A REVIEW OF PERFORMANCE MANAGEMENT USING THE BALANCED SCORECARD IN PUBLIC SECTOR

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Abstract

The different nature of the public sector made the Balanced Scorecard (BSC) implementation in this sector is interesting to be studied. The objectives of this research were to observe the implementation of BSC in the public sector during 2010-2015 and to identify the most notable performance perspective in the public sector. Even though BSC implementation in the public sector has its advantages, there are several challenges in measuring performance management in this sector. Several things to be considered to measure performance in the public sector were:morale of human capital, changing the executing ideas from manager to be everyday task, incentives for exceptional performanceneeds careful evaluation, silence on management related to public services is more complex than private sector activities, and era of rapid technological development. The research was done by observing 15 papers regarding of BSC implementation in the public sector during 2010-2015. The observation resulted that40% of public sector organizations in the reviewed papers still using financial perspective as highest outcome. Another finding from this survey is that learning and growth perspective considered important because 93.3% of reviewed organizations using this perspective. This percentage is higher than any other perspective. There are two conclusions of this research; the first conclusion is most of reviewed public sector organizations still using financial perspective as highest outcome. The second conclusion is in public sector organizations, learning and growth perspective considered as the most important perspective.

Keywords: The Balanced Scorecard, performance perspective, public sector

1. Introduction

The Balanced Scorecard (BSC) was initially created to be implemented incompanies of the private sector. However, in its development, the implementation of BSC was extended to nonprofit and public sector organizations (Kaplan, 2010). Public sector organizations use BSC because it received many pressures from both internal and external sources to improve its performance (McAdam, Hazlett&Casey, 2005). As a result of this, the implementation of BSC in public sector became more common. Banchieri, Planasand Rebullfound that 18% papers related to implementation of BSC from 1990 to 2010 were implemented in the public sector (2011). Not only that, in his research Hoquehadshown that BSC papers elated to government departments and local governments increased from 2 papers during 1997-2001 to 8 papers during 2002-2006 and became16 papers during 2007-2011 (Hoque, 2014).

Even though the application of BSC in the public sector became more common, it has its own unique challenges. These unique challenges appeared because BSC goals was shifted fromproviding accountability to shareholders into providing accountability to citizens within society (Sharma&Gadenne, 2011). Thus, the financial perspective was not its objective, but rather it serves as constraints (Kaplan&Norton, 1999). Because of this, public sector organizations must develop a new architecture of the BSC strategy map. The newstrategy map must put public sector organizations' social impact and mission, rather than financial gain, as the ultimate outcome to be achieved (Kaplan, 2010).

The different nature of the public sector made BSC implementation interesting to be studied. Surveys regarding of newest application of BSC in health and education sector were already done by Behrouzi, Shaharoun and Ma'aram(2014), Al-Hosaini and Sofian (2015). Meanwhile, a survey of newest applications of BSC in the public sector has not yet been discussed. Therefore, this paper will be discussed about the observation of BSC implementation in the public sector. Hence, the objectives of this paper were to observe the implementation of BSC in the public sector during 2010-2015 and to identify the most notable performance perspective in the public sector.

2. Research problem

Public sector organizations have always been affected by economic stability, political change, the involvement of external agencies and demands for public services(Arnaboldi, Lapsley&Steccolini, 2015). Consequently, problems often arise during its operation because of that reason. One of the problems that often happen in the public sector is constant reorganizations(Johnsen, 2005; Starling, 2010). This could hinder two things, which are deeper analysis of the organization's performance and adaptation of good practice at a local level throughout the organization(Johnsen, 2005). Therefore, it is crucial to build a framework of performance management system which can be applied in public sector organizations.

BSC is the most common framework of performance management system. Ithas been applied for many years in the private sector. Despite structural and cultural differences between private and public sector, these two sectors haveseveral similarities when itapplied as management practices(Van Der Wal, De Graaf&Lasthuizen, 2008).BSC, as ameasurement performance system, affected civil servants significantly to know what public organizations do and how to perform tasks(Gesuele&Romanelli, 2015).

Even though BSC has its advantages, yet there are several challenges in measuring performance management in the public sector. According to Arnaboldi, Lapsley and Steccolini, several things to be considered to measure performance in the public sector were (2015):

- 1. Morale of human capital.
- 2. Changing the executing ideas from manager to be everyday task.
- 3. Renumeration, reward and incentives for exceptional performanceneeds careful evaluation.
- 4. There is silence on management, what it is and what it means , related to public services is more complex than private sector activities.
- 5. Era of rapid technological development.

One thing that was interesting from these challenges is the impact of information and communication technology (ICT). Akinyi and Moturistated that estimating the impact of electronic services are hard to measure because ICT goals must be aligned with the policy goals and the implementation ofe-Government initiatives require organizational changes (2015).

By knowing the problems faced by the public organization, this paper aims to review the implementation of BSC in the public sector during the period of 2010 to2015 to know how the public sector organizations' BSC handled those problems. By doing this, it was expected to give insight about the solution for good performance management system in the public sector.

3. Review of the relevant literature

The Balanced Scorecard (BSC)

The Balanced Scorecard (BSC) is a performance management system which was founded and developed by Robert Kaplan and David Norton in 1992 (2010). It is used for both profit (business and industry) and nonprofit (government and non-government) organizations worldwide. BSC was made to align business activities to the vision, mission and strategy of the organization, improve both internal and external communications, and monitor organization's performance against strategic goals that was defined in the beginning.

In the past, performance management system mostly only consider about the financial perspective, but BSC not only measure through the financial perspective but also stakeholders, internal process and learning and growth of the company. BSC framework is depicted in Figure 1.



Figure 1: BSC Perspectives(Kaplan, 2010)

The explanations of each BSC perspective are as follows:

- 1. The financial perspective measure and monitor organization's financial performance. The goal of this measure is to answer "how should the organization appear to its shareholders?" (Kaplan, 2010). It includes financial measurements like net profit, return on investment, revenue *etc*.
- 2. The customer perspective measure customer perception towards the organization's performance. The goal of this measure is to answer "how should the organization appear to its customers?" (Kaplan, 2010). It developed satisfaction level of the customer. Usually this perspective measure delivery time, product/service quality, and cost. Several examples of indicators that could be used in this perspective are service level, customer satisfaction and complain rates (Anthoula& Alexandros, 2011).

- 3. The internal process perspective measure the organization's performance, in terms of effectiveness and efficiency of internal process and procedures. The goal of this measure is to answer "what business process must the organization excel at?" (Kaplan, 2010). This measure makes organization can examine which part they were good at and which part they were poor at, so they know how to fix their internal performance and make the organization more effective. It measures to business procedures that have the greatest impact on customers' satisfaction, such as reject rate, inventory turnover, employees' productivity control and logistics (Anthoula& Alexandros, 2011).
- 4. The learning and growth perspective measure the growth of the organization. The goal of this measure is to answer "how willthe organization sustain its ability to changeandimprove?" (Kaplan, 2010). It indicates the commitment of the organization growth and adaptation. It measures the organization's ability to do innovation, improve its employee and product/services (Anthoula & Alexandros, 2011).

BSC Strategy Map

A strategy map is a visual framework of the organization's objective within BSC four perspectives (Kaplan & Norton, 2000). By using strategy maps, the blurry line of sight between organization's strategies and employees' day to day jobs will be focused. Not only that, strategy maps also can show the cause-effect relationship between BSC perspective objectives. Therefore, it will be benefited for the organization to adopt strategy maps because it shows the way organization converts its initiatives and resources into tangible outcomes. The example of strategy map can be seen in Figure 2.

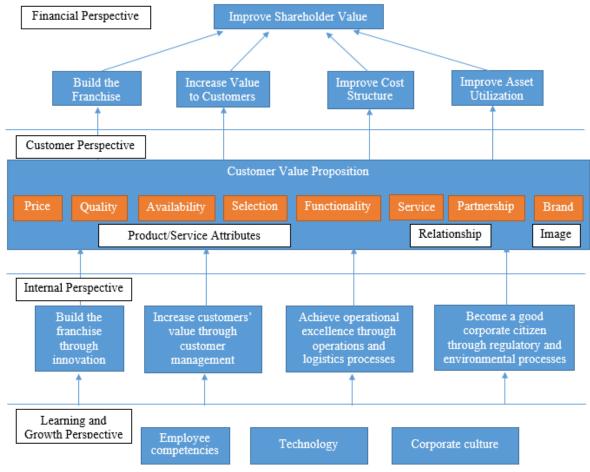


Figure 2: BSC Strategy Map(Kaplan & Norton, 2000) Asia Pacific Institute of Advanced Research (APIAR)

BSC in Public Sector

BSC locates financial objective as a final endpoint which contradicts the goal of public sector organization. However, Kaplan suggested that BSC can be readily adapted to use in public sector organization (Kaplan, 2010). This can be done by expanding the customer perspective and put it in the top of hierarchy (Kaplan&Norton, 2001; Kaplan, 2010; Northcott&Taulapapa, 2012). It was done because organization in the public sector did not pursue profit, but just simply enhance the stakeholders' satisfaction. The stakeholders must be satisfied because they play a role as financial resources to the organization.

Another thing that must be noted is that nonprofit organizations social impact could take years to affect the stakeholders. It is important to design short to intermediate term target for other perspectives. By doing this, the organizations can adapt the stakeholders' feedback into its measurement and provide more control and accountability (Kaplan, 2010).

4. Methods

This research was done by reviewing BSC papers regarding the public sector. The papers were generated from internet searching. Therefore, to make sure the search optimized, several criteria were used. These criteria are:

- The Balanced Scorecard or its abbreviation in paper's title or abstract.
- Public sector related.
- Published from 2010 to 2015.

The search itself was done in two databases, both of which cover scholarly journals: Proquest and Google Scholar. The result of the research was 15 papers were selected due to its relevancy to the research's objectives. Moreover, 15 papers are sufficient to make a survey research so the research can be performed (Department of Computer Science University of Central Florida, 2008). After that, each paper was analyzed to observe itsperformance perspectives, the number of perspectives and the number of Key Performance Indicator (KPI) for each perspective.

5. Data Analysis

Table 1 shown the descriptions of 15 papers that was observed in this research. It can be seen from the table that 40% of the reviewed papers till have financial perspective as the highest outcome. These findings were the opposite of Kaplan's statement about BSC in public sector organizations. Kaplanstated that in the public sector, financial perspective not the primary objective. Financial perspective should only be considered as enabling or constraining role (Kaplan&Norton, 1999).

However, after further analysis, the financial perspective in Bolívar's paper was not focused on gaining or increasing profit. The financial perspective that they used aims to improve organization's resource and its utilization efficiency (Bolívar, Hernández&Rodríguez, 2010). Meanwhile, in Mensah and Muiruri's papers, which is shown in Table 1, have the financial perspective as the highest outcome, did not include the BSC strategy map in it. Despite that, Mensah stated in his paper that all the designed KPI were based on traditional BSC model(Mensah&George, 2015) whereas Muiruri's paper only analyzed BSC perspectives with public sector organization's performance yet this paper put the financial perspective as the first analyzed perspective(Muiruri&Kilika, 2015). Therefore, it was assumed that these two papers put the financial perspective as the highest outcome.

Table 1: Classification of the reviewed papers

Author(s)	Organization	Performance perspective(s)*	No. of perspective(s)	No. of KPI of each perspective
Bolívar, Hernández and Rodríguez (2010)	Granada Municipal Sport Agency	Financial; customer; internal; learning and growth	4	5; 8; 12; 6
Mendes et al. (2012)	Urban Hygiene and Solid Waste Division of the Loulé Municipality	Clients; internal processes; learning and growth; financial	4	1; 18; 2; 3
Ridwanet al. (2013)	Freemantle Port Authority	Business results; services and facilities; trade development; business environment	4	5; 3; 2; 6
Al-Aama (2013)	Jeddah Municipality IT Department	Stakeholders; internal processes; learning and growth; financial	4	15; 8; 12; 3
Bevanda, Sinković and Currie (2011)	Istra Utility Croatia	Customers; financial; internal processes; learning and growth	4	Unspecified
Mensahand George (2015)	Ghana statutory public organization in crop beans	Financial; customer; internal business process; learning and growth	4	37**
Akinyi and Moturi (2015)	e-Government services at Kenya Revenue Authority	Business value; user orientation; internal process; future readiness	4	4; 4; 3; 3
Gesuele and Romanelli (2015)	USA federal agency	Innovationlearning and growth	1	6
Muiruri And Kilika (2015)	Ministry of energy and petroleum in Kenya	Finance; internal business process;innovation and learning;customer focus	4	Unspecified
Kozma and KazaineOnodi (2015)	Handball club in Hungary	Strategic;*** Financial,service user/stakeholder;operational excellence;innovation and learning,people partnership and resources;leadership	7	Unspecified

Table 1: Continued

Author(s)	Organization	Performance perspective(s)*	No. of perspective(s)	No. of KPI of each perspective
Schneider and Vieira (2010)	Germany Wind-farm Company	Financial; internal process; environment and community; learning and growth	4	Unspecified
Anthoula and Alexandros (2011)	Greek Local Authority Organization	Stakeholders; financial resource management; internal process; training	4	17; 12; 13; 11
Philbin (2011)	University Institute in UK	Financial; people development; institute capability; research output	4	2; 4; 4; 5
Pereira and Melao (2012)	AEX School District	Customer; learning and growth; internal process; financial	4	5; 6; 6; 4
Koumpouros (2013)	General Panarcadian Hospital of Tripolis, Public Hospital in Greece	Customer; financial; internal process; innovation and learning	4	8; 4; 2; 1

^{*} Sorted the by highest perspective in strategy map hierarchy

In analyzing Mensah's paper more deeply, the researchindicatedthat financial perspective doesnot have an important system to be used in the organization. This paper focuses more on learning and growth perspective. It was stated in the paper that staff involvement was needed to participate in the implementation process by train the employees to increase their performance. This was also related to the appraisal. The appraisal should consider pay rises and bonuses based on hard work. Aspect of leadership is critical for the success of the performance system (Mensah&George, 2015).

In Ridwan's paper, the organizations still using a performance management system created in 1999 (Ridwan et al., 2013). Therefore, it is understandable why the organizations still put financial perspectives as the highest perspective. It is better for this organization to develop new a performance management system that more suitable for public sector organizations.

Schneider considered financial perspective in his paper because this organization industry is the energy industry which need high capital (Schneider& Vieira, 2010). Therefore, the organization uses financial perspective as highest outcome to compensate it. However, in the future the highest outcome must be shifted to customer/stakeholder perspective.

In Philbin's paper, it shows that even though the financial perspective placed on top of the hierarchy, he used the modified BSC architecture that suggested by Kaplan and Norton as a foundation to construct these perspectives. Philbinput thecustomer perspective is on the top

^{**} Only total KPI was shown in this paper

^{***} Financial-service user/stakeholder and innovation and learning-people partnership and resources are in the same hierarchy level

of BSC while the financial perspective is at the bottom while the internal process and learning perspectives are placed at the same level. Because, school is one kind of the non-profit organization, so they pump up the customer perspective because the main purpose of the school is to educate the customer (students). Speaking of the customer, the teachers and staff were also the customer in terms of stakeholder. The school also has to prepare the KPI for them and make the performance of the lecturer and staff go higher so it also impact the performance if the students. Raising the performance also lies in the learning perspective and internal process with the support of the financial (2011).

The rest of the reviewed papers highest outcome is divided by two, customer perspective and other perspective. 40% of papers have considered the customer perspective as the organization's highest outcome. These papers are adopted the modified BSC architecture that suggested by Kaplan and Norton for BSC in the public sector(Kaplan&Norton, 2001; Kaplan, 2010; Northcott&Taulapapa, 2012). While others 20% considered different perspectives as the organization's highest outcome.

Akinyi's paper puts the business value perspective as the highest hierarchical level because his paper only discussed about BSC implementation in department of the organization(Akinyi&Moturi, 2015). That is why ithas put the business value atits highest outcome because this department's objective is to audit the performance of e-Government that was adopted by the organization. Gesuele's paper on the other hand put innovation learning and growth as the only perspective. This was because the organization's only aim to increase its human resource performance (Gesuele&Romanelli, 2015).

Kozma's paper puts strategic perspective as the highest outcome because the organization wants to reflect its achievement compared to the key expectations of the associations (Kozma&KazaineOnodi, 2015). However, it is interesting to see that in this paper he stated that even though financial perspective is one of the key outcomes, it is only a tool to achieving the objectives. Another thing that also interesting is that this financial perspective is put in the same level with customer perspective.

Table 2: Traditional BSC perspective utilization

Perspective	n	%
Customer/Stakeholder	12	80
Internal process	12	80
Learning and growth/training	14	93.3
Financial		86.7

Table 2 shows the utilization of traditional BSC perspective in the reviewed papers. It can be seen from the table that most utilized traditional BSC perspective in the reviewed papers is learning and growth. This happened because low employee's performance and efficiency in the public sector, especially in developing countries (Windrum& Koch, 2008). By using the learning and growth perspective, the organization can enhance employee innovation and productivity, thus raising the employee competence levels (Akinyi&Moturi, 2015; Mensah&George, 2015). The result of doing this is so that the business performance in the future will be improved.

Conclusion

There are two conclusions that can be taken from this research. These two conclusions are:

- 1. 40% of 15 reviewed public sector organizations still using financial perspective as the highest outcome. This was caused by that most of these organizations consider financial effectiveness as the highest goal. In the future, it will be better to change the highest outcome to more customer/stakeholders' satisfaction oriented and put the financial perspective as a support to achieve this goal. The other 40% of the reviewed papers were already using customer perspective as the highest outcome, while the rest 20% using other perspective.
- 2. Learning and growth perspective is considered as the most important perspective because of low employee's performance in the public sector. Hence, many public sector organizations using this perspective to raise the employee competence levels.

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