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To cite this article: T Harihayati *et al* 2018 *IOP Conf. Ser.: Mater. Sci. Eng.* **407** 012067

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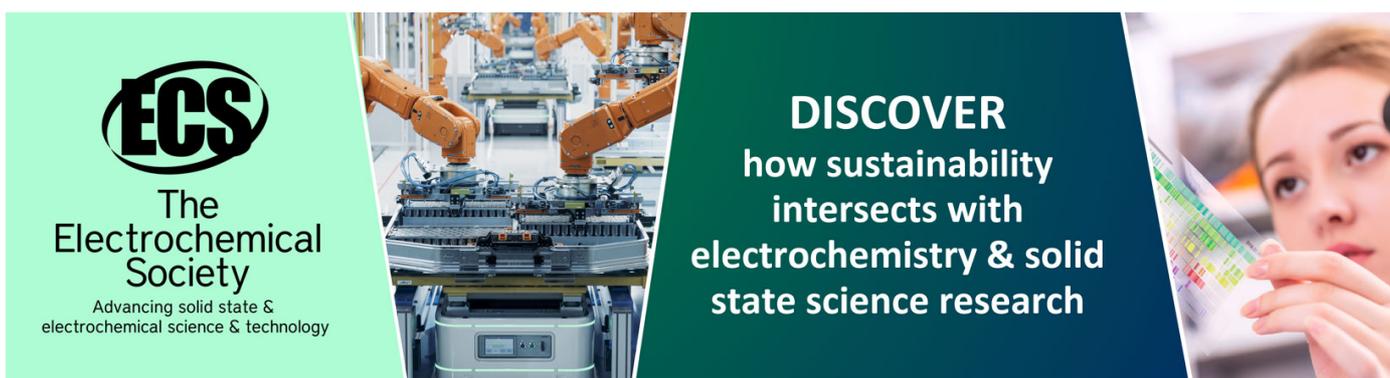
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The company's performance assessment using balanced scorecard

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Abstract. The purpose of this study is to produce a model that can be used as a reference by the managerial in overseeing the implementation of corporate activities and facilitate in measuring the achievement of companies in all sectors. The methods used to reveal the condition of the company and the right strategy using the SWOT analysis. The tool to determine the company's current strategy is to use SWOT analysis. Each strategy target that has been determined will be determined Key Performance Indicator (KPI) and grouped into the perspective of the company using the Balanced Scorecard method. The result of this research is managerial can monitor the achievement of company in all sectors such as financial sector, customer, internal business, and growth and learning. This is because the BSC is a tool that can be used by the managerial to measure the company's performance as a whole based on the strategy goals that have been established both in the financial sector and non-financial.

1. Introduction

A company must have a vision and mission to be achieved. One of the ways used to measure the extent to which a company achieves its vision and mission is to use the Balanced Scorecard (BSC). BSC is a performance measurement system that can be applied either to large companies or small companies that function to connect between the vision and mission of the organization with the operational activities of the company[1]. BSC consists of two words: (1) scorecard and (2) balanced (balanced). A score card is a card used to record a person's performance score. These scorecards can also be used to plan the scores to be achieved or that personnel manifest in the future. The word balanced is intended to show that the performance of personnel is measured on a balanced basis from two aspects: financial and noncash, short-term and long-term, internal and external. Kaplan and Norton introduce 4 different perspectives of a company's activities that can be evaluated by management[1,2].

There are several ways to assess companies in addition to using BSC, is to use Performance Prims in the form of a three-dimensional framework of triangular prism, where the upper side is the satisfaction of stakeholders, the bottom is the contribution of stakeholders, and the other three are strategies, processes and capabilities [3], however this way does not have a standard measurement system and does not have many success reports because Performance Prims is a new framework. In addition to performance prims, there is another way of using Integrated Performance Measurement System (IPMS), where it divides business into four levels, ie business corporate, business unit, business process and activity [4, 5], however IPMS is not yet integrated in financial performance measurement predicting current and future financial conditions.



Therefore, in assessing the company's performance financial and non-financial aspects must be integrated [6], it can be used in conjunction with other approaches such as IWA2 to improve efficiency and effectiveness [7] and can be supplemented by other indicators according to strategy of company to be achieved [8], then this study will discuss the company's performance assessment on Company of Training Services and Management Consulting using the Balanced Scorecard.

2. Research methods

This research refers to Incorporating Design Thinking into Sustainable Business Modelling by Lehmann, Bocken, Steingrimsson, and Evans [9] to construct a company's performance assessment model on training services and management consultancy. The flow of this research consists of several stages. The first stage is analyze the condition of the company using SWOT analysis and Analytic Hierarchy Process (AHP) method. This stage is to determine the company's strategy based on internal and external indicators of the company that has been adapted to the vision and mission of the company. The condition of the company analyzed comes from PT. XYZ is engaged in training services and management consultancy. The second stage is to determine the target of strategy using Key Performance Indicator (KPI) to every aspect of Balanced Scorecard (BSC), both financial and non-financial aspect. The third stage is to assess the performance of the company based on the comparison between the achievement and the target of each KPI that has been established in the previous stage., and the last stage is designing model of the company's performance assessment (See Figure 1).

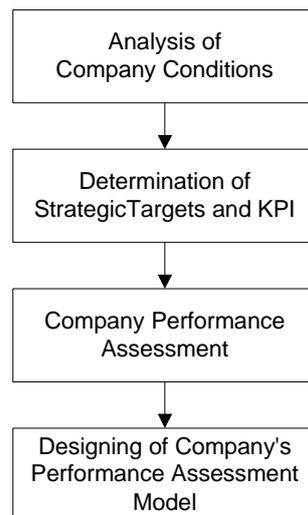


Figure 1. The flow of the research method.

3. Results and discussion

The Company's current Strength, Weakness, Opportunity, and Threat indicators are obtained based on the company's vision and mission [10], the results of interviews with the managerial of company of training services and management consultancy PT. XYZ. The indicators generated from the SWOT analysis will be divided into two parts, namely the internal and external parts. The company's internal environment contains its own Strength and Weakness indicators, and the company's external environment contains its own Opportunity, and Threat indicators. Indicator of internal environment and external environment owned by PT XYZ can be seen in table 1 and table 2.

Table 1. Internal environment indicators.

Strength	Weakness
<ul style="list-style-type: none"> - Training content that is more prominent in terms of spiritual - Number of events increased - The company experience is quite a lot in dealing with projects with large companies - Satisfaction with continuous training content increase - Human resources who are competent in their field - Income increases - Number of events increased - Complete training facilities- Training content that is more prominent in terms of spiritual 	<ul style="list-style-type: none"> - The less satisfactory level of worship services - Lack of organizing committees - Number of clients does not increase - Products that are lacking in care - The level of human resource training the less - The company does not have ROA yet - Products that are less innovative

Table 1 shows the internal environmental indicators of PT. XYZ in 2014 consisting of strength indicators and weakness indicators.

Table 2. External environment indicators.

Opportunity	Threat
<ul style="list-style-type: none"> - Loyal customers - A lot of alumni - There are still many agencies and companies that have not been explored - Events can be performed regularly or continue - Many Tenders are opened by companies or private and public agencies Income increases 	<ul style="list-style-type: none"> - Many Competitors - Market demand for more innovative products - Declining spiritual trends - Participant's satisfaction on event implementation decreased - Many tenders are rejected - The committee is still not bound by contract - The number of Participants decreasing is quite high - The price of operational needs is increasing

Table 2 shows the external environmental indicators of PT. XYZ in 2014 consisting of opportunity indicators and threat indicators.

Each indicator (table1 and table 2) is given weight based on interview result with managerial of PT. XYZ, then calculated using the IFAS (Internal Factor Analysis Summary) matrix and EFAS (External Factor Analysis Summary) to determine the current state of the company. The weights present in the IFAS matrix and the matrix of EFAS are obtained using the Analytic Hierarchy Process (AHP) method [11]. The SWOT analysis that has been done will result in the strategy targets of the company, and each strategy target will be determined KPI in its measurement.

After all the strategic targets and KPI Balanced Scorecard Companies are established, the next step is to measuring the weight of the Balanced Scorecard KPI interests. There are three levels that are compared here, ie perspective level, strategic target level, and KPI level. The weight of each level is obtained and determined by the managerial of PT. XYZ. Value processing techniques used to calculate the final score of each level with the total weight of the maximum level is worth 100 and a minimum of 0, this technique is called the Hundred Scoring technique [12]. Table 3 shows the value information used in the form of Hundred Scoring which will be used in the company performance assessment.

Table 3. Description value.

No.	Information	Symbol	Minimum Value	Maximum Value
1	Very good	A	91	100
2	Good	B	76	90
3	Enough	C	64	75
4	Less	D	41	60
5	Bad	E	0	40

Analysis of company performance assessment PT. The XYZ in 2014 contained in Table 4 shows that the company currently has performance that can be classified under "good" condition with a performance score of 76.43, which is obtained from the performance of 4 perspectives, with details: Financial Perspective 21.50, Customer Perspective 23.25, Internal Business Perspective 19.43, and Growth & Learning Perspective 12.25.

Table 4. Corporate performance assessment.

Perspective	Strategic target	Value	KPI	Target / Realization	Polarization	Value	Implementer
Finance (25%)	Achieving ROA (20%)	16	ROA (100)	40/50	Maximum	80	Secretariat
	Increased net income (40%)	30	Revenues (40%) Net Income (60%)	13.600/18.656 1.574/1300	Maximum Maximum	29 47	Program Program
	Decrease in operating costs (40%)	40	Cost of goods sold event (100%)	75.65/75.65	Minimal	100	Program
Value Financial Perspective							21.50
Customer (25%)	Increased customer satisfaction (40%)	43	Customer satisfaction (75%)	87.25/80	Maximum	81	Operational
			Customer satisfaction for the content of the event (25%)	86.72/80	Maximum	27	Operational
	Increase the number of events (15%)	15	Number of event (100%)	169/220	Maximum	105	Marketing
	Boosting the number of participants (25%)	15	The number of participants (100%)	14484/20000	Maximum	61	Marketing
	Increased number of clients (20%)	20	Number of clients (100%)	70/70	Maximum	100	Marketing
Values Customer Perspective							23.25
Internal Business (25%)	Increased prospects for events (50%)	65.25	Total Prospects event (100%)	1000/1305	Maximum	103.5	Marketing
	Evaluation of the event products (25%)	12.25	Product Evaluation (100%)	2/4	Maximum	50	Program
	Creation of new event products (25%)	0	The new event product (100%)	0/1	Maximum	0	Program
Value Internal Business Perspective							19.43
Learning & Growth (25%)	Improved practice of worship (30%)	18	The level of religious practice (100%)	42.55/70	Maximum	60	Secretariat
	Increased discipline of employees (40%)	26	Delay level (100%)	3 / 4.99	Minimal	66	Secretariat
	Increased training (30%)	5	HR training (100%)	13.5/80	Maximum	17	Secretariat
Value Learning and Growth Perspective							12.25
Value Company Performance							76.43

Table 4 also shows that the growth and learning perspective of this company has the smallest achievement among other perspectives, with an achievement score of 12.25. One of the causes of the small value from the perspective of growth and learning is the strategy of improving human resources training which has a value of 5, this is because currently only 13.5% of the company's HR have attended the training of the target to be achieved by 80%. The focus of the company in planning the next year's strategy on the existing HR training improvement strategy. Assessment of the division can be seen in the table 5. The assessment result show some divisions are still in the classification "Less", for example the Programs and Operations division caused by small achievement value obtained by strategy improvement of training and programming, it is expected for this division to be able to finish strategy of training and making program for the implementation of all activities of company.

Table 5. Division assessment.

Division	Amount	Value	Average	Index	Information
Secretariat	4	223	55.75	D	Less
Program	4	226	45.2	D	Less
Marketing	4	396.5	99.12	A	Very good
Operational	1	108	54	D	Less

The result of PT XYZ performance assessment using a Balanced Scorecard produces a performance assessment model (See Figure 2).

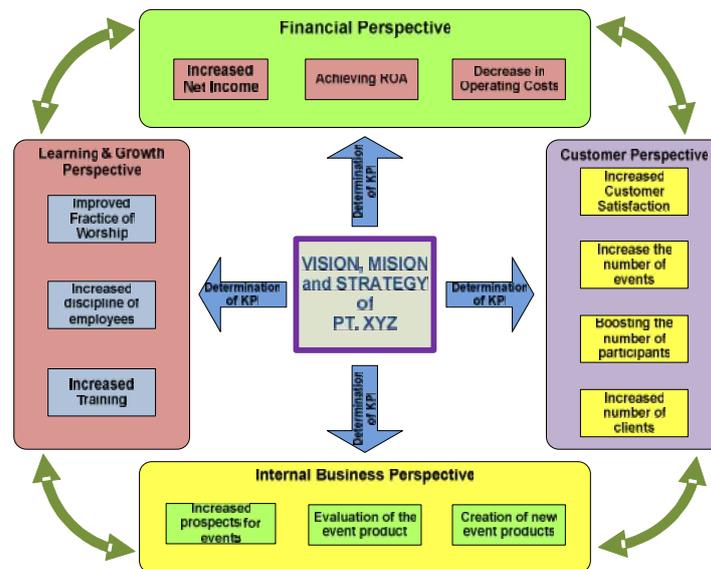


Figure 2. The company’s performance assessment model PT. XYZ.

The dynamic business environment and rapid change, enabling company management strategies to implement an integrated performance assessment system that can measure changes in the financial and non-financial sectors [6]. BSC will allows for efficient communication between all units/divisions of the company during the implementation of established strategies, and implements feedback for adjustment of predetermined goals for units and individuals with company goals [1].

4. Conclusion

This BSC model can be used as a reference by the managerial in overseeing the implementation of corporate activities and make it easy in measuring the achievement of companies in all sectors.

Acknowledgments

The authors would like to thank the Rector of Universitas Komputer Indonesia who has encouraged the making of this paper. Thanks also to my fellow comrades in the Informatics Engineering course which has provided prayers, motivation, and spirit and family of writers who understanding and always pray that this paper can be completed.

References

[1] Kaplan R S and Norton D P 1996 *Translating Strategy Into Action The Balanced Scorecard*. (USA: Library of Congress Cataloging in Publication Data) **12** 1 p 1-10
 [2] Zizlavsky O 2013 The Balanced Scorecard: Innovative Performance Measurement and Management Control System *Journal of Technology Management & Innovation* **9** **12** 1 p

210-222

- [3] Neely A D and Adams C A 2000 *The Performance Prism in Practice, Centre for Business Performance* (UK: Cranfield School of Management) **11** 2 p 1-10
- [4] Bititci U S, Carrie A S and McDevitt L G 1997 Integrated Performance Measurement Systems: A Development Guide *International Journal of Operations and Production Management* **17** 6, May/June 1997. MCB University Press, ISSN 0144-3577 **12** 2 p 522-535
- [5] Yuki G, Ni Made Yunita S, Martua F P and Dermawan W 2016 Analysis Of Integrated Performance Measurement System In PT X *First International Conference on Advanced Business and Social Sciences (ICABSS-Bali)* **13** 1 p 109-119
- [6] Zizlavsky O 2014 The Balanced Scorecard: Innovative Performance Measurement and Management Control System *Journal of Technology Management & Innovation (J. Technol. Manag. Innov)* **9** 3 p 210-222
- [7] Tohidi H, Jafari A and Afshar A A 2010 Using Balanced Scorecard in Educational Organizations *Procedia Social and Behavioral Sciences* p 5544-5548
- [8] Chih-chao Chung, Li-chung Chao, Chih-Hong Chen and Shi-Jer Lou 2016 A Balanced Scorecard of Sustainable Management in the Taiwanese Bicycle Industry: Development of Performance Indicators and Importance Analysis *Journal Sustainability* **8** 6 www.mdpi.com/2071-1050/8/518, accessed on Wednesday April 11, 2018 at 13:25 pm.
- [9] Lehmann M, Bocken N M P, Steingrimsson J G and Evans S 2015 Incorporating Design Thinking into Sustainable Business Modelling *In Proceeding of the 2nd International Conference on Sustainable, Seville, Spain* p 12-14
- [10] Rangkuti F 2004 *Analisis SWOT Teknik Membedah Kasus Bisnis* (Jakarta: PT Gramedia Pustaka Utama)
- [11] Seker S and Ozgurler M 2012 Analysis of the Turkish Consumer Electronics Firm Using SWOT-AHP Method *Procedia Social and Behavioral Sciences*
- [12] Bedjo S 1987 *Manajemen Tenaga Kerja*. (Bandung: Sinar Baru)