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# Literature Review: Application of Hospital Performance Analysis with Balanced Scorecard (BSC) in Various Developing Countries, Especially in Southeast Asia

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#### INDEXING Keywords:

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#### **ABSTRACT**

The Balanced Scorecard is a tool that translates the organization's mission and strategy into a set of performance measures that provides a framework for strategic measurement and management systems. This study aims to see the implementation of the balanced scorecard (BSC) in analyzing hospital performance in developing countries in Southeast Asia. The research method used is a mini literature review method that discusses the application of the balanced scorecard in the analysis of hospital performance. The literature is taken from the Google Scholar, Emerald, and Researchgates database in the last few decades (2011-2020) with the keyword "Balance Scorecard in hospital". Articles obtained and reviewed are in the form of journals and books from systematic reviews, experiments, quantitative survey results and qualitative studies. The inclusion criteria in this literature review are journals that are used to analyze hospital performance using a balance scorecard (BSC), and are applied in developing country hospitals in Southeast Asia, while the exclusion criteria are journals that are not complete text. The conclusion of this study is that the application of the balance scorecard has been widespread in the Southeast Asia region, the journals that were studied using the balance scorecard can improve hospital performance. In addition, the results of the performance analysis with a balanced scorecard in the hospital can provide clear directions in determining policies, resources, direction and destructive goals. The balance scorecard can not only be applied in private hospitals, but government hospitals can also implement it.

#### Kata kunci:

Kinerja; Rumah Sakit; Balance Scorecard; ASEAN;

#### ABSTRAK

Balanced Scorecard merupakan suatu alat yang menerjemahkan misi dan strategi rumah sakit ke dalam seperangkat ukuran kinerja yang komprehensif yang menyediakan kerangka kerja untuk pengukuran strategis dan sistem manajemen. Penelitian ini bertujuan untuk mengetahui implementasi balanced scorecard (BSC) dalam menganalisis kinerja rumah sakit di negara berkembang di wilayah Asia Tenggara. Metode penelitian yang digunakan adalah metode mini literature review yang membahas penerapan balanced scorecard dalam analisis kinerja rumah sakit. Literatur diambil dari data base Google Scholar , Emerald, dan Researchgates dalam beberapa dekade terakhir (2011-2020) dengan kata kunci "Balance Scorecard in hospital". Artikel yang didapat dan ditelaah berupa jurnal dan buku baik dari systematic review, eksperimen, hasil survei kuantitatif dan studi kualitatif. Kriteria inklusi dalam literatur review ini yaitu jurnal yang digunakan menganalisis kinerja rumah sakit menggunakan balance scorecard (BSC), dan diterapkan di rumah sakit negara Berkembang di Asia Tenggara sedangkan kriteria eksklusi adalah jurnal yang ditampilkan tidak full text. Kesimpulan dari penelitian ini yaitu didapatkan penerapan balance scorecard sudah meluas di wilayah Asia Tenggara, jurna yang ditelitil menyimpulkan penggunaan balance scorecard dapat meningkatkan kinerja rumah sakit. Selain itu hasil analisis kinerja dengan balance scorecard di rumah sakit dapat memberikan arahan yang jelas dalam menentukan kebijakan, sumber daya, arah dan tujuan ruamh sakit. Balance scorecard tidak hanya dapat diterapkan di rumah sakit swasta, namum rumah sakit pemerintah juga dapat mengimplementasikannya.

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#### **INTRODUCTION**

Southeast Asia is a region with more than half a billion population spread across various countries with diverse global economic and health strengths. Southeast Asia consists of ten independent countries located along the continental arc and islands off the coast of Asia, these ten countries are members of the Association of Southeast Asian Nations (ASEAN) which includes Brunei, Indonesia, Philippines, Cambodia, Laos, Malaysia, Myanmar, Singapore, Thailand and Vietnam. The geology of the Southeast Asia region is very vulnerable to earthquakes and tsunamis and even seasonal hurricanes and floods, so that this geographical situation increases the need for health facilities. (Chongsuvivatwong et al., 2011)

The increasing demand for health services in Southeast Asia has become a bright spot for investment for health service providers, this is also supported by changes in population demographics with the emergence of various chronic diseases in the upper middle class population in Southeast Asia from 344 million in 2015 to 382 million in 2020 which accounts for approximately 70% of the disease burden in each of these areas (Momin, Zafar, 2016; Ogawa, 2015). However, in line with these opportunities, it should also be noted that the main challenges in health care providers in Southeast Asia include high market valuation, insufficient supply of doctors and nurses, uncertainty over patient willingness to pay, dilution of quality standards of care, and inability to provide health care services. which is cost effective. So that as a capital-intensive, labor-intensive and technology-intensive organization, in carrying out its activities the hospital must overhaul its management system and improve its strategy to be more effective in order to survive and reach the desired consumer group (Sciulli & Missien, 2015).

The traditional way of measuring hospital performance by only using financial reports has limitations, namely that it cannot represent how the company is and does not describe future opportunities and events, because financial reports will only encourage short-term actions of the company and sacrifice the long-term interests of the company. So to overcome this, the measurement of hospital performance is combined with factors outside of financial or non-financial factors using the Balance Scorecard (BSC) method (Behrouzi et al., 2014; Fariz, 2019; Shukri & Ramli, 2015).

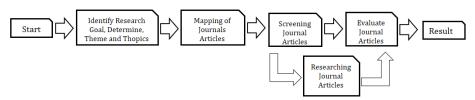
Kaplan and Norton introduced the Balanced Scorecard in a 1992 Harvard Business Review article. The Balanced Scorecard is one of the most popular and practical concepts used to measure company performance. Over the past 15 years the balance scorecard has been adopted by thousands of private, public, service and non-profit companies around the world, therefore Kaplan and Norton have expanded the Balanced Scorecard concept to become a management tool for describing, communicating, and implementing strategies, so that today the Balanced Scorecard not just a tool to assess performance (Behrouzi et al., 2014; Kaplan & Norton, 2001a). The Balanced Scorecard concept transforms the company's vision and strategy into a comprehensive set of performance indicators that provides a framework for assessing its strategy and management system. The Balanced Scorecard measures the company's performance using four balanced perspectives, namely the financial perspective,

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the customer perspective, the internal business process perspective, and the learning and growth perspective. dominating perspective (Behrouzi et al., 2014; Kaplan & Norton, 2001a; Lovaglio, 2011). Therefore, this study aims to determine how the implementation and application of the Balanced Scorecard in various hospitals in developing countries in Southeast Asia using the mini literature review method. In this study, it is only a literature review on how to apply the balanced scorecard method in developing country hospitals in Southeast Asia.

#### RESEARCH METHOD

This literature review uses the mini literature review method which discusses the application of the balanced scorecard in analyzing hospital performance. The literature is taken from the Google Scholar, Emerald, and Researchgates database in the last few decades (2011-2020) with the keyword "Balanced Scorecard in hospital". Articles obtained and reviewed are in the form of journals and books from systematic reviews, experiments, quantitative survey results, and qualitative studies. The inclusion criteria in this review literature are journals that are used to analyze hospital performance using a balanced scorecard (BSC) and are applied in developing country hospitals in Southeast Asia, while the exclusion criteria are journals that are not displayed in full text.



Picture.1 Research Metodology

#### RESULT AND DISCUSSION

The results of literature screening on the database determined on the balance scorecard in analyzing hospital performance in developing countries in Southeast Asia found several journals that successfully met the inclusion and exclusion criteria. Of the 9 developing countries in the Southeast Asia region, there are only 5 countries using the balance card. Other developing countries in Southeast Asia, such as the Philippines, Brunei, Laos, Cambodia, and Timor Leste have not found supporting literatures.

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**Table.1 Description of selected research** 

Tittle	Country	<b>Paper Identity</b>
Implementation of the Balanced Scorecard Approach in Industries: A Systematic Literature Review	Indonesia	Dias Irawati Sukma (2020)
Performance Measurement Using Balanced Scorecard (BSC) (Study at Hospitals in Pasuruan)	Indonesia	Abd Rahman Taufik Ali Djamhuri Erwin Saraswati (2018)
The Implementation Of Balanced Scorecard Customer Perspective As Performance Measurement: A Case Study On Surabaya "X" Hospital, Indonesia	Indonesia	Fariz (2019)
Organizational Structure and Performances of Responsible Malaysian Healthcare Providers: A Balanced Scorecard Perspective	Malaysia	Nur Faezah Mohd Shukria, Aliza Ramlia (2015)
Balanced Scorecard and Strategic Alignment: A Malaysian Case	Malaysia	Hazeline Ayoup, Normah Omar, Ibrahim Kamal Abdul Rahman (2016)
Evaluating Performance of Vietnamese Public Hospitals Based on Balanced Scorecard	Vietnam	Cuong Duc PHAM1, Sen Thi VU2, Yen Thi Kim PHAM3, Nam Thi VU4 (2020)
From unbalanced to balanced: performance measures in a Vietnamese hospital	Vietnam	Luu Trong Tuan (2012)
Performance Evaluation of Community Hospitals in Thailand: An Analysis Based on the Balanced Scorecard Concept	Thailand	Somnuk Aujirapongpan, Kanookwan Meesook, Pornpan Theinsathid, Chanidapa Maneechot (2019)
Use of a Balanced Scorecard in strengthening health systems in developing countries: an analysis based on nationally representative Bangladesh Health Facility Survey	Myanmar	M. Mahmud Khan, David R. Hotchkiss, Tania Dmytraczenko and Karar Zunaid Ahsan (2012)

The Balanced Scorecard is a tool that translates an organization's mission and strategy into a comprehensive set of performance measures that provides a framework for strategic measurement and management systems. The Balanced Scorecard is also an integrated management system consisting of three components of a strategic management system, communication tools, and measurement system (Kaplan & Norton, 2001a). The result is a series of carefully selected actions that are drawn from and linked to the core strategy of the organization. Hospital performance is defined in terms of achieving certain goals, whether medical or managerial. The term performance denotes not only quality but also other factors such as cost of care, access to care, and the relationship between patient satisfaction and expectations. High performance is identified as the provision of effective, high-quality, well-available health services resulting in patient satisfaction (Markazi,M et al., 2016)

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The BSC concept transforms a company's vision and strategy into a comprehensive set of performance indicators that provides a framework for assessing its strategy and management system. BSC measures company performance using four balanced perspectives, namely finance, customers, internal business processes and growth and learning. Therefore Kaplan and Norton divide the balance scorecard into four perspectives. The four perspectives include a financial perspective (financial), a consumer perspective (customer), an internal business perspective (internal business process), and a growth and learning perspective (learning and growth). The idea of a causal relationship between objectives and actions of the Balanced Scorecard leads to the creation of strategy maps (Behrouzi et al., 2014; Kaplan & Norton, 2001).

A number of journals analyzed have their respective differences in discussing performance analysis with balance scorecards in hospitals, but in general, researchers use balance scorecard analysis in hospitals to compare theory and implementation in hospitals and to assess the success of strategic plans in one period. It is also done to study the accreditation index, clinical governance pillars, and the balanced scorecard perspective in order to achieve a concept that is easy to understand, for evaluating hospital performance.

Research in Vietam examined 6 factors of success in implementing the balance scorecard, namely four balanced scorecard perspectives plus the hospital mission and hospital strategy, of these six factors there were 3 factors that significantly affected improving hospital performance, namely hospital mission, internal business processes and financial (PHAM et al., 2020). In contrast to the study in Thailand which used a balance scorecard to determine performance trends over the last five years from 52 hospitals in Thailand, the results of this analysis showed that the trend and performance of hospitals in each balanced scorecard perspective in the last 5 years showed no difference, this shows that balance scorecard is useful for knowing the performance and achievement of the hospital so that the hospital must improve its strategy (Aujirapongpan et al., 2020). Research in Malaysia aims to assess the organizational structure and performance of hospitals using the Balanced Scorecard by focusing on perceptions of power holders. The results revealed that the majority of private hospitals in Malaysia that adopt the Balanced Scorecard are highly centralized and formalized, which means that these hospitals adhere to formal written rules and procedures to ensure the management and governance of health providers act according to espoused values. As such, there is a legitimate link with improved performance in this sector on key aspects: internal business processes, quality of patient service, safety and satisfaction, learning and organizational growth, and finance (Shukri & Ramli, 2015). While research in Indonesia examines the implementation of the balance scorecard in various industrial sectors, one of which is the hospital, the results show that there are similarities in the implementation of the balance scorecard in the BUMN, Health, Cooperative, Medical and Transportation Industry industries, so that the purpose of improvising the application of the balance scorecard method can be applied in all business sectors (Irawati, Dias 2020).

Recommendations given from each study state that in implementing the BSC it is necessary to improve performance in every sector of internal business processes, quality of

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patient services, safety and satisfaction, learning and organizational growth, and finance. This is because there are still several problems related to improving the quality and satisfaction of patients in the health care sector at private hospitals (Shukri & Ramli, 2015). Research in Indonesia recommends an increase in the assessment of hospital performance from the BSC perspective by looking at the ratio of patient satisfaction to hospital services (Irawati,Dias 2020). The recommendation for research in Thailand is that hospital community management should promote high-performing health care systems and improve health care policies and practices through discussion of the BSC method (Aujirapongpan et al., 2020). Research recommendations in Vietnam state that to increase the effectiveness of hospitals, they must focus on applying the BSC method, especially on strategic factors of planning, customers, learning and employee growth (PHAM et al., 2020).

#### **CONCLUSION**

The results of a literature review on seven journals show that the application of the balance scorecard has been widespread in the Southeast Asia region, all journals concluded that the use of a balanced scorecard can improve hospital performance. The results of performance analysis with a balanced scorecard in the hospital can provide clear direction in determining policies, resources. The balance scorecard can not only be applied in private hospitals, but government hospitals and various industries in addition to other health sectors. The findings of existing studies should also be enriched by the literature and with empirical evidence about the benefits of using balance scorecard in hospitals. This will also provide experience for a number of countries in ASIA and in the world that can be a reference for expanding the implementation of the balance scorecard in hospital administration.

#### REFERENCES

- Aujirapongpan, S., Meesook, K., Theinsathid, P., & Maneechot, C. (2020). *Performance Evaluation of Community Hospitals in Thailand: An Analysis Based on the Balanced Scorecard Concept*. Iranian Journal of Public Health. https://doi.org/10.18502/ijph.v49i5.3207
- Ayoup, H., Omar, N., & Rahman, I. K. A. (2016). *Balanced Scorecard and Strategic Alignment: A Malaysian Case*. 6, 11.
- Behrouzi, F., Shaharoun, A. M., & Ma'aram, A. (2014). *Applications of the balanced scorecard for strategic management and performance measurement in the health sector*. Australian Health Review, *38*(2), 208. https://doi.org/10.1071/AH13170
- Chongsuvivatwong, V., Phua, K. H., Yap, M. T., Pocock, N., Hashim, J., Chhem, R., Wilopo, S., & Lopez, A. (2011). Health in Southeast Asia 1 Health and health-care systems in southeast Asia: Diversity and transitions. *Lancet*, *377*, 429–437. https://doi.org/10.1016/S0140-6736(10)61507-3

Website: http://thejournalish.com/ojs/index.php/ichf/index

- Fariz, F. (2019). The Implementation Of Balanced Scorecard Customer Perspective As Performance Measurement: A Case Study On Surabaya "X" Hospital Indonesia. *Eurasia: Economics & Business, 3*(21), 31–38.
- Implementation of the Balanced Scorecard Approach in Industries: A Systematic Literature Review | Irawati | IJIEM (Indonesian Journal of Industrial Engineering & Management).

  (n.d.). Retrieved February 21, 2021, from https://publikasi.mercubuana.ac.id/index.php/ijiem/article/view/10161/3977
- Kaplan, R. S., & Norton, D. P. (2001a). Transforming the Balanced Scorecard from Performance Measurement to Strategic Management: Part I. *Accounting Horizons*, *15*(1), 87–104. https://doi.org/10.2308/acch.2001.15.1.87
- Kaplan, R. S., & Norton, D. P. (2001b). Transforming the Balanced Scorecard from Performance Measurement to Strategic Management: Part II. *Accounting Horizons*, *15*(2), 147–160. https://doi.org/10.2308/acch.2001.15.2.147
- Lovaglio, P. G. (2011). Model building and estimation strategies for implementing the Balanced Scorecard in Health sector. *Quality & Quantity*, 45(1), 199–212. https://doi.org/10.1007/s11135-010-9364-2
- Markazi-Moghaddam, N., Arab, M., Ravaghi, H., Rashidian, A., Khatibi, T., & Zargar Balaye Jame, S. (2016). A Knowledge Map for Hospital Performance Concept: Extraction and Analysis: A Narrative Review Article. *Iranian Journal of Public Health*, 45(7), 843–854.
- Ogawa, N. (2015). Demographic Change in Southeast Asia: Recent Histories and Future Directions edited by LindyWilliams and Michael PhilipGuest, Ithaca, NY, Southeast Asia Program Publications, Southeast Asia Program, Cornell University, 2012, 221 pp.: Book Reviews. *The Developing Economies*, 53(2), 150–154. https://doi.org/10.1111/deve.12074
- PHAM, C. D., VU, S. T., PHAM, Y. T. K., & VU, N. T. (2020). Evaluating Performance of Vietnamese Public Hospitals Based on Balanced Scorecard. *The Journal of Asian Finance, Economics and Business, 7*(6), 339–349. https://doi.org/10.13106/JAFEB.2020.VOL7.NO6.339
- Sciulli, L. M., & Missien, T. L. (2015). Hospital service-line positioning and brand image: Influences on service quality, patient satisfaction, and desired performance. *Innovative Marketing*, 11(2), 11.

Website: http://thejournalish.com/ojs/index.php/ichf/index

- Shukri, N. F. M., & Ramli, A. (2015). Organizational Structure and Performances of Responsible Malaysian Healthcare Providers: A Balanced Scorecard Perspective. *Procedia Economics and Finance*, 28, 202–212. https://doi.org/10.1016/S2212-5671(15)01101-6
- Taufik, A. R., Djamhuri, A., & Saraswati, E. (2019). Performance Measurement Using Balanced Scorecard (BSC) (Study at Hospitals in Pasuruan). *Journal of Accounting and Business Education*, *3*(1), 1–20. https://doi.org/10.26675/jabe.v3i1.11553
- Trong Tuan, L. (2012). From unbalanced to balanced: Performance measures in a Vietnamese hospital. *Leadership in Health Services*, *25*(4), 288–305. https://doi.org/10.1108/17511871211268937