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Balanced Scorecard Adoption in an Institution of Higher Learning: A Survey Evidence

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Abstract

The growing needs for quality in education had forced institutions of higher learning (IHL) to become more competitively responsible. In order to response to this competitive environment, IHL must adopt the most suitable performance measurement system in measuring their performances. The adoption of strategic performance measurement system would help IHL to realize significant cost saving, improve personal satisfactions and enhance organisational performances. Based on previous studies, Balanced Scorecard (BSC) is widely used as a strategic performance system in business sector, but few studies have reported BSC adoption in the education sector. Therefore, the objective of this paper is to determine the effectiveness of the adoption of BSC in assessing academicians' performances in a selected IHL. This study focus on the leadership support and importance of academic qualifications in enhancing performance of academician and the university. Data were collected through survey questionnaire distributed to 70 academicians at the selected university. The survey resulted into 78.57% usable response rate. The descriptive results of this study revealed that the majority of academicians' at the university extensively agree that the measurement used in the BSC which comprised of both financial and non-financial measurement are effective in assessing academicians' performances. The findings from this study have advanced the literature on BSC in the education sector as well as, provided a better understanding of BSC as the performance measurement tool in assessing academicians' performance.

Keywords: Balanced Scorecard, performance measurement system, institution of higher learning

1. INTRODUCTION

Educational institutions play crucial roles and functions such as teaching, research, publications and administration in producing quality graduates and providing qualified manpower for the development of a country (Arokiasamy, Ismail, Ahmad, & Othman, 2011). These important roles and functions must be supported by a strategic mechanism through planning, monitoring and controlling in an educational environment to ensure it is successful (Al-Turki & Duffuaa, 2003). According to Sudirman (2012), because of the important roles and functions people have started to demand for accountability in the institution of higher learning (IHL) since the transformation of the industrial era to the information age has emerged. Since the quality of education plays a crucial role in terms of greater responsiveness, responsibility, accountability and increased expectations, it has forced IHL to shift their focus from quantitative attention to emphasis on qualitative (Hanaysha, Abdullah, & Warokka, 2011). According to Zin, Sulaiman and Ramli (2012) financial measures alone such as Return on Investment (ROI) and Return on Equity (ROE) are insufficient as a measurement tool because these tools only report on outcomes of past actions, and as such, they promote short-term perspective instead of long-term value

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creation. Whereas, combination of both financial and non-financial aspects create organisation values such as teamwork, commitment, ownership, customer service, and personal development (Papenhausen & Einstein, 2006). There are a few models of Integrated Performance Measurement System (PMS) that cater for both financial and non-financial measurement such as Balanced Scorecards (BSC), Tableau de bord, General Electric, Business Modelling, and Economic Value Measurement (Kaplan 2010; Ittner, Larcker, & Randall 2003; Hassan, Mohd. Amir, & Maelah 2012). Among the models, BSC is the most widely used in many types of organizations including services and non-services because it caters the need of both financial and non financial measurement (Kaplan, 2010; Hassan et al. 2012; Zangoueinezhad & Moshabaki 2011; Agostino & Arnaboldi 2011; Jusoh et al. 2008).

Prior literature revealed that there were limited studies that examined the adoption of BSC as a tool in measuring the performance of academicians (Aljardali, Kaderi, & Levy-Tadjine, 2012a; Yüksel & Coşkun, 2013; Zangoueinezhad & Moshabaki, 2011). Further to that, increasing accountability issues in the education sector has motivated this study to be carried out within this sector. Therefore, the objective of this paper is to determine the effectiveness of the adoption of BSC in assessing academicians' performances in a selected IHL. This study also looks at the importance of leadership support and academic qualifications in enhancing performance of academician and the university. The survey method was used to seek the opinions of academician from a Malaysian private university.

This paper is divided into five sections. Section 1 introduces the study while Section 2 provides a review of the relevant literature. Section 3 describes the method used for data collection. Discussion of results is provided in Section 4. The final section concludes this paper.

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2. LITERATURE REVIEW

2.1 Performance measurement system (PMS)

Rapid changes in economic environment and strong competition have encouraged researchers to evaluate the effectiveness and suitability of the traditional performance measurement system (TPMS) (Chenhall & Langfield-Smith, 2007). PMS has become the focus of discussion in recent years in response to the necessity for reforming IHL education system in line with the current needs and growing expectations from the community and business sector (Mizikaci, 2006). PMS is a management control process and it comprises a set of organisational values such as policies, systems, and practices that direct action and transfer the information to support the entire business management cycles (Neely, A., Mills, J., Platts, K., Richards, H., Gregory, M., & Kennerley, M. 2000).

As for the education sector, the necessity to establish a set of performance management tools in IHL is to create a proper educational objectives and standards that will maintain the sustainability among the IHLs in a globalised environment (Umashankar & Dutta, 2007). A comprehensive and systematic sets of measuring system are used in areas of the IHL's administration that are crucial to enhance the quality of IHL and such process ensures the successful performance of university operation, and also improves any weaknesses found (Chen, Wang, & Yang, 2009). This transformation began 25 years ago in the United States (Gumport, 2000) and it is now becoming a global trend where it emphasizes the way how universities are managed. As an example, Kaplan and Norton, (2001a), and Karathanos and Karathanos (2005) recognised the implementation of PMS through the Baldrige Education Criteria for Performance Excellence that has adapted the concept of BSC in the education sector.

2.2 Strategic performance system (SPS)

Strategic Performance System is a new dimension of PMS system where it increases interactivity between the management and the employees that can lead to higher performance (Ukko, J., Tenhunen, J., & Rantanen, H. (2007). According to Gimbert et al. (2010) SPS is a subset of PMS based on their study on 'The Role of Performance Measurement System Strategy Formulation Processes'. Examples of SPS are Balanced Scorecard (BSC) (Kaplan & Norton, 2001), Tableau de bord, General Electric (Jazayeri & Scapens, 2008); Business Modelling and Economic Value Measurement (Ittner et al., 2003).

Non-financial perspectives such as quality, innovation, time, and customer service are proven as the strengths of SPS in evaluating an organization's performance (Azmi, Mehra, & Pletcher, 2002). According to Chenhall (2005), the strength of SPS non-financial features is to provide a way of translating strategy into a systematic set of performance measures. This view is supported by Ittner et al. (2003), where they reported that SPS provides

information that allows the firm to identify the strategies, to offer the highest potential in achieving the firms' objective, and to align management processes, such as target setting, decision-making, and performance evaluation, with the achievement of the chosen strategic objective. Micheli and Manzoni (2010) added that usually that SPS refers to the monitoring of companies long-range plans and success. They reported that previous studies have found SPS is generally productive and helpful in improving organizational performance and can benefit to the following areas (Micheli & Manzoni, 2010, p. 466):

- Formulation, implementation and review of organisational strategy
- Communication of results achieved to stakeholders, thus strengthening corporate brand and reputation
- Motivation of employees at all levels, promotion of a performance improvement culture, and fostering of organisational learning

Furthermore, according to Fullerton and Watters (2002), non-financial measures also have been recommended to be used in various industries from manufacturing to service and marketing industries. Table 1 shows studies that focused an application of SPS in the food, healthcare and financial service industries.

Table 1: Example of SPS Application in Various Industries

Authors	**SPS Application**
(Yilmaz & Bititci, 2006) (Gimbert et al., 2010) (Bigliardi & Bottani, 2010)	Food
Curtright, Stolp-Smith, & Edell (2000), (Greiling, 2010) Lin, Yu, & Zhang (2014)	Healthcare
Ittner et al. (2003) (Hung, 2012) Rotchanakitumnuai, 2013)	Financial Service

2.3 Balanced Scorecard

Balanced scorecard (BSC) is a performance measurement and strategic management system developed by Kaplan and Norton, (1992; 1996; 2001). Kaplan and Norton introduced BSC as a tool with specific indicators to evaluate organizations' performance (Aljardali et al., 2012). According to Zin, Sulaiman, Ramli, and Nawawi (2013), BSC specific indicators namely financial, customer, internal business process, and lastly learning and growth performance work as a composite measure of four perspectives. Figure 1 presents the BSC structure developed by Kaplan and Norton which consists of four distinct measurement perspectives (Schobel, 2012, p. 18):

FINANCIAL Relative to the organization financial aspects	CUSTOMER Concerns which process most influence customer satisfaction.
INTERNAL BUSINESS PROCESS Considers what organizations have to do for its customers in order to ensure financial success.	LEARNING AND GROWTH Concerns with improvements can be made to ensure sound business processes and satisfied customers.

Figure 1: The Structure of Kaplan and Norton's Balanced Scorecard (Schobel, 2012).

The integration of both financial and non-financial areas within the four perspectives creates a "balanced" approach to overcome the limitations of traditional PMS which relies on financial outcomes (Hassan et al., 2012). Furthermore, by integrating a set of measures taken from the firms' strategy, it allows the top management to have a comprehensive view of the firm and further directs the mission to a strategic goal setting (Franceschini & Turina, 2011).

The BSC framework complemented financial perspective measures with non-financial measures where it enabled a balanced view of organisational performance (Tung et al., 2011). In the first stage of BSC development, Kaplan and Norton (2010) proposed the causal links between all the four perspectives within the tool. In the second stage, BSC proposed as a multidimensional PMS which outlined a strategy through cause-and-effect relationships (Speckbaher et al. 2003). At this stage, it supports units and employees to a better understanding of the strategy and to identify how they can achieve their targeted achievement. Further development of BSC included an additional dimension called sustainability. Sustainability is becoming a major concern for various stakeholders (e.g.; customers, investors, and the government) and the inclusion of

sustainability as a new dimension where it can initiate and create a competitive advantage (Tung et al., 2011). Nowadays BSC has become a strategy that is being implemented through communication, action plans and incentives-based (Karathanos & Karathanos, 2005; Kaplan & Norton, 2001a).

Previous studies have examined the adoption and practiced of BSC in different dimensions. Table 2 provides examples of prior studies on the BSC in different sectors:

Table 2: Example of BSC Applications in Various Industries

Authors	**BSC applications**
Farneti & Guthrie (2008) Greatbanks & Tapp (2007) Wisniewski & Ólafsson (2004)	Public
Sainaghi, Phillips, & Corti (2013) Mcphail, Herington, & Guilding (2008) Evans & Evans (2006),	Hotel
Lin et al. (2014) Perera, Dowell, & Crampton (2012) El-jardali, Saleh, Ataya, & Jamal (2011)	Health Care
Shafiee, Hosseinzadeh, & Saleh (2014) Bhagwat & Sharma (2007)	Supply Chain
Wann & Ying (2014) Rotchanakitumnuai (2013), Hung (2012)	e-Services
Janes (2014) Valmohammadi & Servati (2011)	Manufacturing

2.4 Balanced Scorecard in education sector

BSC continues to be a management device for measuring performance in meeting the needs of stakeholders in various sectors and is still being applied until today (Philbin, 2011a). Several researches reported that, more than 80% of the top 1000 corporations in the world have adopted the BSC and the number is increasing (Lin et al., 2014; Ayvaz & Pehlivanl, 2011; Morard, Stancu, & Jeannette, 2013). Apart from the business world, BSC has also been successfully adopted by non-profit organizations in government, health care, education and charities sectors but with some modifications to the BSC design in order to fit the non-profit oriented objectives. (Bouland, Fink, & Fontanesi, 2011; Chan & Ho, 2010; Koumpouros, 2013; Niven, 2002).

Academic institutions also recognized the need for implementing PMS due to increasing competition among public and private IHL that gave rise to a growing interest among shareholders, stakeholders and customers on continuous quality improvement of institutions performance (Franceschini & Turina, 2011). In the education sector, each school or faculty will need to establish its core competencies subject to their vision and mission and they also need to consider their current available resources and state of competitiveness (Pereira, 2012). According to Lee (2005), service organizations such as universities are costing system emphasize three essential functions namely financial reporting for management and statutory purposes, understanding costs of activities, products, services and customers, and providing feedback and insights to the management on what causes the costs.

Based on the relevant literature reviewed, despite its relevance in the education sector, there are few documented applications of the BSC in the public sector of education. Most of the existing studies refer to the application of BSC in higher education institutions, either through case studies (Chen et al., 2006; Lawrence & Sharma, 2002; McDevitt et al., 2008; Papenhausen & Einstein, 2006; Philbin, 2011b; Tapinos, Dyson, & Meadows, 2005; Umashankar & Dutta, 2007) or through custom methodologies (Franceschini & Turina, 2011; Zangoueinezhad & Moshabaki, 2011). Taken together, these studies conclude on the benefits of BSC in the context of higher education, as follows (Pereira, 2012, p. 923):

- it is a means of communicating the strategic direction of the organization (McDevitt et al., 2008; Tapinos, Dyson, & Meadows, 2005)
- it allows a shared understanding of objectives and targets (McDevitt et al., 2008; Umashankar & Dutta, 2007)
- it allows a greater involvement from people (McDevitt et al., 2008; Umashankar & Dutta, 2007)
- it is a methodology that allows the integration of strategic planning, implementation and monitoring of the success of strategic initiatives (McDevitt et al., 2008; Philbin, 2011a) and
- it allows a better understanding of the strengths and weaknesses of the organization (Philbin, 2011a)

2.5 Leadership support and adoption of BSC

According to Chenhall and Langfield-Smith (2007), individuals' behavior has much more effect upon the effectiveness of PMS. Ruth et al. (1996), reported that highest leadership quality should have long-term strategic thinking, communication skills, integrity and ambition. In other words, leadership usually refers to motivating, committing, and leading people and thus leadership style will affect the implementation of the PMS (Ukko et al., 2007) but according to Jing (2008), there has been limited research that has specifically addressed the relationship between leadership behavior and organisational performance. Ukko et al. (2007) highlighted that it is important to explore the performance measurement from the dimension of a leadership. Support from the leaders has been highlighted as an important contingency approach in supporting various management accounting practices such as BSC and Activity Based Costing (ABC) (Tung et al., 2011). There are many studies conducted on the impact of leadership and management support on PMS effectiveness (e.g. Franco-santos & Bourne, 2012; Chan, 2004; Tapinos et al., 2005). For example, Franco-santos & Bourne, (2012) investigated the redesign of PMS and they found that leadership support was influenced the successful of PMS implementation. They also highlighted that, continuous involvements by leaders are needed to resolve any crises and problems that could arise in the future. Whereas, Chan (2004) reported that leadership support is very vital in PMS design and implementation, and that the availability of leaders time to reflect on measures was a major contributor to the effectiveness of PMS. Further to that, a study by Franco-Santos et al., (2007) showed that PMS focuses on the employees' attention on issues that are important to the company linking key objectives to the employees' jobs and continuous review. Therefore, it is possible to find a clear connection between leadership style and performance measurement system. Hence, it is hypothesized that:

H1: There is a significant relationship between leadership support and BSC adoption in assessing academicians' performance

2.6 Importance of academic qualifications and adoption of BSC

The excellent performance of education sector is dependent on the opportunities, qualification of academician, review of curriculum and development, communications of the institution with certified organisations and allocation of resources (Narang & Dwivedi, 2010a). A survey done in Pakistan, where education sector in that country failed to meet international standard as one of the top 300 ranking universities in the world due to lacking of dedicated and qualified academicians where they need 7000 PhD holder but there are currently only 1700 holders (Khan et. al., 2010).

Nowadays, quality assurance in education area has become an issue that cannot be avoided and the efforts of what IHL do to ascertain the performance quality is the most important initiatives since the performance achievement of an individual or institution comes from the quality provided (Bunoti, 2009). In addition, a school with high quality staff can stimulate process creation, and also it can emphasize organisational and individual learning, so that the school can maintain efficient activities (Chen et al., 2006). A study in Uganda, revealed that students complain that most lecturers are not highly qualified since there are very few PhD's holder and there are no professors teaching them. Hence, unsatisfied students will reflect a negative impact on the academicians performance assessment thus later could affect their individual performance (Bunoti, 2009). It is crucial to investigate whether the academicians' qualification may influence the performance achievement. It is crucial to investigate whether the academicians' qualification may influence the performance achievement.

H2: There is a significant relationship between importance of academic qualifications and BSC adoption in assessing academicians' performance

3. RESEARCH METHOD

This study uses non-experimental since this approach has been adopted in many studies on performances' assessment literature (e.g; Aljardali et al., 2012; Verma, 2012; Yu et al., 2009; Gurd & Gao, 2008) This study adopts a survey questionnaire method. The Statistical Package for Social Science (SPSS) version 21 was used to provide the descriptive analysis of the respondents who have participated in the survey. The questionnaire is constructed into five sections namely, Section A (Demographic Information), Section B (Academic Performance), Section C (Leadership Support), Section D (Importance of Academic Qualification), the seven-point Likert scale was used for the respondents to indicate their level of agreement. The target respondents are the academicians teaching in private IHL There are six faculties under the Undergraduate programmes; 1) Faculty of Business and ccounting (FBA), 2) Faculty of Engineering and Technology Infrastructure (FETI) 3) Faculty of Applied Science and Foundation Studies (FASF), 4) Faculty of Architecture and Build Environment

(FABE), 5) Faculty of Arts, Communication and Education (FACE), and 6) Faculty of Creative Media and Innovative (FCMIT) but only two faculties were selected. The respondents have been randomly selected from the two faculties, namely Faculty of Business and Accounting (FBA) and Faculty of Engineering and Technology Infrastructure (FETI). Random sampling method was chosen because, it is more simple to be used and it offers unbiased selection (Pallant, 2011a). Both faculties were chosen as target respondents because of two reasons. First, both faculties have the biggest number of academicians and second, those faculties are the earliest faculties. Hence, they consisted of all levels of academic positions from Lecturer to Professor that are vital in answering the background information questions. From the 70 questionnaires distributed, 57 were returned. Out of the 57 returned questionnaires, 55 were usable while only 2 were excluded due to incomplete response. The final sample consists of 55 respondents which contributed to an overall usable response rate of 78.57%. Some expert considered 25% to 36% response rate to be acceptable (Biersdorff, 2009). The Statistical Package for Social Science (SPSS) version 21 was used to provide the descriptive analysis of the respondents who have participated in the survey.

4. RESULTS AND DISCUSSION

This section presents the discussion of the descriptive results which covers on respondents' background, and the descriptive statistic for leadership support and importance of academic qualifications in assessing the effectiveness of BSC to measure academicians' performances.

4.1 Respondents' Background

The background of respondents is covered in the terms of their gender, age, academic qualifications, job title, working experience and years of service. Overall, under respondents' demographic information, the results illustrated that there are about almost equal distribution of female and male academicians in the university with a majority of the academicians are newly employed. This is because, about half (50.9%) of the respondents' age is between 25 to 35 years old. The results also showed that a majority of academician qualification in the university have Masters', followed by Doctoral and Bachelors' qualification. This finding indicates that qualification is one of the most important criteria in becoming an academician. With regards to the job title, it was revealed that a majority of respondents hold the Lecturer position instead of Senior Lecturer, Dean, Associate Professor and Professor. One possible reason could be that the university is still in the growing phase as a full fledge status of university. Perhaps the university is still hiring academicians with experience and extensive knowledge in various fields. Furthermore, the results demonstrated that most a majority of the respondents' working experience is within one to five years in the education sector. This revealed that most of the respondents are relatively new in the education sector and perhaps it is also possible for them to acquire previous working experiences in other areas. The final section of demographic information is 'years of service'. The results showed that the majority of the respondents are still new in the university with one to five years of service. This might be explained that whether the respondents just started their career or perhaps the turnover of employee is high in private university.

Table 3: Results of Demographic Section

Gender	**Frequency**	**Percentage**
Male	23	41.8%
Female	32	58.2%
Total	**55**	**100%**
Age	**Frequency**	**Percentage**
Less than 25 years	1	1.8%
25 – 35 years	28	50.9%
36 – 45 years	19	34.5%
46 – 55 years	4	5.45%
More than 55 years	3	7.3%
Total	**55**	**100%**
Academic Qualifications	**Frequency**	**Percentage**
STPM	0	0
Diploma	0	0
Bachelor's	5	9.0%
Master's	45	81.8%
Doctoral	5	9.0%
Total	**55**	**100%**
Job Tittle	**Frequency**	**Percentage**
Lecturer	45	81.8%
Senior Lecturer	8	14.5%
Dean	0	0
Associate Professor	2	3.6%
Professor	0	0

Total	**55**	**100%**
Working experience as an academician	**Frequency**	**Percentage**
1 – 5 years	25	45.4%
6 – 10 years	16	29.0%
11 – 15 years	11	20.0%
16 – 20 years	1	1.8%
More than 20 years	2	3.8%
Total	**55**	**100%**
Years of Service	**Frequency**	**Percentage**
1 – 5 years	45	81.8%
6 – 10 years	3	5.6%
11 – 15 years	5	9.1%
16 – 20 years	2	3.6%
More than 20 years	0	0
Total	**55**	**100%**

4.2 Leadership Support

This section presents the results from the descriptive analysis on leadership support, importance of academic qualifications and academicians' performance being measured using the BSC. Descriptive analysis provides analysis on each of variable being examine in terms of mean, standard deviation variance and total mean values.

Table 4 shows descriptive statistics for leadership support based on 55 respondents. This section aims to indicate their level of agreement on importance of leadership support on the performance of BSC adoption in assessing academicians' performance. The scale used for this measurement ranged from 1 (strongly disagree) indicated that the academicians' does not agree with the leadership support factor in enhancing their individual performance to 7 (strongly agree) which indicated that the academicians' extensively agree with the leadership support factor in enhancing their individual performance.

Overall mean score for this variable is 4.28. The highest mean score is 4.67 (SD = 1.69) it seemed that "my leader in my department always recognizes staff's achievement with encouragement and support" suggesting that recognitions and rewards might influence the academicians' performance. While, the lowest mean score is 3.82 (SD = 1.66) indicates that respondents disagree with "my leader in my department seldom gives supports in activities involving the performance activities" (e.g. send to training, involvement in students activities). This result indicates that supports from leader were important in faculty activities in assessing academicians' performance.

Table 4: Descriptive Statistics - Leadership Support

Code and Description	N	Min	Max	Mean	Std. Deviation
My leader in my department always delivers clear information about the assessment criteria.	55	1	7	4.49	1.73
My leader in my department seldom gives supports in activities involving the performance activities. (e.g. send to training)	55	1	7	3.82	1.66
My leader in my department always provides update information about performance assessments.	55	1	7	4.36	1.47
My leader in my department always recognizes staff's achievement with encouragement and support.	**55**	**1**	**7**	**4.67**	**1.69**
My leader in my department always meets me regularly to discuss my needs.	55	1	7	4.07	1.76
Overall Mean				4.28	

4.3 Importance of Academic Qualifications

Table 5 shows the descriptive statistics for importance of academic qualifications. Overall mean score for this variable is 5.82. The highest mean score is 6.00 (SD = 0.79) and this shows that the academicians agree with the statement 'I am aware that my academic qualification can help the faculty to achieve the target performance'. Whereas, the lowest mean score is 5.73 (SD = 1.16) suggesting that respondents disagree with 'I am aware that different level of qualification will have different types of performance assessments. This indicates that most respondents agree that academic qualifications play important roles in enhancing academicians' performance and the university. They too agree that a different performance measurement should be developed for the different level of qualification. This result supports the findings from Narang and Dwivedi (2010) study, where they proved that qualification is one of the crucial factors in determining the success of universities' performance besides other factors such as opportunities, review of curriculum and communications channel. Furthermore, findings from a study by Khan and Mahmood (2010) revealed that the education sector had failed

to meet the international standard which is one of top 300 ranking universities due to the lack of qualified and knowledgeable academicians.

Table 5: Importance of Academic Qualifications

Code and Description	N	Min	Max	Mean	Std. Deviation
Academicians' Qualification					
I am aware that my academic qualification can help the faculty to achieve the target performance.	**55**	**4**	**7**	**6.00**	**0.79**
I am aware that different level of qualification will have different types of performance assessments.	55	1	7	5.73	1.16
My qualification helps me in planning my daily task and responsibilities in order to achieve the highest target performance.	55	3	7	5.76	1.02
A more knowledgeable an academician performs better than less knowledgeable.	55	1	7	5.84	1.15
Knowledgeable employee practice professionalism that reacts efficiently and effectively towards their job performance.	55	2	7	5.76	1.19
Overall Mean				**5.82**	

4.4 Balance Scorecard Performance Measurement System

The result shown in Table 6 indicates that most respondents extensively agree to a certain extent on BSC adoption in assessing the academicians' performance. This finding in line with the objective of this study is to determine the effectiveness of the adoption of BSC in assessing academicians' performances in a selected IHL. 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, "Meeting the dateline for teaching files, final exam papers and marks entry" activity was ranked the highest as a measurement for their performance assessment. This result explained that the outcome of the teaching processes is considered as very important to be used as a performance measurement. Meanwhile, the lowest mean result showed that respondents disagree that "Decrease the number of professionals' membership" would enhance their performance measurement since, professionals' membership and industrial certification is very crucial in education sector.

Table 6: Balanced Scorecard - Performance Measurement System.

Code and Description	N	Min	Max	Mean	Std. Deviation
Financial					
Improving the Profit before tax (PBT)	55	1	7	4.73	1.50
Customer					
Decrease failure rate student	55	1	7	5.02	1.68
Improve the evaluation assessment rate (TLEQ)	55	1	7	5.36	1.22
Extensive involvement in marketing and promotional activities	55	15	7	4.69	1.61
Internal Business					
Achieved minimum 36 credit hours in a year	55	1	7	5.27	1.27
Increase the numbers of knowledge sharing sessions (e.g. meetings/sharing sessions)	55	1	7	5.15	1.19
Less involvement in committee member	55	1	7	4.16	1.61
Meeting the dateline for teaching files, final exam papers and marks distribution.	**55**	**2**	**7**	**5.64**	**1.35**
Learning & Growth					
Extensive involvement in self-development (e.g. trainings/seminars/conferences)	55	1	7	5.42	1.46
Decrease the number of professionals membership	55	1	7	3.51	1.56
Undertake the research/consultancy/project/ publication	55	1	7	5.11	1.18
Improve in the number of students activity	55	1	7	4.98	1.31
Overall Mean				**5.35**	

5. CONCLUSIONS.

The concept of BSC has been widely adopted in business sector but the education sector apparently has not widely embraced BSC concept (Ahmad, Farley & Naidoo, 2012). Using a survey questionnaire, the opinions of academicians at a private university were solicited to determine the adoption of BSC as a tool in measuring their performances. Their opinions were also sought on the leadership support and importance of academic qualifications in enhancing performance of academician and the university. The findings indicate that most respondents extensively agree with the measurements used in assessing academicians' performance suggesting the effectiveness of BSC as a performance measurement tool at the individual level. Consistent with the findings

from ERC (2012), the present findings indicate the awareness of respondents on BSC adoption in assessing their individual performance.

Based on the results of the hypotheses, it can be concluded that in overall, there are insignificant relationships between leadership support and BSC adoption in assessing academicians' performance in IUKL but there is a significant positive relationship between importance of academic qualifications and BSC adoption in assessing academicians' performance in IUKL. According to Budiarso and Mir (2012), a failure of leadership support in any organizations might due to lack of leadership focus to better manage change or execute strategy. This view is supported by Dillon (2012). The author reported that to ensure the successful of leadership support process in terms of emotionally and financially should involve from the beginning of the leadership process. In addition, Yang et al. (2005) explained that it is important for leaders to understand that an effective BSC should well equipped managers with the tools that can measure overall progress towards achieving strategic goals.

It was discovered from this study also that most academicians agree that academic qualifications play important roles in enhancing their performances and the university besides using different performance measurement for different academic qualifications or level of job positions. The current findings provided support for the findings from Benjamin's (2012) study that reported different academic qualifications should be measured with different performance indicators as it will provide accurate results based on different level of capability. Therefore, it was apparent that the findings from this study suggest the importance of using BSC to assess the performance of academician at IHL. In addition to that, BSC was also seen as an effective performance measurement tool to evaluate academicians' performances at the university. Thus, consistent with Kaplan and Norton's (2001) finding, the introduction of BCS in the education sector revealed that financial and non-financial measurements will increase the effectiveness of employees' performance hence further increase the reputation and economic condition of IHL.

Besides advancing the literature on BSC in the education sector, the findings from this study provide an insight into IHL in Malaysia specifically institutions that need to implement BSC practice as their performance measurement tool. The research findings might also be useful to top managements of IHL by generating clear and solid measurement at all levels of management and across all organizational units. There are some limitations that must be recognized besides the usual limitations in survey method. The findings from this study cannot be generalized to the population of IHL in Malaysia due to the difference in the nature of the business objective between private and public sectors. Further studies can be carried out to examine the BC adoption within both private and public IHL in Malaysia. This study has merely shed light on the descriptive result, perhaps future study can be undertaken to compare and contrast on BSC practices within private and public IHL using advance statistical analyses. Further research might also consider other variables such as ownership, time frame, learning orientation, adequate resources and technology support to study on BSC adoption in this sector.

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