DEVELOPING THE BALANCED SCORECARD FRAMEWORK FOR MALAYSIAN PRIVATE INSTITUTIONS OF HIGHER LEARNING

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ABSTRACT: *The Performance of Institutions of Higher Learning (IHL) is one of the important factors in pushing Malaysia to become an international education hub. In Malaysia, Private Institution of Higher Learning (PIHL) constitutes about 85% of the tertiary education sector in Malaysia. In order to materialize this aim, PIHLs must adopt the most ideal performance measurement system (PMS) to measure their performance. In the 20th century, Balanced Scorecard (BSC) introduced by Kaplan & Norton has been widely utilized among profit-oriented businesses and western universities to measure their performance. Different organizations adopt BSC differently, in line with their organization's vision, mission, and strategic goals. Therefore, this paper aims to introduce a BSC as a Performance Measurement System (PMS) to be applied among Malaysian PIHL. Semi-structured interviews were conducted among the administrators of selected Malaysian PIHL to gather information on the BSC perspective indicators. The proposed BSC framework was tested using a survey questionnaire. The interview and descriptive results of this study revealed that majority of the interview respondents and academicians' at the university extensively agrees that the measurement used in the proposed BSC framework is ideal in assessing academicians' performances, particularly in PIHL. The findings from this study can be used to monitor PIHL performance and enable them to adjust to the emerging challenges that come as a result of implementing key strategies.*

Keywords: Balanced Scorecard, Private Institution of Higher Learning, Performance Measurement System

1. INTRODUCTION

The sustainability of the Private Institution of Higher Leanings (PIHL) is more challenging compared to the public institutions. Their responsibilities are not only meant for teaching, doing research and publication [1] but they also have to ensure their education business is able to sustain over the years without compromising their education quality and responsibility to various stakeholders. Furthermore, PIHL needs to have a clear vision, mission and strategy system to cope with this challenging environment. Public institutions in Malaysia are following the Myra requirement set up by the Ministry of Higher Education of Malaysia (MOHE) to ensure they are within the right direction. However, it is very difficult for certain PIHL to adapt to that approach because of their capacity and capability. Without a proper performance measurement system (PMS), they would not be able to sustain long term. Balanced Scorecard (BSC) is a strategic management system that translates a higher education institution's mission and strategy into a comprehensive set of performance measures that provides a framework for a strategic measurement and management system [2]. BSC is regularly used and ideal for manufacturing industries but it is also adopted by western universities. However, the empirical research on the development and implementation of BSC in Malaysian PIHL also found to be very limited. Thus, the current paper will focus at developing the BSC Framework and tries to discuss how it may be beneficial in the performance measurement of Malaysian PIHL.

2. LITERATURE REVIEW

2.1 Balanced Scorecard

BSC was first developed by [3] as a strategic performance measurement model to translate an organization's mission and vision into actual action (operational and strategic planning). BSC intends to combine the use of financial and non-financial measures such as customer, internal business process, and learning and growth so that managers are provided with more detailed information than financial measures alone [2]. Over the years, the BSC concept has evolved through a series of papers and books published by Kaplan and Norton transforming the scorecard concept from an innovative, but relatively simple performance measurement tool, to a complex Performance Management System (PMS) [2-13]. The integration of the four perspectives as shown in figure 1 creates a "balanced" approach to overcome the limitations of traditional PMS which relies on financial outcomes [2, 14]. The BSC is a comprehensive framework that helps in translating the organization's strategic objectives into a coherent set of performance measures. This is done so that effective measurement becomes an integral part of the management process.

The financial perspective is important for shareholders and stakeholders, especially in regards to the key strategic implementation and assessment of organizations' performance. To make the key strategy effective and reliable performance measures, Niven [15] suggested that the financial aspect has to be embedded into the organizations' vision and mission statement and the transformation of financial issues into sustainable goals and minimal cost. Good financial strategic objectives and financial performance measures allow the organization to enhance long-term stakeholder values, meanwhile, it can provide evidence of whether or not the company's financial strategy is increased in profit and decreased in costs [16]. Customer forms another important perspective to strengthen the financial strategy. Kaplan & Norton [3] indicated that an organization needs to identify the two types of customers which the core measure group usually include customer satisfaction, acquisition, profitability and retention including market share. The second strategy is how organization positions the customer value that includes product quality and attributes, image and

relationship. Kaplan & Norton [2] suggested to organizations to include customer satisfaction indicators in internal PMS and compensation plans.

From the perspective of internal processes, organizations should continue to conduct innovation in products, services, and internal processes for the creation of more customer value [8, 17]. The internal process can be referred to as a supply chain which develops services for customers. Learning and growth are two important features that every organization's strategy should incorporate. Human, information, and organization capital, culture, alignment, and teamwork are the important indicators and intangible assets that can be used to depict these features as indicated by [1]. Kaplan & Norton [7] argued that the organization's capital, employees, and knowledge systems are important for this perspective. Meanwhile, organization's employees, infrastructures, and environment, and reflects employee satisfaction, motivation, empowerment, and the capabilities of employees and information systems are urged to facilitate the performance of the other three perspectives [18-19]. Kaplan & Norton [13] proved that learning and growth perspective is related to the organizations' internal skills and capabilities.

2.3 Balanced scorecard in Higher Education

Previous research has indicated and addressed the suitability of BSC in commercial industry such as in public [20-21], manufacturing [5,22], hospitality [16, 23, 24], health care [14, 18, 25], e-services [19, 22, 26] and supply chain business [30]. Generally, IHL is a non-profit organization, but they may be driven by business objectives. Their vision and mission normally focus more on student's satisfaction rather than profitability concerns. Indrianty Sudirman [28] proposed a modified BSC in Hasanuddin University that is able to resolve problems encountered in managing the institution. This study proved that IHL needs to visualize precisely the strategy map according to its own characteristics and strategy. Besides strategy, Al-Hosaini & Saudah Sofia [20] indicated that IHLs are suggested to apply other non-financial perspectives such as community participation, innovation, strategic partnership, and scientific research excellence in order to assess the performance of higher education institutions.

2.2 Malaysian Higher Education Landscape

The higher education sector in Malaysia is under the administration of the Ministry of Education Malaysia (MOE). Malaysian PIHL comprises 85% (111 out of 131 institutions) of the total IHL in Malaysia. With the intense pressure for internationalization of IHL, the Malaysian Federal government has initiated the Malaysian Higher Education Blueprint 2015-2025 [29] with the aim to reform the higher education quality in Malaysia to become a world-class educational hub in Southeast Asia region and to develop a higher education environment that will shape the development of academic and IHL [30]. Thus, the intention to make Malaysia as an educational hub does not only rely on the shoulder of the public university but also rely on the capability and performance of private universities and colleges.

3. RESEARCH METHOD

This study employs two stages of data collection. The first stage is using the semi-structured interview as a qualitative data collection method to gather information of the performance indicators in BSC perspectives. A semi-structured interview is an interactive-relational approach and interviews with the knowledgeable personnel in BSC convey the sense of important aspects of the BSC. Five interview questions were asked in regard to the perception of BSC concept and perspective, indicators, challenges, and the key factors. Five respondents were selected based on their capability to respond to the given questions and to share their experts' opinion. All interviews sessions lasted between 30 to 35 minutes and followed by a structured format, with the possibility for the researcher to follow up on their answers as needed. The interviews were transcribed verbatim and the transcripts were produced for the purpose of analysis using the Nvivo 11 software. Emerging themes were grouped in nodes and these nodes were classified to draw any insights emerging from the interviews. The interviewees were given an opportunity to review their answers prior to them being "final" and included in the results.

The second stage of data collection is via a printed survey questionnaire. The survey questionnaires were used to gather the perceptions of academicians towards BSC as their PMS tools. Findings from interview, performance indicators, for instance, were used in this survey to gather the perception of academician on the suitability to be part of modified BSC. The questionnaires are constructed into two sections namely; Section A (respondents' background) and Section B (adoption of BSC). The seven-point Likert scale was used for the respondents to indicate their level of agreement in Section B. The respondents consisted of academicians who currently hold or had held administrative posts as they have the ideas and experience dealing with the PMS in their IHLs. From the 100 questionnaires distributed, 77 were returned. Out of the 77 returned questionnaires, 75 were usable while only 2 were excluded due to incomplete response. The final sample consists of 75 respondents which contributed to an overall usable response rate of 75%. Some expert considered 25% to 36% response rate to be acceptable.

4. RESULTS AND DISCUSSION

These five respondents came from different university within the same size and level. PIHL 1 (Top Management) had been involved in the BSC since implementation in 1998. They acknowledged some modification in the items in each of the BSC components. In fact, they are going to produce the latest BSC to cater to the changes in the Malaysian higher education sectors. Meanwhile, PIHL 2 (Professor) had modified BSC for three years and later changed to other PMS, but still maintains the components of BSC. On top of that, PIHL 3 (top management) is in the process of integrating the BSC components into their key performance indicator. PIHL 4 (top management) and 5 (top management) have not used BSC as their performance measurement tools, but they used the perspective of BSC in their key performance indicators. Three emerging themes were: (i) Modified BSC; (ii) Understanding strategy map and identify specific key success factors and (iii) Challenges in BSC. The

first theme is modified BSC. All five respondents agreed that the adoption of classical BSC perspective is no longer sufficient. Static BSC lack of ability to predict future performance, thus by reflecting the four BSC perspectives with the new environment and emerging economies, it will lead the BSC to be more dynamic and sustainable in the long term as PMS tools. They all agreed that other perspectives such as community involvement, scientific research excellence, innovation, and strategic collaboration and partnership need to be considered as a new dimension. Respondent 3 further added, "Adopting four BSC perspectives are a must, but it should not stop there, the organization has to expand the BSC perspectives, make it more relevant with the current changes". This is in line with what [2, 12, 21] said that the BSC is open to modification and adaptation that suits the organizational environment.

The second theme derived from the interview session is understanding the strategy map and identify specific key success factors. Every PIHL has its unique vision and mission and they have constructed their specific strategy to achieve both aims. Respondent 1, 2, and 4 stressed that it is essential for IHL to identify specific key success factors in order to lead in accordance with its vision. With a clear strategy and key success factor, mapping them to the BSC concept can help the IHL to measure its performance and resolve any problems and issues in their organization. The last theme challenges in BSC. Despite its benefits of BSC in decision making, Challenges in BSC are undeniable. Adopting BSC in the organization is time-consuming as the organization needs to clearly identify their strategic map. All respondents remarked that a stable and reliable technology system is now becoming a necessity item to support the implementation of BSC. Without technology system, it is going to be difficult to communicate the strategic assessment in organizations. Respondent 1 further added, *"In my opinion, the greatest challenge in implementing BSC is the human capital, the organization is responsible to make their entire staff understand and clear about the goals"*. Furthermore, human capital attempts to emphasize the investment on the employees who are responsible for critical internal processes to achieve an extraordinary level of management. After considering the opinion given by all respondents, table 1 shows the recorded BSC perspective and specific performance indicators are necessary for proposed BSC perspectives.

Table 2 presents respondents' characteristics, which show a total of 75 respondents that participated in the survey. More than 73% of respondents are female with majorities of 55 respondents. Besides, 38.67% are representatives between 25 – 35 years, which is the highest age range. This is followed by those between 36 – 45 years with 34.67% (26 respondents). Most of the respondents who were involved in the survey are holding bachelor and master degrees with 66.67% (50 respondents) and Doctoral with 33.33% (33 respondents). Then, for category designation, the highest value was lecturer with 72.00% (54 respondents), senior lecturer with 16.00% (22 respondents), associate professor and professor with a 12.00% (9 respondents). In terms of years of service, a majority of 40% (30 respondents) have 1-5 years of working experience in the organization. The result shown in Table 3 indicates that most respondents extensively agree to a certain extent on BSC adoption in assessing the academicians' performance. The highest mean score is 5.64 (SD = 1.35) whereas the lowest mean score is 3.51 (SD = 1.56). Based on the results, "improving student performance" and "achieved student completion rate (graduate on time)" were ranked the highest as a measurement for their performance assessment. This result explained that student performance is one of the important aspects to be monitored as to ensure customer perspective. Meanwhile, the lowest mean result showed that respondents disagreement that "Increase the number of professionals' membership" would enhance their performance measurement as professionals' membership and industrial.

5. CONCLUSION

In summary, this paper intended to develop the BSC Framework and discussed how it may be beneficial in the strategic management of Malaysian PIHL. PIHLs are chosen because of their role as a non-profit organization but they have to acknowledge their business objectives. The BSC is a prominent PMS tool that can be used to strategize and monitor organizational performance, continuously benchmarking this with key elements of the strategic plan. From the interview findings, adopting modified BSC is necessary to align with the PIHL vision, mission, and strategic objective. Besides four perspectives as introducing by [3], the organization needs to consider other perspectives which are relevant for the education sector and compatible with the university environment. The proposed BSC framework from the interview session can help universities and other higher education institutions to utilize intangible assets they need for future growth. Whether such a scorecard has the potential to succeed is unclear. Kaplan & Norton [2, 12] also indicates that the BSC model is open to modification and adaptation that suits the organizational environment. Results of the survey questionnaire indicated that the perception of academicians agreed with the adoption of BSC as their PMS. On the other hand, the implementation of BSC requires an understanding, commitment, and support from the top level of the business to the lowest level and the items in the BSC needs to be communicated clearly. Thus, future study should look into this relationship. Therefore, this research aims to introduce a BSC approach that can be used as PMS by defining all BSC perspective. This research can be considered as a preliminary framework, which is based on the interviews and previous literature review. The overall strength of the BSC is seen to be appropriate performance Indicators in the achievements of PIHLs.

Table 1: Performance Indicators

Original BSC perspectives	Financial	Customer	Internal business process	Learning and growth
Modified BSC perspectives	Revenue sources	Stakeholder's	Internal business process	Learning and growth
Performance indicators	(a) Revenue: Funding level (government allocation, tuition fees, donations, endowments, grants, etc.) (b) Expenditure: Operating expenses	(a) Student's perspective: student outcome, technical & soft skill development (b) Public's perspective: resources management & lifelong learning (c) Faculty and staff's perspective: employee well-being & workplace environment	(a) Teaching and learning: Learning outcome & teaching effectiveness (b) Operational efficiency: resource utilization Institutional management: programme and curriculum development, research and publication, student completion rate, the student failure rate	(a) Research: collaboration (b) Academic programme: Curriculum innovation Employees: Opportunities for professional growth and self-development & student activity

Table 2: Respondents characteristics

Criteria	Gender		Age					Academic Qualifications			Designation				Years of Service (in current organization)				
	Male	Female	Less than 25 years	25 – 35 years	36 – 45 years	46 – 55 years	More than 55 years	Bachelor's	Master's	Doctoral	Professor	Associate Professor	Senior Lecturer	Lecturer	1-5 years	6-10 years	11-15 years	16-20 years	≥ 20 years
Frequency	20	55	2	29	26	10	8	15	35	25	54	12	6	3	30	20	15	5	5
Percentage	26.67	73.33	2.67	38.67	34.67	13.33	10.67	20	46.67	33.33	72	16	8	7	40	20	15	5	5

Table 3: Analysis of BSC Indicators

Perspective and indicators	N	Min	Max	Mean	Std. Deviation
Financial					
Improving faculty revenue	75	1	7	4.73	1.5
Reducing operating expenses	75	1	7	4.73	1.5
Customer					
Improving student performance	75	2	7	5.64	1.35
Developing the technical & soft skill of the student	75	1	7	4.73	1.5
Enhancing lifelong learning	75	1	7	5.02	1.68
Effective resources management	75	1	7	5.36	1.22
Protective of employee well-being	75	1	7	4.69	1.61
workplace environment	75	1	7	5.15	1.19
Internal Business					
Achieved learning outcome	75	1	7	5.27	1.27
Increase teaching effectiveness (student evaluation on teaching effectiveness)	75	1	7	5.15	1.19
Utilize university allocation for individual	75	1	7	5.42	1.46
High involvement in programme and curriculum development	75	1	7	4.16	1.61
High involvement in research and publication	75	1	7	5.36	1.22
Achieved student completion rate (graduate on time)	75	2	7	5.64	1.35
Less student failure rate	75	1	7	4.98	1.31
Learning & Growth					
Actively in research collaboration	75	1	7	5.36	1.22
Involved in curriculum innovation	75	1	7	5.11	1.18
Increase the number of professionals membership	75	1	7	3.51	1.56
High opportunity to attend self-development programme	75	1	7	5.11	1.18
Improve in the number of students activity	75	1	7	4.98	1.31
Overall Mean				**5.01**	

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