

# A Clever Approach to Measure Organizational Performance: An Overview

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## Abstract

If organizations cannot appraise their performance, they cannot manage their businesses. The traditional approach to organizational performance has been to consider profitability, which is normally regarded as return on investment. However, the study has provided a thorough view of organizational performance. Therefore, performance measurement literature has been reviewed; which has focused on various approaches such as the performance prism, the balanced scorecard (BSC), the performance pyramid, and the triple bottom line. The study has discussed the multi-dimensionality of organizational performance and suggests that organizations need to incorporate both dimensions of organization's performance (subjective and objective). The main purpose of the study was to provide a holistic view of various approaches with respect to organizational performance.

**Keywords:** triple bottom line approach, balance score card approach, performance pyramids, organizational performance

**JEL Classification:** L25, M1, M40

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If you can measure performance, that means you can manage the business, so performance measurement and management are the two sides of the same coin. According to Abu-Jarad, Yusof, and Nikbin (2010), one of the important questions in business has been why some organizations succeed, while the others fail. Organization performance has been the most important issue for every organization, be it a profit or a not for-profit organization. Defining, conceptualizing, and measuring performance has not been an easy task. Organizational performance, as a result, is described as the extent according to which the organization is able to meet the needs of its stakeholders and its own needs for survival. Therefore, performance is not suitably equated with a certain profit margin, a high market share, or having the best products, although these things may result from fully achieving the description of performance.

Organizational performance is influenced by different factors that are combined in unique ways to both increase and detract performance (Ramayah, Samat, & Lo, 2011). If organizations cannot appraise their performance, they cannot manage their business. If organizations have to subsist and prosper in the competitive information age, they ought to use performance measurement systems derived from their strategies and capabilities. Organizational performance is defined in terms of the ability of an organization to meet the expectations of three main stakeholders comprising of owners, employees, and customers (Aluko, 2003). According to Akroush and Al-Mohammad (2010), the construct of organizational performance is composed of three measures (the market, customer, and financial measures). However, the three market measures were used to assess market performance including the organization's image, the organization's non-financial assets, and the organization's ability to develop new services. Accordingly, three customer measures were taken into consideration, which are: loyalty, customer satisfaction, and the ability to attract new customers. Financial performance were measured using four financial components, that is, profitability, return on investment, market share, and contribution to the organization's financial assets. He, Zhang, Li, and Piesse (2011) used a 21-item

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scale to measure the respondents' assessment of the major dimensions of performance, namely financial performance, market performance, corporate social performance, and employee performance relative to major competitors over the last financial year, rated on a 7 point scale ranging from 'poor' to 'excellent'.

According to Uncles (2011), business performance is often taken as a dependent variable in majority of the studies. Researchers have preferred to rely on measures of "relative performance," but it means that the assessment not only depends on relative measures, but also depends on which competitors are chosen (e.g., direct or indirect competitors). Organizational performance is measured by four different items to mediate the extent to which the organization is performing better than its competitors in terms of sales growth, profitability, cash turnover, risk management, and financial goal achievement (Hsiao, Chen, & Chang, 2011 ; Vytlačil, 2010). Measures of firm performance frequently include bottom-line, financial indicators such as sales, profits, cash flow, return on equity, and growth. It is paramount to specify how an organization compares with its industry competitors when assessing organizational performance. Hence, it is significant to use an industry comparison approach when making firm performance assessments for organizations sampled from a wide variety of industries (Allen & Helms, 2006). Consequently, performance appraisal is the significant determinant of performance management, which in turn affects the organizational performance (Indradevi, 2012).

## **The Multidimensionality of Organizational Performance**

In studies of organizations, performance sometimes appears as an independent variable, but it is more likely to appear on the left-hand side of the equation as a dependent variable. This emphasis is most explicit in the field of organizational strategy, which is often defined as having organizational performance as its primary focus, but the idea that performance is to be predicted, understood, and shaped is commonplace throughout the field (March & Sutton, 1997). The traditional approach to organizational performance assessment has been to consider profitability, which is often regarded as return on investment. However, many researchers and academicians have questioned the validity of return on investment as the sole exclusive indicator of business performance. One major objection to the use of this procedure is that short-term profits can be enhanced at the expense of long-term growth (Kroeger, 2007). Organizational performance is multidimensional in nature, because it has several dimensions such as financial and non-financial. However, organizations often rely on profitability, but this is not limited to profitability only. As a matter of fact, there are subjective measures, which need to be taken into consideration.

There are various frameworks such as the balanced scorecard (BSC), which is multidimensional in nature, as it focuses on both financial and non-financial performance. However, the balance score card (BSC) ignores the role that various stakeholders have in the success and failure of an organization. Therefore, the performance prism is an attempt to overcome this problem by incorporating more multidimensional views of performance as it focuses on five dimensions such as stakeholders' satisfaction, strategies, processes, capabilities, and stakeholders' contribution (Neely, Adams, & Kennerley, 2002). Consequently, performance pyramid provides a comprehensive view by highlighting the dimensionality as it covers both external effectiveness and internal efficiency (Lynch & Cross, 1991). Organizational performance is multidimensional; it is advantageous to integrate different dimensions of performance, including financial and non-financial indicators in empirical studies (Fox, 2005).

Organizational performance and organizational effectiveness are used interchangeably; the former captures organizational outcomes in three domains: Product performance, financial performance, and shareholders' returns ; whereas, the latter is broader and covers outcomes specific to efficient operations. On the other hand, the balanced scorecard methodology, widely employed by many firms as instruments for internal management control, contributes to the increase in awareness to issues related to effectiveness rather than to performance (Alexandru, 2012). There are various conceptualizations with respect to the valuation of the organization. It has been suggested that there are two measures to assess the performance, that is, efficiency and effectiveness. For suppliers, managers, and investors, these two terms may be synonymous; however, each of these terms have their

own meanings. Efficiency deals with the input - output relationship, but the effectiveness is concerned with sales, output, value added creation, and innovation (Bartuševičienė & Šakalytė, 2013). Consequently, a dual nature of organizational performance can be ascertained in terms of efficiency or effectiveness. Measures of efficiency have a cost-benefit focus, comprising a ratio of some inputs and outputs, such as return on assets, return on equity, and other financial ratios. However, the measures of effectiveness have a revenue generation focus and are measured by variables such as market share, sales, and so forth (Katou, 2008 ; Wang & Ahmed, 2003). Kuo and Ye (2010) suggested that due to the multidimensionality of organizational performance and effectiveness, scholars have assessed the overall organizational performance through a number of different combinations of dimensions.

## Models of the Performance Measurement System

Research on performance measurement has gone through several phases during the last 30 years. In the 1970s, researchers examined how organizations used management accounting systems, especially budgeting as tools for performance measurement. In the 1980s, the focus was put essentially on the budgeting process and its impact on performance (Gosselin, 2005). According to Gosselin (2005), the scope of research on performance measurement began to broaden in the beginning of the 1990s . There are three perspectives of organizational performance: **(a)** a goal approach, in which the performance is defined by goal attainment, **(b)** a systems resource approach, in which performance is defined by an organization's ability to secure scarce and valued resources, and **(c)** a process approach, in which performance is defined in terms of the behavior of organization participants (Murphy, Sepehri, & Werner, 2013).

The performance measurement system is defined as the process of quantifying the effectiveness and efficiency of actions (Zeglat, Alrawabdeh, Almadi, & Shrafat, 2012 ). According to Shahzad, Luqman, Khan, and Shabbir (2012) , “It is very important for organizations to make the performance measurement system to evaluate the performance of the employees, which is very helpful to evaluating the achievement of organizational goals and in developing strategic plans for the organizations” (p.979). This section is an attempt to study some widely used performance measurement systems:

➤ **The Triple Bottom Line Approach :** The term 'triple bottom line approach' was developed by Elkington (1997). However, Elkington coined the term in 1994. According to Norman and McDonald, there are, in fact, very few references to the term before this date, and many claim that Elkington coined it. In the last three or four years, the term has spread like wildfire. The Internet search engine, Google, returns roughly 25,200 web pages that mention the term. The phrase “Triple Bottom Line” also occurred in 67 articles in the Financial Times in the year preceding June 2002 (2003, p. 2). According to Jackson, Boswell, and Davis (2011) , triple bottom line is a societal and ecological agreement between the community and businesses. In presenting information about the company's impact on issues impacting sustainability, there will be both positive and negative items that emerge. Triple bottom line reporting incorporates presenting what the business is doing well, along with areas that need improvement (2011, p.56).

Fauzi, Svensson, and Rahman (2010) examined that corporate performance is not only limited to the financial aspect, but also to the environmental and social ones. The comprehension of two additional components in measurement and evaluation of corporate performance can be better known by the fact that responsibility of an organization is not only generating economic welfare (i.e. profit), but also responsibility towards the society (i.e. people) and the environment (i.e. planet). However, these components are often called the “three Ps” of the triple bottom line approach. According to Elkington's triple bottom line approach, organizational performance is divided into three parameters, that is, economic prosperity (e.g. profit), environmental quality (e.g. planet), and social justice/equity (e.g. people) (as cited in Sherman, 2012). There are a large numbers of studies which have employed the triple bottom line approach (e.g. Archel, Fernandez, & Larrinaga, 2008 ; Christen, Shephard, Meyer, Jayawardane, & Fairweather, 2006 ; Dixon & Clifford, 2007 ; Ekwueme, Egbunike, & Onyali, 2013 ; Elkington, 1997; Giovanni, 2012 ; Glaser, 2006 ; Granados & Gamez, 2010; Majid & Koe, 2012 ; Meijer &

Schuyt, 2005 ; Milne, Ball, & Gray, 2013 ; Nganwa, 2002; Sridhar, 2012a; Sridhar, 2012b ; Tsolakis, 2004; Wexler, 2009).

➡ **The Balanced Scorecard (BSC) Approach :** According to Malmi, “In 1992, Robert S. Kaplan of Harvard School of Business and his associate David Norton developed the Balanced Scorecard (BSC) approach. The Balanced Score Card (BSC) was initially described as a performance measurement system containing both financial and non-financial measures” (2011, p.208). Traditionally, organizations used to measure their performance on the basis of short-term financial measures; however, the balanced scorecard (BSC) approach extends the measurement of performance to customer, internal processes, learning, and growth needs of their people (Chavan, 2009). Organizational performance entirely could be estimated in many ways, with financial and non-financial indicators. There are various approaches to organizational performance measurement, which include different stakeholder's perspectives.

The balanced scorecard (BSC) is a performance management tool for measuring whether small-scale operational activities of a company are aligned with its large-scale objectives in terms of vision and strategy and includes four perspectives: financial, customer, internal processes, and innovation and learning perspective (e.g. Chen & Mohamed, 2008; Rašula, BosiljVukšić, & Štemberger, 2012). Purbey, Mukherjee, and Bhar (2007) suggested that the balanced scorecard approach links different components of business performance measurement to organizational strategy and integrates four important perspectives. However, the balanced score card (BSC) has been criticized for ignoring the stakeholder's interests such as competitors, regulators, and suppliers (e.g. Atkinson, Waterhouse, & Wells, 1997 ; Metawie & Gilman, 2005; Neely, 1995). The balanced score card (BSC) approach is based on four perspectives:

- (1) The financial perspective,
- (2) Internal business process perspective,
- (3) Innovation and learning perspective and,
- (4) Customer perspective.

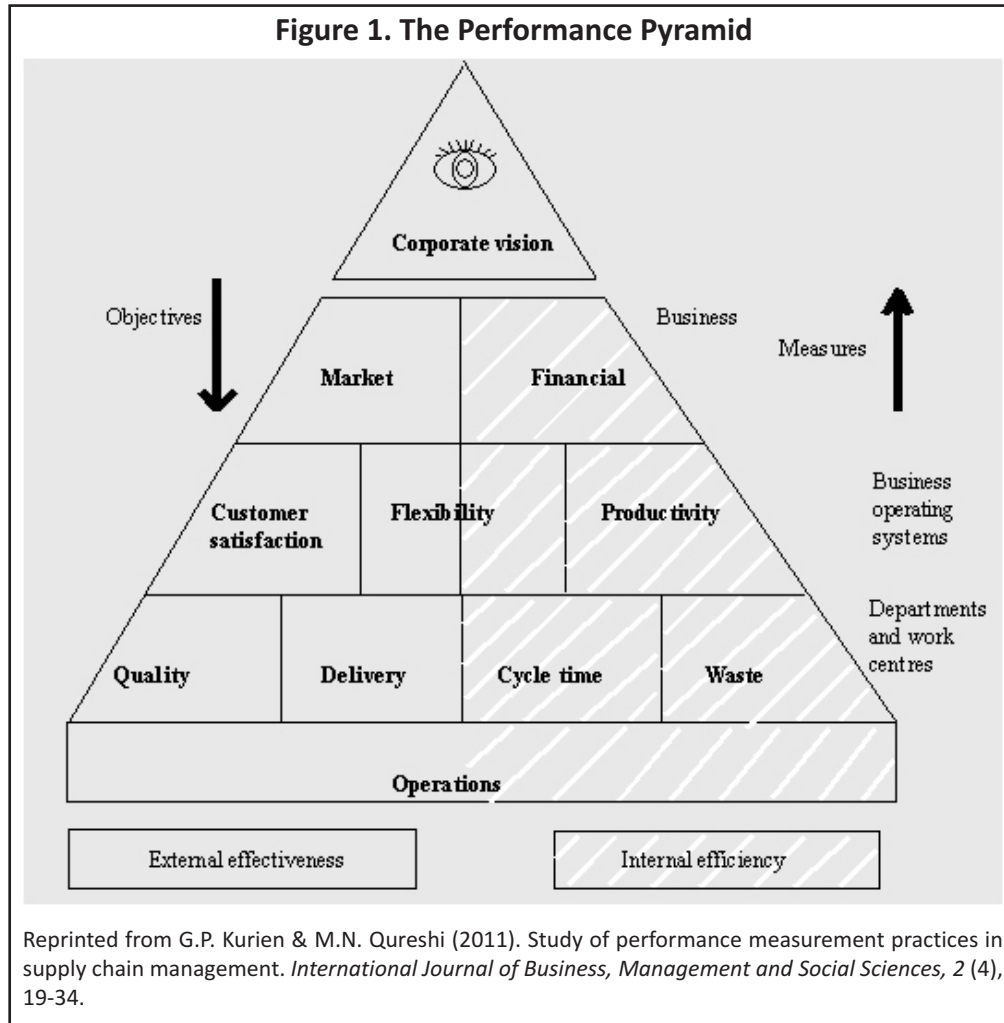
**(1) The Financial Perspective:** According to Kaplan and Norton (1996), financial performance measures define the long term objectives of the business unit. While most businesses will emphasize profitability objectives, businesses with many products in the early stage of their life cycle can stress rapid growth objectives and mature businesses may emphasize maximizing cash flow .

**(2) The Internal Business Process Perspective:** This perspective focuses on internal processes which will have the greatest impact on customer satisfaction and on achieving organization's financial objectives (Abran & Buglione, 2002).

**(3) The Innovation and Learning Perspective:** According to the Balanced Scorecard Institute (n.d.), the innovation and learning perspective includes employee training and corporate cultural attitudes related to both individual and corporate self-improvement. In a knowledge-worker organization, people- the only repository of knowledge- are the main resource. In the current climate of rapid technological change, it is becoming necessary for knowledge workers to be in a continuous learning mode.

**(4) The Customer Perspective:** This perspective includes results of customer surveys, customer profitability, and sales from repeat customers (Lipe & Salterio, 2000). Kaplan and Norton (2001) defined the customer's perspective as the strategy for creating value and differentiation from the perspective of the customer. The studies which have employed the balanced scorecard (BSC) approach as a part of their research include the following authors ( Abran & Buglione, 2002 ; Chavan, 2009 ; Chen & Mohamed, 2008 ; Kaplan & Norton, 1996; Kaplan & Norton, 2001; Lipe & Salterio, 2000; Malmi, 2001; Makkar and Kumar, 2011 ; Purbey et al., 2007; Rasula et al., 2012).

**Figure 1. The Performance Pyramid**



## Performance Pyramids

The performance pyramid was developed by Lynch and Cross in 1991, which includes a hierarchy of financial and non-financial performance measures. The notion of the performance pyramid is to link an organization's strategy with its operations. This pyramid includes four levels of objectives that cover the organization's external effectiveness (left side of the pyramid) and its internal efficiency (right side of the pyramid) as shown in the Figure 1. The development of the organization's performance pyramid starts with defining the corporate vision at the first level, which is then transformed into individual business units. Consequently, the second level starts with business units, that is, short term strategies of profitability and cash flows and long term strategies of market position and growth (market and financial). The third level starts with the business operating system which includes customer customer satisfaction, flexibility, and productivity. Finally, four main performance measures (quality, delivery, cycle time, and waste) are used at different work centers and departments on a daily basis.

Purbey et al. (2007) concluded that the performance pyramid system monitors performance at various levels of an organization, as it makes distinct differences between measures that are of concern to external parties such as quality, delivery, and customer satisfaction, and measures that are concerned within the business such as products, wastes, and cycle time. According to Metawie and Gilman, "It does not, however, provide any mechanisms to identify key performance indicators, nor does it explicitly integrate the concept of continuous improvement. It should be also noted that the system has not been empirically tested" (2005, p.6).



## The Performance Prism

The Performance Prism was developed in collaboration between Centre for Business Performance at Cranfield School of Management and the Process Excellence Core Capability Group of Anderson Consulting (Neely, Adams & Kennerley, 2002) in 2002. With the advent of the performance prism, a number of organizations have started applying this framework to test its applicability in the field. According to Neely et al., (2001), “The performance prism is a second generation measurement framework designed to assist performance measurement selection- the vital process of picking the right measures” (p. 6). In accordance with O'Boyle & Hassan (2013), the designers of this model use the word 'Prism' in its title to establish a connection between performance management and the fact that a prism is a device that refracts light. A prism can reveal the hidden elements behind something as apparently simple as white light. There are ample studies which have used the performance prism in their research (e.g. Kurien & Qureshi, 2011 ; Neely, Adams, & Crowe, 2001; Neely et al., 2002; O'Boyle & Hassan, 2013 ; Purbey et al., 2007). The performance prism proposes that a performance management system need to be coordinated around five different perspectives of business performance :

**(1) Stakeholders' Satisfaction :** Who are stakeholders, what are their needs? Organizations exist to deliver value to their stakeholders. Therefore, stakeholders will include investors, suppliers, employees, customers, and regulators.

**(2) Strategies :** According to Neely et al. (2002), strategies are required to fulfil the needs and desires of stakeholders. Having first decided what respective stakeholders' wants and needs are, executives must then decide whether and to what extent they will prioritize their satisfaction in the strategies which the organization develops to deliver the requisite stakeholder 'value' (whilst also ensuring that its own requirements are satisfied too). Delivery of long term stakeholder value can be viewed as the 'destination,' whilst strategy can be viewed as the chosen route to achieve that destination.

**(3) Processes :** What are the processes required to allow our strategies to be delivered ? Many organizations conceive their business processes consisting of four different categories: Development of products and services, generation of demand for them, fulfillment of demand for them, and overall planning and management of an organization, with each category corroborated by different sub-processes (Neely et al., 2002).

**(4) Capabilities :** The combination of people, practice, technology, and infrastructure together ensures the execution of organizations' business processes (Kurien & Qureshi, 2011). Processes cannot work on their own, they need certain policies and procedures about the way things are done. However, the capabilities are the combinations of infrastructure, people, technology, and people that represent the organizations' capability to create value for stakeholders (Neely et al., 2002).

**(5) Stakeholder Contributions :** It must be kept in mind that for every stakeholder, there is a *quid pro quo* (something for something) - what organization needs from stakeholders and what stakeholders needs from an organization (Neely et al., 2002).

## Subjective Versus Objective Measures of Performance

The measure of performance may be objective (available in financial statements) or perceived/subjective. The use of subjective measure is a common practice in strategy-related research when financial statements data are unavailable, or they do not allow for accurate comparisons amongst firms (Protogerou, Caloghirou, & Lioukas, 2012 ). According to Carley and Lin, “there are many indicators of performance, with little agreement as to which is the best indicator” (1997, p. 985). According to Walker, “relying on subjective (rather than objective) measures

appears to be justified based on extensive prior research, which reports a strong correlation between subjective assessments of organizational performance and their objective counterparts" (2001, p.144). Performance in an organization can be measured in two main ways: subjective and objective. Subjective measures are based on opinion or estimates provided by the respondents, who usually are asked to assess company performance (Narver & Slater, 1990). Objective measures are based on independently observable facts either by asking respondents to report absolute values or by accessing secondary sources (Kohli, Jaworski, & Kumar, 1993). Gosselin (2005) concluded that the use of objective financial measures are more prominent in manufacturing firms. It has also been reported that the implementation of other approaches like integrated performance measurement systems and balance scorecard are very low. However, there is a need to understand effectively how different organizations design and implement their performance measurement systems and how they are supposed to better their competence in terms of organizational performance.

Jaafreh & Al-abadallat (2013), "classified the organizational performance into five categories: Customer evaluation of product and services, human resource result, supplier and partner performance, financial and market result, and organizational effectiveness results" (p.99). Rose, Kumar, and Ibrahim (2008) concluded that organizational performance is affected by external economic factors ; subjective measures may be more appropriate than objective measures. There are two main reasons for using subjective performance measures: First, subjective measures are often preferred because of difficulties of collecting objective performance data from small firms. Second, there is a correlation between subjective and objective measures of performance (Tsai, Edwards, & Sengupta, 2010). Business performance has been divided into financial (profit, profit growth, sales growth, after tax return on assets, share prices, after tax return on sales, and industry leadership) and non-financial (Future outlook, overall response to competition, and success rate in new product launches) indicators, which provides a clear picture of an organization (Mahmoodsalehi & Jahanyan, 2009).

Business performance is a broader concept encompassing both financial performance and operational performance indicators. It is defined in both financial and non-financial context; financial indicators of the performance of an organization are the return on investment (ROI) and return on assets, and non-financial indicators like product or service quality, market share, customer loyalty, and customer satisfaction (Zaman, Javaid, Arshad, & Bibi, 2012 ). Consequently, marketing performance is divided into two dimensions of financial and non-financial indicators; financial indicators include profit, revenue, and return on investment (ROI), and non-financial indicators consist of market share, sales volume, customer satisfaction, and customer loyalty (e.g. Allen & Helms, 2006 ; Al-Saeed, Rajamohan, & Upadhya, 2010 ; Dess & Robinson, 1984; Lakhal, 2009). According to Vytlačil (2010), the use of subjective measures allows a standard way to assess performance within organizations across different manufacturing sectors characterized by varying standards of performance and business objectives. Organizational performance measures frequently focus on "hard" financial indicators, such as return on investment and share price, however, such measures were not considered sufficient to determine the effectiveness of an organization. Additionally, many of these measures are more applicable to private, for-profit organizations than the public sector. Therefore, "soft" indicators indicating employee satisfaction, morale, and attitudes along with "hard" indicators can together measure the organizational effectiveness (Lai, 2012 ; Sitlington & Marshall, 2011).

## Discussion

In management research, various indicators, both economic (objective) and non-economic (subjective), have emerged to measure organizational performance. However, it has been difficult to operationalize the concept of performance and there is a lack of consensus regarding the measures of performance in the management field. Measurement of organizational performance is a controversial topic. This debate is associated with traditional financial/economic measures, for example, return on investment, profit, growth, and returns sales (Leitao & Franco, 2010).

Performance is the recurrent theme in most branches of management, including strategic management, and it

is of interest to both academic scholars and practicing managers (Venkatraman & Ramanujam, 1986). The traditional approach to business performance assessment has been to consider profitability, which is normally regarded as return on investment. However, many researchers have questioned the validity of return on investment as the sole indicator of business performance. The biggest objection to the use of this criterion is that short-term profits can be enhanced at the expense of long-term growth (Kroegeer, 2007). Therefore, it is important for the organizations to consider performance from a multi-dimensional point of view. Hence, researchers and academicians should incorporate both subjective as well as objective measures of performance.

## **Managerial Implications**

Managers should not only rely on objective measures, but they need to consider the subjective measures of business performance as well. Academicians and researchers can capitalize from these different performance management systems such as the triple bottom line approach, performance prism, performance pyramid, and balanced scorecard approach in order to gain the competitive advantage. According to Homburg, Artz, & Wieseke (2010), “Managers who design their performance measurement system with the intention of increasing marketing alignment should focus first on improving the strategy fit of performance measures and then on providing cause-and effect-relationships” (p.72).

## **Conclusion**

The paper has focused on various approaches to organizational performance, including balanced scorecard (BSC), triple bottom line, performance pyramids, and performance prism. However, it has been observed that a majority of the studies have failed to highlight the holistic view of performance management. Nevertheless, highlighting and validating these management approaches is an important agenda for future research at both the empirical and theoretical level (Richards, Devinney, Yip, & Johnson, 2008). The most widely used performance measurement system is the balanced scorecard (BSC), which provides a structured approach for describing improvement opportunities and threats, and transforming an organization's strategy into goals. However, there are other competing frameworks like the performance prism (Neely et al., 2002), performance pyramid (Lynch & Cross, 1991), and the triple bottom line approach, which have gained much attention of academicians and researchers in the management field. However, the triple bottom line approach has been a revolutionary non-financial reporting approach that organizations have certainly accepted into their culture (Sridhar, 2012a).

There is a paucity of research with regards to the triple bottom line approach, performance pyramid, and performance prism, because there are a few number of empirical studies which have focused on these frameworks separately (Elkington, 1997; Lynch & Cross, 1991; Neely et al., 2001). The performance prism model attempts to differentiate itself from other related frameworks such as the balanced scorecard (BSC) approach by providing an unequaled perspective on a measuring system that can ultimately be acquired as a way of operating within an industry instead of just measuring the performance of an organization. However, the balanced scorecard (BSC) approach is only limited to four dimensions such as finance, customers, internal processes, and innovation and learning. That is why different management studies tend to focus on narrower aspects of performance rather than tackling the issues with respect to the organizational effectiveness (Alexandru, 2012).

As a conclusion, it neglects the role that various stakeholders of an organization have in deciding the failure or success of its strategic objectives (O'Boyle & Hassan, 2013). Despite the fact that the implementation of various performance management systems has been greatly recommended in literature, but still, organizations are relying on traditional financial measures (Gosselin, 2005).

## **Limitations of the Study and Scope for Future Research**

Several limitations of the study provide additional research opportunities. The paper has focused less on scale



development of organizational performance as there is paucity of research in scale development in business performance. Hence, there is a great need to empirically validate the organizational performance scale. Future researches need to consider the multidimensionality of organizational performance as there is a dearth of empirical studies which have focused on the multidimensionality of performance. Researchers can also empirically validate the frameworks such as performance pyramid, performance prism, and the triple bottom line approach in future research studies.

## References

- Abran, A., & Buglione, L. (2002). A multidimensional performance model for consolidating Balanced Scorecards. *Advances in Engineering Software*, 34(6), 339-349. DOI : [http://dx.doi.org/10.1016/S0965-9978\(03\)00033-4](http://dx.doi.org/10.1016/S0965-9978(03)00033-4)
- Abu-Jarad, I. Y., Yusof, N. A., & Nikbin, D. (2010). A review paper on organizational culture and organizational performance. *International Journal of Business and Social Science*, 1 (3), 26-46.
- Akroush, M. N., & Al-Mohammad, S. M. (2010). The effect of marketing knowledge management on organizational performance: An empirical investigation of the telecommunications organizations in Jordan. *International Journal of Emerging Markets*, 5 (1), 38-77. DOI:10.1108/17468801011018266
- Alexandru, C. (2012). The impact of supply chain performance on organizational performance. *Journal of Electrical and Electronics Engineering*, 5 (2), 45-48.
- Allen, R. S. & Helms, M. M. (2006). Linking strategic practices and organizational performance to Porter's generic strategies. *Business Process Management Journal*, 12 (4), 433-454. DOI:10.1108/14637150610678069.
- Al-Saeed, R. Rajamohan, P. & Upadhya, A. (2010). Entrepreneurial orientation, knowledge process and marketing performance: An investigation in small organizations in Sharjah Emirate. *Journal of Asia Entrepreneurship and Sustainability*, 6 (2), 103-119.
- Aluko, M. A. O. (2003). The impact of culture on organizational performance in selected textile firms in Nigeria. *Nordic Journal of African Studies*, 12 (2), 164-179.
- Archel, P., Fernandez, M., & Larrinaga, C. (2008). The organizational and operational boundaries of triple bottom line reporting: A survey. *Environmental Management*, 41 (1), 106-117.
- Atkinson, A. A., Waterhouse, J. H., & Wells, R. B. (1997). A stakeholder approach to strategic performance measurement. *MIT Sloan Management Review*, Spring 1997. Retrieved from <http://sloanreview.mit.edu/article/a-stakeholder-approach-to-strategic-performance-measurement/>
- Balanced Scorecard Institute. (n.d.). Balanced scorecard basics. Retrieved from <https://balancedscorecard.org/Resources/AbouttheBalancedScorecard/tabid/55/Default.aspx>
- Bartuševičienė, I., & Šakalytė, E. (2013). Organizational assessment: Effectiveness vs. efficiency. *Social Transformations in Contemporary Society*, 1, 45-53.
- Carley, K. M., & Lin, Z. (1997). A theoretical study of organizational performance under information distortion. *Management Science*, 43 (7), 976-997.
- Chavan, M. (2009). The balanced scorecard: A new challenge. *Journal of Management Development*, 28 (5), 393-406. DOI:10.1108/02621710910955930
- Chen, L., & Mohamed, S. (2008). Contribution of knowledge management activities to organizational business performance. *Journal of Engineering, Design and Technology*, 6 (3), 269-285. DOI: 10.1108/17260530810918289

- Christen, E. W., Shephard, M. L., Meyer, W. S., Jayawardane, N. S., & Fairweather, H. (2006). Triple bottom line reporting to promote sustainability of irrigation in Australia. *Irrigation Drainage System*, 20 (4), 329-343. DOI: 10.1007/s10795-006-9011-1
- Dess, G. G., & Robinson, R. B. (1984). Measuring organizational performance in the absence of objective measures: The case of the privately-held firm and conglomerate business unit. *Strategic Management Journal*, 5 (3), 265-273.
- Dixon, S. E. A., & Clifford, A. (2007). Ecopreneurship- A new approach to managing the triple bottom line. *Journal of Organizational Change Management*, 20 (3), 326-345. DOI:10.1108/09534810710740164
- Ekwueme, C. M., Egbunike, C. F., & Onyali, C. I. (2013). Benefits of triple bottom line disclosures on corporate performance: An exploratory study of corporate stakeholders. *Journal of Management and Sustainability*, 3(2), 79-91. DOI: 10.5539/jms.v3n2p79
- Elkington, J. (1997). *Cannibals with forks: The triple bottom line of 21st century business*. Capstone, U.K. : Oxford University Press.
- Fox, J. M. (2005). *Organizational entrepreneurship and the organizational performance linkage in university extension (Dissertation)*. The Ohio State University, USA. Retrieved from [https://etd.ohiolink.edu/ap:0:0:APPLICATION\\_PROCESS=DOWNLOAD\\_ETD\\_SUB\\_DOC\\_ACCN\\_UM:::F1501\\_ID:osu1133286266,inline](https://etd.ohiolink.edu/ap:0:0:APPLICATION_PROCESS=DOWNLOAD_ETD_SUB_DOC_ACCN_UM:::F1501_ID:osu1133286266,inline)
- Giovanni, P. D. (2012). Do internal and external environmental management contribute to the triple bottom line ? *International Journal of Operations & Production Management*, 32 (3), 265-290. DOI: 10.1108/01443571211212574
- Glaser, J. A. (2006). Corporate responsibility and the triple bottom line. *Clean Technologies and Environmental Policy*, 8 (4), 225-228. DOI: 10.1007/s10098-006-0067-2
- Gosselin, M. (2005). An empirical study of performance measurement in manufacturing firms. *International Journal of Productivity and Performance Management*, 54 (5/6), 419-437. DOI:10.1108/17410400510604566
- Granados, A. C., & Gamez, G. G. (2010). Sustainability and triple bottom line: Key issues for successful Spanish school principals. *International Journal of Educational Management*, 24(6), 467-477. DOI: 10.1108/09513541011067656
- He, X., Zhang, X., Li, X., & Piesse, J. (2011). Stakeholder orientation and organizational performance in an emerging market. *Journal of General Management*, 36 (3), 67-91.
- Homburg, C., Artz, M., & Wieseke, J. (2012). Marketing performance measurement systems: Does comprehensiveness really improve performance? *Journal of Marketing*, 76 (3), 56-77. DOI: 10.1509/jm.09.0487
- Hsiao, Y.-C., Chen, C.-I., & Chang, S.-C. (2011). Knowledge management capacity and organizational performance: The social interaction view. *International Journal of Manpower*, 32 (5/6), 645-660. DOI: 10.1108/01437721111158242
- Indradevi, R. (2012). Relationship between appraisal and organizational performance. *Prabandhan: Indian Journal of Management*, 5 (6), 19-25.
- Jaafreh, A. B., & Al-abadallat, A. Z. (2013). The effect of quality management practices on organizational performance in Jordan: An empirical study. *International Journal of Financial Research*, 4 (1), 93-109. DOI: 10.5430/ijfr.v4n1p93
- Jackson, A., Boswell, K., & Davis, D. (2011). Sustainability and triple bottom line reporting- What is it all about ? *International Journal of Business, Humanities and Technology*, 1 (3), 55-59.
- Kaplan, R. S., & Norton, D. P. (1996). Linking the balanced scorecard to strategy. *California Management Review*, 39(1), 53-79.

- Kaplan, R. S., & Norton, D. P. (2001). Transforming the balance scorecard from performance measurement to strategic management: Part I. *Accounting Horizons*, 15(1), 87-104.
- Katou, A. A. (2008). Measuring the impact of HRM on organizational performance. *Journal of Industrial Engineering and Management*, 1(2), 119-142.
- Kohli, A. K., Jaworski, B. J., & Kumar, A. (1993). MARKOR: A measurement of market orientation. *Journal of Marketing and Research*, 30(4), 467-477.
- Kroeger, J. W. (2007). *Firm performance as a function of entrepreneurial orientation and strategic planning practices* (Unpublished Doctoral Dissertation). Cleveland State University, Ohio, USA.
- Kuo, Y.-K., & Ye, K. D. (2010). How employees' perception of information technology application and their knowledge management capacity influence organizational performance. *Behavior and Information Technology*, 29(3), 287-303. DOI:10.1080/01449290701852166
- Kurien, G. P., & Qureshi, M. N. (2011). Study of performance measurement practices in supply chain management. *International Journal of Business, Management and Social Sciences*, 2(4), 19-34.
- Lai, H. - H. (2012). Study on influence of employee promotion system on organizational performance. *International Journal of Organizational Innovation*, 5 (1), 231-251.
- Lakhal, L. (2009). Impact of quality on competitive advantage and organizational performance. *Journal of the Operational Research Society*, 60, 637-645. DOI:10.1057/palgrave.jors.2602601
- Leitao, J., & Franco, M. (2010). Non-economic organizational performance of SMEs: Is there a rationale for a cognitive entrepreneur? Retrieved from <http://webs2002.uab.es/edp/workshop09/Papers%20Workshop/5Joao.pdf>
- Lipe, M. G., & Salterio, S. E. (2000). The balanced scorecard: Judgmental effects of common and unique performance measures. *The Accounting Review*, 75 (3), 283-298.
- Lynch, R. L., & Cross, K. F. (1991). *Measure up- the essential guide to measuring business performance*. London : Mandarin.
- Mahmoodsalehi, M., & Jahanyan, S. (2009). The effect of knowledge management on relationship between intellectual capital and business performance: A case study of Iran's industrial development and renewal organization (IDRO). *Journal of Knowledge Management Practice*, 10 (3), 1-9.
- Majid, I. A., & Koe, W. L. (2012). Sustainable entrepreneurship (SE): A revised model based on triple bottom line (TBL). *International Journal of Academic Research in Business and Social Sciences*, 2 (6), 293-310.
- Makkar, U., & Kumar, H. (2011). Impact of implementation of balanced business score card (BBSC) on organizational effectiveness: A case study of Bharat Sanchar Nigam Ltd (BSNL). *Prabandhan: Indian Journal of Management*, 4(1), 17 - 35.
- Malmi, T. (2001). Balance scorecards in Finnish companies: A research note. *Management Accounting Research*, 12(2), 207-220. DOI : <http://dx.doi.org/10.1006/mare.2000.0154>.
- March, J. G., & Sutton, R. I. (1997). Organizational performance as a dependent variable. *Organization Science*, 8(6), 698-706.
- Meijer, M. M., & Schuyt, T. (2005). Corporate social performance as a bottom line for consumers. *Business and Society*, 44(4), 442-461. DOI: 10.1177/0007650305281659.
- Metawie, M., & Gilman, M. (2005). *Problems with the implementation of performance measurement systems in the public sector where performance is linked to pay: A literature review drawn from the UK*. Paper presented at the 3rd Conference on Performance Measurements and Management Control, Nice September 22-23, 2005 . Retrieved from <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.104.9267&rep=rep1&type=pdf>

- Milne, M. J., Ball, A., & Gray, R. (2013). Whither ecology? The triple bottom line, the global reporting initiative, and the institutionalization of corporate sustainability reporting. *Journal of Business Ethics*, 118, 13-29.
- Murphy, R., Sepehri, M., & Werner, M. (2013). Is market orientation an advantage for business performance ? *The Journal of American Academy of Business, Cambridge*, 18 (2), 106-112.
- Narver, J. C., & Slater, S. F. (1990). The effect of a market orientation on business profitability. *Journal of Marketing*, 54 (4), 20-35.
- Neely, A., Adams, C., & Kennerley, M. (2002). *The performance prism: The scorecard for measuring and managing business success*. U.K. : Pearson Education.
- Neely, A., Adams, C., & Crowe, P. (2001). The performance prism in practice. *Measuring Business Excellence*, 5 (2), 6-11.
- Neely, A. (1995). Performance measurement system design: Developing and testing a process- based approach. *International Journal of Operations & Production Management*, 20 (10), 1119 - 1145.
- Nganwa, P. K. (2002). Taking on the triple bottom line. *Accountancy, SA*, 13-14.
- Norman, W., & MacDonald, C. (2003). Getting to the bottom of “Triple Bottom Line”. *Business Ethics Quarterly*, 1-19. Retrieved from <http://isites.harvard.edu/fs/docs/icb.topic549945.files/Canadian%20Paper.pdf>
- O'Boyle, I., & Hassan, D. (2013). Organizational performance measurement: Examining the practical utility of the performance prism. *Organization Development Journal*, 51-58. Retrieved from <http://www.highbeam.com/doc/1P3-3153977981.html>
- Protogerou, A., Caloghirou, Y., & Lioukas, S., (2012). Dynamic capabilities and their indirect impact on firm performance. *Industrial and Corporate Change*, 21, 615-647. DOI: 10.1093/icc/dtr049
- Purbey, S., Mukherjee, K., & Bhar, C. (2007). Performance measurement system for healthcare processes. *International Journal of Productivity and Performance Management*, 56 (3), 241-251.
- Ramayah, T., Samat, N. & Lo, M-C. (2011). Market orientation, service quality and organizational performance in service organizations in Malaysia. *Asia-Pacific Journal of Business Administration*, 3 (1), 8-27. DOI: 10.1108/17574321111116379
- Rašula, J., BosiljVukšić, V. B., & Štemberger, M. I. (2012). Impact of knowledge management on organizational performance. *Economic and Business Review*, 14 (2), 147-168.
- Richards, P. J., Devinney, T. M., Yip, G. S., & Johnson, G. (2008). Measuring organizational performance as a dependent variable: Towards methodological best practice. *Strategic Management Journal*. Retrieved from [http://www.researchgate.net/publication/228136632\\_Measuring\\_Organizational\\_Performance\\_as\\_a\\_Dependent\\_Variable\\_Towards\\_Methodological\\_Best\\_Practice/file/9fcfd5080dcfcb36f3.pdf](http://www.researchgate.net/publication/228136632_Measuring_Organizational_Performance_as_a_Dependent_Variable_Towards_Methodological_Best_Practice/file/9fcfd5080dcfcb36f3.pdf)
- Rose, R. C., Kumar, N., & Ibrahim, H. I. (2008). The effect of manufacturing strategy on organizational performance. *Performance Improvement*, 47(1), 18-25. DOI: 10.1002/pfi.175.
- Shahzad, F., Luqman, R. A., Khan, A. R., & Shabbir, L. (2012). Impact of organizational culture on organizational performance: An overview. *Interdisciplinary Journal of Contemporary Research in Business*, 3 (9), 975-985.
- Sherman, W. R. (2012). The triple bottom line: The reporting of “doing well” and “doing good”. *Journal of Applied Business Research*, 28 (4), 673-682.
- Sitlington, H., & Marshall, V. (2011). Do downsizing decisions affect organizational knowledge and performance. *Management Decision*, 49 (1), 116-129. DOI:10.1108/00251741111094473.
- Sridhar, K. (2012a). The relationship between the adoption of triple bottom line and enhanced corporate reputation and legitimacy. *Corporate Reputation Review*, 15 (2), 69-87. DOI:10.1057/crr.2012.4.

- Sridhar, K. (2012b). Corporate conceptions of triple bottom line reporting: An empirical analysis into the signs and symbols driving this fashionable framework. *Social Responsibility Journal*, 8 (3), 312-326. DOI: 10.1108/17471111211247901.
- Tsai, C.- J., Edwards, P., & Sengupta, S. (2010). The association between organizational performance, employee attitudes and human resource management practices: An empirical study of small businesses. *Journal of General Management*, 36 (1), 1-20.
- Tsolakis, D. (2004). Triple-bottom-line evaluation approach shows promise for local government. *Road &Transport Research*, 13(4), 87-88.
- Uncles, M. D. (2011). Researching market orientation and business performance. *Australasian Marketing Journal*, 19 (3), 161-164.
- Venkatraman, N., & Ramanujam, V. (1986). Measurement of business performance in strategy research: A comparison of approaches. *The Academy of Management Review*, 11(4), 801-814.
- Vytlacil, L. L. (2010). *Market orientation and business performance: The role of positional advantage* (Doctoral Dissertation), Capella University.
- Walker, L. J. H. (2001). The measurement of a market orientation and its impact on business performance. *Journal of Quality Management*, 6 (2), 139-172. DOI: [http://dx.doi.org/10.1016/S1084-8568\(01\)00035-9](http://dx.doi.org/10.1016/S1084-8568(01)00035-9).
- Wang, C. L., & Ahmed, P. K. (2003). Knowledge management orientation and organizational performance. Working Paper Series, 1-19. Retrieved from [https://www.wlv.ac.uk/PDF/uwbs\\_WP004-03%20Wang%20%20Ahmed.pdf](https://www.wlv.ac.uk/PDF/uwbs_WP004-03%20Wang%20%20Ahmed.pdf).
- Wexler, M. N. (2009). Strategic ambiguity in emergent coalitions: The triple bottom line. *Corporate Communications: An International Journal*, 14 (1), 62-77. DOI: 10.1108/13563280910931081.
- Zaman, K., Javaid, N., Arshad, A., & Bibi, S. (2012). Impact of internal marketing on market orientation and business performance. *International Journal of Business and Social Science*, 3 (12), 76-87.
- Zeglat, D., Alrawabdeh, W., Almadi, F., & Shrafat, F. (2012). Performance measurement systems: Stages of development leading to success. *Interdisciplinary Journal of Contemporary Research in Business*, 4 (7), 440-448.