INNOVATION PRACTICES AMONG MALAYSIAN UNIVERSITY STUDENTS TOWARD BUSINESS VENTURE

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ABSTRACT

This paper empirically assesses the relationship between innovation and business performance among university students. A theoretical model based on the Resource-Based View approach to Malaysian university students' business performance was developed to answer the research questions. Four different hypotheses have been developed which objectively to examine causal relationships between product innovation, process innovation, administrative innovation, marketing innovation and Malaysian university students' business performance. A quantitative survey method was employed in the study, and the questionnaires were used to obtain data from the Malaysian public universities students business in northern area of Peninsular Malaysia. Research framework was developed and the performance was tested against innovation practices. This study supports the proposition that innovation is one of the strongest variable that has direct influence towards students' business performance, where process, administration and marketing innovation has a significant influence on their ongoing business performance. Based on the outcomes from this study, the paper is concluded through explanation of the outcome by using PLS Path Modelling.

Keywords: Innovation Activities, Product Innovation, Process Innovation, Administration Innovation, Marketing Innovation, Business Performance.

INTRODUCTION

Entrepreneurship is regarded as one of the key economic development strategies to advance a country's economic growth and to sustain its competitiveness in facing the increasing trends of globalization. The rate of growth for entrepreneurship varies from country to country as well as from time to time. But the established fact is that it has a clear and positive impact on economic growth (Rasli et al., 2013). In university, student entrepreneurs is a valuable asset that can contribute to the Malaysian economic development because appropriate level of education besides experience is very important in the success of young entrepreneurs by referring to this student entrepreneurs. Entrepreneurship amongst students also can help in providing employment since in current economic downturn employment opportunities are extremely limited (Badariah et al., 2016; Rengiah, 2016). Therefore, there is the need to study about the factor contributing to their success and performance of their business to ensure the sustainability of these young entrepreneurs. Creative and innovative graduates with entrepreneurial mind-set and actions may contribute to the progressive career development and improve resilience to both the graduates and the organization in which the graduates ventured into.

This research is all about the relationship between Innovation Practices and Malaysian Students' Business Performance. Past studies critically argued that who embarked into running their own business may contribute to the job creator rather than job seeker as inspired in the new higher education blueprint 2015-2025 (MOHE, 2016). This paper is focusing on two basic concepts: the performance of Malaysian University Students' as endogenous variable and Innovation practices which comprise of product, process, administrative and marketing innovation as the components for the exogenous variable. The objectives of the study is to investigate the relationship between innovation activities (Product, process, administrative, marketing innovation) and Malaysian University students' Business Performance.

LITERATURE REVIEW

Resource-Based View (RBV) Theory

This study rely on the need of the Resource-Based View (RBV) Theory which is the most applied theory in previous research on innovation and firm performance (Das & Zheng, 2008). It shows that firms' differences in innovation activity can be due to resource-based differences. The RBV Theory regards the firm as a bundle of resources and suggests that their attributes significantly affect the performance of the firm (Abu Bakar & Ahmad, 2010; Lee et al., 2001). These resources are limited/scarce, imperfectly tradable and hard to imitate. Barney (1991) highlighted four empirical indicators in his study regarding potential firm resources for generating sustained competitive advantage, namely: value, rareness, imitability and non-substitutability (VRIO).

There are empirical evidence which show innovation can improve a firm's performance (Damanpour & Aravind, 2011; Hassen and Mccarthy, 2011; Hilmi & Ramayah, 2008). Various researchers have referred to innovation as the technological aspects of innovation consist of product, service and process innovation; while administrative innovation refers to market and administrative innovation (Damanpour & Aravind, 2011; Kang, 2012); and marketing innovation (Hilmi & Ramayah, 2008). This is where the innovation activities play an important role as the resources that relates to the theory which is the resources should be value, rare, in-imitate and non-substitute.

Business Performance

Performance could be defined in various ways. The current study defines students' performance as productivity and profitability as suggested by (Crossan & Appadin, 2010; Jaaffar et al., 2017; Santos & Brito, 2012). For the purpose of this study, the researcher uses performance as a term to indicate the performance of student's business who managed their own business and defined as the degree to which the enterprise meets the owner's expectations in terms of sales, profitability and overall performance as suggested by (Calogherou et al., 2004; Crossan & Appadin, 2010). Past studies conducted by Rengiah, 2016 and Badariah et al., 2016 which similarly investigating factors related to students and youth business performance also suggesting similar measurement in their study.

Innovation Practices

Since the objective of this study is to improve the productivity and profitability of students' business, innovation is identified as having a positive impact on firm performance (Abdul Aziz et al., 2013, Damanpour & Aravind, 2011; Jaaffar & Sharif, 2014; Law, 2012). Mhd Juri and Idris (2008) also found that innovation is one of the crucial factors associated with the growth of the world's most profitable firms. The study also indicates that innovation practices can influence a firm's ability to reinvent and change in order to exploit opportunities and subsequently will improve firm performance.

In this study, innovation refers to innovative activities carried out in the student business and is considered to be an appropriate response against performance enhancement. There are four types of innovation being practiced by firms: product, process, administrative and marketing. Various researchers have referred to innovation as stated above with the technological aspects of innovation consist of product, service and process innovation; while administrative innovation refers to market and administrative innovation (Damanpour & Aravind, 2011; Jaaffar & Sharif, 2014) and marketing innovation (Hilmi & Ramayah, 2008). There is empirical evidence which shows innovation can improve a firm's performance (Jaaffar et al., 2017; Damanpour & Aravind, 2011). Although most studies have argued that innovation has a positive impact on firm performance, this relationship still needs continuous studies because of a persistent gap in the performance theory, profit among organizations and dynamic changes in the market environment (internal and external). By referring to the study by Jaaffar et al. (2017) and Lumpkin & Dess (1996) recommendation, it suggested innovation activities as a possible causal variable in assessing the Malaysian university student's business performance.

RESEARCH METHODOLOGY

A quantitative survey method was employed in this study. Past literature has suggested that the quantitative survey approach is thought to be the most appropriate research method in the social science area and in studying innovation and performance (Chye et al., 2010; Mirza & Ali, 2011; Robinson & Stubberud, 2012; Runyan et al., 2008). It is recommended that it is the most extensively used technique in innovation research.

The questionnaires were used to obtain the data from 137 Malaysian public university students' business owner. In this study, their business must be registered with the university, in active operation for more than a year and located within northern region namely Perlis, Kedah and Penang as suggested by previous studies. (Renggiah & Sentosa, 2016; Soon & Ali, 2015). This study utilized the list of students registered businesses from respective Student Affair Department (HEP) and actively in operation as suggested by Badariah et al. (2016). The present study had employed PLS path modeling (Henseler & Fassot, 2010) using Smart PLS 3.2.4 M3 software (Hair et al., 2017; Ringle et al., 2012) to test the theoretical model.

A probability sampling method was employed in this study, to enable it to generalize the findings to the whole population (Bryman & Bell, 2003). Since this study was able to identify a specific sampling frame from the Student Affair Department, the probability sampling method was deemed to be more suitable for the current study as recommended by past studies (Newbie et al., 2003; Salkind, 2012).

A set of ten-point likert scales questionnaires was designed as to measure the attributes of performance and innovation. The questionnaire comprises of 52 items, which includes three section: Section A for Respondent Profile which consist of eight questions, Section B for Firm

Performance which consist of eight questions and Section C for Innovation Activities which consist of twenty questions for product, process, administration and marketing innovation. The interplay between the aforementioned constructs was incorporated with following hypotheses accordingly:

H1: There is a relationship between Product Innovation activities and business performance.

H2: There is a relationship between Process Innovation activities and business performance.

H3: There is a relationship between Administration Innovation activities and business performance.

H4: There is a relationship between Marketing Innovation activities and business performance.

ANALYSIS AND FINDINGS

Analysis was done after the completion of data cleaning process by using SPSS version 22 and counter checked with PLS algorithm process in measuring the model. During the assessment of the model three items from administration latent variable have been deleted due to high multicollinearity between the latent constructs as suggested by Hair et al. (2017). The present study has applied the standard bootstrapping procedure with 5000 samples and 130 cases to assess significance of the path coefficients. Results shown in Figure 1 and Table 1 explains all the results derived.

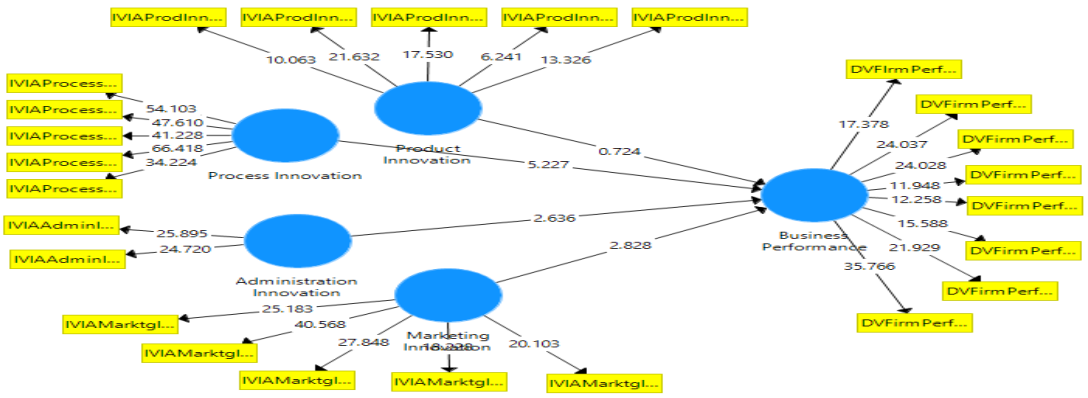

FIGURE 1
STRUCTURAL MODEL OF THE RESEARCH FRAMEWORK

Table 1
STRUCTURAL MODEL ASSESSMENT

	Hypothesis Relation	Beta (β)	SE (mean)	T-Value	P-Value	Result/Decision
H1	*Product Innovation -> Business Performance*	-0.109	-0.098	0.724	0.469	Not Supported
H2	*Process Innovation -> Business Performance*	0.528	0.533	5.227	0.000	Supported
H3	*Administration Innovation -> Business Performance*	-0.400	-0.403	2.636	0.008	Supported
H4	*Marketing Innovation -> Business*	0.462	0.470	2.828	0.005	Supported

	Performance					

Unfortunately, result on *H1* revealed that product innovation was insignificant (β=-0.109, t=0.724, p=0.469) which the t value less than 1.96, p>0.05. Hence, all the other hypotheses were significant and supported. *H2*, Process Innovation (β=0.528, t=5.227, p=0.000), *H3*, Administration Innovation (β=-0.400, t=2.636, p=0.008) and *H4*, Marketing Innovation (β=0.462, t=2.2828, p=0.005). Even though the result revealed an insignificant relationship between product innovation and performance but it revealed a significantly positive relationship for the other innovation activities between process, administration, marketing and firm performance and congruent with the RBV Theory, that has been suggested earlier. Therefore, innovation activities instituted by an organization should theoretically be able to improve the firm's performance through, process, administrative and market innovation.

Furthermore, firms which regularly practice innovation within their organizations have better prospects of expanding and strengthening their market position (Salim & Sulaiman, 2011; Dyer & Ross, 2008). Salim and Sulaiman (2011), in their study on the relationship between innovation (technology, market and administrative innovation) and firm performance, also found a highly positive relationship between the two constructs. In addition, their study also indicates that administrative innovation is important in explaining financial performance and marketing innovation, which are key components for market performance.

CONCLUSION

The result of this study suggests that students which involved as a start-up or a beginner should focus on the process of the products or service delivered to customers, improve their way of administrating their business establishments and enhance their marketing creativity and activities such like branding, promotion and packaging. The graduate students who plan to venture or currently running their own business must also proactive and aggressive in reaching out their prospects.

The findings also indicated that products alone does not guarantee the successful of students who actively involved in business. This may be due to various factors such as the operation as a part-timer, limited marketing channel, limited capital, lack of experience and uncertainty in market demand. The findings of this study should be conveyed to various parties related within the student's business ecosystem such like policy maker, entrepreneurship development internal or external entity and also their educator. Based on the research findings, the present study has contributed several practical implications in terms of giving a very important consideration on innovation activities in improving student business performance. Graduate entrepreneurs can make considerable effort to optimize available resources to practice innovation activities in all aspects, such as process development and improvement, administration and marketing which is important for improving firm productivity and profitability (Cockpekin & Knudsen, 2012; Damanpour & Aravind, 2011; Hilmi & Ramayah, 2008; Huang & Rice, 2009; Salim & Sulaiman, 2011).

This study also provided a theoretical implication by giving additional empirical evidence in the study of innovation and performance under the RBV theory. The findings of this research had demonstrated a positive relationship between process, administration and marketing innovation and student business performance consistent with previous literature. Even though this study has provided support for three hypotheses, the findings still have to be interpreted in consideration of the study's limitations especially for the unsupported hypotheses. The present

study adopts a cross-sectional design which does not allow causal inferences to be made from the population and the present study adopts probability sampling (i.e., systematic random sampling) in which all systematic elements of the target population have been identified before samples are captured (Hair et al., 2016). Although this study attempts to lessen these problems by improving scale items and ensuring anonymity (Henseler, 2013; Ringle et al., 2012), it is possible that the participants in this study might have under or over-reported their business performance on survey questionnaires.

Since the researcher has adopted a cross-sectional study design, therefore, a longitudinal design in future needs to be considered to measure the theoretical constructs at different points in time to confirm the findings of the present study. Future research also should find another approach or strategy to extract more respondents. Consequently, additional work is needed to include students from other private institutions in order to generalize the findings. The relationship between product innovation and performance is insignificant; therefore future research is necessary to verify whether moderating variables may be needed to strengthen this relationship.

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