expense of the private sector. It is the expansion of the private sector that must be counted on in the long term to sustain the government's expenditure plans.

There are clear indications from the preceding statement that GoS revenue generation is not sufficient for the ever increasing wage bill. Such a scenario is peculiar and unsustainable and it is for this reason that GoS investments into other sectors of the economy have been disadvantaged and capital development projects stretched beyond their projected completion dates.

In attempts to curb the ballooning personnel expenditure and increasing civil service the GoS through Establishment Circular No.8 of 1971 after the adoption of the Chief Udoji commission that was tasked to review the training and localisation of the Swaziland Civil Service established the MSD under the then Prime Minister's Office. The MSD mandate is to assist in the finding of solutions to problems encountered by Principal Secretaries (PS) of Ministries and Heads of Department (HoD's) in terms of productivity, lack of motivation, organisation development, staffing levels, quality of staff, job grading, and systems and procedures reconfiguration. In carrying out this mandate, MSD is to be guided by the Government's policy of having a right sized and efficient public service also known as "leaner and more efficient civil service" (GoS, 2017, p.3).

GoS (2016, p.91) concedes that "a number of studies have revealed that the size of the public sector in Swaziland is bloated when compared to other countries at the same stage of development". It furthermore states that, over the years, there has been a steady increase in the number of government departments and ministries. There is general over-staffing in government ministries/departments. In support of the forgoing the IMF (2015, p.3) postulates that in "2015 Swaziland had the fourth largest wage bill in Africa at 14% of GDP and the highest within the Southern African Development Community (SADC). This has been attributed to the total increase in the number of civil service posts (head count) and not necessarily the increase in real wages and allowances".

The Swaziland economy has been directly impacted by the increased wage bill as a result of the April 2016 implemented Salary Review as commissioned by Government. Worth noting is that the last salary review was implemented in 2004. However, there is an agreement between Government and Public Sector Associations to the effect that there shall be a salary review every five years and an annual cost of living adjustment. Kariaki & Kannan (2017, p.4) made the following observations, "The GoS fiscal stance is affected by continued dependence on volatile SACU revenues and increased government spending. The fiscal outturn in 2015/16 financial year was a budget deficit of 5% of GDP, above the initial estimate of 3%. This mainly reflected the passing of a supplementary budget of E1.7 billion (4% of GDP). Revenues were 0.2% below target mainly due to a decline in SACU receipts of 7% from the previous year, although they remained substantial accounting for 47% of total revenues"

The foregoing is in contrast with the impressive economic growth witnessed in the late 1980's and early 1990's. However, this was outwitted by the growth of the civil service, which to date has not witnessed any significant decrease. It currently stands at 40 746 established posts (without factoring in the Army) an increase of 8 789 (22%) posts from 2008 at the beginning of the global financial crises when established posts stood at 31 957 (without factoring in the Army) (GoS, 2017).

Furthermore, Kariaki & Kannan (2017, p.5) predicted that due to the "implemented salary review the 2016/17 budget mid-year results indicate the emergence of a fiscal crunch mainly due to a significant 25% decline in SACU revenues. Estimates show a significant worsening to a deficit of 12% of GDP (E6.8 billion)". The budget provided for an expansion in government spending, particularly regarding capital outlays, in an attempt to boost real GDP growth. However, the major budget pressure emanated from the civil service wage bill, which is estimated to have increased significantly after the salary review implemented in July 2016 (and backdated to April 2016), which proposed pay rises ranging from 17% to 38% for the lowest paid cadres. The salary increase is projected to cost E850 million (about 2% of GDP) against the budgeted amount of E500 million, such that the wage bill in the 2016/17 financial year is estimated to have increased to about 47% of recurrent expenditure.

In view of these circumstances, financing the deficit proved challenging. Most of the financing was covered by domestic borrowing. However, meeting such a large shortfall from the local financial system is complicated by the nascent domestic capital market and the relatively liquid domestic banking sector. As a result, the government has accumulated payment arrears that it plans to settle, one-on-one, with suppliers (Kariaki & Kannan, 2017).

It is from these statistics that one can fully grasp the impact of the huge wage bill, which is above the World Bank and IMF recommended 10% of GDP. It is however noted that this scenario is not peculiar to Swaziland but other African countries such as Zimbabwe, Kenya and Lesotho, with Swaziland having the highest in the SACU. The huge wage bill is the bases of this research study. Added impetus to the wage bill concern is given by the IMF as it notes in its 2015 assessment report on Swaziland, that the country needs rigorous fiscal discipline and debt management to ensure social development, because the gains from the 2014/15 financial year reserves strengthening are not sustainable at the country's current recurrent expenditure (wage bill being the highest) rate (IMF, 2015).

Related to the requirement for fiscal discipline, the IMF hypothesise that Swaziland's civil servant per head income is high and will continue to rise. They far exceed nominal GDP per capita indications; this data is for the period 2012-2014 and does not factor in the rise in the civil service wages as per the Salary Review implemented in April 2016. The Fund argues that this results in the country having the fifth highest compensation per employee in Africa after Lesotho, Zimbabwe, Namibia and Botswana. The Fund suggests that this is an important contributor to the country's huge wage bill coupled with the high head count (IMF, 2015).

To address the huge civil services, African governments have resolved more often than not to economise their civil service. This has notably been under the disguise that the civil service is "over extended" and "bloated", as a result of the colonial era that left many African countries underdeveloped. The governments that came into power after independence then established huge civil services. Swaziland under the auspices of the Public Sector Management Programme (PSMP) identified economising of the civil service as a strategy. To this end, the PSMP proposed the Enhanced Voluntary Early Retirement Scheme (EVERS) formerly Voluntary Early Retirement Scheme in 2006. This scheme was meant to motivate employees who had reached the age of 55 and had served the government for more than ten years to exit and thus reducing its head count and wage bill. Markedly, EVERS was met with political resistance and to-date never implemented.

2.6. MSD work methodology

The World Bank (2001, p.1) in its study on African countries establishment control and pay structure, denotes the methodology used by Swaziland perfectly as it presents its findings as follows; "departmental organisational structures are agreed with the central personnel office or its equivalent (in Swaziland this is the MoPS) and with the MoF. Approval is then given to a hierarchical staff structure and complement for each department (by MSD which is responsible for establishment determination), expressed in terms of authorised positions, each with a designated grade level. This constitutes an establishment list (establishment register produced by MSD), and is the basis for both budget making and personnel recruitment and promotion". The MoF prepares the budget following confirmation by the MoPS that spending proposals are consistent with the agreed establishment and directly with line departments mandates to ensure

that sufficient resources (and no more) are budgeted for the department's approved establishment.

In using this methodology, the distinction between established and non-established positions is fundamental. Ministries/Departments may fill established positions that are vacant through the Civil Service Commission (CSC) that is responsible for recruitment, promotions, transfers, placements and discipline within the civil service, but may not add positions to the establishment. Departments that wish to increase their establishments apply to the MoPS, and the latter then assesses the increased workload or the implications of a new policy mandate, and adjusts the department's establishment accordingly. This is done in application of the Lean Service Principle and JIT techniques by the MSD, with the determined establishment consulted upon with the MoF for budget support.

Cameron (1994) presents downsizing as an organisational methodology that is not only specific to the reduction of employees but also includes cost saving and re-inventing work processes. The author further indicates that downsizing is placed around four pillars namely; intent, personnel, efficiency and work processes. It is an intentional process that is not normally affected by market share, price fluctuation and/or high staff turn-over. The reduction in personnel can take many formats, with the most commonly used being transfers, outplacements, voluntary early retirement, employee buyouts, layoffs (as agreed with labour unions) and natural attrition. These processes may lead to organisational efficiency which is aimed at cost reduction, enhanced revenue creation and to bolster competitive advantage (i.e. quality or cost). The drive for efficiency is customarily seen as a proactive strategy to enhance organisational performance. The final pillar is re-invention of work processes which is in line with Lean and JIT as discussed in this chapter.

Rao (2013, p.8) agrees that downsizing has been a "preoccupation of many governments that conform to the Weberian theory of government" which the author notes is a structural alignment of functions and responsibilities. He also links civil service reforms to NPM and its tenets. He contends that employment reduction mechanisms such as voluntary departure, early retirement, retraining, redeployment, credit and assigning public works programmes for redundant employees, cost of living salary supplements, attempts to make wages more equitable, and the pay system more efficient are apparatuses used to either maintain current civil service establishment and/or in the long-term reduce the payroll.

2.7. Chapter Summary

This chapter has provided insight into the theory and benefits of Lean Service Principle as well as the JIT technique. An overview of the establishment and mandate giving studies of MSD has also been presented. Key achievements from countries in SSA have further been reviewed, with the understanding that there have been mixed results as to the said achievements. The most notable use of the tools discussed in this chapter has been process improvement, waste reduction and customer value creation. A clear gap therefore exists in how useful the tools are in the reduction of established positions in a production line, especially in the context of SSA.

3.1. Introduction

The study used a mixed method data analysis approach. This method is the use of both quantitative and qualitative forms of data which can be presented using any of the four scales of measurement namely; nominal, ordinary, interval and ratio. Terrell (2012, p.1) reviews mixed-method studies to have “emerged from the paradigm wars between qualitative and quantitative research approaches to become a widely used mode of inquiry”. Depending on choices made across the four scales of measurement, mixed-method can provide an investigator with many design choices which involve a range of sequential and concurrent strategies. Defining features of these designs are reported along with quality control methods and ethical concerns (Kumar, 2011).

The use of both quantitative and qualitative research methods enables the researcher to minimise on each of the methodologies shortcomings, yet creating a variety of data to enable analysis and categorisation using the scales of measurement and creative representation of the data. This is also made possible because this research is categorised as a survey to which the most popular mode of data collection is the distribution of questionnaires to a sample from a sizable population in a highly economical way (Saunders, Lewis , & Thornhill, 2007).

3.2. Research Design

“A research design is a plan, structure and strategy of investigation used to obtain answers to research questions or problems. The plan is the complete scheme or programme of the research. It is an outline of what the investigator will do from diagnosing the research problem to the final analysis of data” (Kumar, 2011, p.95).

This study used the quantitative research approach to collect data on amounts spent on wages, percentage increase of the wage bill for the period 2010-2017 and percentage increase in the number of civil servants as per the Establishment Registers, 2010-2017. Monthly Wage Bill Trend Analysis Reports produced by MoPS for the period 2010-2017 were also reviewed. The Swaziland Public Service Payroll and Skills Audit Report 2015, Annual Revenue Estimates Reports 2014-2017, Lean Service Principle and JIT Technique Studies were also analysed.

Qualitative data was collected from the target population using semi-structured questionnaires. From the quantitative method, perceptions and reasoning behind the observed wage bill increment and applicability of the tools and techniques used and the impact of the recurrent budget on the capital project and social services budget vis-a-via revenue generation were collected.

The documents that were reviewed are listed below:

- Monthly Wage Bill Trend Analysis Reports 2010-2017
- Public Sector Management Programme (PSMP) Report
- Swaziland Payroll and Skills Audit (SPRSA) Report 2015,
- Establishment Registers 2010-2017,
- Annual Revenue Estimates Reports 2014-2017, and
- Lean Service Principle and JIT technique studies

3.3. Population

The population for this study was the 40 technical officers employed by the MSD. The officers under the MSD are categorised by a five tier-hierarchy: the Directorship, Principal Management Analysts (PMA), Senior Management Analyst (SMA), Management Analyst (MA) and the entry level being Assistant Management Analyst (AMA). The indicated hierarchy is mainly based on promotion from one level to another, once an officer is trained on the prerequisite qualifications accompanied by the relevant years of experience. These officers are tasked with implementing the Lean Service techniques on wage bill so as to manage and control it. A population is a set of all elements of interest in a particular study. For this study the population has been identified based on the mandate assigned to the respective departments and their role in the establishment of posts and budgetary support for the established posts in terms of wages.

3.4. Sample Design

A sample is a subset of a population. For the purpose of this study random sampling and probability sampling were used. Probability sampling was then utilised to determine respondents. The following formula was used to determine the sample size.

n=Sample size

N= Population

$(1+N(e^2)) = \text{margin of error (5\%)}$

MSD Sample Size Calculation

$n = N / (1+N(e^2))$

$40 / ((40 * 0,0025) + 1)$

$40 / (0,16 + 1)$

$40 / 1,16 = 34 \text{ respondents}$

Sampling is used to make inference on a population which shares the same characteristics as the latter. From the 40 technical staff of MSD all shall be given the questionnaire so as to ensure that the sample size of 34 respondents is reached. This is done in anticipation of the fact that the response rate may not be 34 respondents due to a variety of reasons.

3.5. Data Collection Procedure

Data was collected through semi-structured questionnaires and interviews with the 40 officers under the MSD. The questionnaires were distributed to all 40 officers. This was done so as to establish what the wage bill push-factors are and whether the Lean Service Principle as applied was having notable impact on the control of the wage bill, this provided qualitative information from the subject-matter specialist. The positions of the 40 officers that were interviewed within the MSD hierarchy ranged from Assistant Management Analyst (AMA), Management Analyst (MA), Senior Management Analyst (SMA), Deputy Director (DD) and Director.

The use of a questionnaire is justified since the educational level of the respondents is undergraduate degree. The use of interviews enabled the research to cross reference answers and respond to respondents questions. The semi-structured questionnaire were enable respondents to answer questions at their own convenience, as it is appreciated by this research that the respondents are employees and may not at the convenience of the researcher have time to engage in an interview. However, to reduce the low response rate of questionnaires, it is noted that the respondents are colleagues to the researcher, therefore making follow-ups was easier.

In order to avoid “subject or participant bias, observer error and observer bias” Saunders, Lewis, & Thornhill (2007, p.149) note that the respondents have no know reason to fear providing responses as this is a purely academic research and will not be shared with any individual in an authority position within MoPS and MSD. Furthermore, the research is conducted by a single researcher and therefore interpretation is based on the acumen of that single researcher. Lastly there were no observations of the respondents as the questionnaire are self-administered at the convenience of the respondent.

The researcher wrote a letter to the Principal Secretaries for both MoPS and MoF. Structured questioners were distributed to the sample population. Interviews were scheduled, conducted and recorded with the knowledge of the respondents. Officers that were given self-administered questioners were requested to submit within a specified time frame. All this was done when the Consent Letter from the University of Namibia had been forwarded to the Researcher, thus giving indication that the study was purely for academic purposes.

3.6. Data Analysis Procedure

Trend analysis was be used in the review of the Recurrent Wage Bill Expenditure Report and Annual Revenue Estimates Reports. Trend analysis enables researchers to determine patterns of increment or decline of a set of variables of an extended period of time. For this research wage bill trends, revenue and capital expenditure spanning from 2010 to 2017 were used, as this is the most accurate data within government database that was accessible. The data was retrieved from the MoF Budget Estimates spanning from the time period indicated and MoPS Recurrent Wage Bill Expenditure Reports. It was believed that through the use of trend analysis future patterns of the civil service wage bill would be estimated based on past expenditure. The data has been presented in both graphical and linear pattern formats for ease of analysis.

The SPRSA report 2015 was reviewed to identify MSD qualifications. This is a comprehensive document that was commissioned by the Government in 2014, and contains the payroll system data (established posts payments), skills and qualifications of more than 30 000 civil servants that were interviewed. It was commissioned after the GoS requested a Staff Monitoring Program from the IMF, and the IMF was of the view that within the civil service there is a likelihood of the existence of “ghost workers”, of which would explain the huge wage bill. It is believed that this data is the most current as there has not been an updated version of the report. Above and

beyond this report the officers will be cross-examined on their qualifications so as to provide a comprehensive understanding of their qualifications.

3.7. Research Ethics

Jones & Bartlett Learning Institute (2013, p.1) define ethics as “the researchers ability to know what is morally and legally right in the conduct of research”. They add that this requires the Researcher to be knowledgeable about what is being done; to use reasoning when making decisions; to be both truthful and intellectual in approach and reporting; and to consider the consequences, and be convisent that the results of the research study should not outweigh any negative impact on participants in particular and society at large. To this end the researchers’ ethical beliefs should not compromise data collection.

The University of Glosgow (2008) emphatically notes that it is the responsibility of the **researcher to uphold the highest level of ethics in he’s or her interaction with research subjects.** This statement has been informed by recent development within varies research field in which research participants have either had their privacy and/or dignity compromised, all in the name research.

The university places ethics doctrine on the principles of an informed participant; wherein no individual should be subject to a research without prior consent of that respondent. Confidentiality and anonymity must be a prerequisite for any research and as such should this not be fully guaranteed respondents must be informed of same. Furthermore, researchers are advised to be fully aware of the imbalance that emanates from the researcher and researched individuals, so as to take note of this imbalance and not cross the ethical threshold. Lastly the institution advises against deceptive or covert behaviour from Researchers. To this end researchers are advised to seek prior permission to engage in any form of covert research.

All participants were informed of the objectives of the study. Confidentiality was observed. Participation of the respondents into the study is voluntary. A consent letter was signed by respondents. Data collected will be kept securely for a period of five years and then it shall be destroyed. Data will be kept in a safe drawer in the office of the researcher and be destroyed after 5 years. The researcher is the only one who will have access to the data.

3.8. Chapter Summary

This chapter has clearly indicated the manner in which a sample was achieved from the staff members of MSD. Emphasis has been placed on the 40 technical officers of the division that are tasked with the application of Lean Service Principle. These techniques are utilised in an attempt to manage and control the wage bill. Data collection was through the use of semi-structured questionnaires that were self-administered by the respondents. There have been ethical considerations that have been adopted not only to protect the respondents but to ensure that the research itself meets the required ethical benchmarks. Issues of data validity and reliability have also been considered.

4.1 Introduction

This section presents data collected and analysed from the sources as discussed in this study. The main aim of this section is to present a picture of the state of the GoS civil service wage bill and the trend that has been observed over a seven year period, the state of established positions and their vacancy rate, the application of Lean Service Principle within the service sector and successful implementation. This was then transposed onto the context of Swaziland in-line with the study area so as to respond to the objectives of this research.

4.2. Establishment Register Data Analysis

Data collected from the Establishment Register 2010/11 and Establishment Register 2016/17, as depicted below, indicates that the Ministry of Education and Training (MoET) has the highest number of established posts. As of the 2016/17 financial year they stood at 16 951 as compared to 14 772 during the 2010/11 financial year, this is an increase of 2 179 or 15%. This can be associated with the level development of the country and the Free Primary Education (FPE) Programme that was introduced by the government in 2010. This programme resulted in the establishment of more primary schools as it was noted that the FPE government policy statement states that “the provision of education in Swaziland is currently guided by the 1999 ‘National Policy Statement on Education reviewed in 2011, and the Constitution of Swaziland, 2005 Section 29 (6) on Education”, which clearly states that “Every Swazi child shall within three years of the commencement of this Constitution have the right to free education in public schools at least up to the end of grade 7” (GoS, 2016, p.17).

The National Policy and the Constitution is clear on the Government’s intentions to offer basic Education for the first seven years, but within the limits of ‘Available financial and other resource capacities’. The ‘Free Primary Education Act’ of 2010, section 10 clause 1 compels parents to send their children to school for FPE schooling. Thus, a requirement of staffing compliments to see this provision being a reality. Swaziland is like other countries in the Eastern & Southern African Region (ESAR) that are closely moving to implement the abolition of school fees in the primary level as one of the strategies to achieve the Millennium Development Goals (MDGs).

The FPE programme was rolled out to each grade level until grade 7 and eventually abolished school fees in primary school completely by the year 2015.

Additional position and ultimately wage bill increase are expected, as a result of the Cabinet's pronouncement that Religious Education should form part of the core subjects from grade 1 to form 5 with effect from January 2017. "This also introduced a change in syllabus and a requirement for more curriculum designers in addition to the projected 1 370 additional teaching posts for the full roll-out of the Cabinet directive" (Sifundza, 2017, p.3). The author further concluded that the Cabinet decision was not informed by a clear analysis of the resource requirements to facilitate the full implementation of the prescribed roll-out.

From the forgoing paragraphs it is evident that the tools and techniques at the disposal of MSD, as per its mandate, were not utilized. Organisational studies were not conducted to inform the teacher posts as created and/or required, but there were clear political requirements as per the Constitution of Swaziland, 2005 and the education sector policies as promulgated by Cabinet through the approval of Parliament. "Human Resource Planning (HRP) should have been engaged into as a means to get the right number of people with the right skills, experience and competences in the right jobs at the right time and at the right cost", as suggested by Bulmash (2015, p.1). However, it has been noted that this is not always possible with regard to the current political dispensation.

The data contained in the establishment registers reviewed is consistent in that it clearly indicates that the second largest groupings of civil servants are police (safe guarding law and order). There are currently 5 600 established posts vis-s-vis 4 528 in the 2010/11 financial year, which indicates an increment of 1 072 post at a variance of 24%. However, this study could not establish the methodology and or police/population ratio used for the increment over the time period under study.

Worth noting is that the health sector has the third highest number of established posts 4 499 in 2016/17 as compared to 2010/11 financial year, which is a 22% increment. This is one of the most crucial social services that any government must provide and sustain. As a result there has been addition of such facilities as Lundzi Clinic, Maphalaleni Clinic, Ezindwendweni Clinic, Tikhuba Clinic, Ngulwini Clinic, Siteki Referral Hospital, and operationalisation of the National TB Hospital, Magwanyane Clinic, Nsalitje Clinic, Nhlambeni Clinic, Bhudla Clinic, Mkhitsini

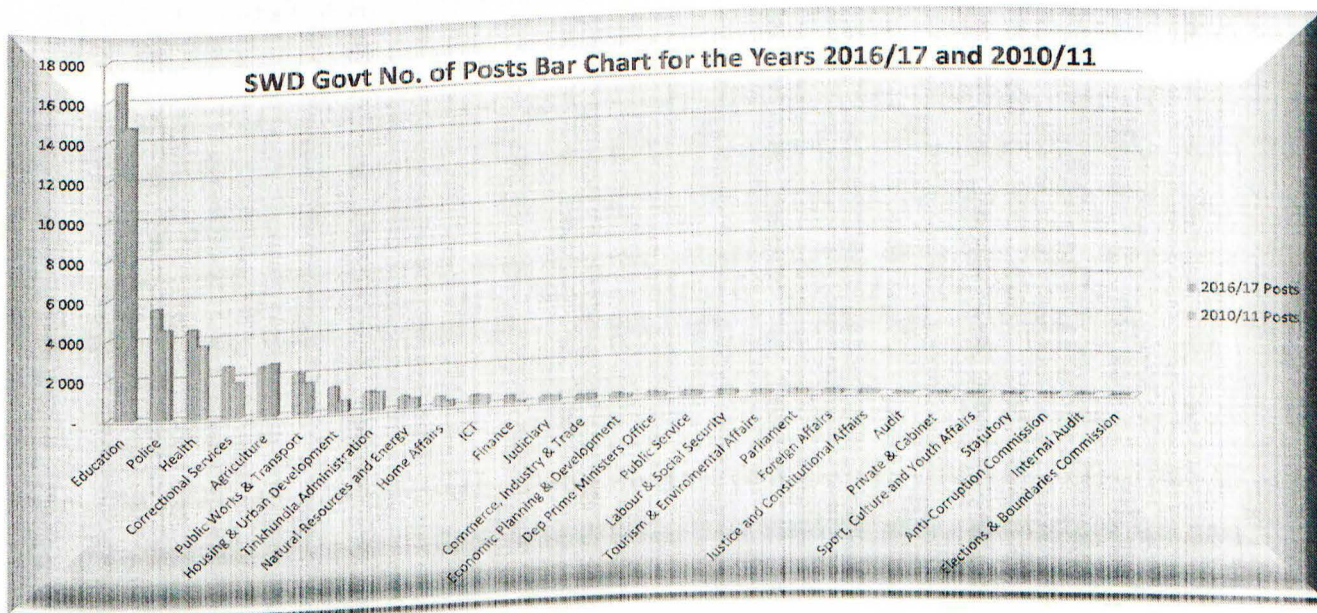
Clinic and addition of a maternity ward at Mkhuzweni Health Centre (MoF, 2017) to name but a few health care additions since 2010. Notably, the establishment and staffing of these additions was a political directive that was funded out of a Supplementary Budget, which resulted in the MoPS having no option but to facilitate the implementation of the Cabinet directive. This resulted in the none-adherence to the principles of Lean Service, as per the dictates of the mandate of MSD.

Whilst Correctional Services Officers are the fourth highest with 2 565 in 2016/17, an increment of 46% from the 2010/11 financial year when they stood at 1 752 established post. The research could not establish the warder/prisoner ratio that was used in the determination and projection of the posts as created. Statistics on the number of the increase of inmates over the time period were not readily available. However, it must be noted that all the first four sectors with the highest established posts are core functions of any government service delivery.

There has not been a situation over the time period under study that a decrease in the number of established positions were observed. This is true for even ministries/departments that were identified by the PSMP report of being possible candidates of outsourcing, privatisation and/or decentralisation, e.g. Ministry of Natural Resources and Energy (water management function, landscaping), Government Computer Services, MoPS (MSD) and Ministry of Commerce, Industry and Trade (MoCIT), to which such functions as the issuance of licences, Industrial Development and Industrial Estates Management, Handicraft Promotion can be outsourced. The MoCIT has the fourteenth highest number of establish posts, with 268 posts in the 2010/11 financial year with a variance of negative 5% from the 2010/11 financial.

The precluding information as discussed is presented as tabulated below (figure 1). The numbers of established positions per ministry are presented ranging from the largest ministries to the smallest. Furthermore, from the tabulated information comparative data is presented based on the 2010/11 and 2016/17 financial years.

Ministry/Department	No. of Posts 2016/17 and 2011/12		Variance	% Variance
	2016/17 Posts	2010/11 Posts		
Education	16 951	14 722	2 229	15,1%
Police	5 600	4 528	1 072	23,7%
Health	4 499	3 676	823	22,4%
Correctional Services	2 565	1 752	813	46,4%
Agriculture	2 472	2 595	- 123	-4,7%
Public Works & Transport	2 050	1 544	506	32,8%
Housing & Urban Development	1 282	589	693	117,7%
Tinkhundla Administration	957	896	61	6,8%
Natural Resources and Energy	641	518	123	23,7%
Home Affairs	518	289	229	79,2%
ICT	490	453	37	8,2%
Finance	381	82	299	364,6%
Judiciary	288	280	8	2,9%
Commerce, Industry & Trade	268	273	- 5	-1,8%
Economic Planning & Development	264	184	80	43,5%
Dep Prime Ministers Office	256	181	75	41,4%
Public Service	235	225	10	4,4%
Labour & Social Security	234	220	14	6,4%
Tourism & Environmental Affairs	193	174	19	10,9%
Parliament	191	173	18	10,4%
Foreign Affairs	176	177	- 1	-0,6%
Justice and Constitutional Affairs	171	155	16	10,3%
Audit	106	99	7	7,1%
Private & Cabinet	100	86	14	16,3%
Sport, Culture and Youth Affairs	73	75	- 2	-2,7%
Statutory	65	29	36	124,1%
Anti-Corruption Commission	58	48	10	20,8%
Internal Audit	52	33	19	57,6%
Elections & Boundaries Commission	24	33	- 9	-27,3%
Grand Totals	41 160	34 089	7 071	20,7%



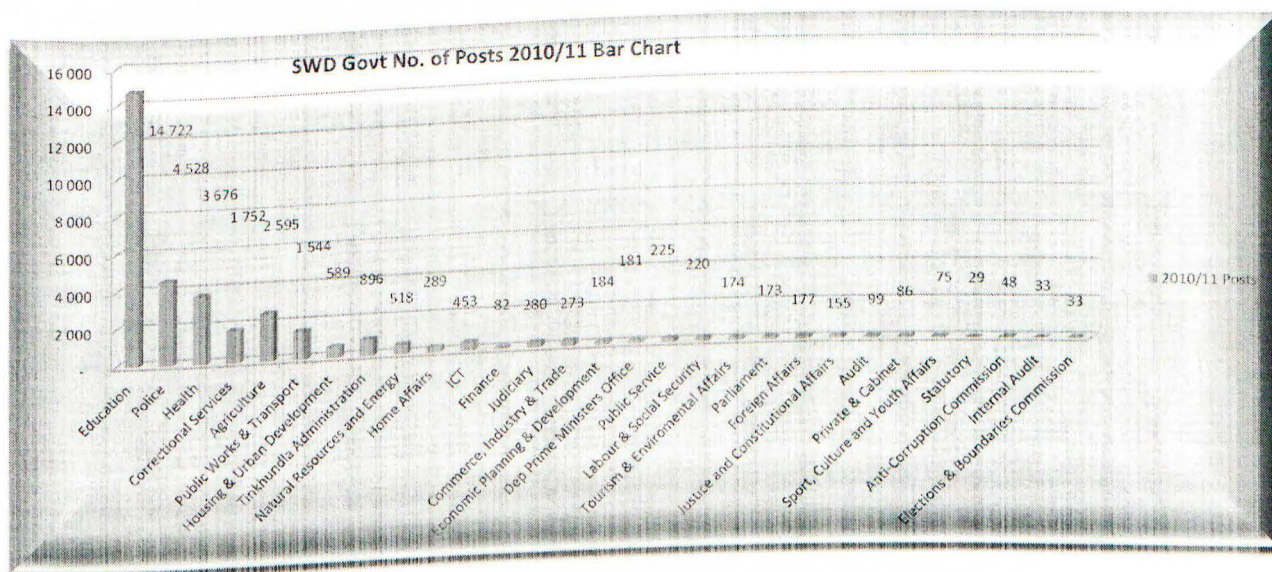
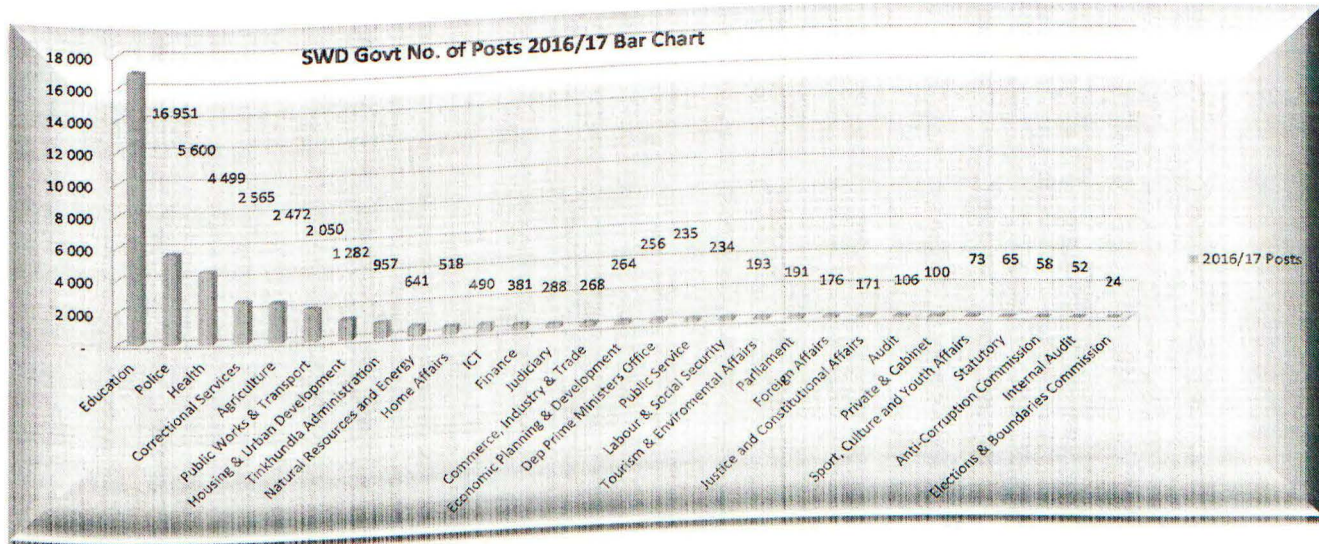


Figure1: Establishment Register 2010-2017 Data

It must be noted that the establishment registers at the disposal of the researcher do not contain the established posts for the Army. However, the SPRSA report 2015 indicates that there were 5 312 posts attached to the Army, inclusive of His Majesties close protection unit as of February 2014 (MoPS, 2015). The report however, does not include information on the yearly increment of established posts within the Army.

The report additionally notes that in analysis, 9 822 (27% of the 37 027 of the expected civil servants, as of February 2014) members who were not enumerated, of which 5 312 (54%) of these members were from the Ministry of Defence and State Security. This means that the members from the ministry were accounted for on February 2014, although they were not

verified to be occupying the number of established as indicted and at the authorised staffing levels (MoPS, 2015, p.26).

The data contained in the establishment registers (as annually produced) does not specify the vacancy rate at any given time. However, the SPRSA report (2015) reflects that as of February 2014, the core ministries with the highest number of established posts i.e. MoET and Police, had a vacancy rate of 2 470 people against 381 posts. This is an indication of overstaffing, as each individual should occupy a distinct post and post number. Therefore this alludes to over expenditure which is not capture in the establishment register, but payable under the Treasury Payroll System. In essence the perceived savings from the vacancies were not realised due to the overstaffing under MoET. "This indicates lack of adherence to the establishment register and an increase in employment costs" (MoPS, 2015, p.39).

4.3. Annual Revenue and Expenditure Data Analysis

The GoS Financial Revenue and Expenditure Report (2014-2017) contain the government's expenditure and revenue collection of the year ended and the mid-term financial projections. It indicates sources of government revenue and government expenditure per ministry/department. The data from the above-captioned reports has been summarised as indicated below:

Table 1: GoS Revenue, Capital Expenditure and Wage Bill Distribution Data

Govt Revenue, Capital Expenditure and Wage Bill Distribution for the Financial Year 2014/2015 to 2016/2017						
Item	Revenue	Capital Expenditure	Wage Bill	Grand Totals	Capital Exp to Revenue	Wage Bill % to Revenue
2014/2015	13 952 966 000	3 610 421 000	4 804 480 777	8 414 901 777	26%	34%
2015/2016	14 122 910 000	3 725 278 000	5 319 826 765	9 045 104 765	26%	38%
2016/2017	13 538 082 000	5 296 092 000	6 505 357 592	11 801 449 592	39%	48%
Grand Totals	41 613 958 000	12 631 791 000	16 629 665 134	29 261 456 134	30%	40%

Ministry of Finance (2017)

Table 2: GoS Revenue, Capital Expenditure and Wage Bill Variance data

Govt Revenue, Capital Expenditure and Wage Bill Distribution Variances for the Financial Year 2014/2015 to 2016/2017						
Item	Revenue	Capital Expenditure	Wage Bill	Grand Totals	Capital Exp to Revenue	Wage Bill % to Revenue
2014/2015	-	-	-	-	0%	0%
2015/2016	169 944 000	114 857 000	515 345 988	630 202 988	68%	303%
2016/2017	(584 828 000)	1 570 814 000	1 185 530 827	2 756 344 827	-269%	-203%
Grand Totals	-414 834 000	1 685 671 000	1 700 876 815	3 386 547 815	-406%	-410%

Ministry of Finance (2017)

Table 3: GoS Revenue, Capital Expenditure and Wage Bill Percentage Variance data

Govt Revenue, Capital Expenditure and Wage Bill Distribution % Variances for the Financial Year 2014/2015 to 2016/2017					
Item	Revenue	Capital Expenditure	Wage Bill	Grand Totals	
2014/2015	0%	0%	0%	0%	
2015/2016	1%	3%	11%	14%	
2016/2017	-4%	42%	22%	64%	
Grand Totals	-3%	45%	33%	78%	

Ministry of Finance (2017)

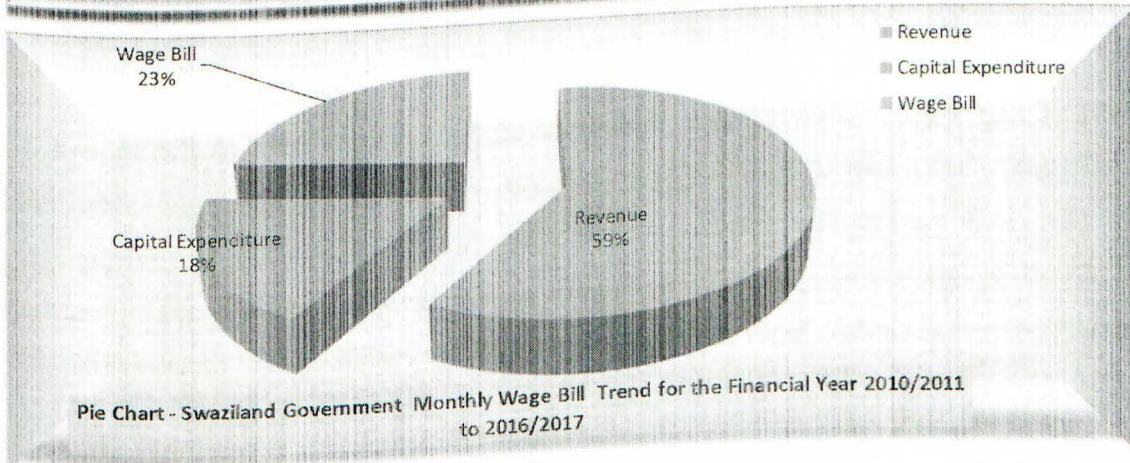
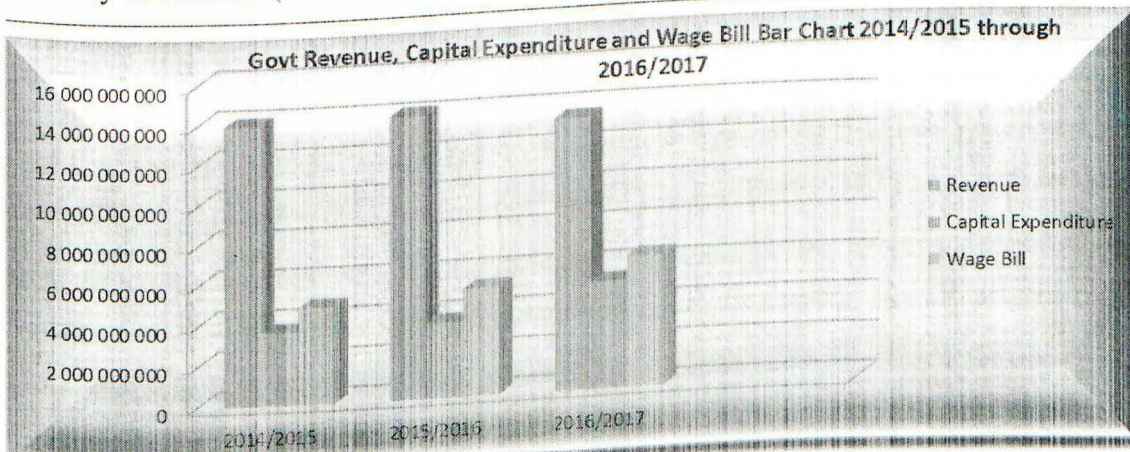


Figure 2: Pie Chart GoS Revenue, Capital Expenditure and Wage Bill Data

Ministry of Finance (2017)

The data as tabulated above (refer to Figure 2) is evident that the wage bill expenditure for the period between the 2014/15, 2015/16 and 2016/17 financial year was on average 40% of the total revenue, whilst capital and non-wage social expenditure has been on average at 60% combined, of the national revenue. The wage bill on average outweighs capital expenditure and social expenditure individually by 10% annually.

However, it must be noted that there has been an observed shortfall in actual revenue collected and revenue projections. The shortfall has been argued to be as a result of the drop in SACU receipts that have been frequently renegotiated, as and when there is a variance in the trade deficit of the SACU member states and as resultant to the occasional changes in the international trade dynamics.

The GoS wage bill for the 2014/15-2016/17 time period, has been increasing at an average of 4.6% of the total revenue, whilst capital projects expenditure have not increased with a projected average of 6.5% increase for the 2016/17 financial year (refer to Table 1). However, based on the track record of the countries actual revenue collection, this projection might fall short.

From the foregoing data it is evident that Swaziland is no exception to the conclusion that a high wage bill tends to crowd out capital expenditure. This therefore is a cause for concern, as governments are elected and to a large extent contest power, so as to deliver on social and infrastructure development. This picture becomes much clear when observed at a micro or monthly expenditure level. On average, the country's revenue stands at 59% of projected monthly collection, with 23% being utilise to pay civil servants, whilst 18% is capital expenditure and the remaining 18% utilised for social services and other monthly operational expenditure (refer to Figure 2).

The wage bill as a recurrent budget far out-weighs other recurrent non-wage operational items and social expenditure. Therefore the conclusion by the IMF (as discussed in the introduction of this paper) that the wage bill is the single largest recurrent budget item holds true. Also worth nothing is that social expenditure has to compete with other government operational costs. This therefore greatly compromises the delivery of social services such as university bursaries, FPE, health care and social security items e.g. elderly grants.

The major push-factor as per this data has been the creation of teacher posts within the educational sector. This has been necessitated by the FPE as previously discussed, which resulted in more children being enrolled and more schools being built. Cabinet policy directives and lack of proper planning (resources) for their implementation on the education function cannot be overemphasised, as we have discussed the change in religious education curriculum.

4.4. Swaziland Payroll and Skills Audit Data Analysis

The GoS commissioned the SPRSA in 2013. One of this exercises ToR, was to establish cases of over-establishment and/or under-establishment in the government payroll. As a result MoPS (2015, p.38) observed that of the 38 465 established post in the 2014/15 financial year, a total of 196 post were over-established (i.e. had more personnel than that was authorised).

Furthermore, the report states that 24 ministries/departments out of 34 had over-established responsibility centres. This means that 70% of the responsibility centres as at 28 February 2014 had more personnel than the total numbers prescribed in the Establishment Register, 2014/15. A total of 131 responsibility centres had more personnel than stipulated in the Establishment Register, 2014/2015. Ministries of Health (MoH) and MoET had the most over-established responsibility centres. Not only has the number of established positions been increasing on an annual base, but even the number of personnel attached to the established positions is much higher than that which is authorised. The report added that the foregoing was a clear sign of a much higher wage bill, as the Human Resources Management Information System (HRMIS) (managed by MoPS) and the Payroll System (managed by Treasury) were clearly not synchronised.

The report adds that, as at 28 February 2014, a total of 525 posts in ministries and departments had excess personnel than the number stipulated in the Establishment Register 2013/14. According to the Establishment Register 2013/14, 5 155 officers were supposed to be occupying these posts, instead, 7 906 officers were occupying these posts as at 28 February 2014. This means that there was an excess establishment of 2 751 members. "Ministries/Departments highly affected, included Police (1 122); MoET (582); Correctional Services (339) and MoH (179) (MoPS, 2015, p.39). There were 894 posts (as per their post designations/job titles) that were supposed to be manned by a total of 38 465 members, however only 17 393 were found to be

manning these posts. This indicates that as much as some posts were overstaffed, there were posts within the civil service that were found to be vacant.

4.5. Monthly GoS Wage Bill Analysis

The MoPS in its awareness of the fact that the wage bill is an economic and service delivery performance issue, commissioned MSD to conduct monthly wage bill analysis that is produced at the end of every quarter (three month period). This data is presented below, and it clearly indicates that the cost of government salaries has not gone down over the six year period under review. Noteworthy is that during the period between 2010/11-2015/6 there was no salary review, as government was going through financial challenges, yet the wage bill increased steadily. This has been attributed to two factors namely; cost of living adjustment and continued creation of posts.

During the financial years 2010/11 and 2011/12 it must be observed there was no cost of living adjustments, therefore there was no wage bill increments. For the financial years 2012/13, 2013/14, 2014/15 and 2015/16 cost of living adjustments were; 10%, 5%, 7% and 7% respectively (refer to Table 3). However, it must be observed that the actual wage increments were higher to these adjustments owing to the addition of established posts within the civil service. It is however, difficult to isolate the contribution of salaries paid to the army from this data, as this data was collected from the amounts paid to all established post by the Treasury Department.

During the 2016/17 financial year the GoS implemented the salary review adjustments as recommended by an independent consultant. The review had not been undertaken in over ten years, yet GoS has a standing agreement with Public Sector Associations to review the civil service salaries every five years. It is the implementation of this salary review that has significantly spiked salaries payable to civil servants. It is argued that during this period government observed a zero growth personnel policy, however, it is noted that there were positions that were given special authority or sanctioned for creation, namely; MoH, MoET, Police and Correctional Services.

A detailed month-to-month analysis for the time period understudy, undoubtedly shows the cost increment of the wage bill. Monthly salaries expenditure show that government does not pay

anything less than E 300, 000, 000.00 to its employees (refer to Table 4). This is irrefutably a huge recurrent expenditure for a country of the size of Swaziland that is also reliant on ever dwindling SACU receipts. It must further be pointed out that monthly capital expenditure is normally below the monthly government salaries. This should, without a doubt be cause for concern.

The month-to-month wage bill data for the financial years 2010/11-2016/17 has been summarised and presented below;

Table 4: Month to month wage bill distribution data

Month to Month Wage Bill Distribution for the Financial Year 2010/2011 to 2016/2017								
Month	2010/2011	2011/2012	2012/2013	2013/2014	2014/2015	2015/2016	2016/2017	Grand Totals
April	311 113 180	317 635 344	322 208 573	333 259 876	384 603 175	404 221 275	452 111 773	2 525 153 197
May	296 386 048	317 846 652	322 827 467	336 522 891	375 473 658	411 243 419	471 982 501	2 532 282 635
June	293 003 526	316 546 143	323 298 699	363 064 550	398 564 011	446 664 402	452 755 881	2 593 897 211
July	314 107 094	329 742 224	334 324 391	580 622 118	386 424 331	425 025 339	771 011 915	3 141 257 411
August	356 481 891	316 731 620	325 731 937	355 689 601	478 290 944	414 370 820	550 577 268	2 797 874 081
September	312 256 737	317 614 114	323 819 888	349 754 211	398 505 479	552 426 080	534 422 387	2 788 798 897
October	325 459 578	317 438 636	323 115 949	348 859 076	395 516 352	445 809 048	533 529 217	2 689 727 856
November	316 755 731	318 500 824	324 891 708	356 862 227	395 900 924	439 669 507	539 693 539	2 692 274 459
December	314 499 777	343 213 693	343 213 693	408 215 620	397 163 799	505 267 682	593 117 611	2 904 691 874
January	316 282 339	316 074 812	317 362 917	341 724 748	395 685 743	419 834 398	529 845 420	2 636 810 378
February	310 943 196	305 028 543	326 022 196	341 544 212	394 670 733	427 548 555	538 120 543	2 643 877 978
March	315 251 141	331 387 075	336 709 844	353 396 002	403 681 628	427 746 241	538 189 538	2 706 361 469
Grand Totals	3 782 540 239	3 847 759 680	3 923 527 263	4 469 515 131	4 804 480 777	5 319 826 765	6 505 357 592	32 653 007 447

Ministry of Public Service (2017)

Table 5: Month to month wage bill distribution variance data

Month to Month Wage Bill Distribution % Variances for the Financial Year 2010/2011 to 2016/2017								
Month	2010/2011	2011/2012	2012/2013	2013/2014	2014/2015	2015/2016	2016/2017	Grand Totals
April	0%	2%	1%	3%	15%	5%	12%	39%
May	0%	7%	2%	4%	12%	10%	15%	49%
June	0%	8%	2%	12%	10%	12%	1%	46%
July	0%	5%	1%	74%	-33%	10%	81%	138%
August	0%	-11%	3%	9%	34%	-13%	33%	55%
September	0%	2%	2%	8%	14%	39%	-3%	61%
October	0%	-2%	2%	8%	13%	13%	20%	53%
November	0%	1%	2%	10%	11%	11%	23%	57%
December	0%	9%	0%	19%	-3%	27%	17%	70%
January	0%	0%	0%	8%	16%	6%	26%	56%
February	0%	-2%	7%	5%	16%	8%	26%	59%
March	0%	5%	2%	5%	14%	6%	26%	59%
Grand Totals	0%	2%	2%	14%	7%	11%	22%	58%

Ministry of Public Service (2017)

Form the information tabulated in Figure 3 it is observed that the month of July saw an increase of E6, 061,093.00 in basic salaries attributable to 1,040 additional staff employed over the month,

with 984 by the Ministry of Defence & Security. The month of August and September saw an increase of about 94 staff resulting in a total increase of E504, 496.00 on the wage bill. There is an upward movement of E14, 761,806.00 in total basic salaries for the first and second quarter of financial year 2017/2018 and an overall amount of about E3, 1 billion paid towards basic salaries across government (MoPS, 2017).

As much as the forgoing is on a month-to-month bases, it clearly shows the extent to which the wage bill is an issue. It must be noted that the additional posts as discussed were not informed by the application of the tools and techniques at the disposal of MSD, but argued to have been politically motivated. Therefore, the impact of the lack of application of the Lean Service Principle on the wage bill has been confirmed by the statistics given by MoPS itself.

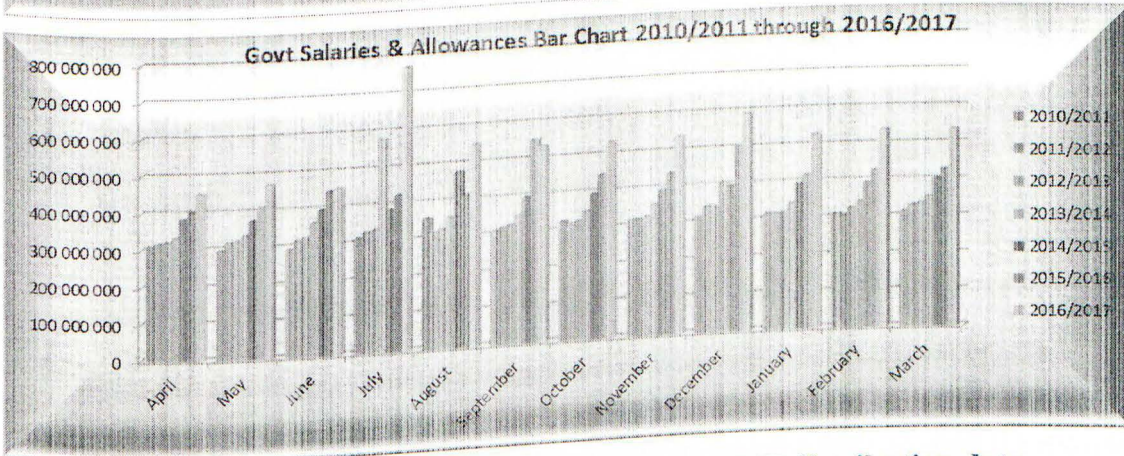
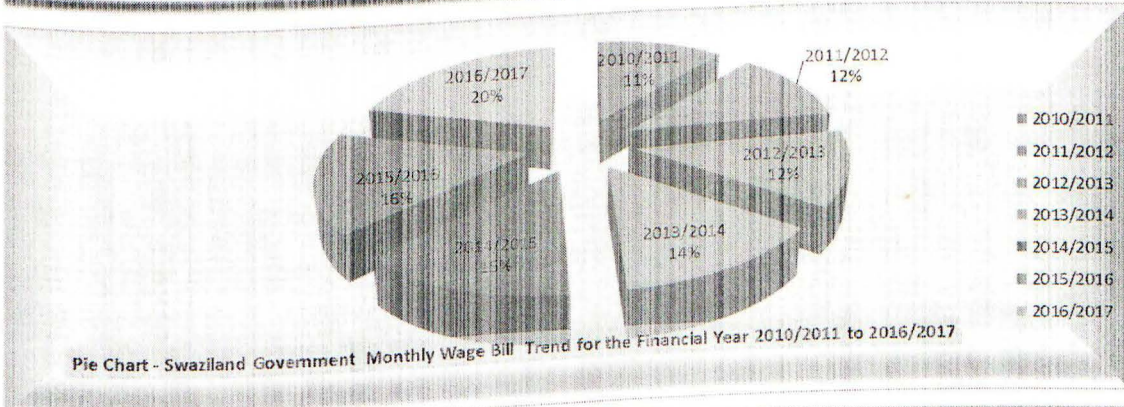
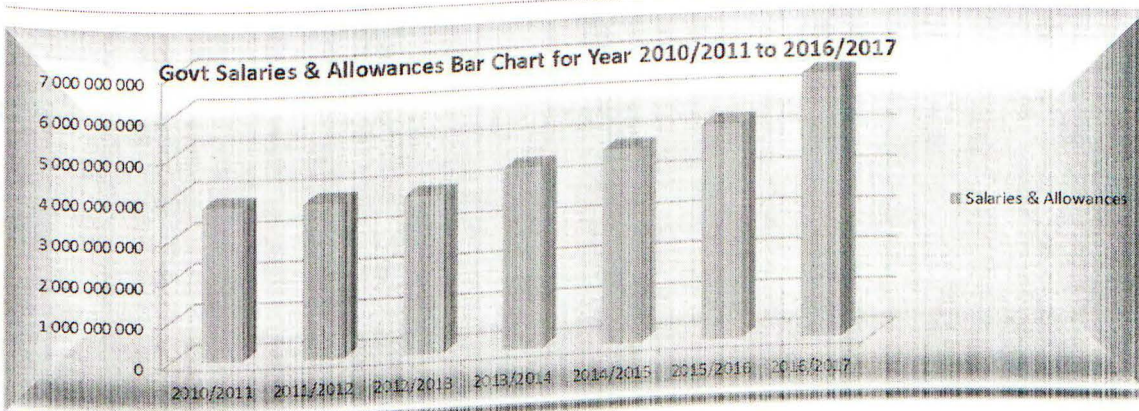


Figure 3: Bar and Pie Chart of month to month wage bill distribution data

Table 6: GoS Wage Bill, April-September 2017

GOVERNMENT WAGE BILL TREND IN EMALANGENI FROM APRIL 2017 TO SEPTEMBER 2017					
Months	Count	Basic Salary	Total Allowances	Wage Bill/Earnings	Percentages Allocation
April	43 830	492 580 762,36	58 402 156	550 982 918,42	15,9%
May	44 042	495 665 017,46	57 194 341	552 859 358,48	15,9%
June	44 690	499 840 466,94	137 838 064	637 678 530,48	18,4%
July	45 730	505 901 559,49	89 133 106	595 034 665,79	17,2%
August	45 807	506 838 071,17	59 780 162	566 618 233,63	16,3%
September	45 901	507 342 568,07	57 004 231	564 346 798,88	16,3%
Year to Date Total		3 008 168 445	459 352 060	3 467 520 506	100%

Ministry of Public Service (2017)

Table 6 indicates that the basic salaries between the month of April and May show an increase of E3, 084, 255.00 It should note that the noticeable increase of basic salary in the month of June is attributable to an increase in basic salaries of E3, 008, 896.00 under the Police Department (Table 6). This increase in basic salary is a result of the increase of 582 Police Personnel (head count) under the same month. There is also an increase of 38 in personnel numbers under the Ministry of Labour & Social Security (MoLSS) between April and June resulting in a total amount increase of E271, 053.00 in basic salaries under MoLSS.

4.6. MSD Questionnaire Data Analysis

It is imperative to note from the on set that the study received a 90% response rate from the MSD officers, of which 21 (63%) of the sampled 34 MSD officers, who had signed the consent form and agreed to partake in the study, indicated that they were not sure of what the questionnaire required of them. They could not answer the questions which were based on the work that they perform. Many indicated that the concepts that they were being referred to were not known to them.

The data on the proportion of respondents that were not able to respond to the questionnaire as distributed is shown below:

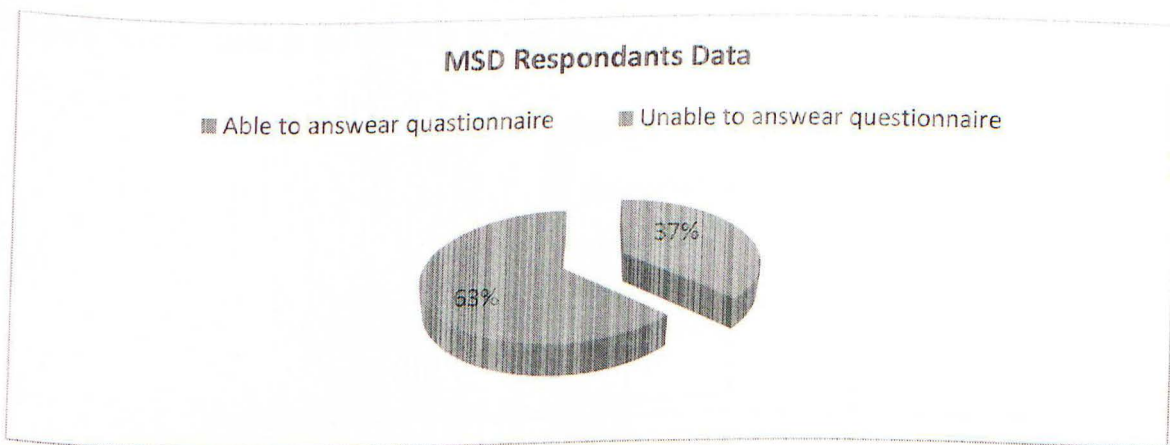


Figure 4: MSD Respondants' Data

As a result of the raising of the issues of not being able to respond to the questionnaire as distributed, time was spent explaining the basic principles of Lean Service, the wage bill, the JIT technique, HRFP and the objectives of the study. However, the respondents still could not respond.

The MSD is divided mainly into three sections namely; Consultancy [Headed by an Acting Principal Management Analyst (PMA)] with fifteen officers assigned, Research and Development (R&D) [Acting Principal Management Analyst (PMA)] with seven officers assigned and Administrative Reforms [Acting Principal Management Analyst (PMA)] with eight officers assigned, then the offices of the Director and Assistant Director.

The Consultancy Section is tasked with the provision of organisational development studies, while the R&D Section is assigned to undertake research on the latest labour market remuneration and terms & conditions studies to inform government policy. The Administrative Reforms Section must initiate and administer civil service wide organisational reform programmes. Within these sections there are positions ranging from AMA grade C5, MA grade E2, SMA grade E3 and PMA grade E4, amounting to forty established posts with two vacancies (GoS, 2017).

Below is the organogram of MSD as explained above.

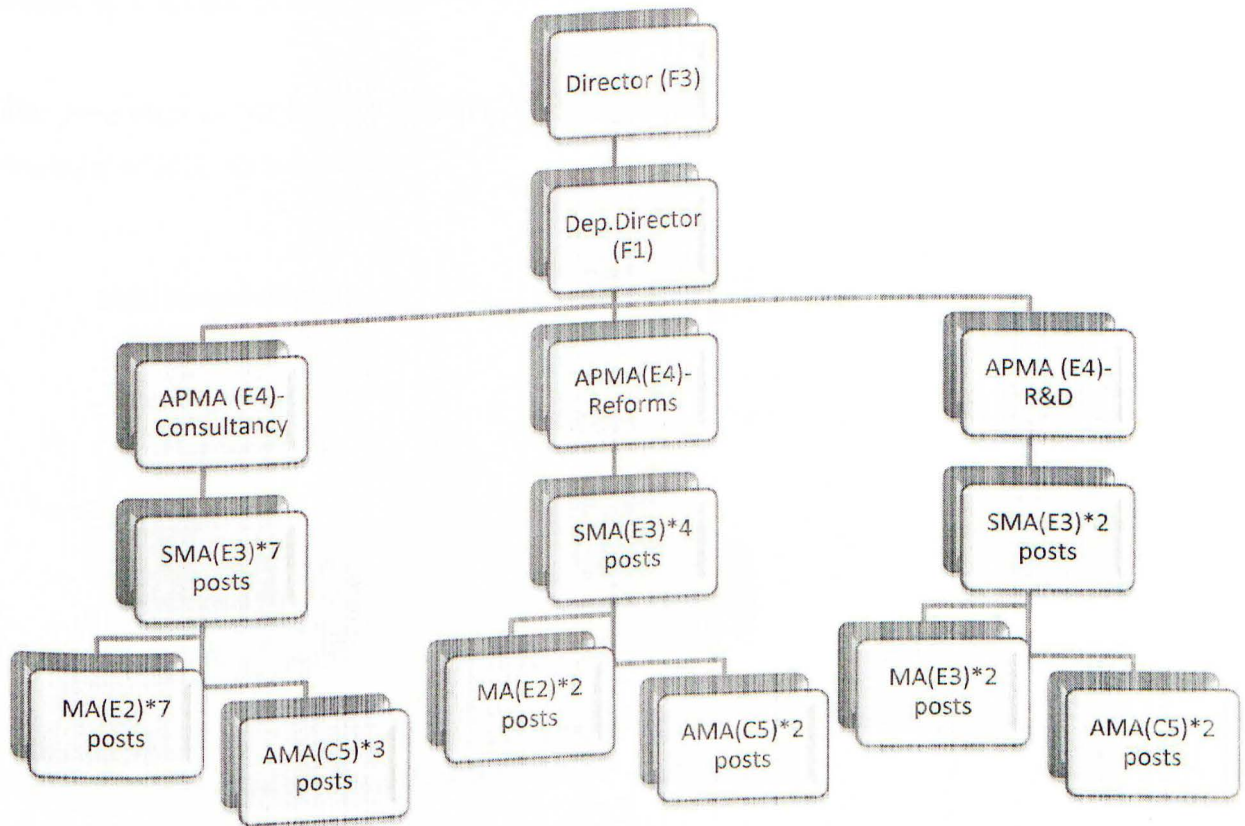


Figure 5: MSD Organogram

The research notes that from the respondent; one is a APMA, six were SMA's, three were MA's and only two were AMA's. This then leads the study to conclude that those levels that indicated they could not respond to the questionnaire (because the subject-matter was not understood) were two APMA's, seven SMA's, nine MA's and five AMA's. It would be expected that only those within the rank of AMA could not have an in-depth understanding of the tools and techniques as employed by MSD, mainly because this is an entry level that is still at the learning curve. That is only if they are still serving their two year probation as government policy does not allow same to undergo long term training. Nonetheless, it would be assumed that some form of in-house training, mentoring and/or orientation would have been done to familiarise these officers with the division work methodology and tools.

The Schemes of Service (SoS) clearly indicate that the ranks of PMA, SMA and MA should be manned by individuals that have completed their probation and have been trained in Management Services Certificate (MSC). However, the data collected indicates that five SMA's, eight MA's and five AMA's (none are under probation) do not have the MSC. This is an anomaly as the

function and mandate of MSD is purely technical by virtue of the scale and level of organisational transformation that is required, not to mention that the forgoing is civil service wide.

The proportion of the MSD's officers that responded to the questionnaire and those with the requisite MSC is shown below:

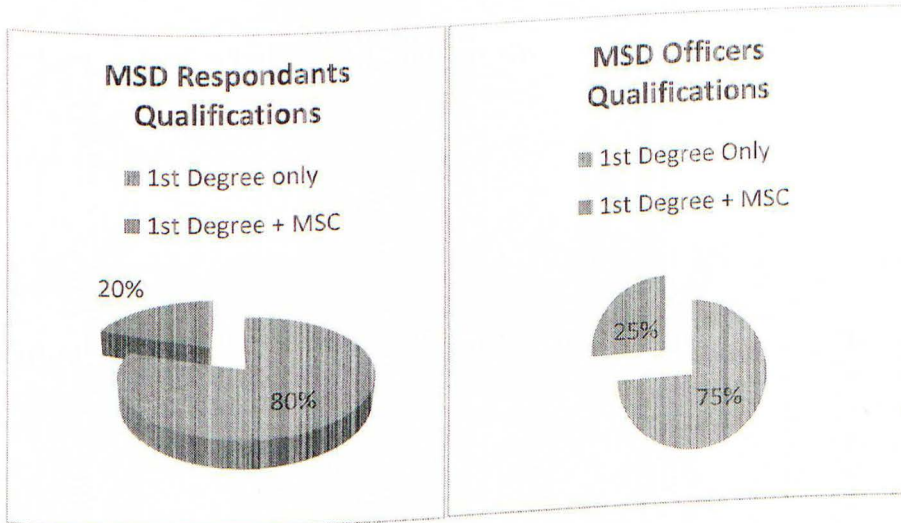
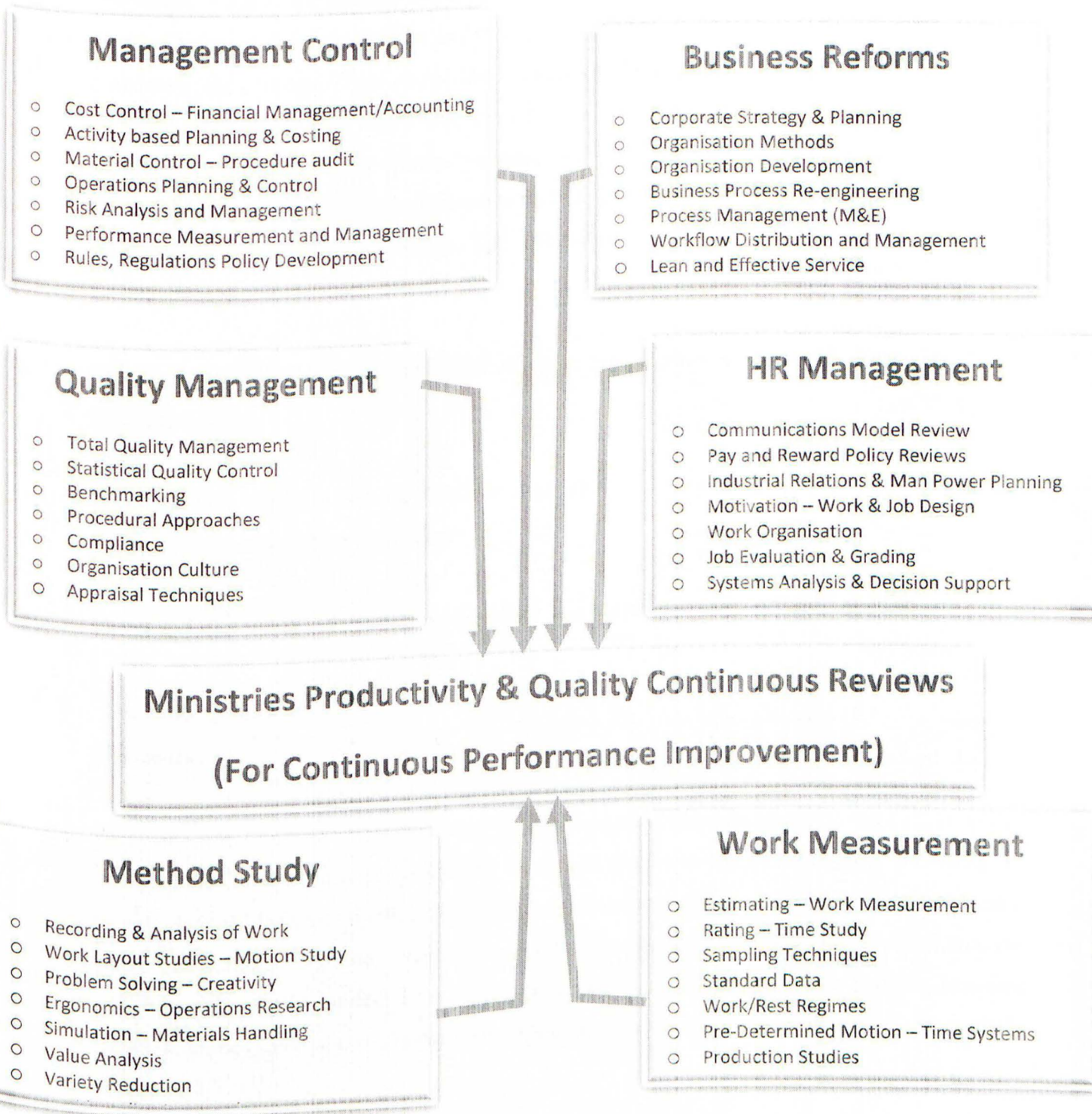


Figure 6: MSD Officers Qualifications data

The MSC pertains to training in Lean Service, Work Measurement, Time Study, Work Flow Analysis and Business Process Engineering. This qualification equips officers with practical skills in management services with regards to the identifications of muda within a production process. It enables qualification holders to re-engineer business process so as to reduce production costs and ensure customer satisfaction. From the forgoing, the research noted that all of the sampled respondents were first degree holders with only 9% (3 respondents) possessing Masters Degrees, and only 3 of sampled (9%) possessed the MSC qualification.

The background in MSC training equipped the respondents with the basic understanding of the techniques understudy. It enabled them to respond to the questionnaire. From the respondents, 63% did not have the basic knowledge of the techniques applied in the monitoring and control of the wage bill as per the mandate of MSD. Therefore, the 63% were not in a position to apply the said techniques. Worth noting is that of the 40 MSD officers only 13 officers possessed the MSC qualification.

Figure 7: Summary of the Contemporary Body of Knowledge for MSD



It is imperative to present the work methodology and outputs that MSD seeks to achieve. This knowledge gives added impetus to the relevance and need for training on the MSC. The diagram clearly illustrates the tools utilised and how they are linked to the clientele in achieving the core mandate of the division. These responsibilities and tools transcend throughout the divisions three sections. They are on paper argued to ensure the attainment of the outputs as envisaged in the divisions mandate. However, the study notes that this is somewhat far from reality based on the failure by 63% of the sampled population to recognise that this research questionnaire was based on their divisions body of knowledge. This information as depicted is contained in the divisions' official documentation.

The questionnaire that was distributed amongst the sampled respondents is presented and analysed below:

Question 1: Is the Lean Service Principle applicable to the organisational development studies that are the mandate of you Division?

Table 8: Lean Service Principle applicability to organisational development studies

	Yes	No	Not Sure
No. of Respondents	10	-	3
Percentage	77	-	23

From the thirteen respondents that were able to complete the questionnaire, ten (77%) agreed that the Lean Service Principle as defined on the questionnaire and based on their knowledge of the mandate of MSD, was applicable to the organisational studies commissioned by the division. It was interesting to note that when probed further the majority were not able to detail how the principle was actually applied. They merely related it to the end results of the mandate assigned to MSD. Three (23%) of these respondents could not associated the theory to the mandate of the division .

Question 2: Is the JIT technique applicable to the organisational development studies that are the mandate of you division?

Table 9: JIT technique applicability to organisational studies

	Yes	No	Not Sure
No. of Respondents	11	1	1
Percentage	85	8	8

As much as 85% of the respondents agreed that the JIT technique was applicable to MSD work, they could not however detail in a form of examples how they reached this conclusion. They did not fully grasp that the technique was applied to the production process in service delivery. The respondents were not aware that the technique enhancing reduction of inventory in the production process.

Question 3: Have the above-mentioned principles as applied by MSD been effective in the containment of the wage bill? Kindly include examples to your response.

Table 10: Application of techniques by MSD

	Yes	No	Mixed Results
No. of Respondents	4	4	5
Percentage	31	31	39

The question required that the respondents detail how they arrived at the conclusion that the Lean Service Principle and the JIT technique were effective in the containment of the wage bill, these examples were not forthcoming. In fact, contradictions (from the 39%) in the success of these tools was noted, especially when it was pointed out to the respondents that established posts had never been reduced and/or remained stagnant over a ten year period. The 31% of the respondents only associated what the tools were designed to achieve with the assumption that same would reduce staff numbers in any production line. They could not exactly pinpoint as to how these tools neither reduced staff numbers nor enabled present staff levels to perform better.

Question 4: Are the Human Resources Forecasting and Planning techniques applied in your work methods in the determination of the required number of personnel to perform a function?

YES.....NO..... (Please tick your response and kindly elaborate on same)

Table 11: Application of HRFP techniques in MSD work

	Yes	No	Not Sure
No. of Respondents	9	4	-
Percentage	69	31	-

These HRFP techniques include amongst other tools; total turnover analysis, employee movement ratio trend analysis, skills audits, labour market trends, organisational placement models, succession planning to mention a few. Review of organisational development studies reports produced by MSD, contradicted the 69% of the respondents that argued that these tools were used by MSD. In fact human resource forecasting was understood by the respondents to merely mean concluding that a requested position was needed or not, based on the duties that are attached to the position. Studies conducted by MSD did not follow the human resource forecasting technique. The respondents themselves could not argue how exactly this technique was used.

For the 31% of the respondents that stated that the technique was not used, they were of the opinion that they could not associate it with the manner in which they conducted their organisational studies. The MSD organisational study reports reviewed agree with this conclusion. Worth noting, is that only the determination of cleaners using work measurement tools was identified by only two respondents.

Question 5: In your opinion what are the major wage bill push factors?

Table 12: Major wage bill push factors

	Not Sure	New Ministrys/Departments	Political Interference	Army	Redundant Posts	Allowances
No. of Respondents	4	2	2	4	1	1
Percentage	31	15	15	31	8	8

At least 31% of the respondents were of the view that the army was the major wage bill push-factor. However, the SPRSA report, 2015 indicates that there were 5 312 posts attached to the Army inclusive of His Majesties close protection unit as of February 2014 (MoPS, 2015, p.9). The data under section 4.1 clearly specifies that the bulk of established posts are under MoET.

Table 7: MSD Years of Service

Range	Frequency	Percentage
1-5	3	23
6-10	4	31
11-15	4	31
16-20	2	15
	13	100%

Years of experience within the MSD have been argued by the SoS as one of the determining factors for upward progression and the ability to perform assigned duties by officers. It is for this reason that a question of the years of service was included in the questionnaire.

As shown in table 4 above, there is an average of 8 years of experience within MSD staff members. The relevant techniques to the achievement of the mandate of the division should have been mastered. Relevant training should have been afforded to the officers in building capacity, as this is a highly technical field. Furthermore, it is noted from the data, none of the respondents are serving their probation, which is below two years of service, as per GoS regulations. All the respondents qualify for long term training as per GoS Training Policy.

Figure 7 below is a summary of the contemporary body of knowledge for the Management Services. The diagram identifies the main techniques and application areas used by the MSD in executing its portfolio mandate (MoPS, 2017, p.3).

To this end, the research study notes that the respondents are not aware of the wage bill push-factors. Also of interest was that 15% of the respondents are of the view that political interference was a major push-factor. They believed that the work of the MSD was hindered by political directives. There was also 31% of the respondents that were not sure what the major wage bill push-factors were. This indicates officers that do not seem to know what items of the wage bill must be targeted for review.

Question 6: There is a theoretical notion that a huge wage bill overcrowds capital expenditure in most developing countries; in your view is this true or false; please elaborate your answer with examples.

Table 13: Overcrowding of capital expenditure by wage bill

	Yes	No	Not Sure
No. of Respondents	7	2	4
Percentage	54	15	31

At least 54% of the respondents agree with this observation, which means that they recognise that the current GoS civil service wage bill is not sustainable and has antagonistic consequences for the development of the country, and the achievement of its service delivery agenda. The wage bill therefore cannot be allowed to outweigh the countries development agenda, under the pretext that governments must ensure employment, thus being the largest single employers in most Sub-Saharan Countries. It is however noted that there are those respondents (31%) that are not sure of the impact of the wage bill on other service deliverables, yet the wage bill is a major challenge of the country, and a major responsibility assigned to their division.

Question 7: Data contained in the Establishment Registers dating from 2010-2016 indicates that there has been an annual average increase of 21% of the wage bill; in your view what is the main cause of this increase; is it the failure of the of the techniques employed by MSD or level of the developmental state of Swaziland? Please elaborate on your answer.

Table 14: Main causes wage bill increase

	Failure of Techniques	Level of Development	Both	Not Sure	Other
No. of Respondents	-	2	3	-	8
Percentage	-	15	23	-	62

The majority of the respondents (62%) argued that other factors contributed to the annual wage bill increment. Chief amongst these was political influence. However, the exact examples of same were not given, but this alluded to political directives in the establishment of posts. Nevertheless, this could not be ascertained as such political directives were not documented.

Question 8: Political and administrative leadership is essential to any administrative and/or financial reforms; in your opinion has same been forthcoming within your department. Please elaborated on your answer.

Table 15: Forms of support given to MSD

	Yes	No	Not Sure	Irrelevant
No. of Respondents	2	6	5	-
Percentage	15	46	39	-

It was interesting to observe that 39% of the respondents could neither agree nor disagree with the view that political and administrative support was given to MSD in its drive to reform the civil service. This might to a large extent be confirmed by the failure of all wage bill reform initiatives e.g. ASD and EVERS. It is from these respondents (even though not documented) that previous Ministers did not support these initiative, as they felt that they were soft targets and beleaguered the most venerable of the civil services e.g. cleaners and security guards.

Question 9: There is a notion within the civil service that the Army constitutes the largest proportion of the wage bill; is this statement factual?

Table 16: Proportion of the Army cost to the wage bill

	Yes	No	Don't Know
No. of Respondents	5	-	8
Percentage	39	-	62

Notably the majority of the respondents' preferred to remain neutral on this matter, mainly because they contended that they did not have access to the actual Army personnel numbers. Yet in response to question five, the majority cited the army as the major wage bill push-factor. As noted earlier, the data at the disposal of this research contradicts the notion that the Army compose the largest share of the established posts. As much as the study stated that the Army would not form part of the research, it is common understanding that there is a negative perception to the existence of the Army for a small country such as Swaziland.

Question 10: The Lean Service Principle was first recommended by the Public Sector Management Programme in 1999; Are you aware and/or do you have access to this report? YES.....NO.....if your answer is yes, what is your view of this recommendation considering the manner in which MSD performs its organisational development studies

Table 17: Knowledge of PSMP report

	Yes	Aware but no Access	Not aware of the report
No. of Respondents	2	1	10
Percentage	15	8	77

It is unfortunate to learn that the majority of the repondents' were not aware of the core ISAP document that made a variety of recommendations that are now being pursued by MSD, e.g. revival of ASD, Performance Management System (PMS), Lean Service and Payroll and Skills Audits, MoPS (2016). Therefore, of those sampled that indicated they were not in a position to respond to the questionnaire, (the 37% alluded to earlier) were also not aware of the PSMP report. This alludes to a management gap in the orientation of recruits into the division. It demonstrates a lack of a proper strategy in the planning and placement of new entrants into the division.

Question 11: In your opinion what are the best methodologies that can be applied to contain the wage bill? (Please elaborate your answer with examples).

Table 18: Best wage bill reduction techniques

	Appropriate Skills Mix	Economising options	Political & Administrative support	Not Clear
No. of Respondents	2	6	2	3
Percentage	15	46	15	23

As much as 46% of the respondents noted economising options as the main options at the disposal of MSD. Its interesting that none of those that were proposed were within the Lean Service and JIT techniques. None of the proposals seek to reform neither service delivery production line nor customer satisfaction. The majority were purely designed for the actual reduction of the head count, without consideration of knock-on effects from these proposals. This may explain why they never received political support. This is to say that the majority of the respondents identified ASD and removal of the Army from the payroll. When questioned further, the officers were not in a position to propose responses to the knock-on effects that may result from having individuals lose their jobs. This was a key item as it has been noted that “the private sector in Swaziland is not creating as many jobs as required, and government remains the major employer” (GoS, 2016, p.7).

Question 12: There is a notion from Cabinet that MSD has not been successful in its mandate to contain the wage bill, what is your opinion on this statement? Kindly also justify your response.

Table 19: Cabinet perception of MSD

	Notion is correct	Notion is misguided	Not aware of notion	Partially true, but there are other factors	No opinion
No. of Respondents	1	10	-	1	1
Percentage	8	77	-	8	8

Reasons given by the 77% of the respondents to maintain that Cabinet was misguided in its conclusions on MSD, was that there was political interference in the undertaking of the mandate of MSD. To this end, it was argued that unfounded and undocumented instructions on the creation of certain posts were made. These were mostly pointed to be rampant within the Armed Forces (i.e. Police, Correctional Services and the Army). However, further cross-examination into the question unearthed the desire to have MSD functional so as to ensure job security. The failure to manage the wage bill was not at all placed on the ineffectiveness of the tools at the disposal of MSD, even though many were not sure of how these tools were practically utilized.

4.7. Lean Service Principle, JIT technique and PSMP Data Analysis

MSD conducts organisational reviews on systems and procedure audits to attain a “Lean Civil Service” as based on the PSMP that was initiated by GoS in the 1995 and reviewed between 1999 and 2005. The programme identified a number of initiatives that would seek to curb the low service delivery rates by the civil service. Amongst these were that the civil service should be reconfigured to be more “Lean and Efficient” and this was to be achieved through reduction and/or control of the posts/positions created for ministries/departments and the outsourcing of none-core government functions.

The PSMP was designed to raise the standards of service delivery and to realise greater efficiency and cost effectiveness of the civil service. As a result the under-listed were identified as the programmes outputs/objectives:

- (1) Develop clear and appropriate ministerial missions, objectives, strategies, structures and staffing levels;
- (2) Identify areas where Government involvement needs to be reduced or is found to be inappropriate, and to increase the participation of the private sector, non-governmental organisations (NGOs) and individuals in the provision of services;
- (3) Improve the performance and productivity of the public service for efficient and effective delivery of services, through new or revised operating, technical and management systems and new or revised human resources management systems;

(4) Build the capacity and capability of operational staff, and middle level and senior public sector managers, through training;

(5) Create and increase awareness and to disseminate information to public servants and the nation at large about the compelling need for public sector reform and the goals, objectives and activities of the programme, in order to encourage support and ownership of the PSMP; (MoPS, 1999, p.3)

In pursuit of the objectives as highlighted, Lean Service Principle was identified and is the guiding philosophy of the MSD based on the PSMP. Worth mentioning is that the PSMP project staff were absorbed by MSD to ensure the implementation of the PSMP objectives. To this end, Maleyeff (2007, p.9) advocates that Lean Service can be defined as a “management approach that seeks to maximise value to customers, both internal and external, while simultaneously removing wasteful activities and practices”. He also argues that Lean is not just an organisational development technique but a management principle that should be embraced to achieve efficiency and improved productivity.

There has not been a detailed appraisal of how well the division has pursued and/or implemented the PSMP as a base for service delivery and SAP for the GoS. The PSMP’s usage as a mechanism to reconfigure the functionality of ministries/departments within the Lean Service Principle has also not been evaluated. However, as indicated in the previous section, 77% of the respondents were not aware of the PSMP report (refer to Table 17). They had no access to it nor were they oriented on its recommendations.

Public service reform becomes necessary when uncontrolled growth of the establishment, combined with unsustainable levels of pay (often aggravated by a deterioration of the economy) force the wage bill to surpass its economic development. On the foundation of this statement the GoS initiated the self-imposed Internal Structural Adjustment Programme (ISAP) through the implementation of the PSMP in 1999. It is this programme that observed the trend towards a ballooning civil service, and as the indication of the data discussed, the programme was correct in its observations.

This programme was born out of the introduction of the NPM paradigm into the public service management discourse. Many governments have embraced the NPM as the framework or

paradigm through which governments are modernised and the public sector re-engineered. The NPM movement is driven by the desire to maximise production and allocate efficiencies that is hampered by public agencies, that are unresponsive to the demands of citizens Zawalinska (2004). Swaziland is of no immunity to the observations by the author, and as a result, MSD was given added responsibility based on this doctrine, and reaffirmed by the absorption of the PSMP staff into the staff compliment of the division at the end of the project.

The Lean Service Principle was born of this programme. It was promoted as a means by which the increase of the civil service would be curtailed. Chief amongst the methodologies that the PSMP recommended were; retrenchments, early retirement programmes, freezing on recruitment, freezing of increases on pay scales and outsourcing. However, these recommendation do not fall within the tools advocated for by the Lean Service Principle.

The Lean Service Principle continues to be the cornerstone to the work methodology of MSD. The Honorable Minister for Public Service in his 2017/18 financial year budget request report, noted that MSD shall continue to persue Lean Service “to control the size of the public service whilst ensuring a meritorious quality service. The Ministry will additionally undertake work study and work reviews to determine the need for requested new positions” (MoPS, 2016, p.1). However, as alluded to there is no direct linkage to the PSMP recommendations and the Lean Service tools that are utilised by MSD.

The Lean Service techniques are mainly process improvement, waste reduction, customer satisfaction, production alignment, and reduction in production cost techniques. As a result, Pienkowski (2014, p.3) notes that the core applicability of Lean Service is the reduction in “Muda (uselessness), Muri (overburden) and Mura (variation in production volume), which represent the essence of complete and permanant waste (an activity which does not add value to the product) elimination in the production process”.

The forgoing is contrary to the spirit of the PSMP report, as it does not identify the items as indicated to be the means to the reduction of the wage bill. The respondents also did not identify the techniques as those that would result in retrenchments, early retirement programmes, freezing on recruitment, freezing of increases on pay scales and outsourcing.

Leite & Viena (2013, p.15) argues that the most dominant human resource application of Lean Service, is the “empowerment” for employees and teams. This notion is in line with the principles of establishing an organisation that embraces the involvement of the human resource in the value streaming of the production process. The PSMP report and the respondents did not identify the foregoing as items that can contribute to the reduction and/or control of the wage bill.

The argument is that for an organisation to effectively meet customers’ needs, it requires to follow through with the TQM principle. This principle involves the efforts designed at improving quality at every level of the organisation. Therein rests the involvement of the human resources function. The employees should be involved and motivated in the definition and quantification of product and systems reliability, performance, durability, courtesy, promptness and general organisational atmosphere.

Based on the foregoing, the TQM and Lean Service Principle are designed to enhance employee performance and not directly reduce their numbers in the production process. As a result, employees are expected to contribute by seeking out, identifying and correcting quality problems. If these tenants were to be transposed to the context of the GoS civil service, MSD would be tasked with motivating employees to perform their operations in a more effective manner. The civil service would be “Lean” in that its service processes would directly meet the expectations of the masses. This however, does not directly imply that the wage bill would be drastically reduced.

The human resource component is also appreciated when reviewing the broad view of the organisation philosophy within the JIT technique. This view is of the notion that employees should not focus exclusively on their own tasks and/or duties, but must understand the processes within the entire spectrum of the organisation. This is suggested because each and every task or duty is linked to another in the production process, which must result in customer satisfaction, as all employees are responsible for satisfying customers. This is directly linked to the visibility of the production or service process. Once again it is witnessed that this technique as well is not purely and directly designed for the reduction of staff complements, as is the overreaching goal of MSD’s application of these techniques. Furthermore, as noted the respondents did not identify the JIT techniques as explained to result in the reduction of the wage bill. In fact, 46% of the respondents identified economising as the methodology for

wage bill reduction (refer to Table 18). This methodology is not within the JIT technique application.

As noted that the PSMP was the main doctrine that pushed for the Lean Service Principle, it was later evaluated and refocused with objectives that were more streamlined, up to late 1998 it had not meet its goals. Worth noting is that the objective to reduce the civil service did not clearly appear in the Framework For More Effective Implementation of the Public Sector Management Programme report 1999. What was then termed as objective 3: "To improve the performance and productivity of the public service for effective and efficient delivery of, services, through new or revised operating, technical and management systems and new or revised human resources management system", took center stage. But lessons of experience have indicated that the reduction of the wage bill resurfaced in later years, especially with the decline in Foreign Direct Investment (FDI) as a result of the lifting of trade barriers in the Republic of South Africa at the fall of the apartheid regime. This situation was as discussed previously worsened by the decline in SACU receipts and the continued failure by the country to device domestic sources of revenue.

The third objective of the revised framework speaks directly to the main tenants of Lean Service Principle. But it must be noted that the change in operations and management system does not tally with reduction in staff numbers. It speaks to the manner in which inputs can be converted to outputs that are customer centric goods and service. It refers to a civil service that is responsive, accountable and transparent in its dealing with the populace. A civil service that guarantees value for money, not only for the populace, but also in its own internal operations. However, is also does not directly result in the reduction of the civil service head-count.

There are methodologies that have been conceptualised and were at one point or another customised for the GoS civil service reform agenda. As part of the PSMP. ASD was recommended, wherein certain "non-core" service were identified for either outsourcing or decentralisation to local government structures. Amongst these were cleaning services, security services, revenue collection services, consultancy services i.e. MSD & Swaziland Institute of Management and Public Administration (SIMPA), abattoirs, facilities maintenance and fleet management to mention but a few (PricewaterhouseCooper, 2003).

Another facility was EVERS in 2006, which attempted to give exit packages to individuals who wished to leave the service before their retirement age who had served a minimum of ten years. The latest attempt was through Establishment Circular No.9, 2010: Freezing of Vacant Posts and Suspension of all Appointments into the Service. Noteworthy, is that none of this programmes were ever fully implemented and/or adhered to. The only ASD success story was the removal of the Income Tax and Customs Department and its conversion into the Swaziland Revenue Authority (SRA), but the revenue centers remained as part of the Treasury and Stores Department. The EVERS did not receive political support as did some of the ASD items. These were good reform agendas, but for them to succeed they required political support. Stevens & Teggemann (2004), noted that lack of political support resulted in the failure of reform programmes. Establishment Circular No.9, 2010, was only successful for only two financial years (during the economic downturn), and then witnessed a boom in the creation of posts thereafter.

Based on the current literature and items achieved under the Lean Service Principle and the JIT technique, the study notes that a more suitable methodology in personnel determination is HRFP. This includes a number of steps and processes that are postulated to result in more organisational structured human resource recruitment. This methodology stems from the Organasational Strategic Plan (as determined by the Board and top management), which is then translated into a Human Resource Strategy (HRS) that is reduced to a Human Resource Plan (HRP).

This process entails a number of steps as highlighted by Bulmash (2015), the most key of these is the establishment of a Human Resource Planning Team (HRPT), which in the context of GoS is the mandate given to MSD. It is this team that aligns the HRP to the organisational strategy. It is mandated to pursue the tools as assigned in the determination of personnel requirements. Firstly, the team must understand the Appropriate Planning Horizon, which is defined is a judgement about how far into the future predictions can be made, taking into consideration acceptable levels of operational, organisational, and environmental uncertainties. Bulmash (2015) also postulates that this can be on a yearly base or within the mid-term.

4.9. Chapter Summary

This chapter conclusively indicated that the civil service wage bill is an issue for concern. It has clearly shown that this item has outpaced the capital programme expansion and compromised development. There has been a clear indication that the lack of MSC qualification within the MSD has resulted in the failure to apply the requisite tools and techniques. As 75% of the officers within the division do not possess the MSC (refer to Figure 6). There has not been a clear link between the provisions of the Lean Service Principle, the JIT techniques and the recommendations of the PSMP. The latter recommended retrenchments, early retirement programmes, freezing on recruitment, freezing of increases on pay scales and outsourcing as mean to the reduction of the wage bill. However, these methodologies do not form part of the provisions of the Lean Service Principle and the JIT techniques. The usage of a lean and efficient civil service in the PSMP was not then correlated to specific tools that would result to the GoS civil service being lean and effective.

The respondents were aware of the Lean Service Principle and the JIT technique, but they were not able to detail these tools applicability to the reduction of the wage bill. Close to 77% of the respondents (refer to Table 17) did not know of the PSMP report that advocated for the lean and effective civil service.

5. Chapter 5- Conclusion and Recommendations

5.1. Introduction

This research addressed the veracity of the increase in the wage bill as a result of the failure of MSD in the implementation of the principles applied and the relevance of said principles in the context of the civil service (service sector) as adopted from the manufacturing sector.

Moving forward appropriate methodologies for the reduction and management of the civil service wage bill should be devised based on the outcomes of this research, and if determined the capacity and mandated of the MSD shall be strengthened.

HRFP techniques have proved to be more relevant to the determination of required posts, as they not only indicate relevant numbers, but also consider the organisation context and market environment. They enable organisation to identify personnel requirements from the strategic direction and intent of the organisation. Furthermore, the labour market is adequately considered and enables appropriate human resource planning. This is a key element that a cash-strapped government like GoS is in dire need of. The adoption of the HRFP will prove to be an innovative move towards the balancing of competing needs for manpower and socio-economic development of the citizenry.

In pursuit of the HRFP a Team must engage into an evaluation of the internal labour force of any ministry/department. This Team must be in the context of Swaziland be the MSD. The evaluation of internal labour force ensures identification of the nature of the employment status of the organisations current employee's e.g. Contract, temporal, permanent and pensionable, seasonal and interns to mention just a few. From this stage the process moves on to the conduct of a skills audit or human resource (HR) audit, of which GoS undertook as contained in the SPRSA 2015.

The skills audit enables the organisation to understand under which functions is it lacking and requires engaging into a capacity building programme. Furthermore, The HR audit compares the past with the present labour specifications to identify trends and patterns in multiple aspects, including turnover, training, absence, and diversity. An HR audit can identify key information about HR operations, including how well they work, and where improvement may be needed

Bulmash (2015). This has been a fundamentally lacking aspect in the tools and techniques utilized by MSD.

The MSD must then consider external labour force, before a final determination of the need to create a post is made. The labour pool that will supply the organisation with the right skills to attain its identified operations and service delivery needs must be known to the entity. The MSD can go as far as creating relations with training institutions that have been identified as potential supply sources of human resources, specific to the operations of the various ministries/departments. In the context of Swaziland there is an already established entity within GoS mandated to collect data and forecast labour market personnel requirements; this unit is known as the Human Resource Planning and Development Unit (HRPD) under the Ministry of Labour and Social Security (MoLSS). Closer relations can be forged between MSD and HRPD so as to feed into the operations of MSD as far as HRF is concerned.

Another important stage that must also be engaged into is Trend Analysis; which assumes that past trends and ratios in employee movement are stable and indicative of future trends and ratios in employee movement. The information collected in the HR audit is used to identify labour patterns—hiring patterns, retirement patterns, productivity patterns, and turnover patterns. By examining the trends of the past, predictions of the effect of the same activity on the future of the organisation, because it is assumed that these patterns will remain stable. This will enable MSD to be better understanding of the labour dynamics as per individual ministry/department such that specific labour practises are recommended and adopted.

If all the above steps within the process are successfully undertaken, Demand Forecasting is then pursued. Bulmash (2015, p.15) argues that demand analysis identifies the future workforce requirements needed to maintain the organisation's mission and goals. The end result of a demand analysis is the identification of the required number of employees in an organisation and the necessary functions that the employee must perform to meet organisational objectives. This will better contribute to the budgeting function for future personnel costs, and to an extent making personnel budgeting more predictable.

It is after the careful and well-articulated undertaking of the steps and activities, as highlighted in the HRF that posts within an organisation can be considered for creation. However, it must be noted that this process must have the support of the leadership of any organisation. In the

context of the civil service, Principal Secretaries and their managers from the client ministries/departments must offer this support. It is the belief of this research that it is after this detailed process the Lean Service Principle and the JIT technique can then be engaged into. The notion of Kaizen (continues improvement) then comes into play. The implementation of the HRFP process creates a proper environment for the use of the Lean Service Principle and the JIT technique.

If for example a new position(s) have been created it is then that the production process can be investigated to remove Muda and streamline the activities into customer satisfaction. Value creation of any service must meet the strategic goals of the organisation as supported by the HRP. A continues review of these activities must be undertaken so as to identify areas of adjustment and cost saving. This is also true if the HRFP resulted in the none-creation of a new position.

5.2. Conclusion

MoPS has not invested heavily in the capacity building of the MSD staff in Lean Service Principles and JIT technique, especially the 63% of officers that failed to respond to the study (refer to Figure 4). The failure in the training of these techniques has resulted in these officers not being fully utilised. The wage bill has as a result continued to increase, and the political discourse has also made a huge contribution to same.

It has been noted that as much as there are no “ghost employees” within the civil service, there is a huge number of established posts that are manned by more employees than those that have been sanctioned. This is a major cause for concern as it is not clear as to how this was allowed to happen. This implies failure by MSD to properly manage the establishment of post and the assignment to each post to one officer per post.

The major wage bill push-factor has been the continued creation of posts mainly within the education sector and armed forces. There has not been any evidence of the application of the tools and techniques at the disposal of the division. Most notably is the political influence in the creation of posts as noted in the 2017/18 financial year, were over 1000 posts were approved by Cabinet without following due techniques and principles.

The techniques and tools have been noted to be process and systems improvement tools that are designed to create customer value in the production line and remove waste. Other methodologies that were earmarked for the reduction of the civil service head count have not had sufficient political support, and therefore up-to-date have not been implemented. The sanctioning of Cabinet policies without the identification and/or consideration of the resources needed for their implementation has also resulted in the addition of the civil service head count. The salary review as implemented in April 2016 along with the yearly cost of living adjustment has also increased the basic civil service minimum salaries, and undoubtedly increased the general wage bill.

The research has been able to fill the knowledge gap with regards to the success of MSD in the attainment of its mandate. There is now knowledge on why the tools and techniques as should be employed by MSD have failed. The major defect in the said tools is that they were not purely designed for wage bill control. The tools and techniques have failed, and this has also been as a result of the lack of training on the said tools and techniques.

Based on the trend analysis as employed in this research, it is evident that the wage bill is an issue and will continue to increase unless decisive action and techniques are employed. There has been a steady increase of the civil service head-count, even though Cabinet has sanctioned establishment circulars that restrain the creation of additional post, clearly there is a major issue to be addressed with a great sense of urgency.

5.3. Recommendations

Based on the findings of this research the under-listed recommendations are put forth:

- It is recommended that Lean Service Principle and the JIT technique should not be used to control and/or manage the wage bill, but must be used for process and systems improvement to create customer value. This is one of the main items that MSD has to achieve.
- It is recommended that all MSD employees that do not possess the MSC be afforded an opportunity to be trained in this qualification. This will enable the officers to understand the application of Lean Service and other relevant techniques in customer value creation

and reduction of muda, mura and muri within the service delivery production line of individual ministries/department.

- It is recommended that HRFP be adopted as a more relevant technique to determine the number and caliber of required posts within the civil service. These techniques have been proven to be a more logical tool that has the potential to control the creation of posts as they purely deal with the relevance of a required function or duty in the attainment of an organisations strategic direction.
- It is recommended that not only should the MSD staff be trained on the Lean Service Principle and the JIT technique, but must also be trained on the HRFP. This will enable a better appreciation of this technique and its tools. This will also broaden the officers understanding and appreciation of the requirements of organisational processes and manpower planning.
- It is recommended that personnel requirements must be linked to the specific ministry/departments HRP that is intricately strategically linked to that ministry/departments mandate, vision, goals and strategic direction over that strategic period.
- It is recommended that all posts that were created without the requisite establishment justification (those identified by the SPRSA) be abolished if they are vacant and/or abolished as a result of natural attrition. In line with the forgoing the creation of posts for the armed forces must also be subjected due the relevant organisational development processes, not political directives.
- It is recommended that a strategic review and work methodology review for MSD itself be conducted. This process can be undertaken by a private consultancy firm, as MSD may not be objective in its own review. This review will enable the determination of the most appropriate tools and techniques that the MSD can utilise, as discussed by this research study.
- On the strength of the forgoing, it is recommended that Cabinet considers and approves a capacity building program for MSD before it contemplates disbanding the division.

Furthermore, it must also cogitate its political role in the creation of posts without due technical considerations.

- It is recommended that all political policies be carefully considered for their manpower resource needs prior to them being implemented. It has been proven in this research that more often than not these tend to have a huge personnel component to them that are neither properly identified nor budgeted for.
- It is recommended that the personnel reduction programmes, e.g. EVERS and ASD be reconsidered and revitalised so as to contribute to the reduction of the civil service head-count. The need for political support of these programmes cannot be over accentuated. This is also on the strength that the majority of the respondents identified reduction of personnel as the best option to reduce the civil service. However, this should be done with due consideration of all social-economic factors that may affect those identified under the personnel reduction programme.
- It is recommended that the notion among MSD officers that the Army is the major push-factor for the wage bill be addressed. This is in line with the findings of this research that the education sector is the major wage bill head count push-factor. The notion implies that there is a lack of understanding amongst officers of the major wage bill push-factors. This also indicates that the officers are not in a position to readily identify which areas of the wage bill need attention.
- It is recommended that on the strength of the above recommendation, the MSD officers must be oriented on the major mandate giving documents for the department. These must not only be limited to the PSMP report but also the Chief Udoji and Wamawalwa Commission reports. It has been clearly shown by this research that the officers are not preview to the founding documents of the department they service. This is a concerning anomaly.

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Appendix A: Cover Letter



01 September 2017

To Whom it may Concern

Re: MBA STUDENT -- SABELO SIFUNDZA-- STUDENT NO: 201512738


As part of our MBA Programme, students are expected to submit a research report after completion of their course-work. They need to explore in detail, some concepts and issues pertaining management strategies. To do that effectively, they need to conduct interviews and obtain practical examples.

Mr Sifundza has chosen your organization to approach for information. It is against this background that I wish to kindly request you to assist Mr Sifundza with the information she requires. Accept our assurance that the data will be used for academic purposes only. A copy of the completed document will be available at the Namibia Business School for perusal. His research synopsis indicates that his topic touches on the *"An Investigation of the effectiveness of the Lean Service Principle in the civil service: A Case Study of the Management Services Division (MSD), Ministry of Public Service (MoPS), Swaziland"*

Your kind assistance is highly appreciated.

Yours sincerely




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Sabelo Sifundza
P.O. Box 2874
Manzini
Swaziland

18th September 2017

The Principal Secretary
Ministry of Public Service
Second Floor
Finance Building

Dear Sir

RE: PERMISSION TO COLLECT THESIS RESEARCH DATA

As partial requirement of the MBA in Management Strategy, students are required to undertake a thesis report process, to which data collection is a prerequisite. To this end the undersigned student has identified your Ministry as a data collection centre in the study; *The Effectiveness of Lean Service Principles: A Case Study of The Management Services Division (MSD), Swaziland.*

Your Ministry has been identified due to the role it plays in the budgeting and mandate to the containment of the civil service wage bill. The study seeks to understand the wage bill push-factors. The preliminary data has indicated that the wage bill is the largest component of the Recurrent Budget.

The objectives of the study are:

1. To assess the effectiveness of the Lean Service Principle on the control and maintenance of the wage bill.
2. To identify wage bill push-factors that should have been curtailed and mitigated by the adoption and application of lean service principle at MSD in Swaziland.
3. To assess the main wage bill push-factors that are causing the continued increase in public sector wage bill.
4. To identify defects and sever gaps in the implementation of Lean Service Principle and JIT techniques by MSD.

To this end, permission is hereby requested for the collection of data from the Management Services Division (MSD) officers as per the questionnaire attached and the Consent Letter issued by the University of Namibia.

Your cooperation in this regard is enlisted.

SABELO SIFUNDZA
RESEARCHER
UNIVERSITY OF NAMIBIA

DEPARRTMENT OF ECONOMICS AND MANAGEMENT SCIENCE

ASSESSING THE EFFECTIVENESS OF THE LEAN SERVICE PRINCIPLE: A CASE STUDY OF THE MANAGEMENT SERVICES DIVISION, SWAZILAND

Informed Consent Form for Management Analysts and Finance Officers, Government of Swaziland

Name of Principal Investigator: Sabelo Sifundza

Name of Organisation: University of Namibia

Name of Sponsor: Government of Swaziland

Name of Project and Version: A thesis submitted in partial fulfilment of the requirements for the degree of Masters of Business Administration- Management Strategy

Part I: Information Sheet

Introduction

I am Sabelo Sifundza, working for the Ministry of Public Service; Management Services Division. I am inviting you to participate in the study. The departments under study are Management Services Division (MSD) and National Budget Section (NBS). These departments have been identified due to their role in the management and/or control of the wage bill.

The participants can talk to anyone they feel comfortable talking with about the research and they can take time to reflect on whether they want to participate or not. They can also ask questions at any time.

Purpose of the research

The research is aimed at:

1. To assess the effectiveness of the Lean Service Principle on the control and maintenance of the wage bill.
2. To identify wage bill push-factors that should have been curtailed and mitigated by the adoption and application of lean service principle at MSD in Swaziland.
3. To assess the main wage bill push-factors that are causing the continued increase in public sector wage bill.
4. To identify defects and sever gaps in the implementation of Lean Service Principle and JIT techniques by MSD.

Type of Research Intervention

The research involves questionnaires and interviews.

Participant Selection

You have been invited to take part in this research because of your experience on the subject matter and the mandate assigned to your respective department.

Voluntary Participation

The participation is voluntary and the participants can choose to participate or not. The responses you give will have no bearing on your job or any work-related evaluation or reports.

Procedure

You are requested to assist the researcher gain a better understanding of the wage bill push-factors. A questionnaire with questions relating to demographic data and subject-specific questions shall be distributed.

Duration

The questionnaire will take no more than 10 minutes.

Risks

There is no risk involved, as the participant will not be required to divulge personal information.

Benefits

There will be better understanding of the wage bill push-factors and the relevance of the techniques applied to monitor and/or control it.

Reimbursement

There is no reimbursement.

Confidentiality

The Researcher will maintain confidentiality of data with respect to both demographic information about the participant and information that the participant shares. Information gathered will only be used for the sole purpose of the research. The identity of participants will not be revealed.

Sharing of results

Nothing that you share with the researcher will be shared with anybody, and nothing will be attributed to the participant(s).

Right to Refuse or Withdraw

You do not have to take part in this research if you do not wish to do so.

Who to contact

Sabelo Sifundza

Cell: 7617 1041/ 79171041/ 24043521

This proposal has been reviewed and approved by the University of Namibia Post Graduate Studies Committee, which is a committee whose task is to make sure that research participants are protected from harm.

Signature of Research Participant

I have read the information provided above. I have been given a chance to ask questions. My questions have been answered to my satisfaction, and I agree to participate in this research. I have been given a copy of this form.

Name of Participant

Signature of Participant

Date

Statement by the Researcher

I confirm that the participant was given an opportunity to ask questions about the study, and all the questions asked by the participant have been answered correctly and to the best of my ability. I confirm that the individual has not been coerced into giving consent, and the consent has been given freely and voluntarily.

-----Sable G. Sifundza-----

Name of Person Obtaining Consent

Signature of Person Obtaining Consent

ASSESSING THE EFFECTIVENESS OF THE LEAN SERVICE PRINCIPLE: A CASE STUDY OF THE
MANAGEMENT SERVICES DIVISION, SWAZILAND

Questionnaire for Management Service Division (MSD) Respondents

This study will generate information on the causes of the continued increment of the wage bill and the shortcomings of the Lean Service Principle and JIT Technique in the management and reduction of the Government of Swaziland civil service wage bill and further indicate the relevance of these principles in the context of the Government of Swaziland civil Service, this will enable the development of effective strategic pursuit by management of the Ministry of Public Service (MoPS) in realigning the most relevant aspects of the principles, tools and techniques as pursued to the mandate of the MSD.

Section 1: Management Service Division (MSD) Bio Data

1. Post Title.....
2. Years of service.....
3. Qualifications.....

Definitions

Wage Bill: Constitute, annual cost of living adjustments coupled with the additional costs of promotion and job regrading; the increase in employee head-count (creation of posts); the introduction of the occupation-specific dispensation (categorised recruitment and retention benefits).

Lean Service Principle: A standardisable system of service operations made up only by activities that generate value for customers, focusing on explicit tangibles and aiming to meet the customers' expectations for quality and price.

Just-In-Time Principle (JIT): JIT as a philosophy is designed to eliminate waste from the production/value system so as to create customer satisfaction. This is a tool that is designed to address reduced lead time in customer satisfaction that results from any equipment, parts, production processes, inventory and employee's time that does not add value to the service rendered to the customer.

Human Resources Forecasting and Planning techniques: these are techniques used by organisations to pre-plan personnel requirements for the achievement of organisational goals, sales forecast and natural attrition.

1. Is the Lean Service Principle applicable to the organisational development studies that are the mandate of you Division?

2. Is the JIT Principle applicable to the organisational development studies that are the mandate of you Division?

3. Have the above-mentioned principles as applied by MSD been effective in the containment of the wage bill? Kindly include examples to your response.

4. Are the Human Resources Forecasting and Planning techniques applied in your work methods in the determination of the required number of personnel to perform a function?
YES.....NO..... (Please tick your response and kindly elaborate on same)

5. In your opinion what are the major wage bill push factors?

6. There is a theoretical notion that a huge wage bill overcrowds capital expenditure in most developing countries; in your view is this true or false; please elaborate your answer with examples

7. Data contained in the Establishment Registers dating from 2006-2016 indicates that there has been an annual average increase of 21% of the wage bill; in your view what is the main cause of this increase; is it the failure of the of the techniques employed by MSD or level of the developmental state of Swaziland? Please elaborate on your answer.

8. Political and administrative leadership is essential to any administrative and/or financial reforms; in your opinion has same been forthcoming within your department/; please elaborated on your answer

There is a notion within the civil service that the Army constitutes the largest proportion the wage bill; is this statement factual?

10. The Lean Service Principle was first recommended by the Public Sector Management Programme in 1999; Are you aware and/or do you have access to this report? YES.....NO.....If your answer is yes, what is your view of this recommendation considering the manner in which MSD performs its organisational development studies

.....

11. In your opinion what are the best methodologies that can be applied to contain the wage bill? (Please elaborate your answer with examples)

.....

12. There is a notion from Cabinet that MSD has not been successful in its mandate to contain the wage bill, what is your opinion on this statement? Kindly also justify your response.

.....

Appendix E: Language Editing Letter

P. O. Box D 107

The Gables

Swaziland

06 December 2017

Dear Sir/Madam

To whom it may concern

This letter serves to confirm that Sabelo G. Sifundza's mini thesis entitled, "Assessing the Effectiveness of the Lean Service Principle: A Case Study of the Management Services Division, Swaziland" has gone through the editing process as per the requirements of the university. The work was reviewed and substantive improvements were made on the report.

I hope this comment satisfies your requirements.

Yours sincerely



Nomsa K. Masuku

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