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# The Changes of Balanced Scorecard (BSC): A Comprehensive Review

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## Abstract

This study aims to review the changes of Balanced Scorecard (BSC) approach over four generations followed by its research trends over the last three years. The narrative literature method is used to analyze the information of each reference. The last BSC generation generally is used by many companies caused it has been improved. Furthermore, the research trends currently show that the BSC is not only for profit-oriented entities but also for social companies. This study also found that there are many companies starting to combine BSC with other approaches. It is such as Best-Worst Method (BWM), Gray Relational Analysis, Data Envelopment Analysis, and SWOT analysis. By combining these approaches, the result of performance measurement will be more accurate

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## Keywords

**Balanced Scorecard, BSC Generations, Performance Measurement, Research Trend**

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## INTRODUCTION

The use of a single dimension in a company's performance measurement system is considered not able to provide a comprehensive understanding (Simerly, 1998; Voivio, 1999). Multiple measurements should be able to be carried out or integrated with each other (Ventkatraman, 1986; Wiklund, 1999). This phenomenon is corresponding to the results of empirical studies conducted by Feltham and Xie (1994) and Kaplan and Norton (1992). It is stated that a single performance measurement or financial has a drawback because it has not been able to measure the important aspects of performing properly. Also, the research by Abemethy and Lillies (1995) and Harrison and Poole (1997) expressed that performance measurement focusing on financial does not have a significant effect on improving performance aspects.

The Balanced Scorecard (BSC) is defined as a system of measuring strategic performance introduced by Robert Kaplan and David Norton in 1992. They were students from Harvard University who were initially conscious that the traditional financial performance measurement was not representative of the company goal. Therefore, a balancing aspect is needed in its measurement (Kaplan & Norton, 1992). The financial measurement balancing has to

consists of customer perspective, internal business perspective, innovation, and learning perspective.

Gallo et al (2018) provide an explanation regarding the four perspectives in the BSC. The first perspective is finance, which notices the company from the owner's point of view. The objectives of the financial perspective are focused on progress, cost reduction, investment, and market compatibility. This perspective also provides an analysis of whether or not there is an increase in the company's profit from the strategy that has been carried out. The second is the customer perspective which notices the company from the customer's point of view. The goals of the customer perspective are related to market share, customer satisfaction, having new customers, and lifetime customers. The third perspective is an internal business process that notices the aims related to the processes needed to achieve the goals in the financial and customer perspective. The focusing of this perspective is on value systems, innovative or operational processes. Furthermore, the learning perspective as the last perspective focuses on infrastructure and corporate education.

Basically, the BSC concept is the result of strategies and goals translation that will be achieved by a company in the long term (Elisabeth, 2018). Also, BSC provides

strategic objectives for the company into a set of interrelated performance parameters. The BSC concept must be considered by a company. Therefore, it can be used as an accurate measuring assessment and the right decision-making parameter. These two things make the BSC concept an important indicator in assessing the performance of a company (Nazari-Shirkouhi, 2020).

This paper aims to trace the development of BSC over several generations. The new concepts related to BSC were not proposed in this study. However, research trends associated with the BSC over the last three years are described. It is to obtain an analysis related to the development of it as a company performance measurement assessment.

### RESEARCH METHODS

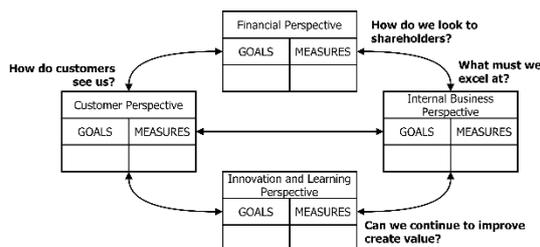
This study is used the narrative literature review method objectively. The step of research consists of collecting the information and literature, comparing, analyzing, discussing, and concluding. The information collected is utilized to follow the changes of each BSC generation and its research trends. Each of the BSC generation changes is identified to mapping the advantages and the otherwise. Furthermore, the research trend related to BSC over three years is used to identify the development of the performance measurement.

## RESULTS AND DISCUSSION

### A. BSC Generations Overview

#### First Generation

Kaplan and Norton (1992) introduced an initial BSC design wherein there are four performance measurement perspectives consisting of one financial perspective and three non-financial perspectives. The non-financial perspective consists of customers, internal business processes, and learning and growth. Each perspective helps answer basic performance questions like Can we continue to improve and create value? What should we excel at? How do customers see us? and How do we look to Shareholders?.



### Figure 1 – The First Generation BSC Concept

Unfortunately, it has several practical problems such as unclear definitions (Lawrie and Cobbold, 2004). In addition, there are difficulties in answering the questions posed by the first-generation BSC design. Especially, it occurs regarding the need to filter that consists of selecting some specific actions to report and grouping. It decides the actions into perspective (Ali, 2019).

In 1993, Kaplan and Norton quickly introduced a new concept of strategic objectives for overcoming adversity. The innovation proposed is the direct mapping between each perspective from several strategic objectives. It makes the first generation BSC design underwent a significant change. Nevertheless, BSC still needs to be developed so that it can be adapted to the development and the user needs. Finally, the second generation BSC appeared to complete it (Ali, 2019).

#### Second Generation

The second-generation BSC was introduced by Kaplan and Norton in 1996. It emerges inasmuch as the definition of the first generation BSC was unclear. The innovation offered is linking the BSC to the company's vision. It provides a way to manage the company's strategy through four important stages as well. The stages consist of translating the company's vision, connecting the vision that has been set to various departments, business planning to achieve the company's vision, and feedback by comparing planned performance with actual performance (Ali, 2019). So, the BSC evolves from a measurement system to a core of management system (Kaplan and Norton 1996).

#### Third Generation

The third generation BSC completes by adding new features to provide more strategic relevance and better functionality. The design is made in reverse. The destination statement becomes the first design activity (Lawrie and Cobbold, 2004). Whereas in the previous generation, it has been the last design of the model. Shulver et al (2000); Cobbold and Lawrie (2002); Lawrie et al (2004) find that an agreement within the management team can be reached quickly if a job starts from a statement of purpose.

#### Fourth Generation

The fourth-generation BSC begins with the strategy. Explicitly, this generation discusses how an organization learns. It accelerates the organization's learning process from its strategy. It means that the organization will be more receptive to change and more able to respond when the change is needed. So, the organization learns about strategies and studies their effects on performance.

The fourth generation uses "The Business Compass". It is a methodology designed by Allan Rodrigues to support the fourth-generation BSC (Ali, 2019). Rodrigues has brought the scorecard concept to the fourth generation by linking the scorecard to corporate value. He also relates the scorecard as a measure of the impact of the company's strategies on society and the environment. Moreover, he correlates four scorecard perspectives from the first generation BSC, Strategy Mapping from the second generation

BSC, Statement of Purpose from the third generation BSC to the current and future value of a company's stock from the fourth Generation BSC. The business compass also measures the impact of the vision and mission on the environment and the wider community (Ali, 2019).

### B. BSC Research Trends

The research about Balanced Scorecard from year to year has run into headway. This is indicated by the many recent studies that have emerged relating BSC to various sectors. currently, many public companies have adopted the BSC as a tool to measure performance. Though before BSC was only known in profit-oriented companies. Table 1 shows research trends on BSC from 2019 to 2021.

**Table 1 – The Research Trends of BSC**

Research by	Result	Recomendation
Xie et al, 2021	Learning and growth is the most significant balanced scorecard perspective for the improvement of renewable energy investment projects.	Using different multi-criteria decision-making (MCDM) method to determine the consistency of the results of this study.
Dwivedi et al, 2021	The combined BSC-BWM model has been successfully applied. The model can measure the performance of an organization. It also integrates the efficiency and effectiveness of the strategies. Eventually, it assists an organization in decision-making.	We can implement the BSC-BWM method in different industries.
Rafiq et al, 2021	The use of BSC is highly recommended to eliminate routine problems and to ensure environmental sustainability.	We can improve the study by adding another variables such as leadership issues and socio-cultural aspects. In addition, this study only includes political and regulatory influences. While, other mediating variables like customers, rival activities, or pressure from NGOs were not discussed. These variable can be considered as moderating variables on the future research.
Benkova et al, 2020	There is a significant relationship between companies that adjust non-financial indicators. So, the use of BSC is important in the industrial sector.	We can focus on modern management tools that fulfill the concept of sustainable development.
Fatima and Elbanna, 2020	It is important for the hospitality and tourism industry to implement the BSC.	We can conduct research on the sustainable tourism sector and emerging tourism management

Research by	Result	Recomendation
Sulastiningsih et al, 2020	<ul style="list-style-type: none"> <li>• Based on growth and learning perspective, supervisory support and training have a major effect on increasing job satisfaction. It can result in strong loyalty from Zakat Institution employees.</li> <li>• Based on the internal process perspective, strong employee loyalty has an effect on improving the quality of services provided.</li> <li>• Based on the customer's perspective, service quality plays an important role in the satisfaction and loyalty of muzakki and mustahiq.</li> <li>• Based on the financial perspective, the result indicates that customer satisfaction and loyalty have an effect on financial performance.</li> </ul>	<p>to ensure effective implementation of the BSC.</p> <p>We can apply the BSC approach to other social entity.</p>
Delen et al, 2020	<p>Study findings show that consumer is the most significant dimension than learning and growth. This means that all consumer-focused criteria have the highest priority.</p>	<p>Further research can be carried out on various sectors and topics that can be evaluated with the proposed methodology. it is like service quality in cosmetics or similar industry segments.</p>
Truong et al, 2020	<p>Internal factors (IF) and external factors (EF) of the tourism company have a positive relationship to the implementation of the BSC in evaluating the performance of tourism companies in Hanoi.</p>	<p>We recommend improving the implementation of the Balanced scorecard in evaluating the performance of tourism enterprises in Hanoi.</p>
Pham et al, 2020	<p>The performance of public hospitals in the Northwest Province of Vietnam is influenced by factors in the BSC model in descending. It shows by the regression coefficients such as internal processes, finance, mission, strategic planning, customers, employee learning and growth.</p>	<p>We can conduct a similar study on other public hospitals in Vietnam with similar conditions.</p>
Firk et al, 2020	<p>The findings suggest that the use of BSC as a framework for preparing conference calls can give an advantage to the company.</p>	<p>The companies can use the BSC as a framework for preparing their conference calls.-</p>
Quezada et al, 2019	<p>Combining SWOT and BSC analysis is very useful for improving company performance.</p>	<p>We can use the same method (SWOT and BSC) in other research areas.</p>
Sarraf and Nejad, 2019	<p>Gray Relational Analysis is an accurate method for measuring the performance of water and wastewater companies compared to Data Envelopment Analysis.</p>	<p>We can apply both methods to measure the performance of water and wastewater companies.</p>

Research by	Result	Recomendation
	In addition, the BSC in this study helps managers to understand the causal relationship between variables.	
Mamabolo and Myres, 2019	The perspectives that adapted from the BSC such as customer, organizational learning and growth, finance, and internal processes can be used as performance indicators.	We can conduct further qualitative research to explain the performance of social enterprises.
Tuan, 2019	Vietnamese commercial banking companies in particular have successfully implemented the balanced scorecard to improve business performance.	We have to promote the application of BSC to improve the performance of Vietnamese Commercial Banks.
Peris-Ortiz et al, 2019	There is a significant effect between the application of the BSC on research performance and higher education innovation.	We can research the implementation of BSC in other educational sectors.

### Discussion

The application of the Balanced Scorecard (BSC) as an instrument is used to measure financial and non-financial performance in a company. It has been carried out for approximately 29 years from 1992 until 2021. The adjustments of the model and design have been conducted for four generations. The changes made are aimed at improving the design and maintain the relevance of the BSC to the growth of the company. So, the BSC is becoming more complex to measure the performance. The development of the BSC generation is also followed by research progress. Many researchers have analyze the BSC as a measuring tool for companies whose implementation areas are very broad.

The research trend on BSC shows a very significant progress. The focus of its research is not only on a profit company but also on a social enterprises. In addition, the researchers also merge BSC with other approaches such as Best-Worst Method (BWM), Gray Relational Analysis, Data Envelopment Analysis, and SWOT analysis. The company must be creative to collaborate the BSC with other models. Hence, the results of the analysis of performance measurement become more accurate.

In 2020, BSC research had been growth rapidly in the sectors that previously did not adopt a performance measurement approach. It is such as zakat institutions and the hospitality tourism industry. Nowadays, zakat institutions have begun to maximize their performance measures to increase public trust and loyalty. This phenomenon shows that BSC is needed by the wider community. Meanwhile, in 2021, the research on BSC is

more focusing on sustainable development in the renewable energy field. The existence of recent studies on BSC can provide insight for the companies. Basically, the implementation of BSC is not rigid but it can be adapted to the needs of each company.

### CONCLUSION

From 1992 to 2021, the Balanced Scorecard has undergone many changes. These are shown by the design process used to make it more relevant to the needs of the company. The BSC changing is related to innovation driven by empirical evidence based on the weaknesses in the former. It does not omit the original idea. The change has also occurred in the trend of research on BSC in recent years. Many researchers have analyzed the use of BSC in unique companies which previously did not adopt it. Hopefully, the latest research related to the BSC can provide knowledge to companies and to the public. Because, the BSC can be used unlimitedly in various fields.

### REFERENCES

- Abemethy, A. M. & Lillies, M. A. (1995). The Impact of Manufacturing Flexibility on Management Control System Desin. *Accounting Organizational and Society*, 20(11), 47-56.
- Ali, M. R. M. (2019). Balanced Scorecard Development Over The Last 26 Years. *IOSR Journal of Business and Management (IOSR JBM)*, 20(1), 13-16.
- Benkova, E., Gallo, P., Balogov, B., & Nemeč, J. (2020). Factors Affecting the Use of Balanced Scorecard in Measuring Company Performance. *MDPI*, 12.

- Cobbold, I. C. & Lawrie, G. J. G. (2002). *The Development of The Balanced Scorecard as a Strategic Management Tool*. Proceedings of the 3rd International Conference on Performance Measurement and Management (PMA 2002). Boston, MA, July.
- Delen, D., Dorokhov, O., Dorokhova, L., Dincer, H., & Yuksel, S. (2020). Balanced Scorecard-Based Analysis of Customer Expectations for Cosmetology Services: A Hybrid Decision Modeling Approach. *Journal of Management Analytics*. doi: <https://doi.org/10.1080/23270012.2020.1818319>
- Dwivedi, R., Prasad, K., Mandal, N., Singh, S., Vardhan, M., & Pamucar, D. (2021). Performance Evaluation of an Insurance Company Using an Integrated Balanced Scorecard (BSC) and Best-Worst Method (BWM). *Decision Making: Applications in Management and Engineering*, 4 (1).
- Fatima, T. & Elbanna, S. (2020). Balanced Scorecard in The Hospitality and Tourism Industry: Past, Present And Future. *International Journal of Hospitality Management*, 91.
- Feltham, G., & Xie, J. (1994). Performance Measure Congruity and Diversity in Multi Task Principal/Agent Relation. *The Accounting Review*, 69, 429-453.
- Firk, S., Hennig, J. C., & Wolff, M. (2020). Can the Balanced Scorecard Help in Designing Conference Calls? The Effect of Balanced Information Composition on the Cost of Capital. *European Accounting Review*. doi: 10.1080/09638180.2019.1709523
- Gallo, P., Mihalcova, B., Timkova, V., & Tomcikova, L. 2018. Importance of Financial and Non-financial Indicators in Companies with the Balanced Scorecard Concept. *General Management*, 19(165), 34-38.
- Harrison, G. S. & Poole. M. (1997). Customer Focused Manufacturing Strategy and the Use of Operation Based Non Financial Performance Measures. *Accounting Organizational and Society*, 22(6), 557-572.
- Kaplan, R. S. & Norton, D. P. (1996). Using the Balanced Scorecard as a Strategic Management System. *Harvard Business Review*, 74(1), 73-85
- Kaplan, R.S. & Norton, D. P. (1992). The Balanced Scorecard – Measures That Drive Performance. *Harvard Business Review*, 70(1), 71–79.
- Lawrie, G. & Cobbold, I. (2004). Third-Generation Balanced Scorecard: Evolution of an Effective Strategic Control Tool. *International Journal of Productivity and Performance Management*, 53(7), 611-623.
- Lawrie, G., Cobbold, I. & Marshall, J. 2004. Corporate Performance Management System in A Devolved UK Governmental Organisation: A Case Study. *International Journal of Productivity and Performance Management*, 53(4).
- Mamabolo. A. & Myres, K. (2019). Performance Measurement in Emerging Market Social Enterprises using a Balanced Scorecard. *Journal of Social Entrepreneurship*, doi: <https://doi.org/10.1080/19420676.2018.1561499>.
- Nazari-Shirkouhi, S., Mousakhani, S., Tavakoli, M., Dalvand, M. R., Saparauskas, J., & Antucheviciene, J. (2020). Importance-Performance Analysis Based Balanced Scorecard for Performance Evaluation in Higher Education Institutions: An Integrated Fuzzy Approach. *Journal of Business Economics and Management*, 21(3), 647–678.
- Peris-Ortiz, M., Garcia-Hurtado, D., & Devece, C. (2019). Influence of the balanced scorecard on the science and innovation performance of Latin American universities. *Knowledge Management Research & Practice*, doi: <https://doi.org/10.1080/14778238.2019.1569488>
- Pham, C. D., Vu, T. S., Pham, Y. T. K., & Vu, N. T. (2020). Evaluating Performance of Vietnamese Public Hospitals Based on Balanced Scorecard. *Journal of Asian Finance, Economics and Business*, 7(6), 339 – 349.
- Quezada, L. E., Reinaldo, E. A., Palominos, P. I., & Oddershede, A. M. (2019). Measuring Performance Using SWOT Analysis and Balanced Scorecard. *Procedia Manufacturing*, 39, 786–793.
- Rafiq, M., Maqbool, S., Martins, J. M., Mata, M. N., Dantas, R. M., Naz, S., & Correia, A. B. (2021). A Study on Balanced Scorecard and Its Impact on Sustainable Development of Renewable Energy Organizations; A Mediating Role of Political and Regulatory Institutions. *MDPI*, 9.
- Sarraf, F. & Nejad, S. H., (2019). Improving performance evaluation based on balanced scorecard with grey relational analysis and data envelopment analysis

- approaches: Case study in water and wastewater companies, *Evaluation and Program Planning*, doi: <https://doi.org/10.1016/j.evalprogplan.2019.101762>
- Shulver, M., Lawrie, G. & Andersen, H. (2000). *A Process For Developing Strategically Relevant Measures Of Intellectual Capital*. Proceedings of the 2nd International Conference on Performance Measurement and Management (PMA 2000), Cambridge, July.
- Simerly, R. L. & Mingfang, L. (1998). The Moderating effect of Environmental Dynamism on The Ownership and Performance Relationship. *Strategic Management Journal*, 19, 258-271.
- Sulastiningsih, Wikaningtyas, S. U., & Novitasari, D. (2020). Improving Performance of Zakat Institution in Poverty Alleviation: Balanced Scorecard Approach. *Tazkia Islamic Finance and Business Review*, 14(2), 142-163.
- Tuan, Tran Trung. (2019). The Impact of Balanced Scorecard on Performance: The Case of Vietnamese Commercial Banks. *Journal of Asian Finance, Economics and Business*, 7(1), 71-79.
- Truong, D. D., Nguyen, H., & Duong, T. Q. L. (2020). Factors Influencing Balanced Scorecard Application in Evaluating the Performance of Tourist Firms. *Journal of Asian Finance, Economics and Business*, 7(5), 217 – 224.
- Vaivio. R. P. (1999). Exploring a Non Financial Management Accounting Change. *Journal of Management Accounting Journal Research*, 10, 409-437.
- Venkatraman, N., & Ramanujam, V. (1986). Measurement of Performance in Strategy Research : A Comparison Approaches. *Academy of Management Review*, 11(4), 801-814.
- Wiklund, Johan. (1994). The Sustainability of The Entrepreneurial Orientation Relationship, Entrepreneurship Theori and Practice. *Academy of Management Review*, 17(4).
- Xie ,Y., Zhou, Y., Peng, Y., Dincer, H., Yüksel, S., & Xiang, P. A., (2021). An Extended Pythagorean Fuzzy Approach to Group Decision-Making With Incomplete Preferences for Analyzing Balanced Scorecard-Based Renewable Energy Investments. *IEEE*, 9.