

Suitability of the Kaizen Model on the management of fixed assets in the South African Reserve Bank

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Abstract

Suitability of the Kaizen Model on the management of fixed assets in the South African Reserve Bank (SARB)

This study involves establishing the suitability of the Kaizen Model on the management of fixed assets in the SARB. The goal is to show that the Kaizen Model could enhance the management of fixed assets in the SARB. This has been done through a literature review, empirical study and hypothesis testing.

The literature review indicated that implementation of the Kaizen Model could help to eliminate none value-adding activities and ensure that standard processes are continuously adjusted. Hence its implementation would influence frequent revisiting of the standardised process, which results in the identification of gaps in the process and adjustment thereof to be in line with the changing working environment.

Overall conclusion based on the respondents analysis indicated that implementation of the Kaizen Model will eliminate non-value adding activities which would enable all phases of asset mangement processes (including acquisition and disposal processes) to be adjusted to the changing working environment, which will result in fixed asset process improvement.

Four hypotheses results analysis indicated suitability of the Kaizen Model on the management of fixed assets of the SARB. Hence implementation of the Kaizen Model should result in improvement of service provided and will also foster teamwork which will contribute positively to the achievement of intended goals.

Based on the findings, the overall conclusion is that the Kaizen Model is suitable for the management of fixed assets in the SARB.

The Kaizen Model: The management of Fixed Assets at SARB.

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List of abbreviations

BB	Bloemfontein Branch
CBAO	Chaharmahal-Bakhtiari Agriculture Organisation
CSA	Control Self Assessments
CSD	Corporate Services Department
CTB	Cape Town Branch
DB	Durban Branch
ELB	East London Branch
EMM	Ekurhuleni Metropolitan Municipality
JHB	Johannesburg Branch
MBA	Master of Business Administration
MLPHAP	Michigan Local Public Health Accreditation Program
NPS	National Payment System
NPIP	National Productivity Improvement Program
NTAMG	National Treasury Asset Management Guidelines
NWU	North West University
OCE	Overall Consumable Effectiveness
OECD	Organisation for Economic Co-operation and Development
PDCA	Plan, Do, Check, and Act
PEB	Port Elisabeth Branch
PIs	Performance Indicators
PNB	Pretoria North Branch
SABNC	South African Bank Note Company
SAMC	South African Mint Company
SARB	South African Reserve Bank
SARBCICL	South African Reserve Bank Captive Insurance Company Limited
SWOT	Strengths, Weaknesses, Opportunities and Threats
The 5's approach	Sort, Set in order, Shine, Standardise and Stick to the rules

APPENDIX

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Chapter 1

Nature and scope of the study

1.1 Introduction

During the past century different concepts, approaches and tools were developed to help improve operations of various organisations. To date, through a number of research studies with different objectives, many of such concepts, approaches and tools have been addressed. Examples are research in ‘internal control over capital assets of the EMM’ and ‘the management of government immovable assets’ respectively conducted by (Motubatse, 2005:4) and (Mavasa, 2007:1). These studies were aimed at identifying methodology that would improve the management of fixed assets of an organisation.

However, there has emerged a methodical desire for the suitability of the Kaizen Model on the management of fixed assets. According to Imai (cited by Farris, 2006:16), the Kaizen Model can be referred to a continuous improvement process that involves everyone (from junior to top management) in an organisation. It can be applied at different levels of an organisation (management level, supervisors level general workers level, team or group level, and individual level). It emphasizes direct contact and communication between the individual and his/her manager that fosters teamwork and commitment.

Farris (2008:1) defines the Kaizen Model as a focused and structured improvement project that is implemented by dedicated cross-functional team to improve a targeted work area, with specific goal in an accelerated timeframe. Yamaki, former president of Mitsubishi Space Software, has explained the manager-worker relationship in the Kaizen Culture: “In the revised manager-worker distinction, the worker is supposed to plan, do, and control; and management is charged with motivating workers for higher productivity.”

The Kaizen Model is based on the belief that the people doing a particular job will often know better than everyone, including their supervisors, about how that task can be improved; and that they should be given the responsibility for making those improvements (Cane, 1996:3). It is based on a participatory process involving the entire workforce aimed at continuous improvement of productivity and quality.

The Kaizen Model is based on a continuous cycle of PDCA. “Plan phase” refers to the need to set a target for improvement because without a benchmark, success cannot be measured. “Do phase” refers to the implementation of the plan. “Check phase” is the determination of whether the plan improved the process or achieves the intended objectives. “Act phase” means standardised the improved process so that it can be repeated. The Kaizen Model relies on the idea that there is no end in the making of a better process. As a result, it is suitable in any area that needs improvement and process should be continuously revisited to identify emerging gaps that are influenced by changing working environment and also eliminate them.

Based on previous studies such as ‘critical success factors for sustaining the Kaizen event outcomes’ by Glover (2010:12), there is a consensus on the importance of the Kaizen Model implementation in enhancing the manufacturing processes of any organisation. The Kaizen Model is applicable not only to the manufacturing sector but also to the public organisation, service sector and non-profit organisations. Hence it installs both the constant innovation in the product or service that the organisation provides and a culture of continuous improvement that adapt to the changing working environment.

➤ **Case Studies related to the Kaizen Model**

Lee (cited by Singh, J. & Singh, H, 2009:60) has conducted a case study at Nichols Foods manufacturing food products. There was a lack of standardised operating procedures, forces and structure. The study describes how the company values have improved the work environment for the employees and motivated them to achieve excellence after implementation of the Kaizen Model. The paper describes that how

the Kaizen Model has been implemented in that company by using the 5's approach and team training. The result shows decrease in quality rejections, reduction in overtimes worked and increase in manufacturing efficiencies.

Palmer (cited by Singh, J. & Singh, H, 2009:60) has focused his study on the 'inventory management Kaizen' that has been conducted at 'BAE SYSTEM' to remove the muda (waste) from the receiving and storing process for the project which was scheduled for ten months. The Kaizen event encompasses about five months one week from actual analysis of the process and the remaining four months three weeks were used to implement the changes that are identified. Results show that the process time was reduced from 610 hours to 290 hours. Ultimately the Kaizen event resulted in saving amounting to over million dollars per year.

Ahmed *et al.* (cited by Singh, J. & Singh, H, 2009:60) conducted a study in a casting based manufacturing plant, which is currently implementing the Kaizen Model to achieve higher productivity. The study has focused on the PIs currently being used to measure the company performance. Careful investigations and observations have been taken to show the effectiveness and efficiency of the implementation of the Kaizen Model in an innovative manner. After analysing the collected data, sufficient information has been generated on various aspects of performance evaluation which showed positive results due to implementation of the Kaizen Model. However, due to lack of financial data, monetary-based could not be carried out for a study.

Granja *et al.* (cited by Singh, J. & Singh, H, 2009:60) study the Target and the Kaizen Costing concept in a construction company. The aim was to develop the framework taking into account these two matching approaches which provide a basis for a total cost management system. The researcher explains that the continuing series of the Kaizen activities are needed to achieve product performance and reduce the cost. Combining the Target and the Kaizen Costing is a powerful approach for the construction company by assuring value for the customer at a low price but profitable price.

Dehghan *et al.* (cited by Singh, J. & Singh, H, 2009:60) carried-out the case study of the Kaizen project that is performed by NPIP, at CBAO. Two Kaizen methodologies namely the 5's approach and process improvement were used for this project. The status of the process before and after the Kaizen Model was shown by using flow charts, block diagrams and spaghetti charts, etc. Shortening of work processes and decrease in financial expenses result in increasing the satisfaction level of both domestic and foreign customers. Results indicated reduction in 11% stations, 11.7% reduction in moving around, 16% time saving, 34.2% length reduction and 53% saving in transportation cost.

Kikuchi *et al.* (cited by Singh, J. & Singh, H', 2009:60) carried-out study that was aimed at applying OCE method to cost reduction by using the Kaizen technique to a semi-conductor industry. The consumption of gases and chemicals for a specific process was very high. Two different methods of OCE technique were adopted to reduce the consumption of gases and chemicals for 12-items. The result indicated a cost reduction of 7% annually for the use of gases and chemicals. This experience has raised the awareness that the Kaizen process can be suitable also to other areas.

However, despite numerous studies, there is no proven evidence or agreement among researchers, authorities, organisations and specialised professionals on the suitability of the Kaizen Model on the management of fixed assets in relation to the standardized process.

Hence this study which is aimed at establishing the suitability of the Kaizen Model on the management of fixed assets in the SARB. Its effectiveness will be based on an analysis of PDCA throughout the major stages (acquisition phase, operations and maintenance phase and disposal phase) of a fixed assets life cycle.

According to Nemoto (cited by Suárez-Barraza, 2011:157-176) the concept of standardisation has two strands. The first is linked to establishing product size, weight, and quality based on International Standards. The second is linked to a systematic

process for regulating, normalising, and establishing work methods regarding the key organisational variables and is expressed through processes, procedures, and work guidelines and instructions.

Standardised process is defined as a way of breaking large pieces of work into small pieces that are manageable and achievable by outlining the process to be followed when carrying out a task with the aim of meeting planned objectives within an organisation's operations.

The standardised process helps to eliminate ambiguity and unpredictability. According to Schein (cited by Lamb and Rhodes, 2007:1), standardised process also attempt to ensure the efficient use of all resources, namely human, financial and material. Unlike the Kaizen Model, the standardised process is not applicable in a rapidly changing working environment.

1.2 Problem statement

Many researches such as the one done by Mollentze in 2005 have carried-out research aimed at improving the management of fixed assets through proper fixed assets management policy, process and internal control. However, these studies failed to highlight the importance of eliminating non-value adding activities and the importance of the flexibility or frequency updating of the standardised process.

Implementation of the Kaizen Model could help to eliminates none value-adding activities and ensure that standard processes are continuously adjusted to be in line with the changing operating environment. Hence, the Kaizen Model fosters continuous improvement process through direct contact and communication between an individual and his/her manager aimed at promoting teamwork and commitment. As a result, implementation of the Kaizen Model would influence frequent revisiting of the standardised process and adjustment thereof to be in line with changing working environment.

The Kaizen Model can be referred to as on-going process improvement that involves all employment levels in an organisation. As a result, this study will find out the suitability of the Kaizen Model on the management of fixed assets at the SARB.

The study is designed to answer the following questions:

- Why the Kaizen Model suitable for the fixed assets management in organisation such as SARB?
- What are the benefits of implementing the Kaizen Model on the management of fixed assets of an organisation?
- Is the Kaizen Model seen as a continuous improvement tool?
- Is the Kaizen Model applicable on fixed assets management?
- How may the Kaizen Model contribute to the management of fixed assets?
- What risks can be embedded in none updated standardisation process that does not adjust to the changing operating environment with regard to the management of fixed assets?

1.3 The objective of the study

The objective of the study is divided into primary and secondary objectives which discussed in details in 1.3.1 and 1.3.2.

1.3.1 Primary objective

The purpose of the study is to establish the suitability of the Kaizen Model on the management of fixed assets at the SARB. This will also include an analysis of the Kaizen Model from its conception to its success today, basic components and tools of the Kaizen Model and specific requirements for suitability of the Kaizen Model in an organisation.

1.3.2 Secondary objective

In order to perform the necessary investigation outlining how a flexible process such as the Kaizen Model could be suitable for management of fixed assets in SARB. The following secondary objectives for literature review and empirical study need to be considered:

➤ Literature review

Literature review will cover the following:

- Fixed asset management;
- Definition of the fixed asset;
- Definition of the fixed assets management;
- Objectives of the fixed assets management;
- Fixed assets management concepts and its best practice;
- Fixed asset life cycle;
- Fixed assets management framework;
- Methods used to manage fixed asset;
- How the Kaizen Model is suitable for fixed assets management focusing on acquisition and disposal stages of fixed asset life cycle; and
- Organisation selected for research.

➤ Empirical study

Empirical study analysis will be based on answers to the questions which are aimed at answering the questions that the study objective is aiming to address.

Empirical study questionnaire will be composed of the following subdivisions:

- Research Methodology;
- Method for data collection;
- A pilot study;
- The sample of the research;
- Questionnaire development;
- Questionnaire design;

- Questionnaire layout;
- The questionnaire covering letter;
- Analysis of the empirical study results; and
- Interpretation of the empirical study results.

1.4 Testing of hypothesis

The hypothesis testing will be used to determine whether the suitability of the Kaizen Model on the management of fixed assets in the SARB is accepted or rejected by the selected population.

- **Hypothesis 1:** Support from the top management of the SARB could lead to suitability of the Kaizen Model in the management of fixed assets.
- **Hypothesis 2:** Continuous updating of the standardised process in terms of acquisition and disposal of fixed asset helps the organisation to adjust to the changing working environment.
- **Hypothesis 3:** Planning could help to identify gaps, eliminate gaps and identifying areas of the process that requires adjustment or improvement.
- **Hypothesis 4:** Continuous improvement could result in improvement of service provided and that could foster teamwork which could contribute positively to the achievement of intended goals.

1.5 Scope of the study

Although several factors have been identified, from secondary sources, as the effect of the standardised process on the management of fixed assets, this study will concentrate on issues regarding the fixed standardised process as well as the factors necessary for suitability of the Kaizen Model on the management of fixed assets.

The study will be conducted at the SARB mainly because the fixed assets management process of the SARB is standardised and this could enable the researcher to check the suitability of the Kaizen Model on the management of fixed assets in the SARB.

1.5.1 Geographical area

The banking industry is one of the largest business sectors in South Africa, while the SARB is the central bank of South Africa. The SARB has its Head Office in Pretoria with seven branches in different cities (Pretoria North, Johannesburg, Port Elizabeth, East London, Bloemfontein, Cape Town and Durban). Branches are mainly responsible for currency circulation.

The SARB also has subsidiaries, which are the SABNC, SAMC and SARBCICL. SABNC and SAMC are respectively responsible for the production of notes and coins. SARBCICL is responsible for providing insurance to the assets of the SARB.

This study will find out the suitability of the Kaizen Model on the management of fixed assets in the SARB and its branches.

1.5.2 Industry and importance of the study

The research will focus solely on fixed assets management in the SARB, which operates within the banking industry. Organisation such as the SARB has invested large amount of its financial resources on fixed assets. Therefore, effective and efficient management and economical use of fixed assets is crucial.

1.5.3 Organisation and size

After the First World War (1914–1918), commercial banks had to buy gold at a higher price in London than the price at which they converted their banknotes into gold. For the banks to protect their financial viability, they required the Government to release them from the obligation to convert their banknotes into gold on demand.

Following the Gold Conference of October 1919, a committee selected by the Parliament recommended the establishment of a central bank and opens its doors for business for the first time in 1921 (SARB, 2012). To date, the SARB's staff compliment is about 2500 excluding those appointed in its subsidiaries.

1.5.4 The unit of analysis and level within the organisation

According to Hussey and Hussey (cited by Erasmus, 2008:23-24) a unit of analysis is the unit under study and around which the research problem is based; data is collected and subsequently analysed. The unit of analysis in this study will be the employees who are directly and indirectly involved in the fixed assets management process in the SARB. Contract and casual staff members will be excluded from the study.

1.6 Research Methodology

To address the objectives of this study, the research methodology will be divided into two main components, namely the literature review and the empirical study.

1.6.1 The literature review

Chapter 2 of the study will outline the literature review of sources such as internet; website; articles and previous relevant research studies.

1.6.2 The empirical study

Before questionnaires are send out, face-to-face and telephonic interviews will be conducted to get an understanding of the asset management operation process in the SARB. Interviews will help explain the purpose of the study and to answer any question that the respondents might have. Automated e-mail method will be used for the completion of the questionnaire by the respondents.

A covering letter explaining the purpose of the study will accompany the questionnaires. Confidentiality of the information will be assured. E-mail) will be used to distribute questionnaire to the identified study population sample. Respondents will be expected to complete and use email to return the questionnaires as an attachment.

Full details of the research methodology are explained in Chapter 3, which is summarised as follows:

- **Design:** This study is a descriptive study. Structured and quantitative research methods are used in the research design. For the purpose of designing

questionnaire, information will be gathered by means of face-to-face and telephonic interviews.

- **Population:** The population was small hence; it only considers the SARB with the exception of its subsidiaries. Managers, supervisors and general workers who are directly and indirectly involve in the management of fixed asset were selected. This study will be based on sample size of 65 employees of the SARB.
- **Communication through e-mail:** The manager, supervisors and general workers who are directly and indirectly involve in the management of fixed asset were engaged through e-mail to complete questionnaires and also return them to the researcher.
- **Measuring instruments:** Measuring instrument will be based on questionnaire. Rating scale will be used to analyze questionnaires results. It will be used to measure the variables such as level of contribution by standardised process to the sustainability of the Kaizen Model, benefits of implementing the Kaizen Model in an organisation and relationship between flexible standardised process and the Kaizen Model.
- **Interpretation and analysis of the results:** Tables and hypothesis testing will used to analyse the results.

1.7 Limitation of the study

The following are the limitations of this study:

- Owing to time limit, this research is carried out only on a small size of the population that is directly and indirectly involved in fixed assets management at SARB;
- It excludes SARB's subsidiaries;
- Theoretical in terms of what theory says about the Kaizen Model;

- Practical in terms of the suitability of the Kaizen Model to companies (does company size matter or what are the requirements that need to be met for the Kaizen Model to be suitable);
- Limitation as has to do with your choice of company. Can the SARB be a representative of the banking sector or companies in general?
- Other limitations include the absence of bench marking with any company that practice the Kaizen Model on management of fixed assets.

1.8 Chapter layout

The main purpose of the study is to establish the suitability of the Kaizen Model on the management of fixed asset in the SARB. This research study is consists of four chapters.

Chapter 1 covers the introduction of the research study; background to the study; problem statement; the research purpose and objectives; description of key concepts, the research methodology; and the value of the study.

Chapter 2 outlines the literature review. It covers the definition of both the standard process and the Kaizen Model. It also covers the history, principles and objectives of both standard process and Kaizen Model. It will also cover the suitability and evaluation of the selected organisation with regards to its management of fixed assets. The advantages and disadvantages of Kaizen Model are also outlined in this chapter.

Chapter 3 discusses the methodology used in the study. Thus, such issues as the research design, population, questionnaire design, data collection and data analysis used in the research study are outlined.

Chapter 4 presents the results of the study and conclusion thereof. It also covers recommendations drawn from the results of the study and summarises the main findings.

Chapter 2

Literature Review

2.1 Introduction

This chapter outlines the literature review on the effect of the fixed standardised process for the management of fixed assets and suitability of the Kaizen Model on the management of fixed assets. It covers concepts of the fixed assets management and its importance in an organisation. It also covers the definition of both the standardised process and the Kaizen Model. Furthermore, it covers the history, principles and objectives of both the standardised process and the Kaizen Model. It will also cover the suitability and evaluation of the selected organisation with regards to its management of fixed assets. The advantages and the disadvantages of the standardised process and the Kaizen Model are also outlined. This chapter also presents the background about the selected organisation and reasons for its selection.

2.2 Asset Management

Asset management could be as a process of guiding the acquisition, use, safeguarding and disposal of assets to make the most of their service delivery. This supported by Nair (2000:7) who states that assets are items that will be used in the services delivery for a number of years.

According to Ismail, Bayai & Meyer (1997:96), the acquisition, utilization, maintenance and disposal should be carried out in an economic, efficient and effective manner. However, Nair (2002:32) supports the view that assets are an investment in the delivery of future services. Based on this definition, an organisation should hold assets that are necessary for the efficient, effective and economical delivery of its services. Effective asset management should encompass the following:

- asset management principles and its life cycle;
- should be able to service the need of the users; and
- should cover both outside view and inside view

2.3 Definition of the fixed assets

Fixed assets are defined as tangible and intangible assets. Tangible assets are assets such as office buildings, furniture, fixtures, and equipment that have a relatively long-term lifespan. These are illiquid assets that are mostly not intended to be sold in the normal process of the business and are an integral part of the day-to-day operation of a business. Whereas, intangible assets are assets such as patents and brand recognition, which are difficult to price but add value to a company.

According to Wright (1994:3), the fixed assets represent long term investments in tangible, visible, physical resources acquired or developed for income producing purposes. The fixed assets usually require maintenance and possible eventual replacement because they are normally held for a longer period.

2.4 Definition of the fixed assets management

Fixed assets management is defined as “a systematic process of maintaining, upgrading, and operating assets, combining engineering principles with sound business practice and economic rationale providing tools to facilitate a more organized and flexible approach to making the decisions necessary to achieve the public’s expectation.” (OECD 2001:41)

Whereas, Peterson (cited by Mavasa, 2007:9) defines the fixed assets management as a global management process through which organisations consistently make and execute the highest value decisions about the use and care of their fixed assets. The author further explains that the term fixed assets management applies to business goals that drive decision making of an organisation and its asset management strategy which is determined by operational considerations.

Therefore, fixed assets management is the systematic; coordinated activities and practices through which organisations optimally manage their physical assets, the associate performance, assets risk, and expenditures over the asset’s life cycle for the purpose of achieving their asset management strategy and that of their organisations as

a whole.

2.5 Objectives of the fixed assets management

According to Nemmers (cited by Krugler, 2006:15), the main objectives of the fixed assets management is to improve a decision-making process such as allocation of funds among the organisation's assets requirements so that the best return on investment is obtained. Fixed assets management embraces all of the processes, tools and data required to manage fixed assets effectively and efficiently. Return on investment relates to return to the cost of asset employed to help generate that benefit for an organisation.

Based on Wright (1994:4), a manager is required to manage the ideal amount and type of both the initial and continuing investment. He or she should also plan and monitor the use of that asset to ensure that there is an optimal level of asset usage that produces maximum production/outputs. The maximum return on investment is achieved when the purchase of the asset is planned, organized, directed and controlled. The maximum return on investment can also be achieved by the manager, who employed flexible standardised processes that harmonises the relationship of the fixed assets management with other assets such as human assets; information assets and financial assets.

As a result, a standardised process for the management of fixed assets that adjust to working environmental changes is crucial. Hence, a flexible standardised process should effectively encompass an organisation's policy goals, objectives and performance measurements. Policy goals and objectives should inform the fixed assets management decisions making.

2.6 Fixed assets management concepts and its best practice

The concepts of fixed assets management described below should be included in fixed assets management in order to adjust to changing working conditions such as technological changes in operation. The concepts also address how fixed assets

management contributes to the achievement of the overall strategic goals of the organisation.

2.6.1 Fixed assets management policy

Fixed assets management policy should be directly linked to the organisation's strategic plan and its objectives. It should also cover the legal, regulatory, and statutory requirement that guides the organisation operation.

In addition to that, the fixed assets management policy should outline the steps to be followed while implementing asset management processes throughout the fixed asset's lifespan. The asset management policy's functional aspects cover the accounting rules, the budgeting cycle, the risk assessment requirements, and stakeholder interface. Furthermore, fixed assets management statement should contain purpose, definition, policy, responsibility and processes.

2.6.2 Asset management strategy

According to Wilson (cited by Mavasa, 2007:25), the successful fixed assets management strategic plan is the one that has been developed and characterised by the following:

- an appreciation of knowledge of the corporate, production objectives and future operational needs of the fixed asset;
- an appreciation of the asset plans;
- an understanding of the fixed asset life cycle;
- knowing the impact of the latest safety regulations and statutory requirements;
- view of skills and techniques in property industry; and
- understanding of the assets objectives.

Fixed assets management strategy is defined as the long-term action plan for fixed assets that is obtained from organisational strategic planning and should be in line with the asset management policy.

Brownless (cited by Mavasa, 2007:24) states that a fixed assets management strategy should embrace the following features:

- consistent with other policies or strategies;
- able to identify the assets and state of their required performance; and
- optimised and take into account the risk assessment with particular attention to the identification of the critical assets.

Fixed assets management strategy highlights the anticipated position of the organisation with respect to the fixed assets and how the plan would support the accomplishments of the overall goals of the organisation.

Implementation of continuous improvement enables the asset management strategy to continuously close the gaps between the current condition (internal operation factors and external operation factors), which covers changes in technology, and the organisation's future vision. An effective and efficient asset management strategy should include stakeholders' expectations, future demand for services, asset criticality, physical condition and capabilities of the assets, and risks and rewards associated with SWOT. The fixed assets management strategy should state the organisation's future vision, anticipated future outcomes and the steps to be taken to achieve the desired outcomes.

2.6.3 Legal and regulatory framework for fixed assets management

The legal and regulatory framework that governs fixed assets management helps to inform the organisation on asset related decisions making. As a result, an organisation should establish and maintain processes for identifying, accessing and adhering to the legal, statutory and other fixed assets management requirements. Other fixed assets management requirements must include fixed assets related standards and must be communicated within the organisation. A standardised process must also be outlined to ensure that the legal and regulatory requirements are being met.

2.6.4 Emergency planning for fixed assets management

Part of asset management should be to plan in order to address what is necessary to prevent an emergency and to take control if an adverse event occurs.

2.6.5 Risk management

When implementing risk management methodology, the organisation is able to understand the causes of risks facing fixed assets management practices and also the effects and likelihood of those risks to occur. Hence, the organisation would fail to meet its current or future corporate goals if negative events occurred. However, putting an action plan in place might help reduce the likelihood of such events from occurring.

2.6.6 Benefits of having the fixed assets management objectives in place

When an organisation has fixed assets management objectives in place, effectiveness and efficiency of the fixed assets strategies and related corporate goals could be measured. There should be a relationship between fixed assets strategies and the overall objectives of the organisation. In other words, fixed assets strategies should support the overall strategies of the organisation.

The basis of the fixed assets management objectives and processes should flexible to frequently cover legal and regulatory requirements, financial imperatives, technology change plans, and stakeholder requirements. Nevertheless, these requirements and their rationale should also be captured in the organisation's strategic plan.

Reliability, capacity adequacy, deferred maintenance, customer satisfaction, safety, and cost control are examples of corporate objectives. The corporate objectives are then cascaded down to the fixed assets-specific performance targets. The fixed assets management objectives should be specified to ensure the following:

- that asset management policies are correctly implemented;
- that strategy is actionable; and
- those results can be measured.

In order for the fixed assets management objectives to serve their purpose, the objectives should be achievable. Financial and human resources coupled with the available time, should be sufficient to achieve the objectives. However, if not, then the fixed assets management objectives may need to be attuned. Setting targets has implications for cost and it may conflict with other targets which would require collaboration or teamwork between the corporate management and the fixed asset managers when setting them.

2.6.7 Information systems for fixed assets management

All aspects of fixed assets management standard processes should be supported by the current asset information system of an organisation. Asset descriptions, costs, location, engineering data, vendor data, capability, conditions, performance, maintenance schedules, and records should be included on the asset information system and should also include the analytical tools that support fixed assets management and decision making thereof.

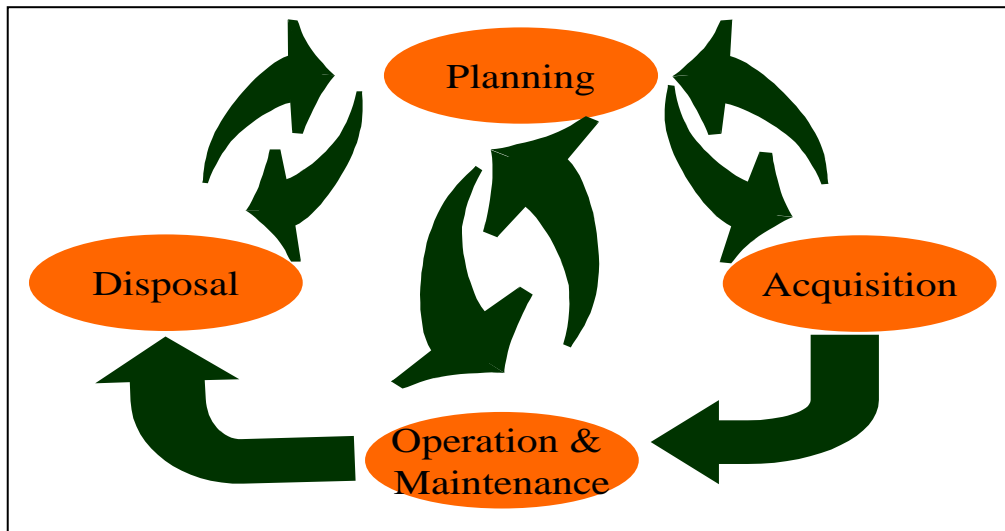
The asset information system should covers the technical and financial information to facilitate lifecycle costing, asset optimization, impacts of deviations from plans, control of risks, and the implementation of a repeatable and auditable asset management process. It must be accessible and available for use when required.

2.7 Fixed asset life cycle

According to the NTAMG, the life cycle of an asset can be defined as that period that an entity can foresee itself utilising an asset on an economically, effective and efficient basis for the furtherance of the entity's trade or service deliverance.

Figure 2.1

Asset life cycle approach



Source: National Treasury, 2004:7

Fixed asset life cycle further covers all the phases (figure 2.1) in the life of an asset namely the planning, the acquisition, the use and maintenance and eventual disposal thereof. These stages are described as the useful life of the asset to the entity.

Furthermore, the NTAMG stipulates that the Fixed Asset Management framework consists of the following:

- the strategic planning of fixed assets,
- acquisition of fixed assets,
- operation and maintenance of fixed assets,
- disposal of fixed assets, and
- asset performance management

2.8 Fixed assets management framework

Fixed assets management framework is explained as follows:

➤ **The strategic asset planning**

Depending on the industry, senior management develops a long-term capital plan that includes upgrading of aging assets, as well as acquiring new assets that accommodate growth and an ever-changing strategic plan for the overall corporation.

This phase of fixed assets management analyses the demand for its service, considers methods for delivery of the service and prepares a long term service delivery strategy.

Evaluation will take place at this stage and will cover assessing all the options, quantifying the cost and benefits and recommending the preferred options. The projects that provide the maximum return and meet most critical objectives of the overall strategies of an organisation will be selected.

➤ **Acquisition phase**

During this phase, fixed assets will be identified and specifications determined. Once stakeholders accept an asset specification, the asset is built, purchased or acquired through the efforts of the procurement department using external vendors.

Differentiation should be outlined to highlight fixed assets that get capitalised straight away and those that have to go through work in progress process and capitalized once there completed and ready to be use. Assets such as chairs get capitalised straight-away hence they are ready to be used when they are bought. But those that have to go through work in progress process are those that required some adjustment to get them to a usable state.

➤ **Operation stage**

Operation stage provides the greatest source of revenue, and ultimately, the return on capital employed. It is the longest and most expensive stage in an asset lifecycle.

This phase includes the stages of start-up, management and review. During start-up stage, organisations start operating the fixed asset and a maintenance program is developed to maximise life cycle efficiency.

Continuous review of fixed asset performance must be undertaken to ensure that the fixed asset's appropriateness to service delivery requirements. The review may culminate in the altering of the fixed asset's management, classification, use or service or procurement of a more appropriate asset.

➤ **Maintenance**

This phase is responsible for maximizing the availability, reliability and performance of the asset at minimal cost during the operational stage. The maintenance stage is interspersed throughout the operational stage, such as breakdown, planned shutdowns, or for periodic preventive maintenance inspections and so on.

➤ **Modification/refurbishment**

From time to time, a business need or technology change influences a modification to the asset by engineering, maintenance or an outside vendor (example is to boost fixed asset performance). Refurbishment simply brings the asset back to "good as new" condition.

➤ **Disposal**

The final stage of the asset lifecycle begins when an asset is no longer satisfying the needs of the business in a cost-effective manner or is at the end of its

usefullife. When this occurs, fixed asset in question will be disposed once the proper process of asset disposal authorisation has been finilised as per fixed assets management policy of the organisation.

Although fixed asset life cycle covers more than one stage, this study will focus on acquisition and disposal processes stages.

2.9 Methods used to manage fixed asset

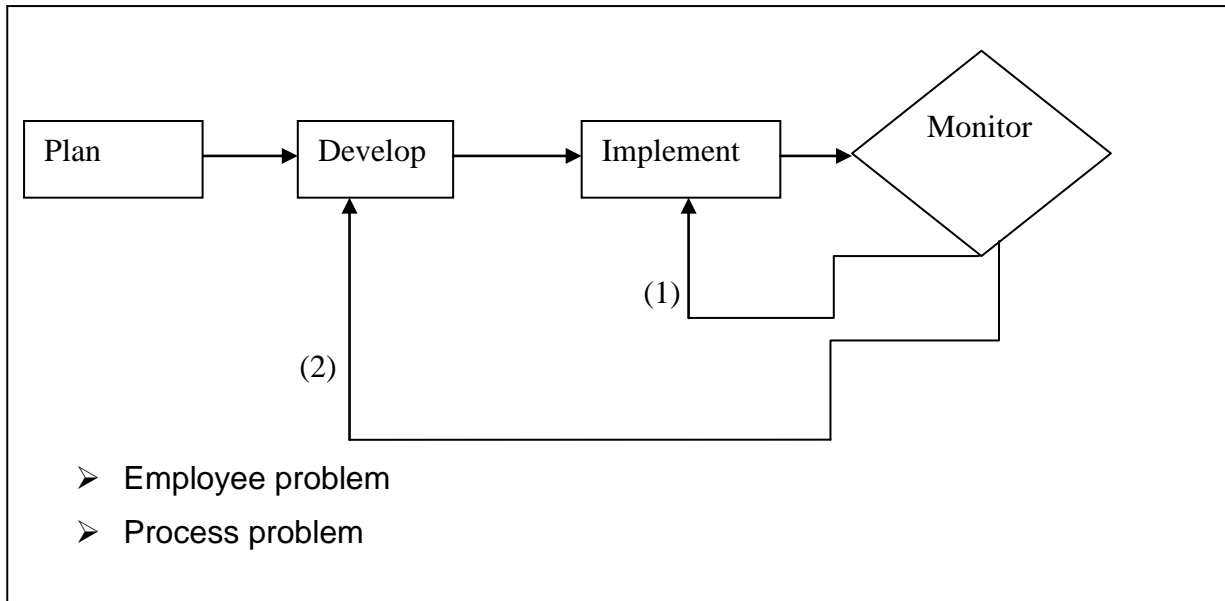
A standardised process and the Kaizen model discussed below are identified for this researcher as some of the methods used to manage fixed asset.

2.9.1 A standardised process

According to Jang and Lee (cited by Suárez-Barraza, 2009:4), a standardised process is defined as the degree to which work rules, policies and operating processes are formalised and followed.

A standardised process is a means of removing variation in task performance caused by employees completing the same task process in different ways. It outlines a set of actions that an employee or group of employees must perform in order to complete a task. A standardised process (figure 2.2) outlines the steps that employee or employees should use to complete the task. Hence variation in standardised processes can lead to reduction of production outputs, poor quality and substandard service delivered.

Figure 2.2
The standard operating process



Source: Stup, 2002:13

A good standard operating process is the one resulting from the innovative inputs from both managers and workers which is designed in a participative manner. Involvement of everyone affected with the standardised process of the activity results in ownership of the standardised process, which fosters commitment to the achievement of the intended objective, elimination of the rejection of the intended standardised process and non-commitment of the employee to the implementation of the standardised process, refers to item number one (1) of Figure 2.2. It eliminates the weakness of them v/s us element that occurs within the organisation, which hinder the organisation's good performance.

A standardised process is a set of written instructions that document a routine or repetitive activity followed by an organisation. Based on the above stated definition of fixed assets management, it provides employees with information to perform a job properly, and facilitates consistency in the quality and integrity of a product or end result.

2.9.1.1 Key features of a standardisation process

According to Thessaloniki (2006:14), standardised process is a process that encompasses the following key features:

- Represents the best, easiest, and safest way to do the job;
- Offers the best way to preserve know-how and expertise;
- Provides a way to measure performance;
- Shows the relationship between cause and effect;
- Provides a basis for both maintenance and improvement;
- Provides objectives and indicates training goals;
- Provides a basis for training;
- Creates a basis for auditing of diagnosis; and
- Provides a means for preventing recurrence of errors and minimizing variability.

A standardised process should support, maintain and improve quality of output for the activities that flow from one section to another within an organisation and to outside customers. It should eliminate the weakness of cabbage in, cabbage out element that occurs within the organisation, which unable the organisation to achieve its objectives.

2.9.1.2 Objectives of standardised processes

The following are objectives of standardised process:

- Serves as a framework for organisational policy hence it provides direction and structure;
- Provides written documentation of best practice;
- It address what, how; when; why; and who;
- Provides a foundation for:
 - Job descriptions;
 - Employee training;
 - Corrective action and discipline; and
 - Performance reviews

2.9.1.3 The use of control of self assessments to improve standardised processes

The single most important and sometimes most difficult step in business performance improvement is to view the entire organisation as a set of processes, identify the gaps within the organisation and to set targets (Tritter, 2000:177). Tritter further explains that the CSA can be used to analyse the business process and improve on it. A participant's deeper knowledge and recall of the subject matter will help to identify negative issues that will assist in answering the question of what is not working well, which result to the implementation of continuous improvement hence the Kaizen Model suitability. This question would lead to the following questions:

- What is the problem?
- Where is the problem?
- What caused the problem?
- Who is supposed to solve it and how?
- When is it going to be solved?
- How to ensure that the problem does not occur in future?

2.9.1.4 Suitability and none suitability of none updated standardized process in changing operating environment

▪ Suitability of none updated standardised process:

The literature claims various advantages of implementation of standardised processes such as work organisation and processes, establishment of a quality system, process performance measurement by audit tool; minimises opportunities for miscommunication; and reduction of costs arising from process standardisation and control.

McAdam, Hazlett, and Casey. (2005:260) stated that the application of standardised processes leads to customer satisfaction and a sense of order by employees. Whereas Imai (cited by Suárez-Barraza, 2009:5) sees the standardised process as a way of identifying problems and areas in which improvements should be sought.

- **None suitability of fixed standardised process**

A standardised process can become more restrictive; reducing individual liberty and individual approaches to work. It can become very time consuming. Unless updated with new regulatory requirements and best practice, they will rapidly fall into disrepute and become outdated. Instead of fostering innovation and continuous improvement, the standardised process only produces stagnation and excessive documentation. It is also not suitable in changing operation environment.

2.9.2 Definition of the Kaizen Model, its origin and its suitability on management of fixed assets management

The Kaizen Model is a Japanese word, which is commonly used to indicate the long-term betterment of something or standardised process. The Kaizen Model means the pursuit of perfection in all one does. Based on this, it represents the element of continuous improvement that is a fundamental part of the Quality Model. In terms of business, it includes all activities which also encompass individual and team members that leverage learning to make processes better at satisfying customer's requirements. The Kaizen Model can be used as a suggestion system for planned events conducted in the workplace that systematically uncover waste in a work process and also eliminate it.

According to Huntzinger (cited by Brown and Eatock, 2008:1), the Kaizen Model originates from the World War II and it was first known as the Job Methods training, which was a simple and effective process that enabled workers (initially supervisors) to devise ways to greatly improve the yield from work processes. It was developed from the World War II and was aimed to produce very much more of everything that was needed for the war effort, faster than anyone had ever done so in the past.

2.9.2.1 Principles of the Kaizen Model

The Kaizen Model focuses on perfecting business operations that is achieved through implementing the following:

- Involves every employees who implement the value stream that result to the work process being improved (e.g. employees inclusiveness);

- Focal point should be on making improvements by detecting and eliminating waste; and
- By using a problem solving approach that observes how the work process operates. It would uncover waste, generates ideas for how to eliminate waste, and makes improvements.

Imai (1997:40) outlines the following guidelines that provided the basis for the culture of the Kaizen Model:

- Continually improve;
- No idea is too small;
- Identify, report, and solve individual problems;
- Focus change on common sense, low-cost, and low-risk improvements, not major innovations;
- Collect, verify, and analyse data to enact change;
- Decreasing variability in the process is vital to improving quality;
- Identify and decrease non-value added steps;
- Every interaction is between a customer and a supplier;
- Empower the worker to enact change;
- All ideas are addressed and responded to in some way;
- Decrease waste; and
- Address the work place with good housekeeping discipline.

Vital Enterprises (2012:4) indicates the following as elements of the Kaizen Model:

- Involvement of workers who execute a work process;
- Focus on improving the performance of that work process;
- Seek to make incremental improvements; and
- Are intended to be repeated over time.

This report further highlighted that the Kaizen Model when applied, would add value to any work-setting or work process that is standardised.

“Standards are set by management, but they must be able to change when the environment changes. Companies can achieve dramatic improvement by reviewing the standards periodically, collecting and analysing data on defects, and encouraging teams to conduct problem-solving activities. Once the standards are in place and are being followed, then if there are no deviations, there will be no need for correction. But when the workers know or discover that there is a problem, they would investigate the cause of the problem and implement a strategy to resolve it. Then employees will review the standards and either corrects the deviation or advice management on changing and improving the standard. It is a never-ending process and is better explained and presented by the PDCA cycle, known as Deming cycle.” (Thessaloniki, 2006:3)

2.9.2.2 Objectives of the Kaizen Model

For a successful implementation of the model, the objectives should be clear and easy to understand and interpret. The Kaizen Model’s objectives are as follows:

- Humanises the workplace to workers and to increasing productivity;
- Eliminates overly hard work;
- Teaches employees how to perform experiments on their work using problem solving process methodology;
- How to learn to spot and eliminate waste in business processes; and
- “The idea is to nurture the company’s human resources as much as it is to praise and encourage participation in the Kaizen activities.” (Tozawa, 1995:34)

Successful implementation requires “the participation of workers in the improvement of the process.” Laria, Moody & Hall (1999:26)

For the successfulness of the implementation of the Kaizen Model, employees at all levels of an organisation as well as external stakeholders when applicable should participate in the Kaizen Model activities. Contributions to continuous improvement could be based on individuals, suggestion systems, small groups or large groups.

2.9.2.3 The Kaizen Model suitability for fixed assets management

Ford (1988:12) states that “if you think of standardisation as the best practice that you know today, but which is to be improved tomorrow- you get somewhere. But if you think of standards as confining, then progress stops- you get nowhere.” Based on this, the Kaizen Model is suitable for fixed assets management hence it fosters continuous improvement and also fosters a long term approach to work that systematically seeks to achieve small, incremental changes in processes in order to improve efficiency and quality.

Teian (cited by Singh, 2009:53) describes the Kaizen Model as more than just a means of improvement. Hence, it represents the daily struggles occurring in the workplace and the manner in which these struggles are overcome. Hammer (cited by Singh, 2009:53) explains that the Kaizen Model generates process oriented thinking since processes must be improved before better results are obtained. The philosophy behind the Kaizen Model is often credited to Deming (1982-1989).

Deming’s philosophy of continuous improvement is as follows:

- Create constancy of purpose toward improvement of products and service, with the aim to become competitive and to stay in business and to provide jobs;
- Adopt the new philosophy;
- Eliminate the need for inspection on a mass basis by building quality into the product in the first place;
- End the practice of awarding business on the basis of price tag, instead of minimising total cost;
- Improve constantly and forever the system of production and service to improve quality and productivity and thus constantly decrease costs;
- Institute training on the job;
- Institute leadership. Aim of supervision should be to help people and machines and gadgets to do a better job;

- Drive out fear so that everyone may work effectively for the company;
- Break down barriers between departments. People in research, design, sales and production must work as a team to foresee problems of production and use of the product or service;
- Eliminate asking for zero defects and new levels of productivity. Such exhortations only create adversarial relationships as the bulk of the causes of low quality and low productivity belong to the system and thus lie beyond the power of the work force;
- Remove barriers that rob the hourly worker of his right to pride of workmanship;
- Remove barriers that rob people in management and in engineering of their right to pride of workmanship;
- Institute a vigorous program of education and self-improvement; and
- Put everybody in the company to work to accomplish the transformation. The transformation is everybody's job.

According to Thessaloniki (2006:2), asset management improvements begin with the admission that every organisation has problems, which provide opportunities for change. The author further states that it evolves around continuous improvement which engage everyone in the organisation and largely depends on cross-functional teams that can be empowered to challenge the status quo. When gaps on standardised processes have been identified, the demand for continuous improvement (the Kaizen Model) for management of the fixed assets accountability and business processes leads to decision-makers demanding more useful information to assist in deciding between competent courses of action and to discharge their accountability meaningfully.

Campbell (1999:10-20) stipulates that before an organisation embarks on an improvement plan, it should assess the strengths and weaknesses of present systems. The diagnostic must be a clear road map of the next step to achieve its vision and should be comprehensive and cover strategic, procedural, technical, administrative and cultural issues. Barret (cited by Mavasa, 2007:19) emphasised that the importance of

the fixed asset principles and behaviours that underpin better practice in fixed assets management should be the following:

- fixed asset decisions are integrated with strategic planning;
- asset planning decisions are based on an evaluation of alternatives which consider the life cycle costs, benefits and risk of ownership;
- accountability is established for asset condition, use and performance;
- disposal decisions are based on analysis of the methods which achieve
- the best available net return within a framework of fair trading; and
- an effective control structure is established for fixed assets.

For continuous improvement, the organisation needs to implement the Kaizen Model. The Kaizen Model is suitable for to the fixed assets management hence it will provide a framework and continuous improvement guidelines to grow the enterprise to a sustainable and improved asset performance at an optimum life cycle cost. Peterson (cited by Mavasa, 2007:23) highlighted the major phases to be incorporated in the maturity continuum to reach fixed assets management excellence; and these are:

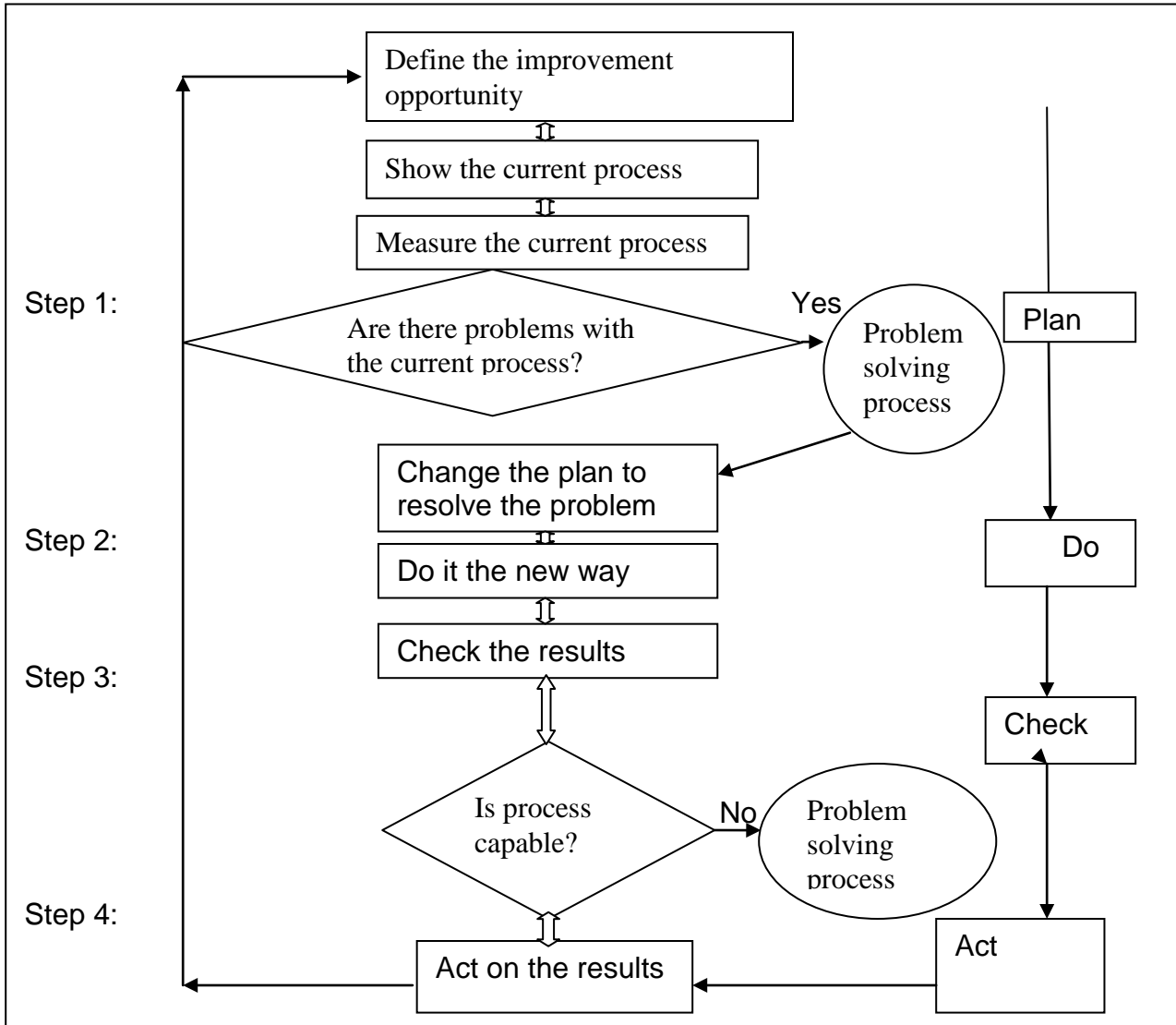
- gain control of the work;
- gain control of the asset condition;
- creates the environment to maximize the contribution;
- systematically eliminate sources failure; and
- assure alignment of financial operations; corporate leadership; sales and marketing, and customers.

2.9.2.4 The Kaizen Model suitability for fixed assets management as a continuous improvement process tool

Suzaki (cited by Singh, 2009:53) explains that continuous improvement process (figure 2.3) as a philosophy widely practiced in the manufacturing and quality cycle and is based on the idea that there is no end to make a better process. The organisation has to undergo several phases in order to achieve incremental improvement. Although continuous improvement was originally used for enhancing manufacturing processes, it

has been extended to all organs of the organisation.

Figure 2.3
The continuous improvement flow chart



Source: PDCA 1995:4

According to Watson (cited by Singh, 2009:53), the origin of PDCA Cycle, also known as Deming Cycle can be traced back to the eminent statistics expert Shewart in the 1920s. Deming modified the Shewart cycle as: PDCA. According to Singh (2009:53), the Deming Cycle is a continuous quality improvement model that consists of a logical

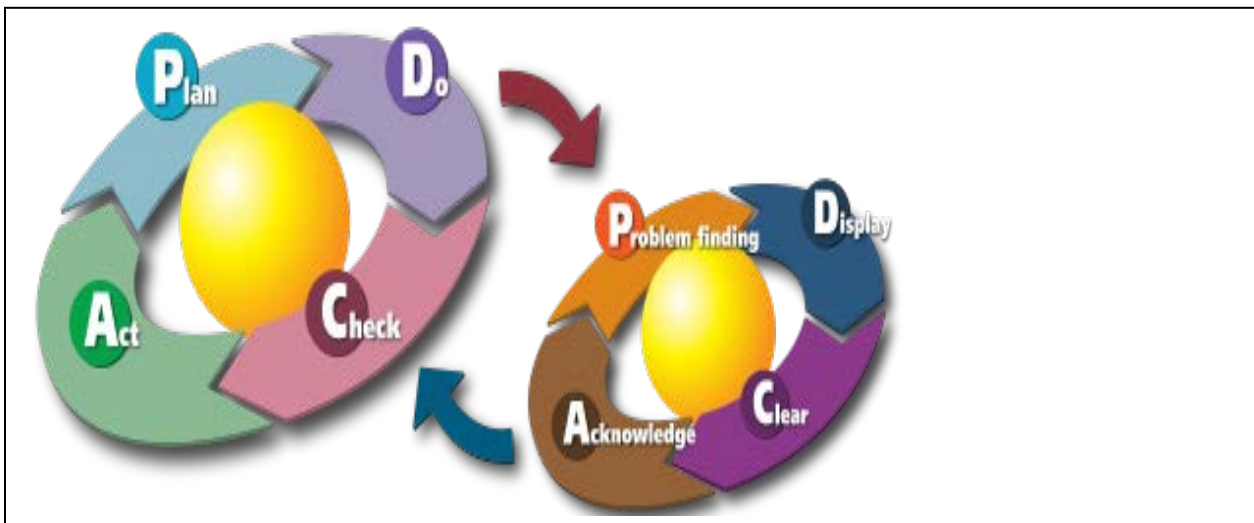
sequence of these four repetitive steps for Continuous Improvement and learning. Hyland (cited by Singh, 2009:57) highlights the following as the major potential benefits of continuous improvement:

- Increased business performance in terms of reduced waste, setup time, breakdowns, and lead time; and
- Increased 'people performance' in the form of improved development, empowerment, participation, and quality of work life of employees.

2.9.2.5 The Four phases of PDCA (Kaizen Model)

PDCA is made-up four phases of the Kaizen Model which is also known as continuous improvement. Figure 2.4 below illustrates the PDCA cycles.

Figure 2.4
The PDCA cycles



Source: Answers-kaizen (2012:2)

When undertaking the PDCA process, the team may decide to address more than one problem, and/or to test more than one intervention to address a root cause of the problem.

The four phases of PDCA are detailed as follows:

- The “**Planning phase**” involves setting parameters, selecting data required, ways of collecting data and setting anticipated goals. During this phase, the following occurs:
 - A team will find out that there are problems or quality improvement opportunities that arise when processes are investigated.
 - A problem statement will be articulated once the quality improvement opportunity has been decided.
 - Throughout the planning process, the problem statement should be continuously revisited and revised;

MLPHAP indicates that teams should develop statements that answer the following questions:

- What are you seeking to accomplish?
- Who is the target population?
- What are the specific, numeric measures you are seeking to achieve?

The measurable improvement objective is a key component of the entire quality improvement process. It is critical to quantify the improvement to be achieved. The problem statement should continuously be revisited and be revised throughout the planning process.

The current process should be described in order to understand the process and also to identify the process areas that require improvements and data should be collected for the current process.

Tools such as Pareto analysis, scatter plots and control charts could be used to collect and analyse data. All possible causes of the problem should be identified and the root cause gets determined. Potential improvements to address the root cause should be identified and tests to be used should also be selected.

The statement objectives and the measurable improvement objectives should continuously be revisited to avoid deviation from the main purpose when developing an improvement theory; and develop an action plan that answers the following questions:

- What needs to be done?
 - By whom?
 - When to be completed?
- The “**Do phase**” is about execution of the planned change. It covers the following:
- The improvement implementation;
 - The data collection and documentation;
 - Problem documentation;
 - Learned lessons; and
 - Knowledge gained.
- The “**Check phase**” refers to assessing results to find out if it is in line with the anticipated change result. It determines if the improvements were achieved and checks if the measurement per objectives statement were met. Any knowledge gained, lessons learned and surprising results that emerged should be documented.
- The “**Act phase**”: during this phase, the organisation takes action to improve the process. Actions to be taken include:
- Standardisation of the process that met the objectives of the problem statement. Objective would be to avoid deviation from the emerged process.
 - Emerged process gets analysed to check if is in line with anticipated results. If not “Do phase” gets revisited and repeated.
 - Return to the “Plan phase” if the changes made to the process did not result in an improvement and lessons learned from the initial test should be considered.

- However, even if the process is currently bringing positive results, relevant stakeholders should know that working process today might not mean it would still be working effectively and efficiently tomorrow. Hence changes in working environment results to new to process. As a results process should be frequently revisited to identify emerging gaps to process and also eliminate them. Hence continuous improvement.

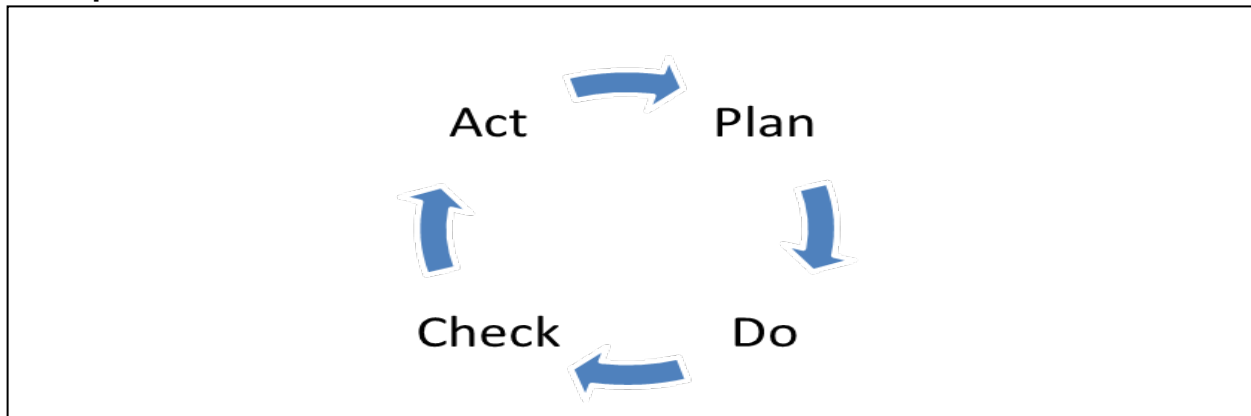
According to the PDCA improvement process guide (1995:3), PDCA method is based on the assumption that staying in business long-term means continually learning how to provide best service to both internal and external customers and how to get the job done in an effective, efficient and economical manner. Based on this, knowledge of processes to do something better must then be guided by knowledge of internal and external customers' needs. PDCA offers a powerful format that drives continuous and ongoing efforts to achieve measurable improvements in the efficiency, effectiveness, performance, accountability, outcomes, and other indicators of quality in services or process which achieve the organisation's overall objectives.

2.9.2.6 The cycle of the Kaizen activity based on PDCA

Gautam, Kumar and Sing (2012:2) define the cycle of the Kaizen activities as follows:

- Standardised an operation and activities;
- Measure the standardised operation;
- Gauge measurements against requirements;
- Innovate to meet requirements and increase productivity; and
- Continue cycle ad infinitum.

Figure 2.5
PDCA process



Source: Answers-Kaizen (2012:2)

2.9.2.7 Advantages and disadvantages of the Kaizen Model

The following advantages and disadvantages of the Kaizen Model, which are also supported by valuebasedmanagement.net (2012):

o Advantages

- If used correctly it does not cause any large scale internal organisational upheaval;
- It can become part of an organisation's culture where all employees feel they are making a contribution to any improvements;
- It is inclusive in its operation;
- Change then becomes a way of organisational life; and
- It results to empowerments of workers which provide advantages such as staff motivation towards achieving the targets for improvements.

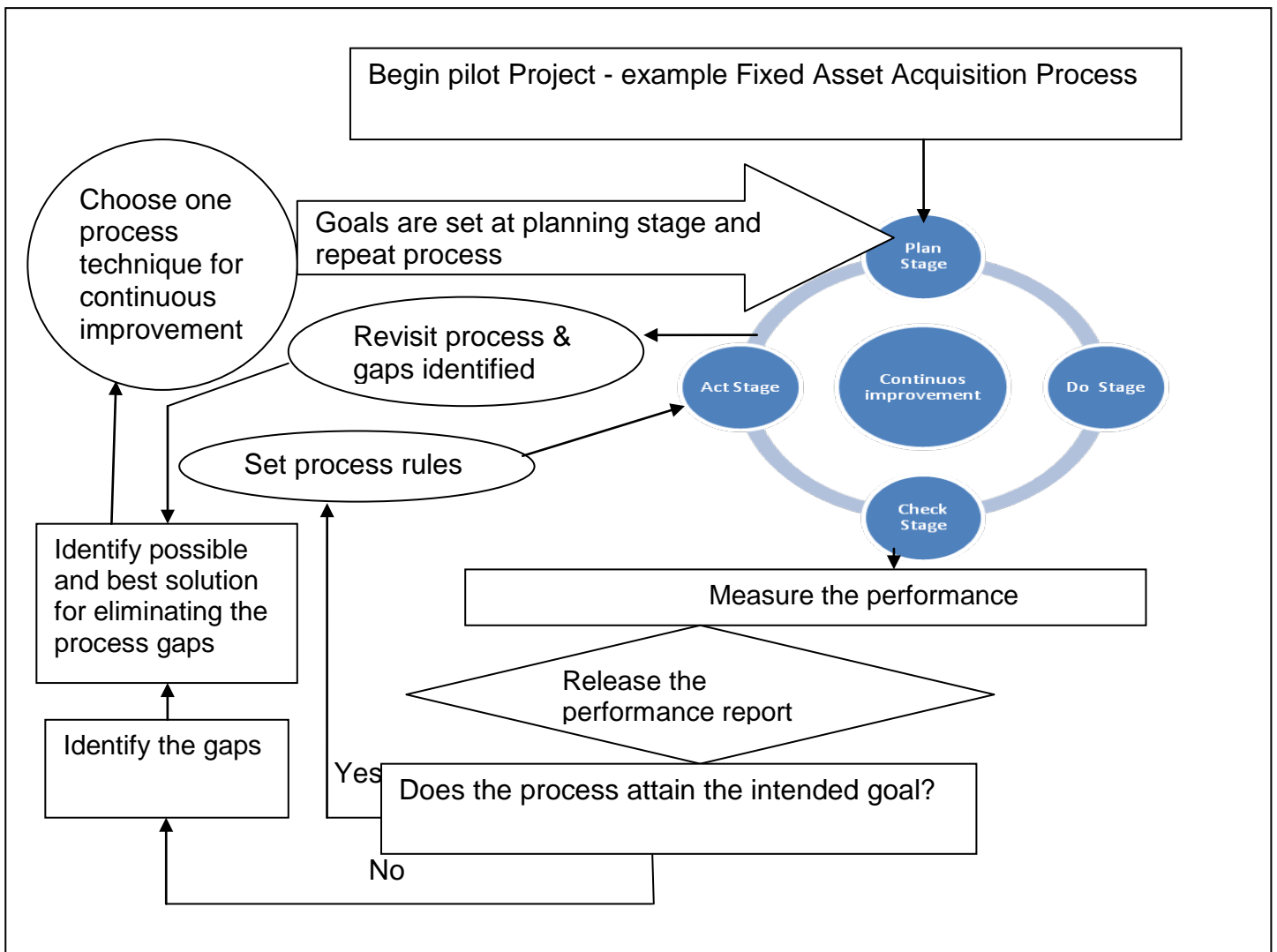
o Disadvantages

- It does not provide for innovative leaps that may otherwise be possible. However if used correctly both continuous improvement and innovative leaps could be seen to complement each other; and
- If innovative leaps are to have a long lasting effect they need to be followed up by continuous improvement activity.

2.10 Implementation of the Kaizen Model in acquisition and disposal of fixed assets

The Kaizen model foster continuous improvements process driven that matured through iterative and improvement focused. Hence it foster involvement every stakeholder. Below (figure 2.6 & 2.10.1-2) outlines how the Kaizen Model could be applied on acquisition and disposal of fixed asset.

Figure 2.6
Sample for implementation of the Kaizen Model on acquisition process
of asset life cycle



Source: Developed by researcher

2.10.1 Fixed assets acquisition

- Plan stage

Careful specification of assets requirements is carried-out to avoid the purchase of unsuitable assets. This helps to avoid the purchasing of assets that do not meet needs of the customers and that of an organisation as a whole.

When a department realises a need for product and services, they must first examine, organise and document their needs. When preparing a request for the asset, department need to consider the answers to the following questions:

- What asset is needed?
- What should the functionality of the asset be?
- Why is it needed?
- Can the department afford the asset?
- Should the asset be purchased or leased?
- What alternatives are available?
- If the asset request is not approved, what effect would this have on the requesting department?

Careful specification of assets requirements should be carried-out to avoid the purchase of unsuitable assets.

The Kaizen Model would enables an organisation to anticipate its needs in advance so as to allow the relevant stakeholders sufficient time to employ the appropriate method of acquisition of asset. Requesting department will outline specification for the asset they want. Budget division will ensure that enough cash is available for the acquisition of asset in question. Procurement division role will be to identify service provider who will supply assets that meet specification and at a reasonable price.

- Do stage

Upon receiving quotations that are in line with the organisation procurement policy, purchase order will be sent to the service provider whose quotation meet specification in terms of price and cost. Requesting department will be notified about the order request and the contact detail of the service provider will also be provided.

- Check stage

When the asset is delivered, both representatives from the procurement section and requesting department should be present. Representative from procurement would be there to make sure that invoice attached to the delivery note reflects the same amount as per relevant purchase order. Whereas representative from the requesting department would be there to ensure that the asset delivered is in line with their specification. Upon reconciling and agreeing there-off of the delivery note, purchase order and invoice, process of paying the service provide will be started.

- Act stage

Act stage involves taking of stock of the whole process of acquisition. If there is any gap identified, the whole process of PCDA will be stated again. If not, rules and regulation that govern the acquisition process will be prepared.

2.10.2 Fixed assets disposal

- Plan stage

An asset disposal decision should be taken after thorough examination and economic appraisal. Objective of this stage would be to minimise holdings of surplus, outdated and underperforming assets. Plan stage should include the following:

- The method of disposal
- The estimated cost of disposal; and
- Proceeds (amount) from disposal

- Do stage

Submission that details the assets identified for disposal should be compiled. There should be committee responsible for the approval of the disposal of the identified assets. Once approved, relevant service provider should be contacted to collect assets identified for disposal.

- Check stage

Only listed and approved assets per submission should be the ones to be collected by the services provider for disposal. Assets release book should be completed with barcode number and asset description for the assets collected by the services provider. Items sold as per service provider report should be reconciled with items listed on the relevant release form. Relevant transaction such as capturing of proceeds and retired of the assets sold should be carried-out.

- Act stage

The process should be reevaluated in order to identify loop-holes. If there is a gap, corrective measures should be implemented. If not, identified process should be standardised. However, such process would be continuously revisited to ensure that it gets adjusted to the changing operation environment.

2.11 Organisation selected for research

SARB, which is the Central Bank of South Africa that forms part of the banking industry, has been selected. In terms of the Currency and Banking Act number 31 of 1920, the SARB was established as the Central Bank of South Africa in 1921. This resulted from the commercial bank's objective of protecting their financial viability requesting the Government to release them from the obligation to convert their banknotes into gold on demand.

The SARB has been privately owned since its establishment and presently has in excess of 650 shareholders. According to the SARB Act, no individual shareholder may hold more than 10 000 shares of the total number of 2 000 000 issued shares. Its act

proves the appointment of fourteen members of a Board of Directors, which their appointments are as follows:

- The Governor and 3 Deputy Governors are appointed by the President for a period of 5 years and are members of the Board;
- The President also appoints 3 non-executive directors for a period of 3 years; and
- The remaining 7 directors are elected by the SARB shareholders for a period of 3 years and are representatives from various sectors of the economy.

2.11.1 Purpose and functions of the SARB

According to the SARB's Annual Report of 2009/2010, the primary purpose is to achieve and maintain price stability in the interest of balance and sustainable economic growth in South Africa. The mandate according to the constitution of South Africa states that, SARB together with other institutions, plays a vital role in promoting financial stability.

SARB's Annual Report of 2009/2010 also outlines the following as the key functions of the SARB:

- Formulating and implementing monetary policy;
- Issuing banknotes and coin;
- Supervising the banking system;
- Ensuring the effective functioning of the NPS;
- Managing official gold and foreign-exchange reserves;
- Acting as banker to the government;
- Administering the country's remaining exchange control; and
- Maintaining professionalism and excellence in the delivery of services

The report further indicates that the SARB aims to be a respected institution and a beacon of stability that follows an agile, responsive and is flexible in its operations.

2.11.2 Reasons for selection

The researcher has selected SARB for this study hence it has invested large amount of its financial resources on fixed assets and uses standardised process to manage its fixed assets. The researcher is familiar with the SARB's fixed asset administration hence he is an employee of the SARB responsible for fixed assets management. The following committees are responsible for fixed assets managements at the SARB are:

- Budget Committee which approves the budget for buying of fixed general assets;
- Procurement committee which is responsible for buying of the fixed general assets; and
- Redundant Assets Committee is responsible for the disposal of fixed assets that are declared redundant.

Standard processes for SARB fixed assets management are as follows:

- acquisition process;
- verification process; and
- disposal process

2.11.3 SARB's strategic objectives and its departments profile

SARB (2012:1) indicates that the primary objective of the monetary policy in South Africa is to achieve and maintain price stability in the interest of sustainable and balanced economic development and growth. Hence price stability reduces uncertainty in the economy and, therefore, provides a favourable environment for growth and employment creation.

SARB has 13 departments and seven branches throughout South Africa. Its branches are BB, CTB, DB JHB, PEB and PNB. This research study excluded the SABNC and SAMC. Although each and every department has got its goals that are aimed at supporting the overall objectives of the organisation, the one affected by our study is the CSD. Hence CSD is responsible for management of all general assets in SARB for both Head Office and branches with a purchase value R643, 427,353, 89 and quantity of +-

56000 as at the dated indicated on the figure 2.6 below.

Figure 2.7**SARB general fixed assets categories and values as at 30 April 2012**

Category	Category description	Purchased Value
GA.PS	Portable safes	771,272.94
GA.AC	Air Conditioning	46,246,139.35
GA.OM	Office machinery	5,674,276.07
GA.OCE	Other communication equipment	561,875.30
GA.SP	Shopfittings	949,809.13
GA.NPE	Note Processing Equipment	137,686,005.34
GA.SF	Soft Furnishings	1,774,269.77
GA.OD	Other décor	946,494.88
GA.KCE	Kitchen Equipment	7,462,240.11
GA.PT	Power Tool	186,079.69
GA.PE	Printing Equipment	5,743,658.58
GA.VA	Valuable Art	8,243,731.74
GA.WE	Workshop equipment	1,779,963.23
GA.FU	Furniture	66,686,250.92
GA.OE	Office equipment	2,386,579.74
GA.VD	Video equipment	4,965,836.57
GA.GR	Gym equipment	2,348,631.99
GA.SI	Security Installations	1,653,584.91
GA.BE	Building Equipment	81,653,926.72
GA.BNCC	Notes and and Coins collections	2,636,310.85
GA.SV	Staff vehicle	593,567.37
GA.AE	Audio Equipment	15,462,183.51
GA.HF	Hard Furnishings	32,889,259.32
GA.CE	Cleaning utensils / equipment	1,118,381.99
GA.MT	Trucks and forklifts	6,219,279.65
GA.MV	Motor vehicles	12,826,556.64
GA.NKP	National Key Points	117,002,675.64
GA.LE	Lifts	76,890,475.46
GA.FM	Fax Machines	68,036.48
TOTAL VALUE		643,427,353.89

Source: SARB fixed asset register

2.11.4 Back ground for fixed assets management in SARB

The Asset Management Section is located in Support Services Division of CSD. It is responsible for maintaining of all records regarding acquisition, recording, safeguarding, maintenance, transfer and disposal of general assets.

❖ Vision of asset management

To provide the most responsive, professional and courteous asset management service in the SARB.

❖ Mission

To be a point of reference in the delivery and safeguarding of general fixed assets of the SARB.

❖ Goals of Asset Management

- To uncover savings through process improvement and support for strategic decision making ;
- To exercise control over stock;
- To increase accountability and to ensure compliance; and
- To enhance the performance of general assets.

2.12 Summary

The Kaizen Model is the methodology that fosters continuous improvement which involves everyone in the organisation from the top management, to managers then to supervisors, and to workers. This methodology takes changing operation environment into account which helps to identify process gaps and eliminate them. Based on this, process would continuously being re-visited so that it could be adjusted to the changing operation environment.

Unlike standard process which is not adjusted or takes long to response to the changing working environment, the Kaizen Model fosters teamwork which could be suitable in each stage of fixed asset life cycle for an organisation such as SARB. The Kaizen Model suitability is also supported by the implementation of the elements of the Kaizen

Model that are PDCA.

The suitability of The Kaizen Model on fixed assets management of the SARB in acquisition and disposal stages of fixed asset life cycle would examined through questionnaire in the next chapter of the empirical study.

Chapter 3

Empirical study

3.1 Introduction

The main objective of this study is to establish the suitability of the Kaizen Model on the management of fixed assets in the SARB. In the previous chapters, theoretical information was gathered through a literature review. Such information will be compared with the information obtained from the empirical study to determine if it supports the study.

In Chapter 2, the philosophy behind continuous improvement which is credited to Deming (1982-1989) has been used as the basis for discussion on the suitability and the benefits to be gained by implementing the Kaizen Model. This discussion was supported by various authors as outlined in Chapter 2, who provided their constructive responses with regard to both the standardised process and the Kaizen Model. The advantages and disadvantages of both the standardised process and the Kaizen Model were also discussed in Chapter 2.

3.2 Research Methodology

According to Hartley (2004:326), research methodology refers to the steps taken to link the research question and objectives to data collection, data analysis and interpretation in a logical manner. Whereas, Leedy (1997:3) defines research methodology as the systematic process of collecting and analysing data in order to increase our understanding of the phenomenon with which we are concerned or interested.

Definition of research methodology by these two authors is also supported by Rozakis (1999:3-4), who defines research methodology as the gathering and presenting of reliable information. Rozakis further states that the research methodology is an analytical way of arguing a point using facts, details, examples and opinions as support.

Mauch and Birch (1998:16) indicate that research methodology can be divided into two categories, which are quantitative and qualitative research. The following is the explanation of the two different categories:

- **Qualitative research**

According to Leedy (1997:122) qualitative research can further be divided into descriptive survey methods and historical survey methods. Descriptive survey method is when the data is obtained by observations. Whereas historical survey methods is a survey method based on reviewing and analysing literature in an attempt to resolve problems that are historical in nature.

- **Quantitative research**

Leedy (1997:123) further indicates that quantitative research can further be broken down into analytical survey method and experimental method. Analytical method is when statistical analysis is done on data that was received through quantitative techniques.

Whereas experimental method is based on comparing data collected from a group under controlled conditions with another group that is under experimental conditions, then differences in results get analysed.

This study will be based on quantitative research because it collects data, which can often be generalised to a larger population and allows direct comparisons between two or more groups.

3.3 Method for data collection

The following methods may be used data collection:

- **Observation:** The researcher unobtrusively observes the subject's behaviour without active participation;

- **Experiment:** the effects of changes that are manipulated and controlled by the researcher are observed in laboratory and field studies; and
- **Survey:** it is conducted through interviews and questionnaires. Surveys can further be subdivided into the following:
 - personal interviews which is regarded as an expensive and time-consuming though the co-operation from respondents is high;
 - telephonic interviews which is regarded as low cost compared to personal interviews; though it is difficult to obtain sufficient quality time with respondents;
 - postal survey is used in the form of questionnaires that respondents are required to complete; and
 - automated e-mail survey is used in the form of questionnaires that respondents are required to complete. The last two are the most commonly used between the researcher and the respondent.

However, the researcher has used automated e-mail method for data collection. Hence it provides the following benefits:

- it is perceived as anonymous;
- it is easy and quick to obtain data;
- this method usually costs the least and is less time-consuming than other methods;
- respondents have enough time to think about the questions;
- data is obtained from respondents within a limited time frame;
- this method for data collection enables the participant to complete the questionnaire and return the questionnaire on line; and
- these questionnaires are usually highly structured and the use of open-ended questions is limited. This ensures that data capturing is easier to obtain from the questionnaire.

Due to above stated benefits of automated e-mail method, the researcher considered it to be the appropriate data collection process for this research.

3.4 A pilot study

According to Mauch and Birch (1998:124), a pilot study is carried out before the actual study to establish the feasibility of the study and to identify any problems that may exist. It also helps to ensure that the questionnaire meets the intended objectives of the study.

A pilot study questionnaire was distributed to four respondents at SARB Head Office and its JHB before the actual study commenced. The respondents were employees who are responsible for general fixed assets management at different levels of the SARB organisational structure.

The respondents were requested to identify any gaps on the questionnaire that may have been missed when compiling the initial request questionnaire. After a discussion with the respondents, the questionnaires were revised to address the gaps identified by the respondents.

3.5 The sample of the research

Sampling can be categorised into probability and non-probability sampling. For the purpose of this research, convenience sampling which falls under non-probability sampling has been used. It is also convenience with regards to expense and time. It is type of sampling that does not take into account the population representation hence is based on people that are readily available.

The sample was taken from SARB Head Office and its Branches, which are BB, CTB, DB, JHB, PEB and PNB. The sample was taken from various levels of employees within the SARB structure based on their involvement in management of general fixed assets of the SARB.

3.6 Questionnaire development

According to Hague (1994:12), the purpose of the questionnaire is to extract accurate information from respondents and to standardise the format for the recording of this information. Based on Saunders, Lewis and Thornhill (2009:279), the facts outlined below were used when preparing questionnaires so that it can increase the response rate, reliability and validity of the data:

- the clear layout of the questionnaire;
- a clear explanation of the intention of the study;
- carefully designing individual questions ; and
- conducting a pilot study.

3.7 Questionnaire design

Literature review that was discussed in Chapter 2 provided the framework for the data required from the questionnaire. The objective of the questionnaire is to get information that will support the study.

According to Leedy (2001:202), the following needs are to be taken into account when developing questionnaires:

- there must be no assumptions inferred in the questions;
- the language used must be clear and concise;
- it must draw out the information that is needed;
- know beforehand how the responses are to be coded;
- must ease the duty of the respondents;
- a pilot test must be conducted;
- instructions must be clearly stated;
- include questions that will verify respondents' standpoint; and
- there should be no indication given on what the preferred answer would be.

3.8 Questionnaire layout

Questionnaire layout was developed to ensure that it was easy to complete, requires online response and easy to analyse the data. The questionnaire was subdivided into the following sections:

❖ **Demographic information**

It was aimed to extract biographical information regarding the respondent's position held, gender and qualification.

❖ **Section A**

The questions in section A were used to determine how the management of SARB supports implementation of continuous improvement on management of fixed assets.

❖ **Section B**

This section is about employee's empowerment in which its questions were aimed at establishing if the SARB culture allows employees to implement their knowledge when carrying out tasks assigned to them.

❖ **Section C**

This section is about employees' training and development. The objective of the questions for this section is to establish if the SARB employees are provided with training and development that implement continuous improvement when carrying out tasks assigned to them with regards to acquisition and disposal of assets.

❖ **Section D**

This section is aimed at determining if the respondents know the difference between the standardised process and the Kaizen Model.

❖ **Section E**

The questions in Section E were aimed at establishing how the respondents view teamwork in terms of fixed assets management in SARB.

❖ **Section F**

Section F is about the communication section that is aimed at accessing if communications within the SARB foster continuous improvement.

❖ **Section G**

The aim of this section was to determine if internal and external customer feedback for acquisition and disposal processes for fixed assets are used to identify gaps and establish action plans to eliminate gaps.

❖ **Section H**

The questions in Section H covers the literature review components discussed in chapter 2 about standardised processes, which are aimed at establishing the following:

- if acquisition and disposal processes for fixed asset is based on standardised process;
- if standardised process gets updated regularly; and
- if standardised process that does not gets adjusted to the changing environment is the pillar of SARB fixed assets management.

❖ **Section I**

Section I was aimed at determining how PDCA could support the implementation of continuous improvement (the Kaizen Model).

❖ **Section J**

Questions in this section covers the literature review components discussed in chapter 2 about the Kaizen Model (continuous improvement), which is aimed at establishing the following:

- if employees are allowed to be creative and innovative;
- if employee input for updating processes with a changing operating environment is allowed; and

- if processes and procedures are continuously updated to address identified gaps.

3.9 The questionnaire covering letter

The questionnaire (**Annexure A**) was accompanied by a covering letter explaining the goals of the study and requesting the recipients to participate in the research effort. Confidentiality and anonymity were assured to the respondents. For any additional information and clarity required, respondents were provided with the contact number of the researcher.

3.10 Analysis of the empirical study results

Based on the objective of this study for the suitability of the Kaizen Model on the management of fixed assets in the SARB, this section of Chapter 3 described the design considerations of the survey as the selected research methodology for empirical study.

It is intended that the results of the research survey should add value to the knowledge and research study already conducted on fixed assets management. Based on its implementation, fixed assets management at the SARB could possible improve.

3.10.1 Analysis of the responses

The questionnaire was sent by e-mail as an attachment to the respondents, who are employees of SARB responsible for fixed assets management. The respondents were requested to complete the questionnaire by e-mail. The results were as follows:

Table 3.1

Questionnaires analysis

Description	Quantity of questionnaires sent out for completion	Quantity of questionnaires completed	Percentage of completed questionnaire in relation to quantity of questionnaires sent out
Questionnaire	65	53	82%

Feedback from the respondents on the questionnaire (table 3.1) represented 82% (53) of the 65 persons targeted for this research. Most of the questionnaires were returned as an attachment via e-mail with the exception of two that were completed manually. The other two were spoiled and not considered for the analysis.

The reason for using e-mail as a method of completing the questionnaire was that the targeted respondents were scattered owing to their employment in SARB Head Office and its branches. The response analysis on sections is irrespective of the gender and of whether the respondents were located at SARB Head Office or branches.

3.10.1.1 Demographic information

Demographic information was composed of the following:

- ❖ gender;
- ❖ age;
- ❖ ethnic group;
- ❖ qualifications; and
- ❖ level in SARB organisational structure

Table 3.2

Gender analysis

Gender	Quantity	Percentage
Male	30	57%
Female	23	43%
Total	53	100%

- **Gender analysis**

Table 3.2 indicates the gender difference in the sample. It was observed that 57% of the respondents were males and 43% were females. This tells us that fixed assets management staff at SARB is dominated by males.

Table 3.3**Age group analysis**

Age group	20-30 yrs	30-40 yrs	40-50 yrs	50 yrs +	Total
Quantity	7	20	18	8	53
Percentage	13%	38%	34%	15%	100%

- **Age analysis**

The respondents' age range falls between twenty years and fifty five years. Majority of the respondents are between the age of thirty years and fifty years. Hence table 3.3 indicates that age range between 30 to 40 years and 40 to 50 years respectively scored 38% and 34%.

Table 3.4**Ethnic group analysis**

Ethnic group	White	African	Coloured	Indian	Total
Quantity	13	28	11	1	53
Percentage	25%	52%	21%	2%	100%

- **Ethnic Group analysis**

Table 3.4 indicates that ethnic groups analysis was dominated for African ethnic group with the score of 52%. However, respondents for White ethnic group and Coloured ethnic group respectively scored 25% and 21%. The respondent from the Indian ethnic group was 2%.

Table 3.5**Highest qualification analysis**

Ethnic group	Grade 12	Diploma/ Certificate	Degree	Post graduate	Total
Quantity	10	13	16	14	53
Percentage	19%	25%	30%	26%	100%

- **Qualification analysis**

The fact that all the respondents have formal educational qualifications ranging from grade 12 to post graduate implies that about 100% of the respondents knew how to complete the questionnaire. Furthermore, they have knowledge and skills required to carry out effective and efficient activities for fixed assets management at the SARB. Degree and post graduate respondents (table 3.5) respectively scored 26% and 30%. Twenty five percent was for those with diploma/certificate and remaining 19% was for those with grade 12.

Table 3.6
Level in SARB organisational structure analysis

Level in SARB organisational structure	Management	Middle Management	Supervisor	Lower level	Total
Quantity	7	15	17	14	53
Percentage	13%	28%	32%	27%	100%

- **Respondents Level in SARB organisational structure**

Majority of the respondents (table 3.6) are at the SARB organisational structure level of lower level, supervisors and middle management, which respectively represent 27%, 32% and 28%. Respondents from the management level were only 13%.

3.10.1.2 Respondents' location

Due to the nature of the SARB's business, respondents were scattered hence respondents were from SARB Head Office and its branches, namely: BB, CTB, DB, JHB, PEB and PNB.

3.10.1.3 Section A analysis

The aim of this section was to determine the level of the top management support for fixed assets management; also find out if top management discuss the importance of continuous improvement on fixed assets management to affected members of staff; and

further check if top management view continuous improvement (the Kaizen Model) on fixed assets management more than the standardised process.

For the purpose of analysis of all the questions received, the researcher has combined the responses of the frequency and percentage for strongly disagree and disagree categories. The same was applied for strongly agreed and agreed categories.

The following abbreviations were used in tables starting from table 3.7 to table 3.16: Strongly disagree (SD); Disagree (D); Neutral (N); Agree (A) and Strongly Agree (SA).

Table 3.7

The top management support response rating based in quantity and percentage

Question Number	1=SD	2=D	Disagree quantity (1+2)	Disagree % (1+2)	3=N	Neutral %	4=A	5=SA	Agree quantity (4+5)	Agree % (4+5)
Question 1	4	11	15	30%	21	41%	15		15	29%
Question 2	7	10	17	34%	18	35%	16		16	31%
Question 3	6	13	19	37%	16	32%	15	1	16	31%

Question 1

Question one (table 3.7) was aimed at determining whether there is clear support for continuous improvement for fixed assets management by the SARB top management. Twenty nine percent of the respondents agreed, while 41% were not sure. The remaining 30% represent the total of the respondents of those who disagreed.

This indicates that majority of the respondents were not certain with regard to whether the SARB top management clearly supports continuous improvement for fixed assets management or not.

Question 2

Objective of question 2 (table 3.7) was to find out if top management discuss the importance of continuous improvement on fixed assets management to affected members of staff. Thirty one percent of the respondents agreed, while the remaining

35% and 34% of the respondents respectively represent neutral and disagreed.

This indicates that 69% was made up of respondents who neither disagreed nor neutral (not sure) on whether the SARB top management often discusses the importance of continuous improvement on fixed assets management with them.

Question 3

Table 3.7 of question 3, the researcher wanted to find out if the SARB top management views continuous improvement on fixed assets management more important than standardised process. Thirty one percent of the respondents for question 3 agreed, while 32% were not sure. The remaining 37% of the respondents disagreed.

This indicates that 69% of respondents neither disagreed nor neutral on whether SARB top management views continuous improvement on fixed assets management more important than standardised process.

3.10.1.4 Section B analysis

The focus of this section was to determine if:

- managers trust respondents in carrying out outputs for fixed assets management;
- respondents are empowered to take corrective decisions on the spot without looking to managers for their approval;
- respondents decide the best way to do their work on fixed assets management;
- and
- respondents know their contribution to both fixed assets management objectives and that of the organisation as a whole.

Table 3.8**An employee empowerment response analysis based in quantity and percentage.**

Question Number	1=SD	2=D	Disagree quantity (1+2)	Disagree % (1+2)	3=N	Neutral %	4=A	5=SA	Agree quantity (4+5)	Agree % (4+5)
Question 4	1	5	6	12%	18	35%	20	7	27	53%
Question 5	6	21	27	53%	11	22%	12	1	13	25%
Question 6	5	13	18	35%	15	29%	15	3	18	35%
Question 7	3	7	10	20%	16	31%	20	5	25	49%

Question 4

On question 4 (table 3.8) of the questionnaire, the researcher wanted to find out if managers trust their subordinates in carrying out activities for fixed assets management. Only 53% of respondents agreed as oppose to 12% who disagreed, while 35% were not sure.

Although the 53% of the respondents that agreed were above the percentage of those respondents who are not sure, management should start to show the elements of trust to its subordinates in carrying out activities for fixed assets management.

Question 5

Twenty five percent of the respondents of table 3.8 agreed that they are empowered to take corrective decisions on the spot without looking to managers for approval, while 22% and 53% of respondents respectively represented neutral and disagree.

Seventy five percent of the respondents are neither disagreeing nor are sure confirms that management consultation is a base for any corrective measure taken on fixed assets management.

Question 6

Question 6 of table 3.8, the researcher wanted to find out if employees are given opportunities to decide the best way to do their work for fixed assets management. Thirty five percent of the respondents agreed, while 29% were not sure.

The remaining 35% of the respondents disagreed. Sixty four percent which is made up of disagreed and neutral confirms the negative impact to innovation and creativity of standardised processes which does not give employees opportunity to decide the best ways of doing their work.

Question 7

Forty nine percent of the respondents as per table 3.8 agreed that they know their contribution to both fixed assets management objectives and that of the organisation as a whole. While 31% and 20% of respondents respectively represented not sure and disagreed.

It is clear that the majority of the respondents, which made-up of 49% that they know their contribution to both fixed assets management objectives and to that of the organisation as a whole.

3.10.1.5 Section C analysis

The aims of this section are to evaluate if respondents are encouraged to participate in education and training within the SARB; respondents are provided with relevant training for their job; and also given opportunities to practice what they have learnt from education and training.

Table 3.9

Training and development for fixed assets management response rating based in quantity and percentage.

Question Number	1=D	2=D	Disagree quantity (1+2)	Disagree % (1+2)	3=N	Neutral %	4=A	5=SA	Agree quantity (4+5)	Agree % (4+5)
Question 8	2	8	10	20%	8	16%	21	12	33	64%
Question 9	2	10	12	24%	14	27%	21	4	25	49%
Question 10	5	16	21	41%	13	26%	14	3	17	33%

Question 8

Sixty four percent of the respondents as per table 3.9 agreed that they are encouraged to participate in education and training within the company. While 16% and 20% of respondents respectively represented neutral and disagreed.

Sixty four percent of the respondents which are made up of total of agreed and strongly agreed confirms SARB employees are encouraged to participate in education and training within the company.

Question 9

The researcher wanted to find out if respondents are provided with relevant training for their jobs for fixed assets management. Forty nine percent of the respondents as per table 3.9 agreed, while 27% were not sure. The remaining 24% of the respondents disagreed.

This indicates that the majority of the respondents agreed that SARB provide them with relevant training for their jobs for fixed assets management.

Question 10

Thirty three percent of the respondents (table 3.9) agreed that they are encouraged to participate in education and training within the company. While 26% and 41% of respondents respectively represented not sure and disagreed.

A consolidation of 67% respondents represented neutral and disagreed indicate that though SARB provides education and training for their jobs, they are not given opportunities to practice what they have learnt.

3.10.1.6 Section D analysis

This section of the questionnaire was aimed at determining if respondents are aware of the difference between standardised processes and continuous improvement (the Kaizen Model); if the Kaizen Model is better than standardised processes; and if the Kaizen Model influenced teamwork.

Table 3.10

Standardised process v/s Continuous improvement (The Kaizen Model) response rating based in quantity and percentage.

Question Number	1=SD	2=D	Disagree quantity (1+2)	Disagree % (1+2)	3=N	Neutral %	4=A	5=SA	Agree quantity (4+5)	Agree % (4+5)
Question 11	0	2	2	4%	25	49%	14	10	24	47%
Question 12	0	3	3	6%	22	43%	11	15	26	51%
Question 13	0	1	1	2%	17	33%	20	13	33	65%

Question 11

The researcher wanted to find out if respondents as per table 3.10 knew the difference between the standardised process and the Kaizen Model. Hence the Kaizen Model influences teamwork and continuous improvement that fosters frequent revisiting of the process and updating it so that it could be in line with the changing working environment.

Forty seven percent of the respondents agreed, while 49% were not sure. The remaining 4%, represented disagreed. SARB should induct its employees to understand the different between standardised process and continuous improvement (the Kaizen Model). Hence it is crucial that employees understand that the organisations are forced to adjust its process to be aligned to the external factors that influenced by changing environment.

Question 12

Fifty one percent of the respondents as per table 3.10 agreed that the Kaizen Model is better than the standardised process, while 43% and 6% of the respondents' analysis respectively represent not sure and disagreed. A consolidated 51% of the respondents for agreed and strongly agreed indicate that the Kaizen Model is better than the standardised process.

Question 13

Sixty five percent of the respondents (table 3.10) agreed that the Kaizen Model influences teamwork, while 33%% and 2% respectively represented neutral and

disagree. Overall, 65% of the consolidated total for respondents for agreed category indicates that the Kaizen Model influences teamwork.

3.10.1.7 Section E analysis

The focus of this section was to determine if:

- there is an emphasis on a team-based problem solving approach rather than individual/department-based approach;
- people in the work unit share responsibility for the success and failure of their work; and
- fixed assets management decisions are made through consensus.

Table 3.11

Teamwork on fixed assets management response rating based in quantity and percentage.

Question Number	1=SD	2=D	Disagree quantity (1+2)	Disagree % (1+2)	3=N	Neutral %	4=A	5=SA	Agree quantity (4+5)	Agree % (4+5)
Question 14	4	12	16	32%	19	37%	10	6	16	31%
Question 15	5	9	14	27%	11	22%	22	4	26	51%
Question 16	5	7	12	24%	25	49%	12	2	14	27%

Question 14

The researcher wanted to find out (table 3.11) if there is an emphasis on a team-based problem solving approach rather than individual/department based approach. Thirty one percent of the respondents agreed, while 37% were not sure. Remaining 32% of the respondents represent disagreed.

This indicates that the majority of the respondents which resulted in 37% were not sure if there was an emphasis on a team-based problem solving approach rather than an individual/department based approach.

Question 15

Fifty one percent of the respondents as per table 3.11 agreed that the work unit share responsibility for the success and failure of their work. While 22% and 27% respectively represented not sure and disagreed.

A resulting consolidation of 49% which is made up of not sure and disagreed reveals that SARB management should implement a strategy that will foster team work.

Question 16

The researcher wanted to find out if fixed assets management decisions were made through consensus. Twenty seven percent of the respondents per table 3.11 agreed, while 49% were not sure. The remaining 24% of the respondents disagreed.

This indicates that the majority of responses which resulted in 49% are not sure if fixed assets management decisions are made through consensus.

3.10.1.8 Section F analysis

The focus of this section was to determine if:

- management provide regular customer feedback;
- the quantity management system contributes to collection and integration of information used for decision making; and
- the company practices continuous improvement in communication between employees and managers.

Table 3.12

Communication on fixed assets management activities response rating based in quantity and percentage.

Question Number	1=SD	2=D	Disagree quantity (1+2)	Disagree % (1+2)	3=N	Neutral %	4=A	5=SA	Agree quantity (4+5)	Agree % (4+5)
Question 17	5	15	20	39%	19	37%	11	1	12	24%
Question 18	5	11	16	32%	20	39%	14	1	15	29%
Question 19	4	14	18	35%	15	30%	16	2	18	35%

Question 17

Twenty four percent of the respondents (table 3.12) agreed that management provide regular customer feedback, while 37% and 39% respectively represent not sure and disagreed.

Resulting to consolidate percentage of 76% which is made up of not sure and disagreed indicates that SARB management should implement methodology that is aimed at improving customer feedback communication.

Question 18

The researcher wanted to find out if the quality management system contributes to the collection and integration of information used for decision making. Twenty nine percent of the respondents per table 3.12 agreed, while 39% were not sure. Remaining 32% of the respondents disagreed.

This indicates that majority response which resulted in 39% are not sure if the quality management system contributes to collection and integration of information used for decision making.

Question 19

Thirty six percent of the respondents (table 3.12) agreed that the company practices continuous improvement in communication between employees and managers, while 30% and 35% respectively represent neutral and disagreed.

Although respondents for those who agreed are more than 36%, there is still room for improving SARB practices for continuous improvement for fixed assets management.

3.10.1.9 Section G analysis

This section of the questionnaire aimed to determine if:

- internal and external service provider feedback is used to determine areas of the process that requires improvement;
- internal and external service provider is used as the basis for identifying the

- need for process of change; and
- they have a lot of complaints for service delivery owing to the fixed assets management process.

Table 3.13

Acquisition and disposal of fixed asset response rating based in quantity and percentage.

Question Number	1=SD	2=D	Disagree quantity (1+2)	Disagree %(1+2)	3=N	Neutral %	4=A	5=SA	Agree quantity (4+5)	Agree %(4+5)
Question 20	4	20	24	47%	20	39%	7	0	7	14%
Question 21	4	13	17	34%	19	37%	13	2	15	29%
Question 22	1	13	14	27%	14	27%	10	13	23	46%

Question 20

The researcher wanted to find out if internal and external service provider feedback is used to determine areas of fixed assets management process that requires improvement. Fourteen percent of the respondents as per table 3.13 agreed, while 39% were not sure.

Remaining respondents' analysis of 47% disagreed that internal and external service provider feedback is used to determine areas of the process that require improvement. It is important for SARB to start using internal and external service provider feedback hence it will help to determine process area that requires improvement.

Question 21

Twenty nine percent of the respondents (table 3.13) agreed that internal and external service provider feedback is used as the basis for identifying the need for process change. Remaining 37% and 34% respectively represent neutral and disagreed.

Respondents' analysis of 37% for neutral indicates that internal and external service provider feedback is not used to identify areas for process improvement.

Question 22

Forty six of the respondents as per table 3.13 agreed that they get lot of complaints about service delivery owing to fixed assets management processes, while 27% and 27% respectively represented neutral and disagreed.

A consolidation of 46% of the respondents of agreed and strongly agree indicate that there are lots of complaints for service delivery owing to fixed assets management processes.

3.10.1.10 Section H analysis

This section of the questionnaire aimed to determine if the standardised process is a base for any acquisition and disposal of fixed assets; standardised process does not get updated regularly and standardised processes do not adjust to the changing environment.

Table 3.14

Standardised process on fixed asset management response rating based in quantity and percentage.

Question Number	1=SD	2=D	Disagree quantity (1+2)	Disagree % (1+2)	3=N	Neutral %	4=A	5=SA	Agree quantity (4+5)	Agree % (4+5)
Question 23	0	1	1	2%	17	33%	24	9	33	65%
Question 24	0	6	6	12%	14	27%	22	9	31	61%
Question 25	0	2	2	4%	18	35%	21	10	31	61%

Question 23

The researcher wanted to find out if standardised process is a base for any acquisition and disposal of fixed asset. Sixty five percent of the respondents (table 3.14) agreed, while 33% and 2% respectively represented neutral and disagreed.

The consolidation of 65% of the respondents which is made up of agreed and strongly agreed indicates that standardised process is a base for any acquisition and disposal of fixed asset.

Question 24

Sixty one percent of the respondents as per table 3.14 agreed that the standardised process does not get updated regularly, while 27% and 12% respectively represented neutral and disagreed.

The consolidation respondents of 61% which is made up of agreed and strongly agreed indicate that the standardised process does not get updated regularly, which matter of concern hence the organisation is forced to adjust to outside operating factors.

Question 25

Sixty one percent of the respondents (table 3.14) agreed that the standardised process does not adjust to the changing environment while 35% and 4% respectively represented neutral and disagreed.

Sixty one percent of the respondents who agreed indicate that the standardised process is not adjusted to the changing working environment. SARB management should implement some positive changes if they want to be effective and efficient in the day to day running of their operation.

3.10.1.11 Section I analysis

This section of the questionnaire is aimed at determining if:

- planning will help to identify gaps, eliminate gaps and identifying areas for adjustment on process; and
- PDCA phases will help to eliminate non value adding activities.

Table 3.15

Standardised process on fixed asset management response rating based in quantity and percentage.

Question Number	1=SD	2=D	Disagree quantity (1+2)	Disagree % (1+2)	3=N	Neutral %	4=A	5=SA	Agree quantity (4+5)	Agree % (4+5)
Question 26	0	2	2	4%	2	4%	24	23	47	92%
Question 27	0	2	2	4%	1	2%	24	24	48	94%

Question 26

The researcher wanted to find out if planning will help to identify gaps, eliminate gaps and identifying areas for process adjustment or improvement. Ninety two percent of the respondents agreed, while 4% and 4% respectively represented neutral and disagreed.

Nine two percent of the respondents (table 3.15) who agreed indicates that planning will help to identify gaps, eliminate gaps and identifying areas for process adjustment or improvement.

Question 27

Ninety four percent of the respondents as per table 3.15 agreed that plan; do, check and act phases will help to eliminate non-value adding activities, while 2% and 4% of the respondents respectively represented neutral and disagreed.

Ninety four percent of the respondents who agreed indicate that phases will help to eliminate none value adding activities.

3.10.1.12 Section J analysis

This section of the questionnaire is aimed at determining if:

- there will be an improvement in the standardised process if continuous improvement is implemented;
- continuous improvement will result in improvement of service provided; and
- continuous improvement will foster teamwork which will contribute positively to the achievement of intended goals.

Table 3.16

Implementation of continuous improvement (the Kaizen Model) response rating based in quantity and percentage.

Question Number	1=SD	2=D	Disagree quantity (1+2)	Disagree % (1+2)	3=N	Neutral %	4=A	5=SA	Agree quantity (4+5)	Agree % (4+5)
Question 28	0	0	0	0%	0	0%	19	32	51	100%
Question 29	0	0	0	0%	1	2%	17	33	50	98%
Question 30	0	0	0	0%	2	4%	17	32	49	96%

Question 28

The researcher wanted to find out if there will be improvement in the standardised process resulting from the implementation of continuous improvement. Hundred percent of the respondents agreed.

The consolidation of 100% of the respondents (table 3.16) which is made up of agreed and strongly agreed; indicate that there will be an improvement in the standardised process if continuous improvement (the Kaizen Model) is implemented.

Question 29

Ninety eight percent of the respondents as per table 3.16 agreed that continuous improvements will result in the improvement in service provided, while 2% were not sure.

The consolidation of 98% of the respondents which is made up of agreed and strongly agreed; indicate that continuous improvement will result in improvement of service provided.

Question 30

The researcher wanted to find out if continuous improvement will foster teamwork which will contribute positively to the achievement of intended goals. Ninety six percent of the respondents (table 3.16) agreed, while 4% were not sure.

The consolidation of respondents 96% which is made up of agreed and strongly agreed; indicate that continuous improvement will foster teamwork which could possible contribute positively to the achievement of intended goals.

3.11 Interpretation of the emperical study results

The existense of the standardised process for the acquisition and disposal process has been established and employees should comply with them when performing their relevant duties. The purpose of the standardised process is to ensure that employees perform their duties accordingly and to prevent deviation from the outlined process that would impact negatively on the intended results of the unit, section, division, department

and that of the organisation as a whole.

The challenge is when the standardised process does not get updated to the changing working environment. Though standardised processes provide direction to the way activity should be carried out, it should be continuously updated to the changing working environment. Response analysis as per question 24 and 25 of table 3.14 which each indicates that 61% of the consolidated respondents that are made up of agreed and strongly agreed, indicated that acquisition and disposal processes do not get adjusted to the changing operating environment.

This is also supported by the consolidated 98% refers question 23 of table 3.14 which is made up of strongly agreed, agreed and neutral, which confirm that acquisition and disposal processes do not get adjusted to align them to both internal and external factors. This is further supported by the consolidated respondents of 45% as per question 22 of table 3.13 which indicated that there are a lot of complaints for service delivery owing to the fixed asset management process.

It appears from the responses who responded positively to the statement that continuous improvement (the Kaizen Model) is the best option that could possible foster adjustment to any cycle of the asset management process to be in line with a changing working environment. However, very few respondents did not understand the difference between the standardised process and the Kaizen Model (question 11 of table 3.10).

This is confirmed by the respondents' percentage of above 94% which is a combination of agreed, strongly agreed for any of question 28, 29 and 30 of table 3.16. The category of these questions were aimed at establishing if implementation of continuous improvement (the Kaizen Model) will help to adjust standardised processes to the changing working environment.

However, overall percentage of less than 8% for strongly disagreed, agreed and neutral for any of questions 28, 29 and 30 of table 3.16 confirm that SARB management would not experience any resistance to change if they intend to implement continuous improvement (the Kaizen Model) in all phases of the fixed asset management process.

Furthermore, respondents' percentage of 94% as per question 2 of table 3.15 which was composed of agreed and strongly agreed confirms that the implementation of will help to identify gaps. It will also eliminate non-value adding activities which would enable all phases of asset management processes (including acquisition and disposal processes) to be adjusted to the changing working environment, which will result in fixed asset process improvement.

3.12 Testing of hypothesis

The expectation of the theory developed was aimed at establishing the suitability of the Kaizen Model on the management of fixed assets in the SARB.

3.12.1 Hypothesis 1

The first hypothesis test if there is clear support for continuous improvement for fixed assets management by the SARB top management, which is covered by section A of 3.7.1.3. As a results, continuous improvement (the Kaizen Model) should be implemented to change the asset management process accordingly.

The results of the survey (section A of 3.7.1.3, table 3.2) indicated that 30% of the respondents disagree that the SARB top management support continuous improvement for fixed assets management process. Respondents based their reasons to that fixed asset management processes and procedures are not continuous updated hence the current process that has been recently updated was last updated in 2003. This challenge resulted to the lack flow of information from the affect unit to another.

The hypothesis is partially supported.

3.12.2 Hypothesis 2

The second hypothesis test if standardised process is a base for any acquisition and disposal of fixed asset.

The literature review (section 2.3.1) indicated that a standardised process is a means of removing variation in task performance caused by employees completing the same task process in different ways. Furthermore, it should support, maintain and improve quality of output of the activities that flow from one section to another within an organisation and to outside customers. Such process should be implemented throughout the life cycle of the fixed asset.

The results of the survey (section of 3.7.1.10, table 3.9) also supported that standardised process is a base for any acquisition and disposal of fixed asset. Table 3.8 indicates that internal and external service provider feedback is not used to determine areas of fixed assets management process that requires improvement. Although 65% (table 3.14) of the respondents agreed that standardised process is a base for any acquisition and disposal of fixed asset, adjustment of such standardised process to be in lined with the changing operation environment is very crucial.

The hypothesis is therefore supported.

3.12.3 Hypothesis 3

The third hypothesis test if planning will help to identify gaps, eliminate gaps and identifying areas for process adjustment or improvement.

The literature review (section 3.2.3.5) indicated that the “Planning phase” involves setting parameters, selecting data required, ways of collecting data and setting anticipated goals that resulted to team finding out problems or quality improvement opportunities that arise when processes are investigated.

The results of the survey (section I of 3.7.1.11, table 3.10) showed that the majority of the respondents agreed hence implementation of planning will contribute to the identification of the process gaps, elimination of identified gaps, adjustment of the process to be in line with the changing environment and support the achievement of the fixed assets management objectives and that of the organisation as whole.

The hypothesis is supported.

3.12.4 Hypothesis 4

The fourth hypothesis test if continuous improvement will result in improvement of service provided and that continuous improvement will foster teamwork which will contribute positively to the achievement of intended goals.

The literature review (section 2.6 and 2.3.2.3) indicated that the Kaizen Model is the methodology that fosters continuous improvement which involves everyone in the organisation from the top management, to managers then to supervisors, and to workers. This is also supported by Ford (1988:12), who states that “if you think of standardisation as the best practice that you know today, but which is to be improved tomorrow- you get somewhere. But if you think of standards as confining, then progress stops- you get nowhere.”

Based on this, the Kaizen Model is the right model for continuous improvement hence it install a long term approach to work that systematically seeks to achieve small, incremental changes in processes in order to improve efficiency and quality.

The results of the survey (section 3.7.1.12, table 3.11) show that 98% of the respondents for both question 29 and 30 agree that continuous improvement will result in improvement of service provided hence continuous improvement will foster teamwork which will contribute positively to the achievement of intended goals.

The hypothesis is supported.

3.13 Summary

The Kaizen Model is the continuous improvement process that is understood by most of the respondents, but its suitability would depend on teamwork which requires involvement of everyone affected by the fixed assets management process. Over and above that the Kaizen Model's suitability will also depend on support from the SARB top

management.

However, it is the responsibility of those affected by the process to ensure that identified gaps are updated in all processes of fixed assets management, including those under review to be in line with the changing working environment.

The simplification of the suitability and the implementation of the Kaizen Model is indicated by the respondents resulting from any of question 28, 29 and 30, which indicate that respondents are aware of the future benefits resulting from the implementation of the Kaizen Model.

The hypothesis were also tested and the results of the first hypothesis results showed that there is lack of support by the SARB top management for continuous improvement for fixed assets management could hamper the suitability of the Kaizen Model. The second hypothesis results showed that standardised process is a base for any acquisition and disposal of fixed asset. However, lacking part is when standardised process is not adjusted to internal and external factors that influence changing working environment affect negatively service delivery and the achievement of the intended goals. The third hypothesis results showed that the majority of the respondents agreed that planning help to identify gaps; eliminate gaps and identifying areas for process adjustment or improvement.

The fourth hypothesis results showed that 98% of the respondents for both question 29 and 30 respectively agree that continuous improvement will result in improvement of service provided and that continuous improvement will also foster teamwork which will contribute positively to the achievement of intended goals. Empirical study analysis indicated suitability of the Kaizen Model on the management of fixed assets of the SARB. Chapter 4 contains the recommendation and conclusion generated by the findings.

Chapter 4

Recommendation and conclusion

4.1 Introduction

Conclusion and recommendation are influenced by the literature study findings (chapter 2) and empirical results (chapter 3). Based on the integration of these findings, solutions to the main problem and sub-problems are recommended. Also taken into account for recommendation is the answers to question aimed at establishing the suitability of the Kaizen Model on the management of fixed assets in the SARB.

4.2 Conclusion

Literature review indicated that the Kaizen Model is suitable for fixed assets management hence it foster continuous improvement. Its implementation results to a long term approach to work that systematically seeks to achieve small, incremental changes in processes in order to improve efficiency and quality.

Suitability of the Kaizen Model on the management of fixed assets was also supported by Thessaloniki (2006:2), who stated that asset management improvements begin with the admission that every organisation has problems, which provide opportunities for change. The author further states that it evolves around the Kaizen Model (Continuous improvement) which engage everyone in the organisation and largely depends on cross-functional teams that can be empowered to challenge the status quo.

The demand for continuous improvement (the Kaizen Model) for management of the fixed assets accountability and business processes leads to decision-makers demanding more useful information that will assist them in deciding between competent courses of action and to discharge their accountability meaningfully.

In summary, the analysis of the empirical results indicated the suitability of the Kaizen Model on the management of fixed assets in SARB. Hence it could result to the continuous improvement which foster teamwork that would contribute positively to the

achievement of the intended goals (question 30 of table 3.16). It could further result to the frequency updating of the standardised process to be inline with operating changing enviroment.

Through planning that form part of PDCA, which is also one of the Kaizen Model principles, respondents results of 92% (question 26 of table 3.15) agreed that planning helps to identify gap, eliminate gaps and identifying areas of the process that requires improvement. The respondents results of 94% (question 27 of table 3.15) also agreed that PDCA phases will help to eliminate non value adding activities.

Generally it can be said that both literature review and analysis of emperical study results and hypothesis testing supported the suitability of the Kaizen Model on the management of fixed asset.

4.3 Recommendations

Recommendations are derived from analysis of the relationship between literature study findings and empirical study.

4.3.1 Recommendation number one

The literature review indicated that unless standardised process gets updated with new regulatory requirements and best practice, it could rapidly fall into disrepute and become outdated. Instead of fostering innovation and continuous improvement, the standardised process only produces stagnation and excessive documentation. Furthermore, it is also not suitable for frequently changing operation environment.

The literature review further indicated that the Kaizen Model differ to the standardised process because it is commonly used to indicate the long-term betterment of something. The Kaizen Model represents the element of continuous improvement hence it includes all activities which also encompass individual and team members that leverage learning to make processes better and to satisfying customer's requirements.

The difference between the two concepts was also supported by Ford (1988:12), who states that “if you think of standardisation as the best practice that you know today, but which is to be improved tomorrow- you get somewhere. But if you think of standards as confining, then progress stops- you get nowhere.”

Although 47% (table 3.10) of the respondents to the questionnaire agreed to question 11, the 49% which is in majority were not sure. This confirms that SARB management should embark on education and training to highlight to the employees the different between the Standardised Process and The Kaizen Model.

4.3.2 Recommendation number two

Literature review indicated that the Kaizen Model foster teamwork and continuous improvement resulting from frequency revisiting of the process. Through process revisiting and the use of PDCA, gaps would be identified and eliminated. Furthermore, areas of the process that requires adjustment to be line with changing environment would be adjusted accordingly.

However, 51% and 65% (table 3.10) of the respondents to the questionnaire respectively agreed that the Kaizen Model is better than the standardised process and it influence teamwork. Commonly it can be said that the Kaizen Model is suitable for the management for fixed assets hence respndents agreed to the benefits of its principles.

4.3.3 Recommendation number three

Literature review indicated that the implementation of the Kaizen Model (continuous improvement) could results to the improvement of standardised process and also servicedelivery. Hence the Kaizen Model influence the assess of the strength and weakness of the present systems, which would results to the identification and elimination of gaps through adjustment of the process to be inline with changing operation environment.

Respondents percentage (table 3.16) of agreed for question 28, 29 and 30 were respectively 100%, 98% and 96%. This support the suitability of the Kaizen Model to the management of fixzed assets in the SARB. Hence respondents scored a percentage of not less than 94% for above stated questions. A agreed that its implementation would results to the improvement in standardised process, improvement in service provided and also foster teamwork which will contribute positively to the achievement of the intended goals.

4.4 The Kaizen Model implementation

The suitable implementation of the Kaizen Model on the management of fixed assets in the SARB could only be achieved when the following have been achieved:

- **Support of the top management**

Although the results of the survey indicates that implementation of the Kaizen Model is suitable for the management of fixed asset in the SARB, support for its implementation by the top management is crucial for its successful implementation.

As a result top management must be briefed of the Kaizen Model principles and full acceptance by the top management is required. Furthermore, top management involvement should be maintained throughout the implementation processes.

- **Workforce education**

As the asset of any organisation, workforce is the road link between the old system and the new system. Based on this, the workforce at all levels must be inducted about the concept of the Kaizen Model and why is it suitable for the management of fixed assets in the SARB. Drawbacks of not adjusting to the new system should also be highlighted to them.

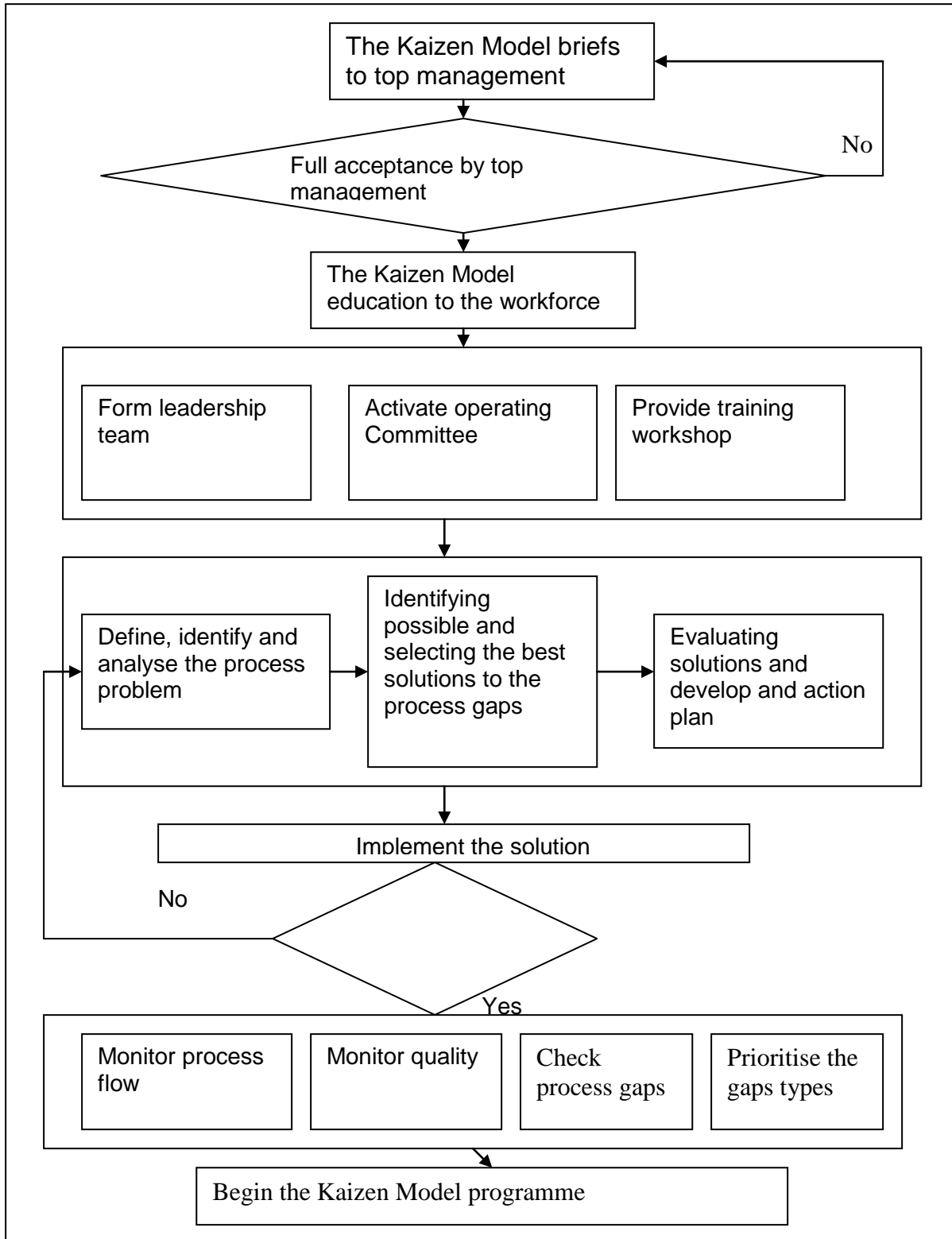
Management team must align the purpose of the Kaizen Model and importance of its successful implementation and how it will enhance the achievement of the asset management goal and that of the SARB as a whole. The leadership support team and active operative committee should be formed and they should be a front runner in ensuring that the implementation of the Kaizen Model materialised.

- **The Kaizen Model implementation**

Before the Kaizen Model gets implemented, training should be provided to the steering committee so that they know what is expected from them. Furthermore, SARB should have a mechanism in place to handle resistance to change. A road map for the implementation of the Kaizen Model for the management of fixed assets of the SARB should be drawn. When progressing with the implementation, monitoring and evaluation should be undertaken to eliminate any deviation from the program. Below figure 4.1 indicates researcher suggested process for the implementation of the Kaizen Model on the management of fixed assets in the SARB.

Figure 4.1

Suggested process for the implementation of the Kaizen Model developed by the researcher.



4.5 Recommendations for further research

A further study is proposed to research the suitability of the Kaizen Model on the management of fixed assets of the SARB subsidiaries, which are the SABNC, SAMC and SARBCICL. Hence suitability for the Kaizen Model to its subsidiaries would result to the common process applied to all fixed assets owned by SARB, including those bought for the subsidiaries.

4.6 Summary

- **Literature review summary**

Literature review indicated that the Kaizen Model is suitable for the management of the fixed asset for any organisation such as that of SARB. Hence its implementation could result to continuous improvement in service delivery, improve customer satisfaction, eliminate non value adding activities and result to the adjustment of the fixed assets management process to be in line with changing operation environment.

- **Empirical study summary**

Empirical study analysis also indicated the suitability of the Kaizen Model to the management of the fixed assets of the SARB. This is confirmed by positive response received from the respondents with regards the questionnaire answers to the question of principles of the Kaizen Model.

Example is question 30 of table 3.16 which was aimed at establishing whether the Kaizen Model (continuous improvement) implementation will foster teamwork that will contribute positively to the achievement of the intended goals. Ninety six percent of the respondents agreed.

- **Hypothesis summary**

Summary of the hypothesis testing also supported the suitability of the Kaizen Model on the management of the fixed assets in the SARB.

- **Overall summary**

Based on both literature review and analysis empirical study and the hypothesis testing, it can be generally accepted that the Kaizen Model is suitable for the management of fixed asset in the SARB.

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Questionnaire

Annexure A

06 August 2012

Dear colleague

Survey for thesis: Suitability of the Kaizen Model on the management of fixed assets in the South African Reserve (SARB)

I would like to invite you to participate in a survey for thesis aimed at establishing the suitability of the Kaizen Model on the management of fixed assets in the SARB.

The results of this research will be submitted to SARB management of CSD and also to the NWU as part of MBA study.

Please complete to the best of your ability the following questionnaire. Also note that all the responses will be treated as strictly confidential and the respondents will remain anonymous. Questionnaire's objective is to determine your perceptions to the suitability of the Kaizen Model on the management of fixed assets in the SARB.

Based on the information gathered in the survey, the researcher will also integrate the appropriate guidelines to be followed when implementing the Kaizen Model in fixed assets management in SARB.

Should you require any additional information, please feel free to contact Simon Mulalo Mavhina at x4667 SARB Head Office. Your assistance in this regard will be appreciated.

Thank you in advance.

SIMON MULALO MAVHINA
RESEARCHER

Definition of the main concepts aimed at ensuring that respondents understand their meaning.

- **Standardised process** outlines a set of actions that an employee or group of employees must perform in order to complete a task or is a degree to which operating process are formalised and followed.

When gaps on standardised processes have been identified, the demand for continuous improvement and business processes leads to decision-makers demanding more useful information to assist in deciding between competent courses of action and to discharge their accountability meaningfully.

- **The Kaizen model** is a continuous improvement process that involves everyone (from junior to top management) in an organisation.

The Kaizen Model is also supported by Henry Ford (1926:53), who states that "if you think of standardised process as the best practise that you know today, but which is to be improved tomorrow- you get somewhere. But if you think of standardised process as confining, then progress stops- you get nowhere."

Fixed assets management Questionnaire: MBA Thesis (ONLINE)

Demographic Information

I	Gender	Male	Female	II. Age		Years	
III	Ethnic Group	White	Black	Coloured		Indians	Other
IV	Highest Qualifications	Grade 12	Certificate	Diploma	Degree		Post graduate
V	Level in Organisation		Management	Middle management	Supervisor/Foreman	Lower	

	STATEMENT	SCALE				
		Disagree -----> Agree				
		Strongly disagree	Disagree	Neutral	Agree	Strongly Agree
SECTION A: TOP MANAGEMENT SUPPORT						
1	There is clear support for continuous improvement for fixed assets management by top management.	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5
2	Top management often discusses the importance of continuous improvement on fixed assets management.	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5
3	Top level managers view continuous improvement on fixed assets management more important than standardised process.	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5
SECTION B: EMPLOYEE EMPOWERMENT						
4	My manager trusts me in carrying out my actions for fixed assets management.	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5
5	Employees are empowered to take corrective decisions on the spot without looking up to managers for their approval.	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5
6	I can decide the best way to do my work on fixed assets management.	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5

7	I know my contribution to both fixed assets management objectives and that of the organisation as a whole.	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5
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SECTION C: TRAINING AND DEVELOPMENT FOR FIXED ASSETS MANAGEMENT

8	Employees are encouraged to participate in education and training within the company.	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5
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9	Employees are provided with relevant training for their jobs.	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5
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10	Employees are given opportunity to practise what they have learned from education and training.	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5
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SECTION D: STANDARDISED PROCESS v/s CONTINUOUS IMPROVEMENT (KAIZEN MODEL)

11	There is different between the standardised process and the Kaizen Model.	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5
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12	The Kaizen Model is better than the standardised process.	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5
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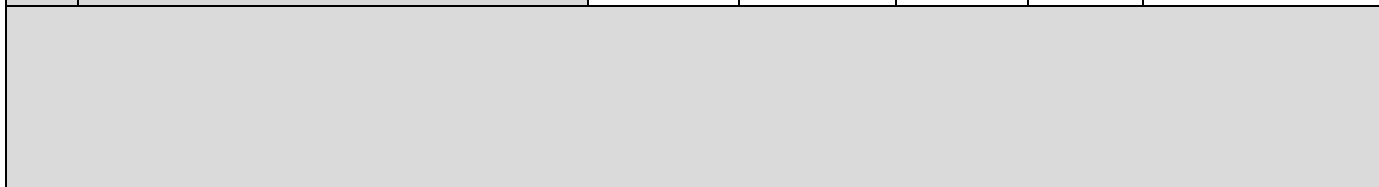
13	The Kaizen Model influence teamwork.	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5
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SECTION E: TEAMWORK ON FIXED ASSET MANAGEMENT

14	There is emphasis on team based problem solving approach rather than individual/department based approach.	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5
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15	People in the work unit share responsibility for the success and failure of their work.	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5
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16	Fixed assets management decisions are made through consensus.	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5
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SECTION F: COMMUNICATION ON FIXED ASSETS MANAGEMENT ACTIVITIES						
17	Management provides regular customer feedback.	● 1	● 2	● 3	● 4	● 5
18	The quality management system contributes to collection and integration of information used for decision making.	● 1	● 2	● 3	● 4	● 5
19	The company practices continuous improvement in communication between employees and managers.	● 1	● 2	● 3	● 4	● 5
SECTION G: ACQUISITION AND DISPOSAL OF FIXED ASSETS						
20	Internal and external service provider feedback is used to determine areas that require improvement.	● 1	● 2	● 3	● 4	● 5
21	Internal and external service provider is used as the basis for identifying the need for process change.	● 1	● 2	● 3	● 4	● 5
22	We have a lot of complaints for service delivery owing to our process.	● 1	● 2	● 3	● 4	● 5
SECTION H: STANDARD PROCESSION FIXED ASSETS MANAGEMENT						
23	Standard process is a base for any acquisition and disposal of fixed asset.	● 1	● 2	● 3	● 4	● 5
24	Standard process does not get updated regularly.	● 1	● 2	● 3	● 4	● 5
25	Standardised process does not adjust to the changing environment.	● 1	● 2	● 3	● 4	● 5
SECTION I: PHASES (PDCA) – If implemented on fixed assets management						
26	Planning will help to identify gaps, eliminate gaps and identifying areas for adjustment on process.	● 1	● 2	● 3	● 4	● 5
27	Phases will help to eliminate none value adding activities.	● 1	● 2	● 3	● 4	● 5

SECTION J: IMPLEMENTATION OF CONTINUOUS IMPROVEMENT (KAIZEN MODEL)

28	There will be improvement in standardised process if continuous improvement is implemented.	● 1	● 2	● 3	● 4	● 5
29	Continuous improvements will results to improvement in service provided.	● 1	● 2	● 3	● 4	● 5
30	Continuous improvement will foster teamwork which will contribute positively to the achievement of intended goals.	● 1	● 2	● 3	● 4	● 5

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