Top Management Support Moderate the Relationship Between Internal Environment and Malaysian Universities Performance

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Abstract

The importance of higher education for a developing country such as Malaysia, there is still paucity- to the researcher's limited knowledge. Internal environment variable in higher education are of a particular importance for achieving high performance, especially when recognizing that such organizational variables entails very important sub-variables. In the other hand the top management support will help the university to achieve the objective help university to have good profile and good reputation this lead to increase the students. Therefore, this study intending to investigate the moderating top management support affects relationship between internal environment and Malaysian universities performance. Therefore, data will also be collected from academicians’ and scholars from the Malaysian Technical University Network (MTUN), which brings together four technology universities' in Malaysia, University Malaysia Perlis (UNIMAP), Technical University of Malaysia Malacca (UTEM), University Tun Hussein Onn Malaysia (UTHM), and University of Pahang Malaysia (UMP). More specifically, academicians and scholars at MTUN universities in Malaysia are the main respondents to this study because their experience in the management field has made them more familiar with risk management, and the researcher will be able to obtain accurate data for excellent results.

Keywords
Top Management Support, Performance, Academicians, Researchers, Malaysia

1. Introduction

Empirical research regarding the implementation of ERM in higher education institutions is limited, and there is also limited academic literature on the practices of ERM within HEIs risk management practices (Ariff, Zakuan, Tajudin, & Ismail, 2015; Dharampal, Cameron, Dixon, Ghali, & Quan, 2016; Lundquist, 2015). However, most of the ERM programs reported in the limited academic literature on the subject adopts ERM practices from corporations (Lundquist, 2015). Nonetheless, not many studies have focused on ERM in higher education, its processes and determinants as well as how it can be implemented with HEIs to manage risk and improve the performance. However, many organizations have adopted the mission and principles of ERM, we know little of how enterprise risk management works in action (Lundquist, 2015). So this gap must be filled.

Empirical evidence on the effect of ERM drivers on universities performance in the academic domains scanty, most of the studies on ERM concentrated on the impact or effect of ERM on firm performance (the financial or non-financial performance). Furthermore, survey conducted on Malaysian public quoted industries by Soltanizadeh et al., (2014) shows that 32.2% of these firms fully implement ERM, 47.2% have a partial ERM framework, 13.1% have no formal ERM framework in place but plan to implement one in the future, 4% were still trying to figure out the need for ERM and 3% have no plans to integrate ERM at all. The study further indicates that firms from industries such as infrastructure, hotel, and technology implemented more ERM in their risk management practices that is why firms in these industries were thriving more economically than firms in other industries. Furthermore et al. (2017) reported that the implementation of ERM is considered at an infancy stage in Malaysia.
In the Malaysian higher education institutions, Sum & Saad, (2017) reports that the implementation of the University Good Governance Index (UGGC) required public universities to incorporate an organized risk management framework alongside other stringent criteria to be awarded an autonomous status. Five research universities have since been awarded the autonomous status and Ariff et al., (2015) explains that this has brought unprecedented opportunities for these universities as well as multidimensional risk. The risk involved entails “the uncertainty around future government spending, increased number of postgraduate students, pursuing high ranking in world university rankings, increased competition in getting quality international students, as well as competing globally in terms of research, and teaching and learning” (Sum & Saad, 2017). Hence, Ahmad et al., (2016) note that the effective risk management is indispensable for these MTUN universities.

Similarly, in light of addressing the concerns of an effective risk management framework for HEIs especially among research universities, Ariff et al., (2015) opine that a starting point could be to explore the relationship between risk management Practices and Organizational Performance. He further explains that HEI would delve into integrating an efficient risk management policy when they understand the impact it will bring in terms of their organizational performance and when they also understand the processes involved.

Setapa et al., (2015) stated that the adoption of ERM in Malaysian higher education is still lack of identified the factors that affect the some of the public universities to adopt ERM. However, the reasons for some company not aware to the important of ERM system. In conclusion, the proposed conceptual model represents the significant relationship between the drivers to ERM adoption and its impact organizational performance outcomes. Higher education in general is a relatively under-researched field and there are little recent studies that focus specifically on the adoption, implementation, and integration of ERM in higher education. Most of the information regarding ERM at IHEs has been developed by practitioners (Ahmed et al, 2016 and Sum et al, 2017).

Based on the recommendation of the previous studies which done by (Ariff et al, 2014; Setapa et al, 2015; Ahmed et al, 2016 and Sum et al, 2017) they reported that, The future study have to investigate how to embed risk management processes into the basic management cycles of a university and develop a risk management framework that can suit a university setting. In addition, studies have recommended that the future study have to analyze the complexity of ERM using more than only financial values. Therefore, the authors suggest a generic approach to assess ERM by the use of well-known frameworks and methodologies which is split into the phase of operating an ERM and measuring the output of an ERM (Kopia et al, 2017). Since evidence of a comprehensive risk management framework is a requirement in the awarding process, Ahmad et al., (2016) investigated existence of a formal risk.

Yet, in Malaysia risk management practices in the non-profit institutions, including universities and higher education, is less developed than in much of the corporate world (Sum & Saad, 2017). Therefore, there is insufficient clear empirical evidence proves that the value of ERM and the effectiveness of ERM implementation, less of future government funding, decrease of the number of post-graduate students, getting down the university ranking in world university ranking, lack or research, intense competition in getting quality of international students, and global competition and then reputational loss of the university, and then lastly develop enterprise risk management model (ERMM) to ameliorate the MTUN universities performance in Malaysia.

This paper intending to investigate the moderating top management support effects relationship between internal environment and Malaysian universities. This subject has enticed research since the collapses of many high profiles both within the created, creating and developing economy as well as improving the universities performance by achieving the goals (Ahmed & Tapa 2016). With the huge changes in the market environment as a source of increasing influence on both business performance and overall processes, it became obvious that organizations working in different sectors should pay close attention to those variables that affect their performance and the attitudes of those employed in them. For these reasons, scholars have recognized in recent years that the internal environment consider as key driver of organizational success (Alshura & Aldaihani, 2017).

In the higher education sector, internal environment could influence the organizational culture, values, strategies, human resources, mission and intent, and have a direct effect on the university performance (Genç, 2014). The importance of higher education for a developing country such as Malaysia, there is still paucity- to the researcher's limited knowledge. Internal environment variable in higher education are of a particular importance for achieving high performance, especially when recognizing that such organizational variables entails very important sub-variables. Internal environment variables and their impact on performance. In the other hand the top management support will
help the university to achieve the objective help university to have good profile and good reputation this lead to increase the students. Therefore, this study intending to investigate the moderating top management support affects relationship between internal environment and Malaysian universities

2. Literature Review

2.1 Internal Environment

With the enormous changes in the market environment as a source of increasing influence on both business performance and overall processes, it has become evident that organization working in the various sectors should be great attention to those variables affecting its performance and the attitudes of those working in them. For these reasons, scholars in recent years have acknowledged that both external and internal organizational environment variables are key drivers in organizational performance (Genç, 2014). In the higher education sector, internal environment consists of all the social and physical dimensions outside of the university campus in which a student spends a significant amount of their academic life, engaged in multiple actions with host community. As the variables of external environment are beyond the scope of the current study, they will be only mentioned in brief. External environment variables are those out of organization control and have direct effect on its operations and activities. These include changes in the international economy, changes in technology, changes in the national economy, national culture and traditions, industry/ business characteristics, regulations, actions of unions and actions of competitors (Tiwari & Saxena, 2012). Internal environment is a broad concept and includes all the organizational material and human resources within the organization. They are in the control of the organization, can manipulate them for achieving the strategic objectives and goals. Thus, they are termed controllable variables in some previous management literature (Alshura & Assuli, 2017) internal environment as all forces within the same organization. For this author, internal environment includes board of managers, workers and employees, organizational culture, structure, management strategies, and finally material and human resources.

Internal environment is the context within which the ERM function is implemented that affects the effectiveness of the whole university performance and system. So, it is a fundamental requirement for a successful implementation of an effective ERM approach. According to COSO’s report on ERM, the internal environment represents the “tone of the top management” that encompasses the management attitude and awareness about the importance and the relevance of the performance towards creating and preserving the value of the university. Kinyua et al. (2015), they recognize that there is a significant association between internal control environment and financial performance.

2.2 Top Management Support as Moderator

Many past studies have highlighted the success of the organizations due to effective top management support. However, top management should provide funding for the task (Faber et al., 2017 and García-Sánchez et al., 2019), top management should support of using technology in (Zhang et al., 2018), top management should involve in information requirement (Rajput et al., 2018), top management should involve in decision making (Rajput et al., 2018), top management should involve in monitoring (Rajput et al., 2018 and Hsu et al., 2019), top management should motivate the employees performance (Butt et al., 2018), top management should value the employees’ ideas and suggestions (Hsu et al., 2018), top management should support in human resources (Wang & Song, 2017), top management should encourage knowledge sharing (Lim & Antony, 2016), top management should established effective communication (Rahikkala et al., 2015). Furthermore, in figure 1, Yaacob & Arifin, (2019) has used top management support as moderator to reduce the risk and help the organisations to increase the opportunities and success, however, figure 1 shows the top management as moderator in different environment than education sector. However, the previous studies focused on top management as moderator with different factors therefore, there is lack of study that use the top management support as moderator between internal environment and performance therefor, this study intending this study the top management support moderate the relationship between internal environment and Malaysian universities performance.
2.3 Organizational Performance of Higher Education

Research has shown that higher education plays an important role in the economic development of a nation (Loganathan et al., 2010) given its ability to develop and maximize human potential resulting in an intellectually, spiritually, emotionally, physically balanced and harmonious individuals (Loganathan et al., 2010).

Consequently, Malaysian public Universities are aiming to transform higher education from the status quo of good to excellent, especially in terms of university ranking, qualitative and quantitative research, an increase in the demand for graduates sought after by the industry (local and abroad), producing world class lecturers and to establish a global brand name (MHE, 2016). The term “organizational excellence” is used in public sectors, whereas “business excellence” is used in private sectors, both terms connote the same meaning (McAdam, 2000). Similar measures have been adopted by Malaysian public Universities using the SETARA rating system to focus on quality in achieving performance excellence and to ensure they are doing well (MHE, 2016).

The Malaysian public universities experienced rapid development and made great progress in education and research over the past two decades (Zainal and Zainab, 2011) and the number of publications has increased from 34th place in 2009, 23rd place in 2013, the quality of publication still needs to be improved as Malaysia has the least average number of citations per publication when compared to the years 2014 (MHE, 2016). While the number of graduates with bachelor’s degrees has also increased by 29% from 2,065 in 2005-93,000 in 2010 there is also an increased in the amount of graduate unemployment (MOHE, 2007). Currently, at least 160,000 graduates between the ages of 20 and 24 are unemployed forming 40% of the total jobless pool. This situation occurred when many graduates were found to be a lack of quality and unable to meet the competency requirements of the job market and thus being rejected by many employers and will continue to be rejected if the graduates do not undergo effective entrepreneurial education (Kalyoncuoğlu, et al. 2017). On the other hand, the performance of the public universities is also studied based on the enrollment of international students. Given the target of 250,0000 Foreign students as stated in the Malaysian higher education blueprint, it is indeed far reaching as at present there are only 10,838 international students studying in Malaysian public Universities (MHE, 2016). As such this study aims to investigate the moderating top management support affects relationship between internal environment and Malaysian universities performance.

3. Conceptual Framework and Hypothesis

The conceptual framework of the study provides a map or schema for the inquiry. It provides a structure to obtain evidence to support or reject a hypothesis in a study. Internal environment has been adopted from the previous studies done by (Alshura & Aldaihani, 2016 and Genç, 2014). This variable will help organizations to reduce risks and maximize opportunities for the success of the organization. While moderation factor (Top Management Support) was adopted from the study done by (Yaacob & Arifin, 2019). However, top management support for performance appraisal can be referred to as the schematized process of assessing job-based performances and skills of workers (Koshy & Suguna, 2014). However, these studies were done in different sector than education and different environment therefore, there is limited study has been done on management support as moderating in education sector so, this gap must be filled, and this study going to fill up this gap and close the model gap and test the management...
support as moderating in education sector. Based on these processes a schema for the conceptual framework of the study is proposed as shown in Figure 2; below.

![Conceptual Framework for this Study](image)

**Figure 2. Conceptual Framework for this Study**

On the other hand, measures of Universities performance (dependent variable) was adopted from the Performance Measure (PM) framework for universities proposed by (Wang, 2010). Wang, (2010) PM framework for universities is based on the Balance score card. Hence, Wang, (2010) proposed that performance in universities should constitute two main aspects of academic and management. The academic dimensions constitute research and education while the management dimension constitutes finance and human resource. Therefore, the indicators reflecting these dimensions will be selected added to them patent and publications since this two are important for measuring university performance. Hence the following hypothesis is formulated and will be tested at .05 level of significance.

H1: Top Management Support Moderate the Relationship between Internal Environment and Malaysian university performance

4. Methodology  
The methodological framework that was used in attaining the stated aims and objectives of the study is bases on positivist paradigm i.e quantitative research methodology. It shows how the research hypotheses postulated were empirically determined and examined through relevant methodological approaches adopted in the study (Mackey and Bryfonski, 2018). The research design, types and sources of data was examined along with the procedure employed in testing the hypothesis and accomplishing the study objective. The methodology of this research paper focused on the study populations/sample frame and its characteristics, sampling technique chosen, and a description of the choice of data collection instruments, questionnaire design, methods of data measurement, analysis and presentation. The methodology employed was quantitative in nature and SPSS and Smart-PLS software were used to analyze data collected from the field.

5. Analysis and Result  
5.1 Respondents’ Demographics  
The profile of the respondents is presented in Table 1. It contains information on the gender of the respondents, their age, marital status, and the highest educational qualification attained by the respondents.
Table 1. Respondents’ Profile

<table>
<thead>
<tr>
<th>S/N</th>
<th>Respondents’ Details</th>
<th>Response</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Gender</td>
<td>Male</td>
<td>274</td>
<td>83.3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Female</td>
<td>55</td>
<td>16.7</td>
</tr>
<tr>
<td></td>
<td>18-29 years old</td>
<td>48</td>
<td>14.6</td>
<td></td>
</tr>
<tr>
<td></td>
<td>30-39 years old</td>
<td>140</td>
<td>42.6</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Age</td>
<td>40-49 years old</td>
<td>103</td>
<td>31.3</td>
</tr>
<tr>
<td></td>
<td>50 years old and above</td>
<td>38</td>
<td>11.6</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Single</td>
<td>73</td>
<td>22.2</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Marital Status</td>
<td>Married</td>
<td>244</td>
<td>74.2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Divorced</td>
<td>12</td>
<td>3.6</td>
</tr>
<tr>
<td></td>
<td>Secondary Certificate</td>
<td>10</td>
<td>3.0</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Diploma</td>
<td>36</td>
<td>10.9</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Degree</td>
<td>231</td>
<td>70.2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Masters</td>
<td>35</td>
<td>10.6</td>
<td></td>
</tr>
<tr>
<td></td>
<td>PH.D</td>
<td>17</td>
<td>5.2</td>
<td></td>
</tr>
</tbody>
</table>

Table 1 is used to present the respondents’ information regarding their gender, age, marital status and educational level they attained. The result shows that the respondents are predominantly male as indicated by 83.3 percent response while females account for the remaining 16.7 percent response. Similarly, Majority of the respondents are within the age bracket of 30-39 years as indicated by 42.6 percent response followed by those within the age bracket of 40-49 years as indicated by 31.3 percent response rate. The younger respondents between 18 and 29 years account for 14.6 percent while the elderly above 50 years account for the remaining 11.6 percent. Majority of the respondents have degree qualification as indicated by 70.2 percent followed by those with Diploma and Masters as indicated by 10.9 percent and 10.6 percent response respectively. 5.2 percent of the respondents have PhD qualification and the remaining 3 percent of the respondents have secondary school certificate.

5.2 Response Evaluation Criteria

The objective of this research is therefore required descriptive analyses to determine the level. As such, an evaluation criterion is adapted from other studies in order to evaluate the various constructs of the research. A 5-point likert scale was used throughout the research with different constructs having similar or different scale descriptors. However, the difference in descriptors, the construct has uniform mean ranking scale. Accordingly, the ranks were numbered between level one (1) which was lowest level to level five (5), which was highest level. This research adapted the mean score decision interval based on the works of Kasim et al. (2013), Hassanain and Iftikhar (2015) and Abdullahi (2017) from which the following interval decisions were deduced. This is shown in table 2 below.

Table 2. Response evaluation criteria

<table>
<thead>
<tr>
<th>S</th>
<th>Mean Interval</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Less Likely</td>
</tr>
<tr>
<td>2</td>
<td>Rarely</td>
</tr>
<tr>
<td>3</td>
<td>Less often</td>
</tr>
<tr>
<td>4</td>
<td>Often</td>
</tr>
<tr>
<td>5</td>
<td>Very often</td>
</tr>
</tbody>
</table>

Table 2 contains the evaluation criteria used to evaluate the responses to the questionnaire questions. The research objective seeks to identify the moderating effects of top management support on the relationship between internal environment and Malaysian universities performance. Thus, a response of less likely, rarely, less often, often and very often shows the level at which top management support moderate the relationship between internal environment and
Malaysian universities performance. Accordingly, the research constructs are evaluated descriptively using tables and mean ranking as presented in subsections below.

5.3 Moderating effects of top management on the relationship between internal environment and Malaysian universities performance

The research objective sought to find out the moderating effects of top management support on the relationship between internal environment and Malaysian universities performance. PLS-SEM is very instrumental in achieving this objective because in addition to estimating linear relationships it also has the ability to incorporate moderator variable which influences the strength or even change the direction of relationship between the independent and the dependent construct in the structural model (Becker, Ringle, & Sarstedt, 2018; Wong, 2016). Moderation refer to the influence of an antecedent that alters that strengthens or alters the relationship between variables in structural model. Thus, a moderator “influences the nature (e.g., magnitude and/or direction) of the effect of an antecedent on an outcome” (Aguinis, Edwards, & Bradley, 2017). Moderation is “where a relationship between an independent variable and a dependent variable changes according to the value of a moderator variable” (Ali Memon et al., 2019).

A moderator variable can be either categorical or continuous depending on the theoretical conceptualisation of the research model (Ali Memon et al., 2019; Hasan, Mohd Saad, & Iteng, 2019; Kee & Rahman, 2017). For categorical moderator, Multi group analysis (MGA) is mostly conducted. For the continuous moderator, three measure methods product-indicator, two-stage, and orthogonalizing approaches are used (Ali Memon et al., 2019). The use of either of the methods depends on the nature of the structural model. This research uses two stage methods to test the moderating effects of top management support on the relationship between internal environment and Malaysian universities performance. The two-stage approach involves calculating the latent construct scores and saved before subsequently building up the interaction term as element-wise product of the construct scores of the independent construct and the dependent construct. The interaction term is then used as a regressor on the latent variable scores of the dependent (Ali Memon et al., 2019). The moderation test result is reported in table 3 below.

<table>
<thead>
<tr>
<th>Paths</th>
<th>Coefficients</th>
<th>T Statistics</th>
<th>P Values</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td>EL*IE -&gt; OP</td>
<td>-0.231</td>
<td>3.483</td>
<td>0.001</td>
<td>Supported</td>
</tr>
<tr>
<td>LC*IE -&gt; OP</td>
<td>0.213</td>
<td>2.917</td>
<td>0.004</td>
<td>Supported</td>
</tr>
<tr>
<td>DA*IE -&gt; OP</td>
<td>-0.107</td>
<td>2.610</td>
<td>0.009</td>
<td>Supported</td>
</tr>
</tbody>
</table>

The result of moderating effects of top management support on the relationship between internal environment and Malaysian universities performance is presented in table 3 above. The result found three significant moderating effect. The result found significant moderating effect of educational level on the relationship between internal environment and Malaysian universities performance ($\beta=-0.231; t=3.483; p=0.001$). Thus, educational level significantly moderates the influence of internal environment on Malaysian universities performance.

Similarly, level of communication significantly moderates the relationship between internal environment and Malaysian universities performance ($\beta=0.213; t=2.917; p=0.004$). Also, the result shows that the relationship between internal environment and Malaysian universities performance is significantly moderated by delegation of authority ($\beta=-0.107; t=2.917; p=0.009$).

Thus, it can be concluded that top management significantly moderates the relationship between internal environment and Malaysian universities performance.

6. Conclusions

This study intending to investigate the moderating effects of top management support on the relationship between internal environment and Malaysian universities performance. Therefore, data was collected from academicians' and scholars from the Malaysian Technical University Network (MTUN), which brings together four technology universities' in Malaysia, University Malaysia Perlis (UNIMAP), Technical University of Malaysia Malacca (UTEM), University Tun Hussein Onn Malaysia (UTHM), and University of Pahang Malaysia (UMP). More specifically, academicians and scholars at MTUN universities in Malaysia are the main respondents of this study because their experience in the management field has made them more familiar with risk management, and the researcher was able to collect accurate data for excellent results.

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References
Biographies

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Rumaizah Binti Ruslan did her PhD in University Tun Hussein Onn Malaysia in 2018, her area of research interest includes occupational health and safety, OSH Risk Assessment & Management, Environmental Health and OSH Training & Education. She is the author of many journals and attended many international and local conferences.

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