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Balanced Scorecard for Sustainability of Malaysian Higher Education Institutions: Myth or Facts?

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Abstract
The purpose of this study is to explore the relationship between Balanced Scorecard initiatives (BSCI) and organizational climate on the sustainability of higher education institutions. A sample of 272 top administrators at eight selected public universities in Malaysia was selected based on purposive sampling. A full-fledged Structural Equation Modeling Software Analysis of Moment Structures version 20.0 was used as statistical analysis technique in examining the psychometric properties, testing the hypothesis of Balanced Scorecard initiatives, organizational climate on the Sustainability of Malaysian higher education institutions (SMHEI) variables. Using a comprehensive Balanced Scorecard Initiatives theory this paper argues that Balanced Scorecard Initiatives provide a systemic strategy for the achievement of sustainability in Malaysian higher education institutions. The findings reveal that organizational climate has no relationship with sustainability and therefore consistent with previous literature due to communication challenges and decision-making in HEI that needs further attention among the selected eight higher education institutions in Malaysia. This study provides a basis for the future study but the result cannot be generalized for the whole of Malaysia due to the study is limited to peninsular Malaysia only. The framework presented in this study can be used as the basis for the development of general framework of the Balanced Scorecard, organizational climate and in the sustainability of higher education institutions perspectives. This paper indicates the preliminary findings on the Balanced Scorecard Initiatives and it is considered as first kind of research on the SMHEI.

***Keywords**: Balanced Scorecard; Sustainability; Higher Education Institution.*

1. Introduction

Prominent strategies such as strategic planning (SP), quality assurance (QA), total quality management (TQM), Balanced Scorecard (BSC) and others might be executed ideally and timely in uplifting the institutions of higher learning. Lee et al. (2000)[i] described BSC in particular as an organizational holistic performance management tool which is geared towards defining performance measures, communicating objectives and vision to the organization. Besides that, Hladchenko (2015)[ii], Allen et al., (2010)[iii] claim that BSC initiative is a key driving performance in organizations. As the co-founders of BSC, Kaplan and Norton (1996b)[iv] emphasized that BSC provides the management with the instrumentation they need to navigate for future competitive success in both corporate sectors and educational institutions. In supporting this, BSC is able to address effectively the serious deficiencies in old-fashioned management system such as managed to create a meaningful linkage between long term strategic planning with short term strategic action plans that merit urgent attention for sustainability of higher education institution sectors (Mike Perkins Anna Grey Helge Remmers, 2014[v]; Nur Anisha, 2012[vi]).

The vibrant vision of becoming Asia higher education hub, the Malaysian public universities need to be more dynamic and highly responsive to quality performance needs to be existed in order to meet the agenda of developed country. In general, public universities in Malaysia were provided with adequate financial resources by the Ministry of Higher Education (MOHE) to upgrade their quality performance and strategies to the extent of meeting the global quality education demand worldwide. The issue is the lump sum of funding as budget allocation meant for developmental capital expenditures was available to contribute certain impact towards the sustainability of higher education without prejudice. Although, it is noted that MOHE preserves the respective universities in their decision-making processes and strategic direction endeavors, however the sustainability performance and improvement are indeed required to be evaluated (Kahirolmohdsalleh & Nor Lisa, 2012)[vii].

Nevertheless, BSC initiative perceived as a performance measurement system that focuses on four related perspectives of *financial* perspective, *the customer* perspective, *internal-process* perspective, and *the learning and growth* perspective which is capable of improving the managerial accomplishments for sustainability of Malaysian Higher Education Institutions (MHEI). Pursuant to this, it is believed that BSC initiative appropriate enough in designing the key performance indicators (KPI) that will indisputably lead to the better understanding of the management performance results for the sustainability of MHEI through successful implementation of strategic initiatives.

2. Literature Review

2.1 Balanced Scorecard Initiative for the Sustainability of Higher Education Institutions

The future sustainability of higher education institutions (HEI) is the most crucial responsibilities to the top administrators. The aim of the future institutions is to achieve quality and quality performance with respect to organizational climate effort through a developed strategic vision on how to appear in the present of the customers and stakeholders (*government* in case of non-profit institutions). Although, scholars have criticized the uses of balanced scored in HEIs that lack of "How" and poor in linking the business goals (Mike Perkins, Anna Grey and Helge Remmers, 2014[viii]; McAdam and O'Neill, 1999[ix]; Schalkwyk, 1998[x]) and 'How' in quality performance of institutional management (Yeung and Connell, 2006)[xi]. Meanwhile, Bittlestone (1994)[xii], Allen (1995)[xiii] and Olve, Petri, Roy and Roy (2004)[xiv] were commented on the inadequacies of BSC that it is ineffective and inappropriate approach in its operation but Kaplan and Norton (2004)[xv] have improved and outlined the fundamental process on 'how' implement through four perspectives. This application methodology can enhance in achieving the link in both organizations for strategic vision and performance.

Furthermore, evidence have revealed successful operation and implementation of BSC at the Royal Canadian Mounted Police (RCMP) in Canada, also at the Economic Development Administration (EDA) in USA (Chan, 2004)[xvi] while, further extended at the United Kingdom Ministry of defence (MoD) thus, tested successful in Finland higher education institutions and Hong Kong. Othman, (2006)[xvii] stress that implementations of BSC in Malaysia have experienced lower level of implementation than many countries consistence implemented. According to Nur Anisah (2012)[xviii] the introduction of BSC indicators aims to facilitate leadership performance in HEIs to move strategically and to develop the ability to relate major decisions to the bigger picture of how future can be achieved.

It was noted that management were too busy and lack high developmental information about how to implement the BSC paradigm for the achievement of initiative goal (Chan, 2004)[xix]. However, the significant of implementing balanced scorecard for quality performance was recognized by Gonçalves (2009)[xx] who proposed that strategic model of planning aligned with balanced scorecard through the strategic ability of organizational climate. Similarly, BSC has been tested based on critical four perspectives aligned with the Malcolm Baldrige National Quality Award in education criteria for performance excellence MBNQA and concept us in USA for promoting quality management in educational sector (Lee et al., 2000)[xxi].

Fundamentally, BSCI was mounted on specific objectives which are crucial that permitted establishing performance indicators becoming evaluating tool employing worldwide in corporate and educational institutions (Othman, 2006[xxii]; Kaplan and Norton, 2004[xxiii]; Hronec, 1994[xxiv]). As a matter of fact in education where the intangible converted to tangible initiative, the main problems of using the balanced scorecard is exact way to measure the performance and its initiative towards achievement of quality performance that developed by the top administrators in HEI. Improving effectively as being the importance of using BSCI, meanwhile effectiveness and efficiency of management in HEIs is to clarify and gain consensus about strategy:

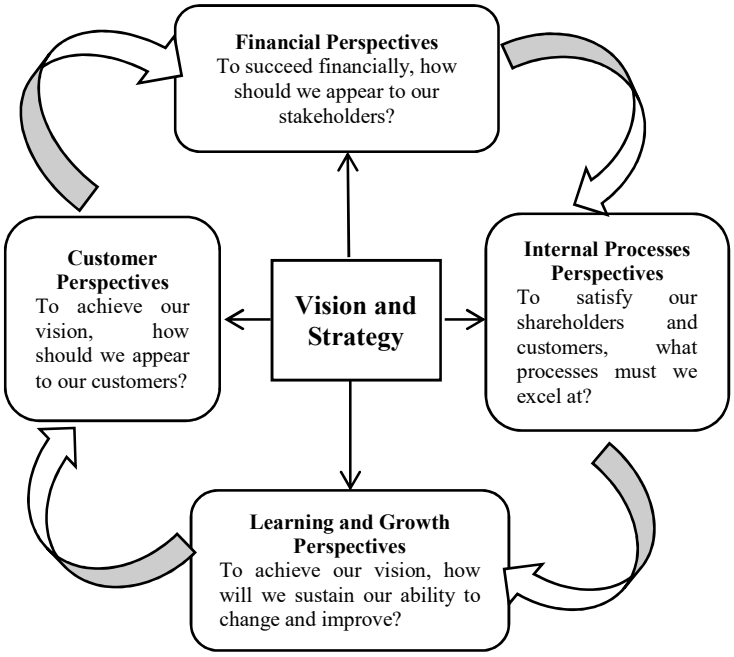
- on how to communicate quality as major part of future performances throughout the organization
- align departmental and personal goals to the strategy
- by linking the strategic objectives to long-term targets and annual budgets
- identify and align strategic initiatives
- perform periodic and systematic strategic reviews
- Obtain feedback to learn about and improve strategy (Lasisi, 2016[xxv]; Allen, et al., 2010[xxvi]; Chen et al., 2006[xxvii]; Kaplan & Norton 2004[xxviii]).

To evaluate the performance in HEI, it required Kaplan and Norton initiative theory that being used widely in various developed and developing countries higher educational institutions. This theory leads the present study applying strategy from corporate and business organizations in achieving future in HEI. This is because achieving quality is persisting in educational sector as seen in corporate organizations. Kaplan and Norton (2004)[xxix] built on strategy of how we can achieve the future for long term rather than short term planning achievement. Nevertheless, BSCI has had tremendous impact on management at various levels to develop balanced indicators of performance in HEI. Meanwhile, original Balanced Scorecard design identified four perspectives which are *the financial* perspective (F); *the customer* perspective (CU); *the internal-process* perspective (IP); and *the learning and growth* perspective (LG).

- ***financial perspective*** represents the long-term objectives of the institute of learning. The measures represent the relevancy of the outcome or efficiency of the service provided for rapid growth of the institution. Financial objectives here are basically on questions of how to succeed and how should we appear to both customer and

financing stakeholders. The existing and new intake customer relationships for development are to be considered for sustaining the institution. The sustainability through balanced scorecard initiatives on the other hand based on financial return which can be analyzed level of capital rewards such as scholarship, financial assistance, discount cash flow, installment payment and perhaps economic value added by the institution. Finally, to realize the value of financial perspective in HEI on sustainability satisfaction returns analysis from customer and stakeholders was very important with specific periods of time.

- ***customer perspective*** consists of management measuring the relationship and customer desired which examine customer satisfaction and customer retention though institution services for sustainability achievement. Customer value and customer expectation required to be investigated in other to look as strategic management in present of the existing and new customer in HEI. This would create a clear vision of importance of the customers and kind of service provided for sustaining the future of the institution. Thus, customer perspective of BSCI should target and identify the needs and meet the expectations of the customers from the institutional service perspective.



Source: Adapted from Kaplan and Norton 1992: 71[xxx]
Figure 1: Balanced Scorecard Theoretical Model

- ***Internal process perspective*** focuses on the internal processes requirement in order for the institution to excel. This stage help the institutions of higher learning to satisfy the shareholders at the same time providing the value expected by the customers efficiently. The successful efforts through the internal process leads MHEI see a tremendous growth in number of students in terms of enrolment in public universities which is up to 68% compared to other private higher education institution in Malaysia (Fernandez, 2010)[xxxi]. Internal process expected follow their developed objective of excellence neither short-term nor long-term objectives. This could further enhance innovative process and set increase towards attractive strategy among HEI customer.

- ***Learning and growth perspective*** focuses on internal skills and capabilities of the management, in order to align them to the strategic goals of the institution. It is true that the government in Malaysia embark on programmes such as MyPhD and PhD, Skim Latihan Akademik Bumiputra (SLAB), in order to increase skill and capability of the institutions (Mohamed Khalid, 2012)[xxxii]. This improvement enhances the institution to identify the efficiency and increase effectively among administrative and academician. However, the Balanced Scorecard process often identifying gaps between the required and existing skills and capabilities of employee and administrator in organization. To identify the strategic initiatives based on learning skill for the achievement of

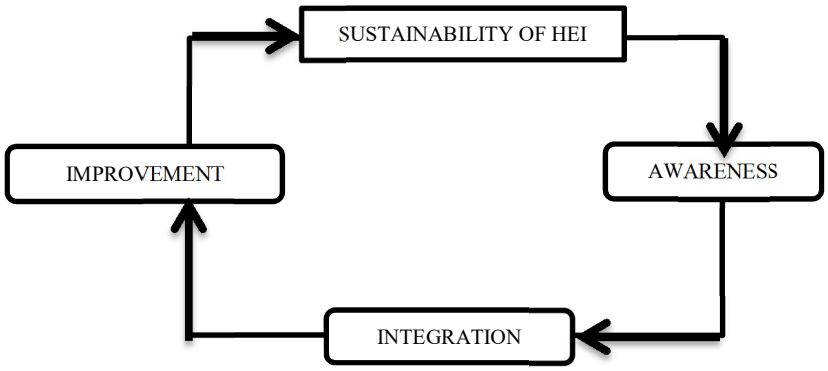
institutional vision and change related measures require, these gaps can then be addressed and closed by initiating balanced scorecard among staff through training and professional development division in universities.

2.2 Need for Sustainability of HEI

Waheed et al., (2011:359)[xxxiii] established that "when quality improves sustainability increases". Meanwhile, Moore (2005) realized that there is a gap about universities obligation on sustainability and to become, continues as a leader in preventing global quality education demand. It is important to envision what a sustainable university might look like through organizational climate activities such as orientation, communication, supervision, decision-making, and reward-management (Jeswani and Dave, 2012[xxxiv]; Wright 2010[xxxv]). This is because engagement of the administrators, staff, faculty and students ensure long-time achievement in HEI (Kurland, 2011[xxxvi]; Filho, 2005[xxxvii]). Sustainability is a collective effort of the people concerned in HEI, thus required strategy of moving towards a sustainable future.

The university is task as a responsibility to creating a sustainable future and should have common understanding about sustainability concept. Emanuel and Adams (2010)[xxxviii] conceptualized the word sustainability as continue development and for development activities now and indefinite future in HEI. It also defined as meeting the needs of the present generation without compromising the ability of the future generations to meet their needs (Brundtland, 1987)[xxxix]. Universities' customers as one of the future generation might meet their needs by implementing certain tools. It can be observed that initiating balanced scorecard has relation with sustainability that enhancing in measures the four perspectives performance in HEI.

Literatures have provided that universities should make sustainability issues a top priority, encouraging critical thinking about sustainability issues, creating partnership with government and non-governmental agent for sustainability issues and consults students on their opinions on sustainability issues in HEI activities. Lasisi and Hairuddin (2015)[xl] creates SHEI model based on: *Awareness (AW), Integration (I) and Improvement (IM)* about sustainability. The formulation of the model encompasses a pilot study among top administrators in HEIs in Malaysia Peninsula and model source it background through meta-analysis of various literatures on sustainability concept from different continent of the world. In this regard, Barth (2015)[xli] opines the area of higher education for sustainable development is where the strands of sustainability started, higher education, and education for sustainable development can be woven together through management, curriculum and facilities apply nevertheless, all the suggestion being raised by the sustainability scholars have been emerged to form SHEI model (Lasisi and Hairuddin 2015[xlii]:13; Lozano, 2011[xliii]; Olson and Thorp, 2011[xliv]; Kurland, 2011[xlv]; Velazquez, 2005[xlvi]; Thomas, 2004[xlvii]).



Source: Lasisi and Hairuddin, 2015:13[xlviii]

Figure 2: Sustainability of HEI Model

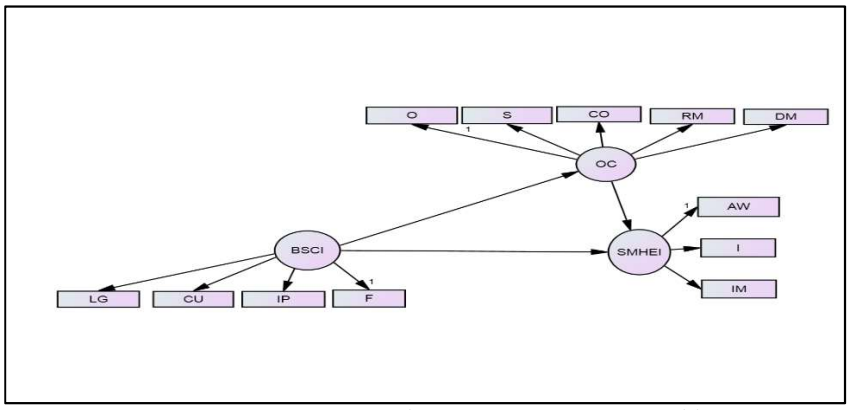
2.3 Organizational Climate as a Pathway to SHEI

Sustaining the future of HEI requires the effort of the management. This is because change is responsibility of administrators for SHEI (Wright, 2010[xlix]; Moore 2005[l]; Waheed et al., 2011:359[li]) The related issues and problem building a gap within this study is attention failure towards quality performance among the administrators even though autonomy was given to HEI leaders by the MoE Malaysia (Morshidi, 2010)[lii]. Organizational climate requires to be assessed based on five factors in this study as already employed by previous researchers (Peña-Suárez, 2013[liii]; Jeswani & Dave, 2012[liv]; Pace & Stern, 1958[lv]; Halpin & Croft, 1963[lvi]). Conceptualizing organizational climate is a set of characteristics that distinguish one organization from another which are relatively enduring over time, and influence the behavior of the people in the organization. In short, organizational climate is a concept that deals with organizational members' perceptions of their working environment.

The existing literature on organizational climate was surveyed by James and Jones (1974)[lvii]. The researchers reviewed all related researches, the definitions, conceptual frameworks, and measurement approaches and divided them into three

principal categories. According to the researchers, their findings show that the majority of the studies were based on theoretical aspect of organizational climate. Similarly, Halpin and Croft (1963)[lviii] measured organizational climate of public school employees' perceptions through dimensions comprising of intimacy on how members enjoy social relationships in an organization. Aloofness as another dimension measured the perception of how formal and impersonal management behavior is in an organizational climate. In addition, hindrance was measured in terms of perception of how employees feel that they are burdened by routine duties. Finally, organizational climate's closeness and constant supervision among supervisors on the subordinate staff in organization was also measured.

The present study based on a recent research, Jeswani and Dave (2012)[lix] study the impacts of organizational climate on turnover intention, measured by a 23-item instrument among faculty members of a technical institution in India. This organizational climate instrument was dimensionally categorized into 5 factors of *orientation (O), supervision (S), communication (CO), and decision making (DM) and reward management (RM)* which are independent variables to turnover intention as the dependent variable. Nevertheless, the general conceptual framework of the study has the three construct consist of BSCI, OC, and SMHEI to establish the relationship for the improvement of Malaysian HEI.



Sources: Lasisi & Hairuddin, 2015:13[lx]; Kaplan & Norton 1992[lxi]: 71; Jaswani & Dave, 2012[lxii]
Figure 3: General Conceptual framework of the study

3. Methodology

3.1 Research design, sampling and data collection

This quantitative study conducted a survey for data collection. The selection of top administrators at 8 selected universities was made through a purposive sampling procedure which is based on position and experience: Deans, Deputy Deans, Directors, Deputy Directors, Assistant Directors, and HODs within Malaysian such as Universiti Malaya (UM), Universiti Sains Malaysia (USM), Universiti Putra Malaysia (UPM), Universiti Kebangsaan Malaysia (UKM), Universiti Teknologi Malaysia (UTM), Universiti Utara Malaysia (UUM), International Islamic University Malaysia (IIUM), and Universiti Teknologi MARA (UiTM). Questionnaires were distributed based on permission from each faculty and human resource offices by showing the introduction letter of the researcher's university.

Respondents and Instrumentation

The research instrument was pilot tested before it was distributed to the actual respondents with 7-likert scale. The results of the pilot test showed that all instruments are valid and achieved acceptable reliability value (α=0.75-0.98). Then, the actual respondents comprised 277 top administrators for the main research on initiating balanced scorecard for sustainability of HEI. After testing the assumptions of outliers and missing data, the total usable responds in the study were 263 which are adequate for Structural Equation Modeling (SEM) statistical techniques for further analysis (Hair, et al., 2010)[lxiii].

Demographic information revealed, the sample comprised 131 males (49.8 per cent) and 132 females (50.2 per cent). Based on position, 32 Deans (12.2 per cent), Deputy Deans were 66 (25.1 per cent), Directors were 15 (5.7 per cent), Deputy Directors also were 12 (4.6 per cent), and Assistant Directors 54 (20.5 per cent) and Head of Departments were 84 (31.9 per cent). The breakdown in term of experience, majority (166, 63.1 per cent) was 1-5 year experience in HEI administration. Meanwhile, some (31, 11.8 per cent) was less than 1year, another (35, 13.3 per cent) was 6-10year of experience, and others (31, 11.8 per cent) were 11years above. Nevertheless, the respondents have shown long term experience in administration of HEI in Malaysia.

Table1: Variables Dimensionality

No.	Construct	Dimensional variables	Factors	Sources
1	Balanced Scorecard Initiatives (BSCI)	1. Learning and Growth Perspectives 2. Internal Process Perspective 3. Customer Perspectives 4. Financial Perspectives	4	Kaplan and Norton (2004)[lxiv] ; Allen, et al., (2010)[lxv]
2	Organizational Climate (OC)	1. Orientation 2. Supervision 3. Communication 4. Decision making 5. Reward Management	5	Jeswani and Dave (2012)[lxvi]
3	Sustainability of Malaysian Higher Education Institutions (SMHEI)	1. Sustainability Awareness 2. Sustainability Integration 3. Sustainability Improvement	3	Wright (2010)[lxvii]; Emanuel and Adams (2011)[lxviii]; Velazquez et al. (2005)[lxix]

3.2 Data analysis and results

We tested the proposed research framework using the structural equation modeling (SEM). In this study, a confirmatory factor analysis (CFA) was applied to validate the measurement model according to dimensional variable of each construct, and the structural model was estimated on full-fledge model (Hair et al., 2010)[lxx]. We used the AMOS 20.0 program as SEM software with the maximum likelihood method of estimation measuring the strength of relationships and model suitability.

Test of the measurement model

For the purpose of addressing the objectives of the study, the measurement model was tested through the application of CFA on each construct of BSCI, OC, and SMHEI. The results illustrated in table2, and then full structural model which was the default model in AMOS was further developed according to CFA output for test the hypotheses in the study. The estimates from this model were used to answer the hypotheses that involved relationships between the constructs in the generated hypothesized model in (figure 4).

Table2: CFA Results of BSCI, OC, and SMHEI

Index name	BSCI		OC		SMHEI		Threshold
	Initial	Revised	Initial	Revised	Initial	Revised	
RMSEA	.126	.074	.117	.070	.124	.071	.03-.08
GFI	.646	.900	.729	.948	.725	.936	>.90
CFI	.791	.959	.790	.973	.855	.975	>.90
X^2 /df	5.145	2.45	4.569	2.284	4.997	2.33	<3

In this study, the fit indices were utilized to assess the overall fit of the measurement model. However, all the factors of BSCI and SMHEI were sufficiently follow the trend of variable dimensionality of (4 factors by BSCI and 3 factors by SMHEI) while, OC was not fit by using 5factors in it dimensionality based on theory. Modification indices (MI) suggested removing the communication factor and decision making were not strong enough in per charge.

Based on recommended criteria are: $\chi 2$, $p > 0.05$; the ratio of $\chi 2$ to its degree of freedom ($\chi 2/df$) < 3.0; goodness of fit index (GFI) > 0.9; root mean square error of approximation (RMSEA) < 0.08; and incremental fit index (IFI) > 0.9 (Hair et al., 2010)[lxxi]. The result revealed that only *orientation, supervision and reward management* were adequate for further the analysis in full-fledged Structural equation modeling for testing the study hypothesis. Thus, the *communication and decision-making* were removed from OC dimensionality for adequate fit statistic: $\chi 2 = 1105.621$ ($p < 0.05$), $\chi 2/df = 4.569$, GFI = 0.729, RMSEA = 0.117, IFI = 0.792, AGFI = .664 and TLI = 0.761. However, the revised measurement model of OC was better with orientation, supervision and reward management (Table2): $\chi 2 = 73.102$ ($p < 0.05$), $\chi 2/df = 2.284$, GFI = 0.948, RMSEA = 0.070, IFI = 0.973, AGFI = .911 and TLI = 0.961 (Hair et al., 2010)[lxxii]. Overall, the results indicated a good fit for the measurement models and the convergent validity and discriminant validity were achieved in the measurement model.

The study employed BSCI (Financial, customer, Internal process, learn and growth perspectives), OC (orientation, supervision and reward management) and SMHEI (Awareness, Integration and Improvement) in full-fledge structural equation modeling. Prior to test the hypothesis, recommended criteria of statistic fit were checked(figure4) which revealed: $\chi 2$, $p > 0.05$; the ratio of $\chi 2$ to its degree of freedom ($\chi 2/df$) < 3.0; goodness of fit index (GFI) > 0.9; root mean square error of approximation (RMSEA) < 0.08; and incremental fit index (IFI) > 0.9 (Hair et al., 2010). The result from initial generated hypothesis model (figure4) was not reaches the level of acceptable fit statistic: $\chi 2 = 86.131$ ($p < 0.05$), $\chi 2/df = 2.662$, CFI=0.962, GFI = 0.935, RMSEA = 0.084, IFI = 0.963, AGFI = .888 and TLI = 0.947. However, the initial generated hypothesis model was to revise due to the inadequate fit of RMSEA >0.08, and AGFI<0.90.

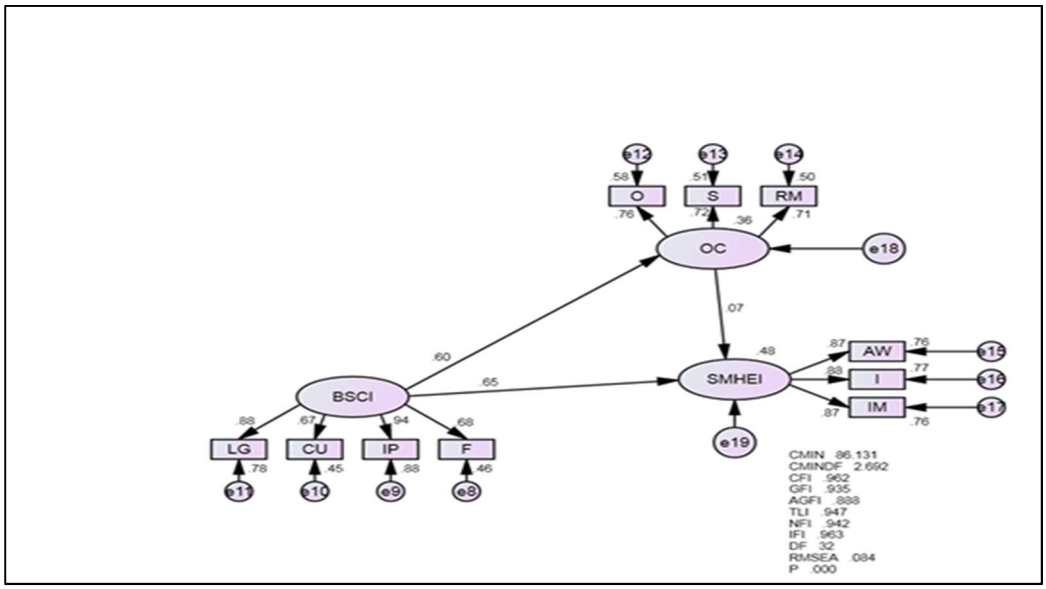


Figure 4: Generated Hypothesized Model

The better fit was achieved while the MI suggested moderate correlation between customer and financial perspectives of BSCI (figure5): $\chi 2 = 69.131$ ($p < 0.05$), $\chi 2/df = 2.232$, GFI = 0.948, RMSEA = 0.071, IFI = 0.974, AGFI = .907 and TLI = 0.961 (Hair et al., 2010)[lxxiii]. Overall, the results indicated a good fit for the revised hypothesis models for testing the hypothesis.

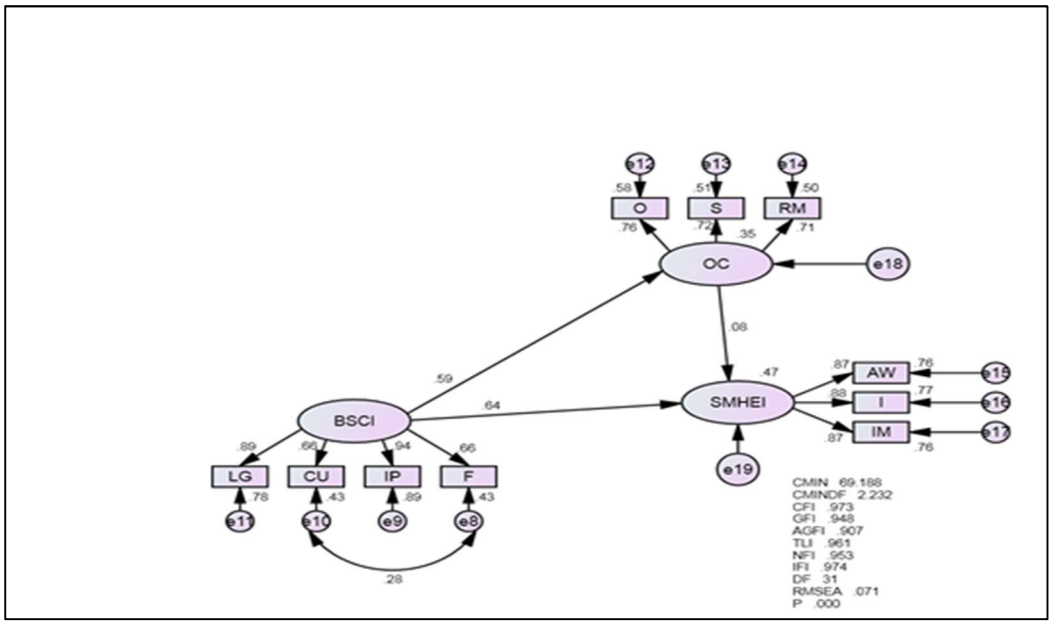


Figure5: Revised Hypothesized Model of the study

Testing of hypotheses.
The research attempt to find the information about direct and indirect relationship among the variables employed in the study as follows:

H1: BSCI has direct relationship with SMHEI
Hypothesis (H1) trying to prove that BSCI in Malaysian HEI has direct relationship on the Sustainability of Malaysian HEI. It is trying to expatiate that if there is improve in BSCI perspectives there will be increase in SMHEI. Investigating the significant direct relationship was to evaluating the strength of the causal effect of BSCI towards SMHEI. According to figure5, the estimated effect of 0.64 has shown significant direct relations which is above threshold of 0.3 (Kline, 2011)[lxxiv]. The result revealed that there is a direct relationship of BSCI on the SMHEI. Thus, the H1 is supported.

H2: BSCI has direct relationship with OC in MHEI
Hypothesis (H2) trying to prove that BSCI in Malaysian HEI has direct relationship OC. This indicated that administrators fully understand the complexity of BSCI and its indicators but adopting in MHEI not exists on the SMHEI. Investigating the direct relationship was the evaluating the strength of the causal effect of BSCI towards OC. According to figure5, the estimated effect has shown 0.69 which is above threshold of 0.3 (Kline, 2011)[lxxv]. The result revealed that there is a direct relationship of BSCI on the OC. Thus, the H2 is supported.

H3: BSCI has significant indirect effect through OC of MHEI on the SMHEI
Hypothesis (H3) is trying to prove that BSCI in Malaysian HEI has significant effect through OC of Malaysian HEI on the SMHEI. It is to expatiate that adoption of BSCI in organizational climate of MHEI will has a significant indirect effect on the SMHEI. Investigating the significant indirect relationship was to evaluate the strength of the causal effect of BSCI towards SMHEI through OC. According to figure5, the estimated indirect effect of 0.06 has shown insignificant relationship which is below the threshold of 0.3 (Kline, 2011)[lxxvi]. The result revealed that there is no indirect relationship of BSCI on the SMHEI. Thus, the H3 is not supported.

H4: Hypothesis model is fit the data well
Hypothesis (H4) is demonstrating that all constructs (BSCI, OC, and SMHEI) in full-fledge of the structural equation modeling are valid and fit the data well. It is to expatiate that the psychometric properties tested on each construct and fit statistic are valuable. Investigating the fit statistic result of RMSEA, P-value, GFI, Chi-Square, TLI, *df* and other criteria were evaluated adequate to the strength of required threshold (Byrne, 2010[lxxvii]; Hair et al., 2010[lxxviii]; Meade, Johnson& Braddy, 2006[lxxix]; Bentler, 1990[lxxx]; Schumacker & Lomax, 2004[lxxxi]; Cheung & Rensvold, 2002[lxxxii]). According to figure 5, the estimated fit statistic is enough and valuable as model fit the data well (Hair, et al., 2010;[lxxxiii] Kline, 2011[lxxxiv]; Hu and Bentler, 1999[lxxxv]). Thus, the H3 is supported.

4. Discussion

BSCI has direct relationship on the SMHEI. It is trying to expatiate that if there is more attention given to effectiveness and efficient uses of balanced scorecard, there will be increase in Sustainability of Malaysian HEI (Waheed, 2011)[lxxxvi]. Previous research has been stress on the Malaysian HEI customers and efficiency of MHEI; the findings revealed the student were attracted due to improvement in places of learning and strategic vision on quality in Malaysian HEI (Fernandez, 2010)[lxxxvii]. However, it is important to further establishing quality performance indicators which seen readily available in MHEI through specific Key Performance Indicator (KPI). Evaluation tool in management that specifically caters for customer, financial, internal process, and learning and growth perspectives is also important. These aspects are believed included in BSCI as it has direct relationship on the SMHEI. Gonçalves (2009)[lxxxviii] opines that relationship of BSCI with SHEI enhance the institution performance expectation based on the vision and strategy of the administrative leaders cordial with the autonomy given by the MoHE Malaysia (Nur Anisha, 2012[lxxxix]; Morshidi, 2010[xc]). Nevertheless, initiating balanced score directly for the SMHEI has input towards satisfying the needs of internal process, satisfy the expectations of the external and internal agents such as stakeholder (government), administrators, and customers thus improve financial perspective of MHEI.

On the other hand, the study result has established that insignificant relationship exist between the balanced scorecard initiatives and sustainability of Malaysian HEI through organizational climate (Kline, 2011)[xci]. The result revealed that there is no indication that balanced scorecard adopted or embraced through OC of MHEI on the SMHEI. This is consistent with preliminary finding on balanced scorecard adopts in Malaysian corporates establishment. Hence, the findings emphasized that little or few corporate sectors constantly developed causal model for the implementation (Othman, 2006)[xcii].

5. Implication and Limitations

This study has contributes to the literatures balanced scorecard and explore the organizational climate towards sustainability concept in HEI. The implication of the study serves theoretical implication as it enriches the further studies in administration theoretically through the implementation of quantitative and multivariate analysis while managerial implication mounted on the level of performance and improvement among administrators in HEI. However, due to the limitation in terms of sample size, financial constraint and distance make the study conducted in Malaysia peninsula only. The result may not be generalized. Further studies can be done by including all public and private universities for the purpose of widening the scope of generalizability and authenticate the theory.

6. Conclusion

This study indicates the preliminary findings on the Balanced Scorecard Initiatives through the basis of its source – the Kaplan and Norton, organizational climate and as it is first kind of research on the SMHEI through examines various literatures and validation of model fit. This study found the evidence to suggest that initiating balanced scorecard in Malaysian HEI can improve the strategic vision of HEI and improve performance towards sustaining the future of MHEI. It shows that those who are concerned in organizational climate of MHEI encountered considerable problem through insufficient communication and freedom of decision-making. Among other things, the absence of emphasizing on KPI through the elements of balanced scorecard as it is indicated as one of management tool in measuring performance created difficulties in developing future sustainability (Mike Perkins Anna Grey Helge Remmers, 2014)[xciii]. Action plan on the financial measures and customer indicated the evidence of improvement for sustaining the future of MHEI. This study suggested that further study needs on implementation of BSCI in Malaysia as may improve performance and plans for satisfaction of stakeholders and customers in HEI.

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