Performance Measurement of the Business Process Outsourcing Sector in Kenya: Balance Scorecard Approach

Chege Purity Nyambura (Corresponding Author)  
Postgraduate student, School of Business and Economics, University of Embu, Kenya  
Email: chegepurity64@gmail.com

Jesse Maina Kinyua  
Lecture, School of Business and Economics, University of Embu, Kenya

Kirema Nkanata Mburugu  
Lecturer, School of Agriculture, University of Embu, Kenya

Abstract

The aim of this study is to investigate the performance measurement of the business process outsourcing sector in Kenya using the balanced scorecard approach. The components of the approach include financial, internal processes, customers, learning and growth. The study was carried out in all the registered business process outsourcing companies in Kenya and questionnaires administered to the marketing managers of the respective companies. To analyze data, descriptive statistics and Kruskal Wallis Test were used. Descriptive statistics was used to ascertain the view of the performance of the sector by use of means and standard deviations. Kruskal Wallis Test was used to obtain the perception of the respondents on the use of the four balanced scorecard perspectives in their companies. The study established that the business process outsourcing sector in Kenya used the balanced scorecard that included both financial and non-financial measures. However, they tended to lean more on the use of financial measures. This paper, therefore, recommends the use of non-financial measures to measure performance too.

Keywords: Performance measurement; Balanced scorecard; Performance; Business process outsourcing; Kenya.

1. Introduction

Globalization has resulted in a very competitive environment and customers’ expectations have greatly increased. In this regard, for organizations to attain a competitive edge, they need to define their strategies and measure performance to ensure that they are met and superseded. Measuring performance helps organizations to establish where they are, benchmark with the industry and competition and thus take the necessary steps to improve their performance accordingly. Performance measurement is considered as the evaluation of results towards the attainment of specified goals (Hatry, 2006). It is also a process of establishing parameters within which programs, investment, and acquisitions reach the desired results (Gupta, 2012). Traditionally, organizational performance measurement has been staff-focused, but the most effective way is to measure it based on strategy thus taking into account all aspects. Such performance measures drives strategy execution and contribute to the attainment of organizational goals (Schneier et al., 1995). There are several techniques for measuring performance, which include the traditional financial measure. This measure keeps organizations on the financial straight and narrow path. Financial specialists primarily use it where financial actions are required from the results (Neely, 2002). The other technique is the balanced scorecard (BSC) which provides broad-spectrum performance measures that encompass both financial and non-financial measures which this study intends to consider.

The failure of financial measures to adequately measure performance necessitated Kaplan and Norton (1992) to originate BSC. However, the BSC retains the financial measures, which alone are inadequate for guiding and measuring performance that the information age organizations must make to create future value (Kaplan and Norton, 1996). The balanced scorecard as stipulated by Hopf et al. (1998) provide a conceptual framework for translating an organization's strategic objectives into a set of performance indicators distributed among four perspectives; financial, customer, internal business processes, and learning and growth. BSC assists the organizations to exploit their intangible assets, which enables them to cultivate customer relations that retain loyalty, introduce innovative products and services, mobilize employee skills, motivate them for continuous improvement, and deploy information technology (Kaplan and Norton, 1996). Marete (2015), postulates that the balanced scorecard framework enables an organization to implement the chosen strategy successfully, as the approach helps in providing adequate linkages, to enable organizations to implement complex and intricate activities involved in implementing the corporate strategies and monitor every activity of the firm with the intent to achieve the strategic objectives. BSC being a systemic approach helps to integrate financial and non-financial factors into a comprehensive model and builds a meaningful relationship among different criteria using cause and effect methods (Namazifard et al., 2011).
For organizations to survive and remain competitive, they need to use measurement and management systems derived from their strategies and capabilities. BSC is thus used to measure business performance by linking customers, internal processes, employees, and financial success (Kaplan and Norton, 1996). The four perspectives are interdependent and each builds on another to achieve the desired organizational goals. Niven (2014) portrays their relationship like a tree, where he likens the learning and growth, which is employee-oriented with the roots that lead through the trunk of internal processes, to the branches of customer results and finally to the fruit of financial returns.

The financial perspective is the long-range target for profit-making Hopf et al. (1998). Financial performance measures indicate whether a company’s strategy implementation is contributing to overall improvement (Kaplan and Norton, 1996). It is a critical component of BSC, which informs whether the strategy execution in the other three perspectives leads to improved bottom-line financial performance (Niven, 2014). Ahmad and Soon (2015) asserts that the financial perspective describes how the intangible assets are be converted into tangible value. It controls how a firm manages its finances and the involvement of the stakeholders in the firm’s operation. The indicators usually are inclusive of operating income, operating costs, return on investment, net profit rate, cash flow among others.

Customer perspective helps the organization to identify the customer and market segments in which to compete using measures such as customer satisfaction, customer retention, new customer acquisition, customer profitability, and market share (Kaplan and Norton, 1996). Niven (2014), proposes that the customer perspective answers three questions, which include, who the target customers are, what their expectations are, and what the organization’s proposition is in serving them. The customer perspective defines how the organization differentiates itself from competitors to attract, retain, and deepen relationships with targeted customers. The value of the customer perspective is crucial because it helps an organization connect its internal process to improved outcomes with its customers (Muiruri and Kilika, 2015). For businesses to achieve their long-run superior financial performance, they must create and deliver products and services that are valued by the customers (Kaplan and Norton, 1996).

The internal process perspective is concerned with the processes that create and deliver the organization’s value proposition as postulated by Muiruri and Kilika (2015) and provides mechanisms through which performance expectations are achieved (Hopf et al., 1998). It helps identify the key processes that the organization must excel in to continue to add value for its customers and improve its performance financially (Niven, 2014). This perspective highlights the processes some of which the organization may not be performing and are critical for its strategy to succeed. This may start by identifying current and future customer needs, develop new solutions to these needs and offer after-sales services that add to the value customers receive from the product offering (Kaplan and Norton, 1996). It is measured in terms of the introduction of new products, order response time, capacity utilization, technology capability order conversion rate, on-time delivery from suppliers, cost of non-conformance, cost of non-conformance and lead-time reduction (Ahmad and Soon, 2015; Ibrahim, 2015; Muiruri and Kilika, 2015).

Learning and growth perspectives considers the ability of the employees, the quality of information systems, and the effects of organizational alignment in supporting the accomplishment of its goals. Processes only succeed if adequately skilled and motivated employees, provided with accurate and timely information are driving them (Hopf et al., 1998; Niven, 2014). Kaplan and Norton (1996), indicate that financial, customer, and internal processes reveal the gaps between the existing capabilities of people, systems and procedures, and what is required to achieve breakthrough performance. To close the gap organizations must invest in reskilling employees, enhance technology and systems. Ahmad and Soon (2015), suggest that the performance measures for these perspectives are employee satisfaction, employee continuity, and employee productivity.

1.1. Objective of the Study
To investigate the use of balanced scorecard as technique of measuring performance by the business process outsourcing sector in Kenya.

2. Review of Literature
The Balanced Scorecard has been used in many studies to measure organizational performance. Successful organizations have notably adopted BSC to measure performance (Ibrahim, 2015). The increase in studies covering various sectors is an indication that BSC has attracted a lot of interest. These include a study on manufacturing by (Ahmad and Soon, 2015; Tibbs and Langat, 2016) that established a positive relationship between BSC and organizational performance that contributed to increase in revenue. In education sector, (Al-Hayaly and Almajjar, 2016; Lin et al., 2016; Marete, 2015) echoed that BSC was an important measure of performance and recommended that it be incorporated with fuzzy evaluation to evaluate the BSC indicators. The studies on the public sector by (Lubis et al., 2016; Muda et al., 2018; Osewe et al., 2018), found out that implementation of BSC affected performance of education institutions. Further, studies on small and medium enterprises by (Afonso and do Rosário Cabrita, 2015; Chong et al., 2019; Malagueño et al., 2018) established that SMEs that used BSC reported better performance. A study carried out on transport by Lu et al. (2018) found out that BSC was an important tool for measurement of performance. The banking sector was found to use more of financial perspective in measurement of performance (Ibrahim, 2015; Mugai and Moturi, 2015). Pham and Vu (2019) in a study in the health sector established financial perspective was more adopted and recommended use other perspectives for the hospitals to improve performance. Additionally, a study on the cooperative sector established that the use of financial perspective was more significant, primarily due to the moderating variable of the Sector Regulation (Muda et al., 2018).
Studies based on various disciplines have used BSC as a measure of performance. In research and development, Spanò et al. (2016) found out that BSC was not only a measure of performance but also a tool for managing different aspects of innovation especially in research organizations. In supply chain, studies have been carried out and BSC was not only found to measure performance, but also as a decision making tool for the purpose of sustainability (Callado and Jack, 2015; Xia et al., 2017). In accounting, Harden and Upton (2016) recommended that the organizations not only used traditional financial measures of performance but also all the BSC perspectives to evaluate performance in order to strengthen competitive advantage. A study on customer relationships management on use of BSC found out that learning and growth was the most influential perspective, and that it influenced the other perspectives (Keramati and Shapouri, 2016). Other researches have combined BSC to measure performance with other methods like fuzzy evaluation and six sigma to evaluate the BSC indicators to come up with evaluation results (Lyu et al., 2016; Raval et al., 2019).

BSC has been used to measure performance as reflected by many studies carried out in various countries. Hladchenko (2015), carried out a study on higher education institutions in Germany and established that BSC provided a systematic view of strategy and ensured a full framework for implementation of the strategy. In Vietnam, Pham and Vu (2019) carried out a study on public hospitals, concluded that implementation of BSC influenced performance, and recommended that the hospitals focus on the customer and internal processes perspectives to improve their performance. In Portugal, a study on food manufacturing small and medium enterprise (SME) was carried out by Afonso and do Rosário Cabrita (2015) where BSC was combined with Lean Supply Chain Performance to measure its performance. Malagueño et al. (2018), carried out another similar study on SMEs in Spain, where it was established that the firms using BSC obtained better financial performance and presented higher levels of exploitative innovation. Callado and Jack (2015), used the scorecard in the study on agribusiness companies in Brazil and they were using the customer satisfaction metric of all the BSC perspectives. The study thus recommended the use of the other perspectives to obtain balanced results.

Similar studies have also been carried out in some Asian countries. Lubis et al. (2016), researched on the implementation of the scorecard in a local authority in Indonesia and found out that this affected its performance. In the same country, Muda et al. (2018) research on the palm oil cooperatives where the results reflected that the financial perspective was more significant than the non-financial perspectives due to the moderating variable of prevailing governing regulations. In Malaysia, several studies have been conducted on the scorecard. Among them is a study on higher education institutions by Ahmad and Soon (2015) which concluded that the scorecard was an important management tool for the measure of performance since it takes into consideration both financial and non-financial measures. In a study on a Malaysian company, it was found out that BSC helped in aligning the company’s strategic objectives thus achieving its goals (Ayoup et al., 2016). The use of BSC was echoed in another study on Malaysian SMEs, which established positive and significant performance with scorecards. Two studies carried out in Taiwan showed the importance of using BSC and echoed the interdependence of the four perspectives namely financial, customer, internal business processes, and learning and growth (Lin et al., 2016; Lu et al., 2018).

In Kenya, various studies have been carried out on both the public and private sectors. One of the studies on the public sector was carried out by Marete (2015) on the University of Nairobi, established that there was a positive relationship between BSC and organizational performance and that customer perspective was the most popular among the four perspectives. Two studies on state corporations in Kenya found out that BSC significantly predicted performance and that it helped clarify vision and strategy and translated them into action and goals (Muiruri and Kilika, 2015; Osewe et al., 2018). Regarding studies on the private sector, which consisted of banks and manufacturing organizations, two studies, established that there was a positive and significant effect on performance resulting in increased revenue (Mungai and Moturi, 2015; Tibbs and Langat, 2016).

The aforementioned studies are a reflection of the importance of the use of BSC to measure organizational performance in various countries as it considers both financial and non-financial perspectives. In the studies carried out in Kenya, they mostly considered the public sector, banks, and manufacturing. However, its application in the business process outsourcing sector has received little attention. This study, therefore, tries to fill this gap by studying the use of BSC in assessing performance in the business process outsourcing sector in Kenya.

3. Research Methodology

The study investigates the use of BSC as a technique of measuring performance. The focus is on all 118 BPO companies registered in Kenya. A survey was carried out using questionnaires administered to marketing managers in all the companies. A five-point Likert scale was used ranging from a very great extent, great extent, and moderate extent, less extent and not at all, to assess the use of BSC as a measure of performance.

The research instrument was pretested using twelve (12) companies to ensure reliability is achieved. Cronbach alpha score coefficient was used which recommends the reliability of at least 0.7. All the perspectives gave a Cronbach alpha coefficient of more than 0.7 and thus the research instrument was retained for the study.

The data were first analyzed using descriptive statistics to ascertain the view of the performance of the BPO companies over the last three (3) years by responding appropriately to the statements for each of the perspectives, namely, financial, internal processes, customer, and learning and growth. The study used means as a measure of central tendency and standard deviation as a measure of variability. Secondly, Kruskal Wallis Test was applied to compare the perception of the respondents on the use of the four BSC perspectives in their companies. This was done to establish which of the four perspectives was given much attention. This test was used since the variables do not comply with quantifiable measurements.
4. Results

The questionnaires were administered to marketing managers from 106 companies. This excluded twelve (12) companies that were used for pretesting of the research instruments. Eighty-nine (89) questionnaires were filled and returned with a response rate of 84%. Kothari (2011), who indicates that a response rate of 70% is very good supports this response rate. The response rate was thus considered adequate for the analysis. Table 1 summarizes the characteristics of the BPO companies, which include age, academic qualifications and years of experience of the respondents, and the years of existence of the respective companies.

| Characteristic                          | Description          | Frequency | Percentage |
|----------------------------------------|----------------------|-----------|------------|
| Age of the Respondents                 | Below 30 years       | 6         | 6.7        |
|                                        | 31-35 years          | 9         | 10.1       |
|                                        | 36-40 years          | 21        | 23.6       |
|                                        | 41-50 years          | 41        | 46.1       |
|                                        | 51 years and above   | 12        | 13.5       |
| Academic Qualifications of the Respondents | Certificate        | 4         | 4.5        |
|                                        | Diploma              | 12        | 13.5       |
|                                        | Bachelor's Degree    | 43        | 48.3       |
|                                        | Postgraduate Degree  | 30        | 33.7       |
|                                        | Certificate          | 4         | 4.5        |
|                                        | Diploma              | 12        | 13.5       |
| Working Experience of the Respondents  | 1 to 2 years         | 11        | 12.4       |
|                                        | 3 to 5 years         | 18        | 20.2       |
|                                        | over 5 years         | 60        | 67.4       |
| Years of Existence of BPO Companies    | 1 to 2 years         | 7         | 7.8        |
|                                        | 3 to 5 years         | 16        | 18.0       |
|                                        | over 5 years         | 66        | 74.2       |

From Table 1, 46.1% of the respondents were aged between 41-50 years, 23.6% aged between 36-40 years, 13.5% aged 51 years and above, 10.1% were between 31-35 years while 6.7% were aged below 30 years. The study, therefore, represented the views of respondents with different ages and experiences.

Regarding academic qualifications, 48.3% of the respondents had attained a Bachelor’s Degree, 32.6% had a Postgraduate Degree, 13.5% had a Diploma while 4.5% had a Certificate. The findings show that 82% of the respondents had a Bachelor’s Degree and above. Therefore, the respondents had the skills and management expertise to respond appropriately.

Findings on working experience indicate that 67.4% of the respondents had worked for over 5 years, 20.2% for a period of between 3 to 5 years while 12.4% for a period between 1 to 2 years. Most of the respondents had therefore gained sufficient experience in their area of operation and the issues relating to the industry, which made them resourceful in the study. On the experience of BPO companies, 74.2% had been in operation for over 5 years, 18.0% for a period of between 3 to 5 years while 7.8% for a period of between 1 to 2 years. The results showed that most of the companies had operated for more than five years thus they possessed adequate experience in the sector to provide the information sought by the study.

Descriptive analysis in Table 2 gives a summary of the analysis of the responses from the respondents. The mean was used as a measure of central tendency while the standard deviation as a measure of variability to describe the characteristics of the responses of each variable.

| BSC Perspective        | Valid N | Mean   | Standard Deviation |
|------------------------|---------|--------|-------------------|
| **Financial**          |         |        |                   |
| Company profits        | 89      | 3.415  | 3.325             |
| Return on assets       | 89      | 3.427  | 1.260             |
| Cash flow              | 89      | 3.202  | 1.298             |
| Cost of business       | 89      | 3.618  | 1.060             |
| Amount of capital      | 89      | 3.325  | 1.145             |
| Composite Mean and SD  |         | 3.3945 | 1.4585            |
| **Internal Processes** |         |        |                   |
| Efficiency             | 89      | 2.213  | 1.081             |
| New services           | 89      | 1.988  | 0.885             |
| Market share           | 89      | 3.078  | 1.130             |
| Service delivery       | 89      | 2.134  | 0.881             |
| Critical internal processes | 89        | 2.123  | 0.863             |
| Composite Mean and SD  |         | 2.2780 | 0.9615            |
| **Customer Perspective** |       |        |                   |
The descriptive results show that the majority of respondents opted for agreement with the statements on financial perspective and moderately on business processes, customer and learning, and growth perspectives. This is reflected by results of a mean 3.3945 for financial perspective, 2.2780 for business process perspective, 2.1749 for customer perspective, and 2.4203 for learning and growth perspective. This indicates that most BPO companies used BSC perspectives to measure performance. However, majority of them still depended heavily on the financial perspective followed by learning and growth, business process and customer perspective respectively.

Kruskal Wallis Test was carried out to gauge the perceptions of the respondents on the use of the four perspectives as a measure of the performance of their respective companies. The analysis is shown in Table 3.

Table 3 presents the results of the Kruskal Wallis Test of 8.253 and the P-value of 0.041. This suggests that there is a significant variation of the responses on the four perspectives. The financial perspective has the highest mean rank of 16.00 followed by learning and growth with a mean rank of 10.00 while both internal processes and customer perspectives have a mean rank of 8.00. This reflects that BPO companies in Kenya focus more on financial perspective, followed by learning and growth and less attention on internal processes and customer perspectives.

5. Discussion

The study attempted to investigate the measurement of performance of the business process outsourcing sector in Kenya using the BSC approach. The descriptive results show that the majority of respondents opted for the agreement with the statements on financial perspective and moderately for statements on internal processes, customer and learning and growth perspectives.

This shows that much weight was placed on financial measures with a mean of 3.3945 followed by learning and growth with a mean of 2.4203, internal processes mean of 2.2780, and lastly customer perspective with a mean of 2.1749. This indicates that the BPO companies in Kenya use performance indicators under financial perspective and moderately on the use of performance indicators under internal processes, customer and learning and growth perspectives. This suggests that BPO companies in Kenya emphasize more on financial measures followed closely by measures using the other three perspectives. Further, the BPO companies utilize both financial and non-financial, that Balanced Score Card measures in the measurement of their performance.

There are studies that support the findings of this study. Ibrahim (2015), in the study on Nigerian Banks established that all the four perspectives were used in the measurement of performance with an emphasis on financial perspective. A similar study by Pham and Vu (2019) on the use of BSC in measuring performance of public hospitals in Vietnam supports the findings of this study by establishing that all the perspectives were in use where financial perspective was in use more than the other perspectives. Moreover, the study by Muiruri and Kilika (2015) echoes the findings of this study. The study was on the influence of BSC on the performance of the public sector organizations in Kenya and the financial perspective was rated highly followed by internal processes, customer and learning, and growth perspectives.

6. Conclusion

The study sought to find out the measurement of the performance of the BPO sector in Kenya using the BSC approach, which considers both financial and non-financial measures. The four perspectives, namely financial, internal processes, customer and learning, and growth were used. From the analysis of data, the study concludes that
the BPO companies in Kenya used financial measures largely followed closely by the other three perspectives to measure their performance. Therefore, to enhance the performance measurement of the BPO sector in Kenya, companies should consider increasing the use of non-financial measures.

References
Afonso, H. and do Rosário Cabrita, M., 2015. "Developing a lean supply chain performance framework in an SME: a perspective based on the balanced scorecard." In Paper presented at TRIZ FUTURE: TRIZ fest-2015, Seoul, South Korea.

Ahmad, A. R. and Soon, N. K., 2015. "Balanced scorecard in higher education institutions: what should we consider?" In 2015 International Symposium on Technology Management and Emerging Technologies (ISMET).

Al-Hayaly, M. A. M. and Alnajjar, F. J. S. (2016). Knowledge management processes and their impact on organizational performance, the adoption balanced scorecard: the moderating role of quality assurance standards—an applied study on Private Jordanian Universities. International Journal of Business and Management, 11(6): 70.

Ayup, H., Omar, N., Rahman, A. and Kamal, I. (2016). Balanced scorecard and strategic alignment: A Malaysian case. International Journal of Economics and Financial Issues, 6(S24): 85-95.

Callado, A. A. C. and Jack, L. (2015). Balanced scorecard metrics and specific supply chain roles. International Journal of Productivity and Performance Management, 64(2): 288-300.

Chong, P., Ong, T., Abdullah, A. and Choo, W. (2019). Internationalization and innovation on balanced scorecard (BSC) among Malaysian small and medium enterprises (SMEs). Management Science Letters, 9(10): 1617-32.

Gupta, S. (2012). Performance measurement: A comparative study of EVA and traditional performance measurement techniques: a case study of steel and petrochemicals industry in India. GRIN Verlag.

Harden, J. W. and Upton, D. R. (2016). An introduction to the use of the balanced scorecard for performance evaluation by financial professionals. Journal of Financial Service Professionals, 70(2): 81-88.

Hatry, H. P. (2006). Performance measurement: Getting results. The Urban Institute.

Hladchenko, M. (2015). Balanced Scorecard–a strategic management system of the higher education institution. International Journal of Educational Economics and Management, 9(2): 167-76.

Hopf, R. H., Pratsch, L. W., Welch, R. A., Ustad, I. M. P. A., Litman, D. J. and Tychan, T. J., 1998. "Guide to a balanced scorecard performance management methodology." In Procurement Executives’. Association.

Ibrahim, M. (2015). Investigating the use of the four perspectives of the balanced scorecard (BSC) as a technique for assessing performance by Nigerian banks. Journal of accounting and taxation, 7(4): 62-70.

Kaplan, R. S. and Norton, D. P. (1992). The balanced scorecard: measures that drive performance. Harvard Business Review Press: Massachusetts.

Kaplan, R. S. and Norton, D. P. (1996). The balanced scorecard: translating strategy into action. Harvard Business Review Press: Massachusetts.

Keramati, A. and Shapouri, F. (2016). Multidimensional appraisal of customer relationship management: integrating balanced scorecard and multi-criteria decision making approaches. Information Systems and e-Business Management, 14(2): 217-51.

Kothari, C. R. (2011). Research methodology and techniques. New Age International Limited Publishers: Delhi.

Lin, M. H., Hu, J., Tseng, M. L., Chiu, A. S. and Lin, C. (2016). Sustainable development in technological and vocational higher education: Balanced scorecard measures with uncertainty. Journal of Cleaner Production, 120(2016): 1-12.

Lu, M. T., Hsu, C. C., Liou, J. J. and Lo, H. W. (2018). A hybrid MCDM and sustainability-balanced scorecard model to establish sustainable performance evaluation for international airports. Journal of Air Transport Management, 71(2018): 9-19.

Lubis, A., Torong, Z. B. and Muda, I. (2016). The urgency of implementing a balanced scorecard system on local government in North Sumatra-Indonesia. International Journal of Applied Business and Economic Research, 14(1): 7575-90.

Lyu, H., Zhou, Z. and Zhang, Z. (2016). Measuring knowledge management performance in organizations: an integrative framework of the balanced scorecard and fuzzy evaluation. Information, 7(2): 29.

Malagueño, R., Lopez-Valeiras, E. and Gomez-Conde, J. (2018). Balanced scorecard in SMEs: effects on innovation and financial performance. Small Business Economics, 51(1): 221-44.

Marete, J. K. (2015). Influence of balanced scorecard on organizational performance in institutions of higher learning: a case study of the University of Nairobi and Centre for Mathematics. Science and Technology Education in Africa. European Journal of Business and Management, 7(20): 106-16.

Muda, I., Erlina, I. Y. and AA, N. (2018). Performance audit and balanced scorecard perspective. International Journal of Civil Engineering and Technology, 9(5): 1321-33.

Muiruri, Z. K. and Kilika, J. (2015). The influence of the balanced scorecard on performance of public sector organizations in Kenya. Science Journal of Business and Management, 3(5): 150.

Mungai, V. and Moturi, C. (2015). Effect of information technology outsourcing on the performance of banks in Kenya: Application of the balanced scorecard. IOSR Journal of Business and Management, 17(3): 83-89.

Namazifard, S., Makui, A. and Barzipour, F. (2011). An integrated framework for outsourcing using balanced scorecard and ELECTRE III. Management Science Letters, 1(2): 99-106.
Neely, A. (2002). Business performance measurement: theory and practice. Cambridge University Press.

Niven, P. R. (2014). Balanced scorecard evolution: A dynamic approach to strategy execution. John Wiley and Sons.

Osewe, J. O., Gachunga, H., Senaji, T. and Odhiambo, R. (2018). Relationship between management fashion rationale for balanced scorecard adoption and organizational performance of state corporations in Kenya. Journal of Developing Country Studies, 3(1): 1-15.

Pham, D. and Vu, T. (2019). Factors influencing the performance of public hospitals: The case of Vietnam. Management Science Letters, 9(8): 1231-42.

Raval, S. J., Kant, R. and Shankar, R. (2019). Benchmarking the Lean Six Sigma performance measures: a balanced scorecard approach. Benchmarking: An International Journal.

Schneier, C. E., Shaw, D. G., Beatty, R. W. and Baird, L. S. (1995). Performance measurement, management, and appraisal sourcebook. Human Resource Development.

Spanò, R., Sarto, F., Caldarelli, A. and Viganò, R. (2016). Innovation and performance measurement: An adapted balanced scorecard. International Journal of Business and Management, 11(6): 194.

Tibbs, C. Y. and Langat, L. K. (2016). Internal process, learning perspective of the balanced scorecard, and organizational performance. International Journal of Economics, Commerce and Management, 4(11): 458-74.

Xia, D., Yu, Q., Gao, Q. and Cheng, G. (2017). Sustainable technology selection decision-making model for enterprise in the supply chain: Based on a modified strategic balanced scorecard. Journal of Cleaner Production, 141(2017): 1337-48.