



# The Balanced Scorecard System as a Performance Measurement Tool for Public Sector Organisations: The Case of the Media Information Communications Technology Sector Education Training Authority (MICT-SETA), Republic of South Africa

O. Mopaki<sup>1,2</sup> and A. Mutono<sup>1\*</sup>

<sup>1</sup>Institute for Advanced Learning and Education (PTY) Ltd., South Africa.

<sup>2</sup>Mopaki and Associates (PTY) Ltd., South Africa.

## Authors' contributions

*This work was carried out in collaboration between both authors. Author OM designed the study, performed the statistical analysis, wrote the protocol, wrote the first draft of the manuscript and managed the literature searches. Authors AM and OM managed the analyses of the study and literature searches. Both authors read and approved the final manuscript.*

## Article Information

DOI: 10.9734/BJAST/2016/29531

### Editor(s):

(1) Hui Li, School of Economics and Management, Zhejiang Normal University, China.

(2) Xueda Song, Department of Economics, York University, Canada.

(3) Meng Ma, Anhui University, Hefei, Anhui, China and Icahn Institute for Genomics and Multiscale Biology, Icahn School of Medicine at Mount Sinai, New York, USA.

### Reviewers:

(1) Borislav Kolaric, Telecom Serbia, Belgrade, Serbia.

(2) Bharat Raj Singh, Technical University, Lucknow, India.

Complete Peer review History: <http://www.sciencedomain.org/review-history/16977>

Original Research Article

Received 15<sup>th</sup> September 2016

Accepted 16<sup>th</sup> November 2016

Published 21<sup>st</sup> November 2016

## ABSTRACT

This work focuses on enriching the already available theory concerning public sector management. Experiential validation of employing the Balanced Scorecard for the public sector organisations is examined. An interpretive paradigm in combination with an action research strategy was employed in carrying out the study. The data were collected using both focus group discussions and personal interviews. The analysis was through content and interpretation examination. It is assumed that this study, having focused on one authority whose function is to enhance skills development within the information and communications technology sector in South Africa. The results in this work indicate

\*Corresponding author: E-mail: [allen@mutono.co.za](mailto:allen@mutono.co.za);

that public organisations should endeavour to put people they serve (clients) at the forefront of their strategic plans. This result confirms the results reported by Kaplan and Norton [9]. Still the study findings indicated that bodies that fund public organisations should as well be taken as stakeholders in the organisational strategic plan, and require to be satisfied in order to ensure continuity of funding. Departmental balanced scorecards should be embraced in contrast to an entire organisational balanced scorecard which seems to be a suggestion from some researchers and scholars. The core advantage with this is that it enhances corporation as opposed to individualism and leads to cohesion rather than divisions.

*Keywords: Public sector organisations; balanced scorecard; management control systems; experiential validation.*

## 1. INTRODUCTION

The concept of a Balanced Scorecard (BSC) was developed by [1]. Irregularities embroiled in the orthodox financial performance measurement methods led to the evolution of the BSC. It never took long, after a decade; over 1000 organisations had embraced the implementation of the BSC [2,3]. Currently many of the public and private organisations have taken up the implementation of the BSC [4,5]. The widespread adoption of the BSC is associated with its multifaceted technique to performance measurement [4]. With reference to the traditional performance measurement methods whose focus was solely on the financial metrics, the BSC puts emphasis on three more performance measures, which are; Internal process, learning and growth, and customers (stakeholders) to ensure that there is provision of a holistic performance measurement viewpoint [1,6].

Though the Balanced Scorecard has primarily been in mostly profit focused (private) sectors, it has a pronounced potential to immensely enhance the management of public sector organisations (PSOs). While the financial perspective delivers a clear long-run objective for profit seeking organisations; for PSO, it may serve as a constraint and therefore cannot be considered as an objective.

In South Africa, the role of the public sector is to provide a combination of well conceived solutions mediated by human resources to enhance service delivery through continuous innovations, such as technological advancement, self-service and data analytics tailored for local government use. One important form of public service delivered by the local governments is higher education and skills training that is majorly provided by public schools and universities. As

public entities these institutions are mandated to comply with the regulations and needs stipulated by the government. For these entities to be supported in their daily activities, they require a well-grounded enhancement mechanism in the form of a benchmark to assist them, within the legal domain to secure funding from both public and private organisations, to be able to account for resources from the funders, manage contracts, procure goods from internal and external markets. This benchmark enhancement can be viewed as a tugboat, assisting the public organisations to manoeuvre in the stagnancy of mediocrity.

In this work, the experience of using the Balanced Scorecard as a planning and performance appraisal tool for helping public sector organisations is presented. The PSOs are expected to achieve the following in the event of having appropriate performance measurement tools:

- Describe their objectives and targets.
- Describe their performance measures.
- Describe their actions for guaranteeing performance improvement.
- Guarantee the institutionalization of a virtuous quality improvement cycle.

Kaplan and Norton [1] as cited by [7] indicated that the BSC enhances organisations to respond to questions:

- How do customers see us? (Customer perspective).
- What must we excel at? (Internal perspective).
- Can we continue to improve and create value? (Learning and growth perspective).
- How do we view our shareholders? (Financial perspective).

As a case study of a public sector organisation, the Media, Information and Communications Technology Sector Education and Training Authority (MICT SETA) was established in terms of the Skills Development Act of 1998. The MICT SETA is a public sector organisation with a principal mandate of enhancing skills development for the people of the Republic of South Africa [8]. It does not aim at gaining profit, but to manage resources that enhance skills development for the media, information and communications technology sector. For this specific situation, [9] suggested that, "For a non-profit or government agency, however, the financial measures are not the relevant indicators of whether the agency is delivering on its mission. The agency's mission should be featured and measured at the highest level of its scorecard" [7].

## 2. OVERVIEW OF MICT SETA

The Media, Information and Communications Technology Sector Education and Training Authority (MICT SETA) was established in terms of the Skills Development Act of 1998. It has the responsibility for Skills Development over its entire sector which encompasses 127 large, 256 medium and 2289 small levy-paying firms [8]. MICT-SETA is an authority with 80 employees, in its leadership organisational structure is: Chairman of the Board and Chief Executive Officer these positions are for the top most leaders in the MICT SETA sector. There are also eight (8) managers who oversee the daily running of the organisation which are; Manager for Quality assurance; Manager for Corporate Services; Manager for Sector Skills Planning; Manager for Quality Management Systems and IT; Manager for Learning Programmes; Manager for Marketing and Communications; Manager for Human Resources and Manager for Supply Chain Management.

### 2.1 Purpose of the Study

The purpose of the study is to contribute to the public sector management literature by presenting both real-world and hypothetical considerations that will be of use to professional, technical and other think tank stakeholders to offer better organisational management skills for the PSOs.

The study also aims at assessing whether Kaplan and Norton's Balanced Scorecard can be

of help to public sector organizations by improving their performances.

## 2.2 Justification of the Study

There is considerable literature to justify that the BSC has long been documented as a performance measurement system and a strategy implementation practice [10] as stated that over 50% of the Fortune 500 companies are employing this method as a performance measurement and strategic management system [11]. Nevertheless, there is agreement that application of the BSC principles in the PSOs has been given little attention and its adoption therefore is likely to present unique challenges [12,13,14,15].

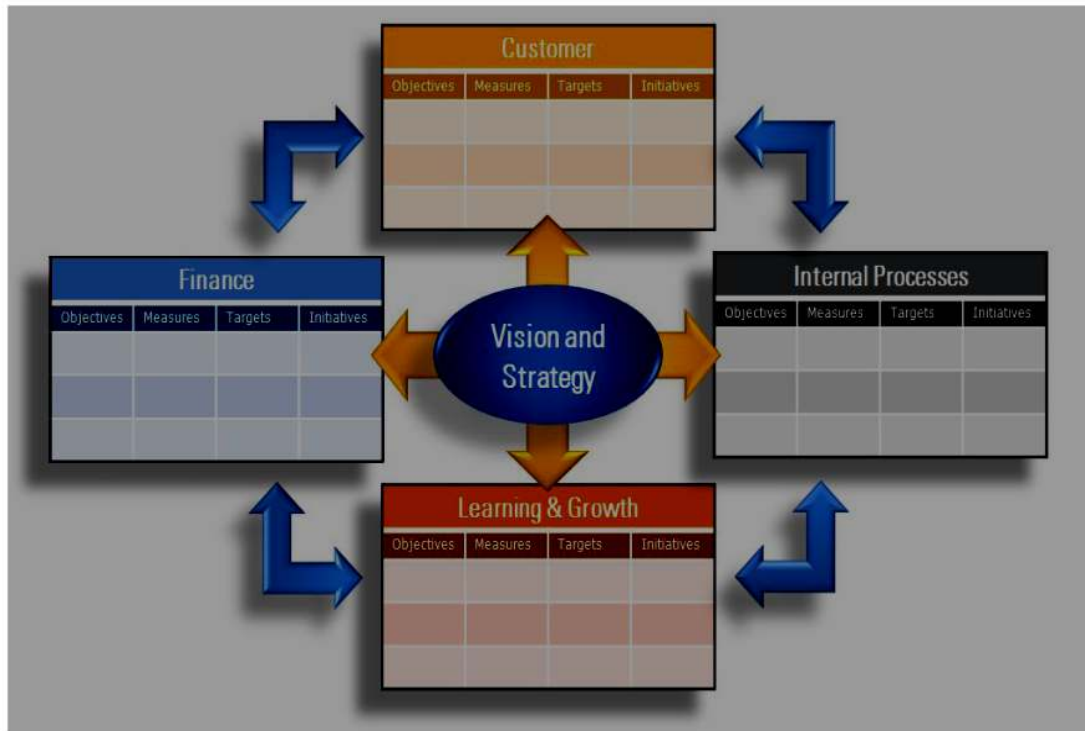
The rest of the paper is organised as follows: The theoretical background of the study is firstly presented. Secondly, presentation of the research methodology, pointing out the philosophical technique on which the study is grounded in relation to data collection, analysis and research plan is done. Thirdly, analysis and study findings are discussed. The theoretical and empirical contributions of the study are presented in the concluding remarks.

## 3. THEORETICAL BACKGROUND

Chang [16] and Afaanz [17], argue that for the last twenty years or so, a paradigm shift in the public sector towards more accountability and the adoption of *new public management* has been noticed. This shift has previously been experienced by private sector management systems.

As the public sector faces considerable pressure from both internal and external causes to show or validate improvements in its performance [18], numerous local/ municipal governments and other relevant government departments are picking up the interest in performance measurement and dissemination of results for improving performance and increasing accountability [19,20].

Kaplan and Norton [21] contend that the BSC translates mission and strategy of an organisation to objectives and actions, organized into four major perspectives which are: Financial, Customer, Internal process, learning and growth, Fig. 1.



**Fig. 1. The balanced scorecard (Kaplan & Norton [21])**

They also stated that, “The four perspectives of the scorecard permit a balance between short- and long-term objectives, between outcomes desired and the performance drivers of those outcomes, and between hard objective measures and softer, more subjective measures”. In [21], the development of strategies is based on cause and effect method. In this manner, “The measurement system should make the relationships (hypotheses) among objectives (and measures) in the various perspectives explicit so that they can be managed and validated” [21] as cited by [7]. For, instance, investments in learning will eventually lead to a better internal business process, which, in turn, has a likelihood of improving a customer’s satisfaction and loyalty, and ultimately result into higher returns on investments, which would satisfy shareholders [9].

Based on the fact that, the BSC has been widely implemented in a considerable number of *for profit inclined organisations*, this study is focused on its application in the *not for profit organisations* or mainly the public sector organisations. The BSC has been applied in several countries whose public sector has undergone reforms; that is, Australia, Britain and

New Zealand since the 1980s and consequently many organisations are still undergoing the process of change management [22,23].

In the face of being widespread in developed countries, there is little empirical evidence reported in the literature (that has been read) of the application of the BSC in developing countries mainly on the African continent, and no evidence whatsoever for the specific case of South African public sector organisations.

Lee [24] documents that, derived from strategy; Stimulates continuous improvement; clearly defined purpose; Simple to understand and use, are the characteristics that justify the application of the BSC as a useful system for improving performance. In order to fit the modulus operandi of *not for profit organisation*, [9], suggested that the BSC requires some modifications, since the goals of the PSOs are not mainly finance related. They proposed relocating the customer to the top of the strategic map. Though, even such a small change could be somewhat complicated. In a non-profit organisation, donors provide the financial resources – they pay for the service – while another group, the constituents, receives the service. Who is the customer – the one

paying or the one receiving?" [9]. For this strategic challenge to be addressed, they proposed that:

Organisations should position the donor and recipient perspectives in parallel at the top of the BSC. Objectives for both donor and recipients, should be developed and then specify the internal processes that deliver the desired valued propositions for either groups of *customers* [9].

Gomes & Liddle [7] documented that, in order to successfully implement the BSC in Health Care Organisation in the UK, they also proposed some key measures:

- Demonstrate the BSC's theoretical and practical potential to add service value.
- Obtain support to introduce the BSC;
- Do not ignore past experiences.

Chan [25] summed up by stating that, it was of considerable importance to make the effort to put the BSC in public organisations using a set of eight factors:

- Top management commitment and leadership buy-in;
- Departmental, middle-manager and employee participation and buy-in;
- Culture of performance excellence;
- Training and education;
- Keeping it relatively simple, easy to use and understand;
- Clarity of vision, strategy and outcome;
- Link balanced scorecard to incentive; and
- Resources to implement system.

A procedural performance management method was suggested by [24] on the basis of the four dimensions of the BSC in PSOs, orienting the study focus on a public school. The BSC has also been used in some voluntary organisations that are involved in health.

#### 4. METHODS AND MATERIALS

There is not abundant literature on interpretive studies focused on public sector performance measurement. In regard to this unavailability of considerable reference studies, an investigative research based on the concept of implementation of the BSC as a plan or strategy as well as a performance measurement system was adopted in this study. The focal organisation

was the MICT SETA which is primarily funded by the government of the Republic of South Africa through a skills levy to promote the development of a skilled work force for both private and public institutions.

In line with the philosophy of interpretivism [26], data were gathered using an action based research method, [27]. The participants were managers, directors and staff of MICT SETA. Semi-structured interviews, participant observation and focus groups, were employed in the process of data collection. The collected, organised and cleaned data were analysed using a combination of research assistants and participants while embracing the content analysis approach [28]. The study period was from June to August, 2016. In June there was a preliminary study and was repeated later in mid-July when specific objectives, goals and performance indicators were revised and streamlined.

#### 5. DISCUSSION OF RESULTS

In this section, the outcomes as they were gathered from the inductive exploration are presented. For a simplified exposition a sequential order of presentation is adopted.

##### 5.1 In the Month of June

The initial meeting was held in June 2016 when the leadership structure the Chairman, the Chief Executive Officer and managers came together to examine the strategic plan for the organisation and intervention plans for July 2016. For this study particularly, the organisation wished to examine the mission, vision, objectives and actions points to guarantee continuity of MICT SETA.

The initial BSC plan was structured on the first day of discussion. It was agreed that the financial scope should be positioned at the top as indicated in Table 1. The pertinent challenges that the South African public sector organisations face prompted this action.

The sectional managers were tasked to come up with an objective, a target and a performance indicator for a respective strategy in the BSC, in line with their operational domain. However, this overwhelmed the management system with performance indicators, but this was necessary so that each managerial line would mimic a business unit.

**Table 1. MICT-SETA strategic map for July, 2016: Developed by author**

Scope	Approaches
Finance	To ensure enough cash flow for supporting the authority's operation
Customers	To ensure customer satisfaction
Internal process businesses	To modernize the whole information system in order to have alignment and agility in processes
Learning and growth	To develop a training programme in order to keep employees and staff motivated and resourceful.

For a long week of discussions, the relevant staff came back with the objectives, targets, performance indicators and point actions that can enhance their attainment. This task yielded more than 40 objectives that were suggested. There was no problem with the large number of objectives at this point as it was the initial step of participation of the staff in a strategic planning process and performance measures had been part of their day to day tasks.

### 5.2 In the Month of July

In the second week of July, 2016 the team returned with some amendments, this was in a different venue all together to commence with the strategic planning process. This was to take a relatively longer period, July - September. At this point each line manager reported his/her results.

After that, the group was called to make an assessment of the entire process and the advantage/damage done to the management development. According to their experience and discourses, the results were very good. The departmental managers were certain that the BSC framework had assisted in focusing on the objectives, and the performance indicators were essential instruments for supporting the control of performance and targets. At the end discussions were held and it was agreed that the BSC be maintained as a strategy and performance measurement system.

At that time, the top management put the following guidelines to be followed in the course of managing the authority ahead.

- To ensure that MICT SETA serves as a reference for managing agreements and contracts;
- To extend affirmative action towards MICT SETA recognised as a supporting entity to the South Africa Public sector in terms of skills development.

- To propose alternative sources of funding due to the constrained government budget.
- To reduce the legal and procedural vulnerabilities;
- To fit MICT SETA's action within a sustainable framework;
- To improve the human resource development processes.

A week later there was reconvention so as to present the objectives, targets and probable actions. On the overall the outcomes were much better this time round, it is assumed that participants had learned from their previous errors. Section managers had suggested more than one objective for each of the mentions, Table 2, for the BSC.

The other participants were in full support of the objectives that had been set before, and their main intention was to define more appropriate targets and unbiased performance indicators that were in line with the guidelines suggested.

Finally, the number of previously proposed objectives substantially decreased and the degree of integration among the different objectives was increased. Table 1 presents the final list. From the outcomes, section managers did not want to see their respective performance levels decrease, as they assumed that the performance indicator framework would be applied for remuneration related policies in future.

As opposed to competition that would have emanated from the organisation's divisions, the management team met in order to give direction on the common objectives that could easily be achieved with less effort. As a consequence of the action taken by the different section managers, ideas were discussed to enhance the quality of the services offered and to scrutinise the process that was employed. The merit for this process is evident from Table 2.

**Table 2. MICT SETA's main objectives a head of time**

<b>Section/Department</b>	<b>Dimension</b>	<b>Objective</b>
Supply chain management	Finance	To improve income from the importation process
	Customer internal process	To improve customer satisfaction To improve the efficiency of the purchasing system
	Learning & growth	To train employees in negotiation processes
Marketing and communication	Finance	To reduce costs
	Customer internal process	To improve customer satisfaction To implement the inventory control system
	Learning & growth	To improve scope of services
Corporate services	Finance	To reduce operational costs
	Customer internal process	To improve customer satisfaction To improve the information system
	Learning & growth	To improve image of the authority
Quality assurance	Finance	To reduce operational costs
	Customer internal process	To ensure critical skills training To ensure staff development
	Learning & growth	To train employees on service delivery approaches
Learning programmes	Finance	Ensure sustainability
	Customer internal process	Ensure client satisfaction Improve information systems
	Learning & growth	Train employees on specific agreement legislation
Sector skill planning	Finance	Reduce operational cost
	Customer internal process	Increase customer satisfaction To improve employees' skilfulness
	Learning & growth	Update employees' knowledge of legislation and formal procedures
Human resources	Finance	To reduce costs
	Customer internal Process	To customer satisfaction To improve the internal communication system
	Learning & growth	To train employees to act as developing human resources rather than controlling mechanisms
Quality management systems and IT	Finance	To reduce costs
	Customer internal process	To improve on customer satisfaction To maximize computer systems resources
	Learning & growth	To improve on employees skills

The collaboration which was a consequence of configuring the mission, objectives and action points, that are taken as a result of using the BSC, assisted the authority to improve its performance, developing a better image among all stakeholders.

Other managerial results of the BSC scheme are:

- The level of staff motivation is higher than ever as measured by turnover numbers;

- The quality of services provided is good, according to a survey carried out among service users and
- The number of services rejected dropped to almost zero, according to each section/department's internal report.

## 6. CONCLUSIONS

- The BSC has been widely used as a strategy and performance measurement

tool in private sector organisations globally. However with the introduction of new public management systems, it is being used for the same purpose in public and non-profit organisations.

- This work is a ground breaking action research aimed at assisting the South African public organisations to take advantage of the BSC as a management framework. The major goal of this study was to corroborate the appropriateness of the BSC as a strategy and performance framework for the public sector organisations.
- The findings established that there are some MICT SETA divisions with operations that allowed managers to develop a better understanding of the BSC. Others did not have the same facility for doing so; lack of facilities for other divisions led to the proposing of hard to achieve objectives in the required time frame which was indeed very limited, inappropriate targets and almost unmeasurable performance indicators. This could have resulted from inexperience from the division managers and other unforeseen circumstances, like some had not taken part in the planning strategy prior to the study.
- It was observed that a poor understanding of the BSC framework on the side of the managers who are implementing the tool can severely affect its positive impact on the organisation.
- Division managers acknowledged that the BSC had assisted them to advance realistic plans and to oversee their jurisdictions better than before.
- There was a consensus across the management team and an acceptance that the results from the BSC performance indicators could be used as a basis for launching a 'performance remuneration regime', to be introduced in the future.
- The outcomes of the study are in agreement with the assumption that a particular organisation should come up with varying BSCs for each business unit within the organisation as opposed to an overall BSC system for the entire authority.
- The study revealed that varying the BSC implementations in the individual divisions enhanced collaboration rather than competition among the employees of the organisation.

## COMPETING INTERESTS

Authors have declared that no competing interests exist.

## REFERENCES

1. Kaplan RS, Norton DP. The balanced scorecard: Measures that drive performance. Harvard Business Review. 1992;172-180.
2. Hendricks KB. The balanced scorecard: To adopt or not to adopt? Ivey Business Journal; 2004.
3. Kraaijenbrink J. Five reasons to abandon the Balanced Scorecard; 2012. Available:<http://kraaijenbrink.com/2012/10/fivereasonstoabandonthebalancedscorecard/> (18/02/2015)
4. Awadallah E, Allam A. A critique of the balanced scorecard as a performance measurement tool. International Journal of Business and Social Science. 2015;6(7): 91-99.
5. Basuony MAK. The balanced scorecard in large firms and SMEs: A critique of the nature, value and application. Accounting and Finance Research. 2014;3(2):14-22.
6. Kaplan RS. Conceptual foundations of the Balanced Scorecard. Harvard Business School, Working Paper. 2010;10-074.
7. Gomes CR, Liddle J. The balanced scorecard as a performance management tool for third sector organisations: The case of the Arthur Bernardes foundation, Brazil. Brazilian Administrative Review. 2009;6(4):354-366.
8. Mopaki, Oupa, Utilising the balanced scorecard measurement for organisational performance: The Media, Information and Communication Technologies Sector Education and Training Authority (MICT SETA) Case Study. MSc dissertation: Da Vinci Institute. South Africa; 2016.
9. Kaplan RS, Norton DP. Transforming the balanced scorecard from performance measurement to strategic management: part I. Accounting Horizons. 2001;15(1):87-104.
10. Tennant C, Tanoren M. Performance management in SMEs: A balanced scorecard perspective. International Journal of Business Performance Management. 2005;7(2):123-43.
11. Gumbus A. Introducing the balanced scorecard: Creating metrics to measure



- performance. *Journal of Management Education*. 2005;29(4):617-630.
12. Kaplan RS, Norton DP. The strategy-focused organisation: How balanced scorecard companies thrive in the new business environment. *Internal Auditor*. 2002;59(1):21-22.
  13. Niven PR. *Balanced scorecard step-by-step: Maximising performance and maintaining results*. John Wiley & Sons: NY; 2002.
  14. Wisniewski M, Stewart D. Performance measurement for stakeholders: The case of Scottish local authorities. *International Journal of Public Sector Management*. 2004;17(3):222-233.
  15. Greatbanks R, Tapp D. The impact of balanced scorecards in a public sector environment; Empirical evidence from Dunedin City Council, New Zealand. *International Journal of Operations & Production Management*. 2007;27(8):846-873.
  16. Chang. The NHS performance assessment framework as a balanced scorecard approach; Limitations and implications. *The International Journal of Public Sector Management*. 2007;20(2):101-117.
  17. Afaanz G. *Balanced scorecard implementation in the public sector: Lessons learnt in a Large Local Government Authority*; 2009.
  18. McAdam R, Hazlett SA, Casey C. Performance management in the UK public sector: Addressing multiple stakeholder complexity. *The International Journal of Public Sector Management*. 2005;18(3): 256-273.
  19. Barry MA. How can performance standards enhance accountability for public health? *Journal of Public Health Management Practice*. 2000;6(5):78-84.
  20. Berman E, Wang X. Performance measurement in US counties: Capacity for reform. *Public Administration Review*. 2000;60(5):409-420.
  21. Kaplan RS, Norton DP. *The balanced scorecard: Translating strategy into action*. Boston: Harvard Business School Press; 1996
  22. Boyne GA. What is public service improvement? *Public Administration*. 2003; 81(2):211-228.
  23. Pollitt C. Is the emperor in his underwear? An analysis of the impacts of public management reform. *Public Management*. 2000;2(2):181-199.
  24. Lee N. Measuring the performance of public sector organisations: A case study on public schools in Malaysia. *Measuring Business Excellence*. 2006;10(4):50-64.
  25. Chan YCL. Performance measurement and adoption of balanced scorecards: A survey of municipal governments in the USA and Canada. *International Journal of Public Sector Management*. 2004;17(3): 204-221.
  26. Walsham G. Interpretive case studies in IS research: Nature and method. *European Journal of Information Systems*. 1995;4(2): 74-81.
  27. Maggie C. *Action research: A guide for associate lecturers*; 2005. Available:<http://www.open.ac.uk/cobe/docs/AR-Guide-final.pdf> (Accessed on 01/09/2016)
  28. Mayring P. *Qualitative content analysis. Theoretical Foundation, Basic Procedures and Software Solution*, Klagenfurt, Austria; 2014.

© 2016 Mopaki and Mutono; This is an Open Access article distributed under the terms of the Creative Commons Attribution License (<http://creativecommons.org/licenses/by/4.0>), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

*Peer-review history:*

*The peer review history for this paper can be accessed here:*  
<http://sciencedomain.org/review-history/16977>