

Management Accounting Tools for Sustainability Information Decision-making and Financial Performance

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Abstract

Many organisations today are still not making use of Management Accounting Tools (MATs) to assist in providing sustainability information for decision-making and the way it influences the financial performance of an organisation. As a result it may negatively impact financial performance of organisations due to a number of errors which may include ancient cost drivers; erroneous business decisions, inaccurate information and human errors. Without applying MATs, managers of organisations may find it difficult to improve the day-to-day operations and take decisions to enhance the financial performance of the business. Information was collected using interviews to examine whether MATs can provide sustainability information for decision-making and how it influences the financial performance of an organisation. The research was carried out among listed organisations on the Johannesburg Stock Exchange (JSE). It was established that MATs provide strategies that influence decision-making and performance, although decision-making is the responsibility of executives or directors of the organisations. The study also established that financial managers who are focusing more on financial statements and reporting perform Management Accounting (MA) tasks. Hence future research should focus on the importance of segregating MA roles from those of financial accountants or managers to enable the organisation to focus on different reports for different outcomes.

Keywords: Management Accounting, Decision-Making, Financial Performance, Sustainability Information, Activity Based Costing (ABC), Balanced Scorecard (BSC), Benchmarking

Introduction

Software provider Oracle conducted a survey that sampled organisations and managers from all over the world. Results indicated that many organisations and managers are affected by the lack of clarity on the meaning of figures as a result of information given and presented in confusing ways. The results further indicated that obtaining accurate and reliable information on profit and financial performance is now a challenge that many organisations and managers are facing. As a result, the decision-makers of organisations experience difficulties as financial performance; success and sustainability of their organisations are affected by a lack of visibility in the accounts and profits (CIMA 2011). Consequently, it may be important for the management accountant to provide information in such a way that it guides decision-making towards sustainability.

In today's competitive environment many organisations may be fighting for survival and sustainability. Financial performance of many organisations may have been impacted adversely as a result of using outmoded drivers and information that is not accurate as well as wrong business decisions and errors caused by humans. MATs enable the establishing of a model for the logical categorisation of cost formation that may support the organisation in the handling of large amounts of data, inaccurate information and flawed decisions (Carenys & Sales 2008:9). Hence, MATs may provide accurate information and reduce human errors that could lead to improved business decision-making and financial performance of organisations.

Many organisations today operate in a very competitive environment and it requires both the manager and all the stakeholders to make informed decisions. Garrison, *et al.* (2010) argue that non-financial performance measures need to be integrated with financial performance measures within a well-designed balanced scorecard (BSC) to address the inadequacies of performance measurement. MATs may assist organisations to aid decision-making by using both financial and non-financial measures; and the BSC may improve performance of organisations (Khan *et al.* 2011). In this regard,

organisations that make use of the BSC may improve their strategies that could lead to improved economic and financial performance.

Nearly two-thirds of organisations are losing faith in financial accounting based performance measures and are seeking alternative ways to implement and manage their businesses (Caulkin 1997:9). Schultze and Weiler (2010) argue that the performance measurement system function provides information to managers for making economic decisions and increasing organisations' returns and financial performance. Performance measures may also convey information about activities within the organisation and should therefore be used together with knowledge management so that creating, capturing, transferring, and accessing information needed for decision-making can be efficient and readily available to drive business strategy (Rowe & Widener 2011). MA may therefore be viewed as an essential tool for measuring the financial performance of organisations.

In today's functioning of an organisation, it may no longer be adequate to measure performance without taking sustainability into consideration. Schaltegger (2008:7) argues that managing sustainability links with sustainability accounting and performance measurement. Sustainability can play an important role in creating a competitive advantage and it can benefit organisations through strategic implementation, productivity, and day-to-day operations of the organisations (Zilahy & Kovács 2008). Therefore, it is plausible that organisations can benefit from sustainability information and being sustainable can create a competitive advantage for an organisation that can impact financial performance positively.

Many organisations are facing high levels of uncertainty due to changes in technology, market deregulation, and also increased competition (Sharma & Gadenne 2002). As a result of new innovations such as activity-based costing (ABC) and continuous improvement methodologies, organisations may be able to respond to the changing nature of operations and competition (Yang *et al.* 2006). Botten and Sims (2005:441) argue that competitive advantage may be improved if managers can act and think like owners as they will: achieve targets; take more risks; and also improve financial performance of the organisation. Hence applying MATs may assist in providing sustainable information regarding risks and future forecasts so as to improve the efficiency of processes. Therefore, this research seeks to investigate the role of MATs in providing sustainability information for decision-making and how it influence financial performance.

The structure of the remainder of the article follows: In the next section the literature review is portrayed and the problem statement and objectives are discussed afterwards. This is followed by a discussion of the methodology employed in the research. The data analysis and findings are discussed next. The article concludes with a section where the findings are categorised and linked to the objectives and recommendations and future work are discussed.

Literature Review

This article is based on a MCom dissertation (Matambele 2015). The literature review provides the necessary background on MATs providing sustainability information for decision-making and its influence on financial performance.

Sustainability Information

Grober (2012:8) argues that sustainability relates to basic human needs in order to maintain and nurture the conditions on which life depends. He further stated that there couldn't be development without sustainability, which is why modern organisations, corporate managers and politicians perceive sustainability to be the antithesis of development, a threat to progress and wellbeing. Hence, sustainability information can be viewed in terms of a biological perspective in order to assist organisations to assess the impact of the economy and long-term survival which may directly influence the financial performance not only in a corporate perspective of creating stakeholder value (Morse 2010:133). The next section discusses decision-making.

Decision-making

Decision-making can be defined as the process whereby the decision-maker identifies and choose alternatives based on values and preferences (Harris 2012). MA provides an organisation with information upon which informed strategic decisions and operations can be assisted (Kidane 2012). From senior decision-makers, be it national and international, to the individual, the need for sustainability information arises at all levels according to the United Nations Environment Programme (UNEP 2014). Therefore, the information that MA provides may be applied to make good and reliable decisions for a sustainable future. The next section discusses financial performance.

Financial Performance

Raiborn and Kinney (2013:12) view financial performance as concerns of shareholders and other stakeholders about profitability and organisational growth. Financial performance may be expressed as a subjective measure based on how well an organisation utilises their assets from its primary business and generate revenues. Financial performance may also measure an organisation's overall financial health over a certain period, and employed to compare similar organisations across the same industry. Taylor and Haneberg (2011:20) state that profit, market share, economic value added, and earnings before interest, tax, depreciation and amortisation may be the focus of financial performance. Hence, for the purpose of this study financial performance may be seen as an integral part of an organisation's sustainability and existence. The next section discusses MA.

Management Accounting (MA)

Garrison, Noreen, and Brewer (2010:33) state that MA is concerned with providing information - to people who manage and govern its operations inside an organisation. They also state that MA emphasises decisions affecting the future, relevance, and timeliness. Vitez (2014) argues that financial information should be separated from Management Accounting Information (MAI) to make sure that only valid, timely and relevant information is contained in management reports. Therefore, the importance of MA may be in providing relevant information for planning, control and performance measurement.

Although management accountants have been seen traditionally as number crunchers, many organisations use management accountants to focus on analysing information and creating knowledge from it rather than collecting data, this resulted in management accountant's becoming decision-support specialists and facilitators of a management decision-making system (Jackson *et al.* 2009:33). MA may therefore be considered relevant to provide sustainability information for decision-making and which in turn influence financial performance. The next section discusses MAI.

Management Accounting Information (MAI)

MAI is focused on decision-makers and internal managers and its purposeful

use is to provide financial information applicable to a manager's operations in an attempt to create sound organisation's decisions and MAI occurs in the form of budget forecasts, financial ratios, cost accounting, and variance analysis (eHow 2014). Hence MAI may play a very useful role in decision-making and in improving financial performance of the organisation as a result of sustainability information that flows from financial ratios, budgets, and cost accounting. The next section discusses MATs.

Management Accounting Tools (MATs)

MATs may assist an organisation in creating shareholder value and also improve financial performance of an organisation. Modern tools such as ABC provide relevant information that may be useful in the decision-making processes. The BSC and performance measurement may also assist an organisation to improve financial performance and sustainability. Hence management accountants should choose the right tool for the specific context, a decision that should be based on their technical knowledge, professional experience and judgement for the organisation to achieve its goals and vision (Ross & Kovachev 2009:5). The tools discussed next form the basis for this research.

Activity-based Costing (ABC)

Weygandt, Kimmel, and Kieso (2010:2) view ABC as a beneficial tool since it results in more accurate product costing and in more careful scrutiny of all activities in the value chain which leads to better management decisions and control over overhead costs. Although there are limitations such as cost, some organisations may find ABC useful for accurate product costing.

Consequently ABC is best suited for organisations that have various outputs with differing levels of complexity and operational intensity and it is also well suited for those organisations that provide customers with varying levels of products or services. ABC permits such organisations to correctly ascertain the amount of total funds and resources dedicated to each particular project (Rothberg 2011:1). Hence for organisations that have various outputs with differing levels of complexity and operational intensity ABC may be the best option to apply compared to a traditional costing system and may result in better decision-making and financial performance.

Balanced Scorecard (BSC)

Kaplan and Norton (2005) developed the BSC. Hilton and Platt (2011:43) define the BSC as a model of business performance evaluation that balances measures of financial performance, learning, innovations, and internal operations. They state that the BSC comprises of four perspectives which are: financial; internal operations; customers; and learning and growth. The mentioned four perspectives may play an important role in increasing performance and sustainability of an organisation.

Benchmarking

Whitecotton, Libby, and Philips (2011:147) state that benchmarking can be used to pinpoint areas where a company is ahead and provide managers incentives to improve their own operations. There is an increase in the use of benchmarking in order to attain best standards or practice and therefore benchmarking establishes attainable standards by the examination of both external and internal information (CIMA 2008:117). A benchmark may provide a standard of excellence against which to measure and compare, which assist organisations in achieving good performance. Next the research problem and objectives are stated.

Problem Statement

Management Accounting is known to be useful in internal planning and control. This may have increased its relevance in improving the financial performance and decision-making processes of organisations (Drury 2008:19). Many organisations are still not making use of MATs to assist them in providing sustainability information for decision-making. This may impede the financial performance and success of organisations since erroneous decisions, inaccuracies in information, the use of antiquated cost drivers, large amounts of information and human errors may occur (CIMA 2011). Without applying MATs, managers of organisations may find it difficult to improve the day-to-day operations and take decisions that will enhance the financial performance of the business.

However, current innovative MATs such as ABC, the BSC and benchmarking may provide sustainability information for decision-making that can improve the sustainability, profit, and performance of organisations.

Aim and Objectives of the Research

The aim of this research is to examine whether MATs can provide sustainability information for decision-making and the influence of this information on the financial performance of an organisation. The practices to be assessed theoretically and empirically will include ABC, performance measurement, the balanced scorecard and benchmarking.

The objectives of this study are to:

- Assess the role of MATs such as the BSC, benchmarking and ABC to provide sustainability information which influences financial performance.
- Ascertain whether the sustainability information generated by tools such as the BSC, benchmarking and ABC improves the financial performance of organisations.
- Establish the extent to which sustainability information influences decision-making in the organisation.

The next section discusses the methodology employed in this study.

Methodology

In this section the research methods, the population, data collection, findings and analysis, trustworthiness and authentication are addressed.

Research Methods

Ryan, Scapens and Theobald (2002:7) define research as a process of intellectual discovery, which has the ability to change knowledge, understanding and perception of an organisation around us.

The role of MA in the provision of sustainability information for decision-making and its influence on financial performance of an organisation is based on facts, scholar's ideas, and the analysis of information and the examination of the different point of views.

The literature review for this study involved information that is publicly available such as library books, subject websites, scholarly journals, etc.,

which guided and provided more information for this study. The literature review examined the theory relevant to MATs in providing sustainability information for decision-making and its influence on financial performance of an organisation. The research population will be discussed in the next section.

Research Population

Heppner and Heppner (2004:110) define a population as organisations, students, employees, or objects of the study. The target population of this study is 400 South African organisations listed on the Johannesburg stock exchange (JSE 2013) and organisations were selected by numbering each organisation and drawing 25 numbers of which the first 15 were approached first.

Table 1: Organisations and Participants

Organisations	Participants
Mining	1 and 2
Pharmaceutical	3
Petrochemicals	4 and 5
Banking (Financial Institutions)	6 and 7

The data collection will be discussed in the next section.

Data Collection

In order to solve the research problem primary data sources were used. Heppner and Heppner (2004:376) argue that a number of problems can occur with data collections that can greatly influence the outcome of the study as a result of participants that may become fatigued and not respond as accurately or carefully over time. The study was conducted by means of semi-structured interviews and the interviews were conducted at public places and also participant's place of work. Interviews ranged from 14 to 35 minutes and they were recorded using a cell phone and the researcher took additional notes. The next section outlines interviews.

Interviews

For the purpose of this study, primary data were collected using semi-structured interviews. The interview questions were clear, concise and pleasing so as to invite participants to participate and the goal was to include all of the questions necessary for collecting the desired information without making the interview so lengthy that it becomes inconvenient to the participants as suggested by (Gideon 2012:300).

An interview plan was developed as a guide to the semi-structured interviews. The plan contained three key focus categories as indicated below and each category has sub-questions that were used to derive information from participants:

1. MATs
2. Improvement of financial performance of an organisation
3. Strategies which influence decision-making and performance

The interview plan was designed with the above-mentioned categories in mind and desired information was achieved. The data analysis and interpretation are discussed in the next section.

Data Analysis and Interpretation

Heppner and Heppner (2004:228) view data analysis as a demonstration of a high degree of analysing and interpreting the results. The study employed a qualitative analysis of the collected data.

For the purpose of achieving the objectives and to solve the problem for the role of MA in the provision of sustainable information for decision-making and its influence on financial performance of an organisation the data were:

- ☐ Organised for the analysis
- ☐ Described, and
- ☐ Interpreted.

The above enabled the analysis and interpretation of the data that were relevant, effective, and efficient for the study that may result in a strong impact and

sustainability of the outcome. The next section discusses trustworthiness and authenticity.

Trustworthiness and Authenticity

Shenton (2004:63) states that the concepts of validity and reliability cannot be addressed in the same way in naturalistic work and as a result, positivists generally often question trustworthiness of qualitative research. He further argues that there are four criteria used: credibility, transferability, dependability, and confirmability.

Therefore, for the purpose of this study, the above four stated criteria were employed to ensure trustworthiness. Lincoln and Guba (1985) confirmed that trustworthiness of a research study is important to evaluating its worth.

Mertens (2005) argues that authenticity has three criteria: fairness, ontological authenticity, and catalytic authenticity. For the purpose of this study, authenticity was employed to ensure that the results are of good quality and reliable. The next section discusses data analysis and findings.

Data Analysis and Findings

This section presents the data analysis and findings of the study. The data were collected using interviews. The researcher mainly depended on semi-structured interviews to collect primary data. Interviews were held at various offices where participants work and also conveniently located restaurants around South Africa and they lasted from 14 to 35 minutes.

However, getting participants to participate in interviews took lots of time as some were busy with half-year end and year-end deadlines. Some participants were no longer interested to participate in the study as a result of their personal commitments. Nevertheless information obtained from seven participants using semi-structured interviews was sufficient to reach data saturation. Baker and Edwards (2014:2) confirmed that there is no exact number to reach data saturation but it depends on the responses as they offer guidance and direction on the epistemological, methodological and practical issues to take into account when conducting research projects and this includes advice about assessing research aims and objectives, validity within epistemic communities and available time and resources.

All participant information was computed on percentage of 100 according to their contribution to the study and also based on the usage of the information they provided, its relevance, accuracy and correctness. Data saturation was reached during interview number three. 64% of information was already collected and only 36% of information was collected from interview number four to seven. Therefore the researcher is confident that based on this analysis the sample size is sufficient. Figure 1 illustrates participant's information computed on a 100% basis

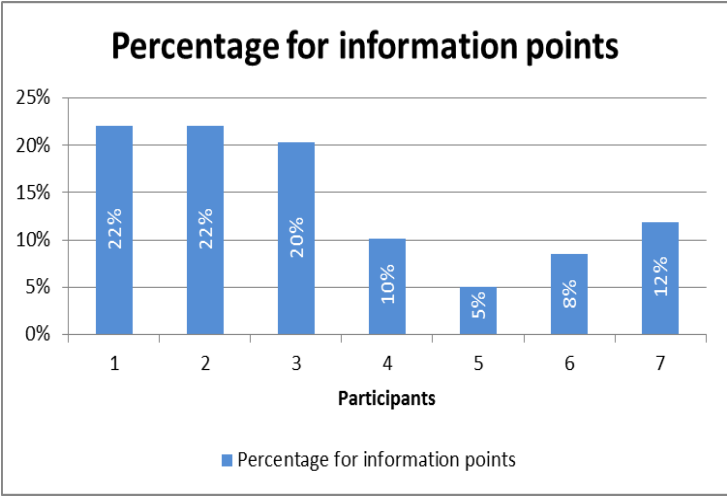


Figure 1: Participants information computed on a 100% basis Source: Created by researchers (2014)

The aim of this study was to assess to what extent MATs provide sustainability information for decision-making and its influence on the financial performance of an organisation. This research was expected to meet the objectives and ultimately state to what extent the MATs are applied by the organisations.

- The role of MATs such as the BSC, benchmarking and ABC in providing sustainability information which influence financial performance.

Management Accounting Tools for Sustainability Information Decision-making

- ☐ Whether the sustainability information generated by tools such as the BSC, benchmarking and ABC improve the financial performance of organisations.
- ☐ The extent to which sustainability information influences decision-making in the organisation. The sections that follow discuss the findings.

MATs

MATs are used by all the listed organisations interviewed, although a sample was selected it gave guidelines that the use of MATs in any organisation today is very relevant and has a direct influence on the financial performance of the organisations. This is why many of the JSE listed organisations has MA departments looking only at MA duties, issues and relevance for future sustainability of the organisations. The following questions were used to derive the needed information.

To what extent does your organisation use the following tool of MA?

Activity-based Costing (ABC)

Although some organisations do not use ABC, they apply other MATs that best fit the purpose and scope of their organisation. In some petrochemical organisations, ABC is applied in other segments and others do not apply it as they focus more on labour costs. This is the result of the fact that MA is used for different purposes to generate different information that fit the segment that it's been used in. This was established as listed organisations that were interviewed were both large in terms of their operations and had different offices all over South Africa.

The participants indicated that organisations use an ABC mainly as a form of cost management.

Benchmarking

During the interview participants agreed that they use benchmarking. It was established that they look at their production cycle, unit costs and benchmark it with similar organisations in their line of business. Although participants said they do not use it on a monthly basis they said it is important to benchmark and

some organisations appoint external companies to do benchmarking on their behalf.

Participants indicated that organisations use benchmarking, although timelines differ depending on an organisation's requirements. The participants confirmed that benchmarking relies on competitive data that isn't readily available from outside organisations (Scarlett 2003/4). Nevertheless participants agree that they use benchmarking and that should they have sufficient information to benchmark against good results are achieved which are useful in the organisation.

The Balanced Scorecard (BSC)

The participants indicated that they have different scorecards and that they use some for business, markets, financial and others. Scorecards of interviewed listed organisations were determined based on the goals, plans, and targets they wanted to achieve. The participants also indicated that scorecards are very important and look at all spheres like quality, costs, delivery, safety, and morale. They also indicated that a scorecard drives the vision and mission of the organisation thereby increasing shareholder value, customer satisfaction and improving competitive strategy of the organisation.

How often does your organisation use information generated from the MATs mentioned above?

‘We use management accounting information daily, weekly, and monthly’ Participant [5]. From the above aspects and practices of MATs the researcher was able to derive sufficient information which indicates that MATs are relevant and its information is widely used by many JSE listed organisations.

How does your organisation generate sustainability information from the tools mentioned above to influence decision-making on the improvement of the financial performance of the organisation?

Based on the responses from participants MATs are being used where relevant within their organisations and they provide sustainability information that assist in decision-making and in improving financial performance of the

organisation. Although not all organisations use all MATs for sustainability information provision, reason is that some are applicable on their scope of business and some are not but the fundamental principle remain that MA is improving their decision-making and financial performance. Although most of participants indicated that they have different ways of generating sustainable information from MATs, the participants stated that information derived from the tools such as ABC, benchmarking and BSC has a direct impact on the financial performance of the organisation although it can be favourable or unfavourable.

Do MATs assist your organisation in the following areas?

Creating Stakeholder Value Customer Satisfaction Competitive Strategy

The participants stated that using MATs improves customer satisfaction, competitive strategy and creates stakeholder value. Hence based on participants' answers it is very clear that MATs directly influence the financial performance of any organisation as depicted through stakeholder's value, customer satisfaction, and competitive strategies.

Does ABC benefit your organisation by providing sustainability information for decision-making?

'Most people focus too much on the manufacturing side and that results on concentrating too much on labour and overheads, but forget about inputs like raw materials that come into the factory, and managing that alone is very critical for the organisations' Participant [3]. Therefore this may confirm that ABC does provide sustainability information for decision-making as costs may be counted during the procurement stage of acquiring raw materials other than from manufacturing stage on ward. Therefore ABC is very relevant for many organisations today and participants agreed to that.

Does the BSC assist your organisation in providing sustainability information for decision-making?

‘Based on the scorecards that we have, it assist us in decision-making regarding our game plan (strategy or goal) such as; customer, competitiveness as well as safety and production’ Participant [1]. This may symbolise that the BSC provide sustainable information which assist organisations to make sound and beneficial decisions, which could assist in improving their financial performance. Participants indicated that the BSC is useful within the organisation and based on the organisation a scorecard is then used to derive the information that will be used for decision-making.

Does benchmarking provide sustainability information for decision-making for your organisation and if so how?

Participants stated that they use benchmarking not on a regular basis and they emphasised however that it plays an important role in decision-making because of the information derived from benchmarking. Hence benchmarking does provide sustainability information for the decision-making of an organisation although the participants do not use it extensively.

How does your organisation’s goal or strategy support MATs in providing sustainability information in the decision-making process?

Participants stated that although there are so many MA reports which provides so much MAI, it still remains the responsibility of executive management to decide whether to utilise such information or not.

Improvement of the Financial Performance of an Organisation

Does your organisation benefit from sustainability information generated specifically from ABC to improve financial performance?

Participants agree that MA is very relevant for modern day operations of a business and does have a direct influence on the financial performance of an organisation. They agree that accurate allocation of costs from the start will impact directly on the financial performance of the organisation and as a result the decision-making process as to whether the product is yielding profit or not

will be visible. Therefore ABC does improve financial performance of the organisation if implemented and used correctly.

Does your organisation benefit from sustainability information generated specifically from the BSC to improve financial performance?

The participants stipulated that although the BSC may not impact directly on the financial performance it measures the problem areas that an organisation needs to focus on a lot. Therefore the BSC plays an important role in improving decision-making and financial performance of an organisation.

Does your organisation benefit from sustainability information generated specifically from benchmarking to improve financial performance?

Participant [4]: ‘Benchmarking does add value as we get better information which influences our financial gain within our organisation as we use that information to measure our productivity and costs. Most of participants stated that benchmarking plays an important role in improving the financial performance of the organisation, although information such as procurement, unit, and production costs to benchmark against is not readily available.

Strategies that Influence Decision-Making and Performance

Does your organisation employ research and development in its line of business for it to remain sustainable and continually improve financial performance?

The participants stated that their organisations have a department that focuses solely on research and development of new ideas that best fit the business that they are in which includes: new technology, new machinery and equipment. Some participants indicated that they have research facilities within the organisation, that focus on the development and testing of chemicals and new ways of improving or doing things differently at a lower cost and also taking safety and sustainability into account.

Does your organisation apply other MATs to improve financial performance?

Although participants indicated the importance of MATs, it is evident that in conjunction with the other strategies they use, desired financial performance can be achieved. Participants indicated that they have MA departments that deal with different sections of their units for specific purposes.

Do your organisation take measures to ensure that sustainability information generated from MATs sustain future financial performance, if so in what way?

Participants indicated that sustainability depends on decision-making of executives' and directors and also from quality information from the operational departments.

Conclusion

This section summarises the findings and makes recommendations. The objective of the study was to examine whether MATs can provide sustainability information for decision-making and its influence on the financial performance of an organisation.

The research was premised on the hypothesis that many organisations are still not using MATs to assist in the provision of sustainability information for decision-making and its influence on the financial performance of an organisation, and that MAI has been optional to many organisations in terms of driving their strategy, financial performance, decision-making, and day-to-day operations of the business. Hence MATs can provide sustainability information to managers and people within and outside the organisation to improve financial performance and sustainability of organisations.

The study had the following sub-objectives:

- ☐ To assess the role of MATs such as the BSC, benchmarking and ABC in providing sustainability information which influence financial performance.

- To ascertain whether the sustainability information generated by tools such as the BSC, benchmarking and ABC improve the financial performance of organisations.
- To establish the extent to which sustainability information influences decision-making in the organisation.

The study was conducted by means of semi-structured interviews and the interviews were conducted at public places and also participant's place of work. The research findings were analysed in three sections as per semi-structured interviews. The three sections were:

1. MATs
2. Improvement of the financial performance of an organisation
3. Strategies that influence decision-making and performance.

Summary of the Findings

MATs

The findings from the participants indicated that MA is very relevant and has a direct influence on the financial performance of the organisations, which is why many of the JSE listed organisations has MA departments looking only at MA duties, issues and relevance for future sustainability of the organisations. All participants agreed to the fact that MATs provide sustainability information for decision-making and that they influence financial performance of organisations.

Improvement of the Financial Performance of an Organisation

All participants agreed that MATs improve financial performance of the organisation although it may not be directly. This study found that MATs are important in providing sustainability information for decision-making and in influencing the financial performance of JSE listed organisations.

Strategies that Influence Decision-making and Performance

Participants stated that their organisations have strategies that influence decision-making and which improves financial performance as well as looking forward into the future and the sustainability of the organisation.

The recommendations are summarised as follows:

- The directors, shareholders, and managers are recommended to realise the role of MATs in their organisations so as to benefit them in terms of accurate measures of sustainability as well as financial performance, obtaining reliable information for decision-making and controlling and planning organisation's operations. The study indicated that MATs forms an integral part in improving financial performance of the organisation as well as decision-making.
- The decision-makers are recommended to make use of reports generated by management accountants so that they can make reliable and informed decisions that will benefit the organisation. The study indicated that decisions to utilise information from MATs lies with decision-makers of organisations.
- Organisations that do not have management accountants or MA divisions are recommended to implement or establish such department. The study indicated that MA is very useful for value creation, accurate decision-making, and driving organisation into successful, profitable future.

Suggestions for Future Work

This study identified the role of MATs in providing sustainability information for decision-making and its influence on financial performance of the organisation. This leads to the suggestion that future studies should focus on role of management in utilising MAI when making decisions.

The study also found that financial managers who are focusing more attention on financial statements and reporting also perform MA tasks. Future research should also focus on importance of segregating MA roles to those of financial accountants or managers so that organisations can focus on different reports for different outcomes.

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Management Accounting Tools for Sustainability Information Decision-making

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Appendix A – Interview Questions

Management Accounting Tools

1 To what extent does your organisation use the following tools of Management Accounting?

- ☐ Activity based costing (ABC)
- ☐ Benchmarking
- ☐ Balanced Scorecard (BSC)?

2 How often does your organisation use information generated from the Management Accounting tools mentioned above?

3 How does your organisation generate sustainability information from the tools mentioned above to influence decision-making on the improvement of the financial performance of the organisation?

4 Does ABC assist your organisation in the following?:

Creating stakeholder value		Customer satisfaction		Competitive strategy

5 Does ABC benefit your organisation by providing sustainability information for decision-making and if so, how?

6 7 Does the BSC assist your organisation in providing sustainability information for decision-making and if so, how?

8 Does benchmarking provide sustainability information for decision-making for your organisation and if so, how?

9 How do your organisation’s goals or strategy support Management Accounting tools in providing sustainability information in the decision-making process?

10 Improvement of financial performance of an organisation

11 Does your organisation benefit from sustainability information generated specifically from ABC to improve financial performance?

12 Does your organisation benefit from sustainability information generated specifically from the BSC to improve financial performance?

13 Does your organisation benefit from sustainability information generated specifically from benchmarking to improve financial performance?

Management Accounting Tools for Sustainability Information Decision-making

- 14 Strategies that influence decision-making and performance
- 15 Does your organisation employ research and development in its line of business for it to remain sustainable and continually improve financial performance?
- 16 Does your organisation apply other Management Accounting tools to improve financial performance and if so, which ones?
- 17 Does your organisation take measures to ensure that sustainability information generated from Management Accounting tools sustains future financial performance? If so, in what way?

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