Linking Entrepreneurial Behaviour and Business Performance of Indigenous Agripreneurs in Sabah

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Abstract
In an entrepreneurial setting, an agripreneur’s decision to venture in entrepreneurial activity is influenced by his or her intention to be involved in entrepreneurship. As such, the entrepreneurial intention serves as an important prediction of involvement among agripreneurs in entrepreneurship. Entrepreneurial Behaviour was deemed as a multidimensional construct encompassing two dimensions, namely Entrepreneurial Attitudes and Entrepreneurial Skills. Quantitative approach and simple random sampling were employed in this study. The location of this study involved the area of Interior Division in the State of Sabah. The sample consisted of 106 responses among indigenous agripreneurs. The data analysis was carried out using Multiple Regressions Analysis and Hierarchical Regression Analysis techniques by applying the Statistical Package for the Social Sciences (SPSS) software. Based on the attributes of Entrepreneurial Behaviour consisting of Entrepreneurial Attitudes and Entrepreneurial Skills, the results did not statistically demonstrate their significant relationships with Business Performance. Furthermore, in reference to government assistance that plays an important role as the moderator, was proven significant in the relationship between Entrepreneurial Behaviour and Business Performance, whilst being influential in strengthening the relationships between Entrepreneurial Behaviour and dimensions and Business Performance. Through the findings of this study, it is hoped that this paper will become a guiding tool for more comprehensive research to unveil the relationship between Entrepreneurial Behaviour and Business Performance.

Keywords: entrepreneurial behaviour, business performance, government assistance

1.0 Introduction
Farmers, agricultural business, researchers and governments have recognised the need for much entrepreneurial culture in the farming business. Agri-entrepreneurship can be the answer towards increasing the household income in Sabah. A huge portion of domestic revenue generated by the communities in the rural area is highly dependent on the agriculture sector, making agri-entrepreneurship the most suitable sector to develop Sabah. In the long run, the people of Sabah especially those in the rural area will be competent in generating their income independently through well-planned agricultural systems that have high commercial values. With proper guidance and correct agri-entrepreneurship exposure, the people in the rural
part of Sabah, especially youths will be able to realise the expectation set upon them.

There are growing opportunities for entrepreneurism around the world. Indigenous groups nowadays suffer from chronic poverty, lower education levels, and poor health. As a result, an often-stated dual objectives of indigenous leaders are to rebuild their ‘nations’ and improve their socio-economic circumstances (Harvey, 2006). Within this multi-objective mission, many indigenous people see entrepreneurial activity as a central element in supporting this endeavour.

The Federal Agricultural Marketing Authority (FAMA) Sabah will be working with indigenous agripreneurs to counter the shortage of crops against increasing demand for them in the State. The indigenous agripreneurs are experienced in the traditional methods of growing crops, but will need modern methods to produce sufficient amount of crops to meet market demand. However, the indigenous agripreneurs in Sabah need help and assistance in terms of modern technologies and effective marketing, which will raise their income as well. Although the amount of crops produced with the agreement will be insufficient, it is the first step towards meeting the State’s demand (Daily Express News, 2018).

Based on the above explanation, it shows that the government’s expectation of high involvement of indigenous agripreneurs in entrepreneurship is not achievable yet. A gap exists between what is expected by the government of the indigenous agripreneurs, and the actual scenario of the lack of involvement among indigenous agripreneurs in entrepreneurship. Here lies a gap that needs further investigation in explaining indigenous agripreneurs and their behaviour towards entrepreneurship.

1.1 Problem statement

The Sabah State Government urged indigenous agripreneurs specifically the local farmers to consider commercial planting and production of crops that have a wide market potential. Local crop production is still insufficient to meet the market demands as the needs of factories producing crop-based products. Therefore, it is time for the District Farmers’ Organisations to deliberate on such consideration that will involve the assistance and expertise of the Ministry of Agriculture and Agro-Based Industry Malaysia towards embarking on commercial crop cultivation (Daily Express News, 2018).

The majority of the indigenous agripreneurs specifically the local farmers in Sabah are having issues in earning high income and yet crop farming is the main source of their household income. They are also facing low productivity of their crops and this affecting the farmers’ monthly income. Due to low income and productivity, business performance of the indigenous agripreneurs is inconsistent from year to year.

1.2 Research objectives

The general aim of this research is to examine the relationship between Entrepreneurial Behaviour (Entrepreneurial Skills and Entrepreneurial Attitudes) and Business Performance on indigenous agripreneurs in Sabah. On the other hand, this study aims to examine whether the Government Assistance has any moderating effects on the relationship between
Entrepreneurial Behaviour (Entrepreneurial Skills and Entrepreneurial Attitudes) and Business Performance.

1.3 Significance of the research

The results of this research have important implications on the Sabah State Government, Federal Government, Government Agencies, Farmers, Planters, Conservationists, Consumers, Researchers, Capital Providers, Political Leaders, Agricultural Department and Policy Makers that share an intense interest in the sustainability of agricultural production systems. This also includes identifying the success factors for the indigenous agripreneurs specifically the local farmers in Sabah. This research will help to improve their development planning and increase the total of hectarage and crops production in Sabah.

2.0 Literature review

Around the world, indigenous population groups suffer from chronic poverty, lower education levels, and poor health. As a result, an often-stated dual-objectives of indigenous leaders is to rebuild their ‘nations’ and improve their socio-economic circumstances (Gartner, 2000). Within the overall multi-objectives mission, many indigenous people see entrepreneurial activity as a central element in supporting this endeavour (De Lauwere et al., 2002).

Agripreneur is defined as an entrepreneur whose main business is agriculture-related. Farmer is defined as someone who is employed on a part or full-time basis for a range of farming activities; they are primarily dependent on the farm and agriculture in the practice of cultivating the soil, growing crops and raising livestock as the main source of income (McElwee, 2005).

Business performance in general seems to be closely related to the attitudes and skills of the entrepreneur (Henry et al., 2005). Hence, it is not surprising that training interventions are adopted as a response to the pressing need for supporting the viability and effectiveness of co-operatives (Petrin, 2007).

Attitude is a core concept within motivation theories. An attitude is defined as a valuation of an object, whether the object is good or bad (Wiklund & Shepherd, 2003). Attitude has been viewed as a uni and multidimensional construct. The behavioural component consists of intentions to behave in a certain way towards the object (Robinson et al., 2001). According to Smilor (2007), entrepreneurial skills can be established by mastering those activities or practical know-hows that are needed to establish and successfully run a business enterprise.

Business performance as “the ability of an object to produce results in a dimension determined a priori, in relation to a target” (Laitinen, 2002). Thus, it is not surprising that training interventions were adopted as a response to the pressing need for supporting the viability and effectiveness of co-operatives (Petrin, 2007; Roca, 2008). Although the duration and mode of these training interventions can differ, their focus was two-fold:

a. The development of entrepreneurial attitudes; and
b. The reinforcement of entrepreneurial skills.
This performance has been measured traditionally in financial terms (De Toni & Tonchia, 2001). The most commonly used measures of performance are efficiency (e.g. return on investment) growth (e.g. increase in sales) and profit (Murphy et al., 2006). The importance of external support services specifically on the role of government (Sydenham, 2001). They also recommend that the government should expand and strengthen the rural facilities and support that are presently inadequate. Priority is given to finance the growth of annual crops and the farmers (Dominic, 2013). A key role for the government has been set in the right direction for continuing the search for optimum economic environment towards fostering industry development and economic growth (Heidi, 2004).

3.0 Research methodology

3.1 Research design

a. Sampling design

The population of this research consisted of indigenous agripreneurs specifically the local farmers in Sabah who commercialise their crop farming business. The sample was selected only from those registered to the Ministry of Agriculture and Agro-Based Industry Malaysia and 302 samples among indigenous agripreneurs registered under this ministry were chosen. The probability sampling method was used using simple random sampling technique, as any elements of the population have an equal chance or equal probability of being selected as a sample and the target population is homogenous in terms of the interest for the research.

b. Instrumentation

The instrument used in this research was quantitative method that utilised the self-administered questionnaire. The main purpose was to get quantitative profiles of indigenous agripreneurs specifically the local farmer and to encourage them to express their views freely. Pilot test was conducted to detect weaknesses in design and instrumentation and provide proxy data for selections of probability sample. The questionnaire was translated into Malay language so that it would be easier for the respondents to understand the contents of the questionnaire.

c. Research framework

The research framework is the foundation on which the entire research is based on the literature review in the previous chapter has characterised the success factor for the indigenous agripreneurs and it is the intention in this chapter to integrate such determinants into a model for better understanding of success factors for the indigenous agripreneurs.

In the Research Framework in Figure 1, the main variable of interest to research is the dependent variable that is the Business Performance. The two independent variables for Entrepreneurial Behaviour that are correlated to the dependent variable are Entrepreneurial Attitudes and Entrepreneurial Skills. The moderating variable, which will have contingent effects on the relationship between the independent variables and dependent variable, is the Government Assistance. This research had been conducted in a way to contribute to the improvement of Government’s Assistance as a moderator (moderating variable) based on the relationship between Entrepreneurial
Behaviour and Business Performance. In this study, the Government’s Assistance was incorporated as the moderator in order to determine if this construct played a significant role in strengthening the relationship of Entrepreneurial Behaviour and Business Performance (Dahi, 2012).

![Research framework](image)

**Figure 1:** Research framework

d. **Research hypotheses**

From the Research Framework of the research, 4 hypotheses were developed. These 4 hypotheses are as follows:
- **Hypothesis1a:** There is a positive relationship between Entrepreneurial Attitudes and Business Performance.
- **Hypothesis1b:** There is a positive relationship between Entrepreneurial Skills and Business Performance.
- **Hypothesis2a:** The relationship between Entrepreneurial Attitudes and Business Performance will be moderated by Government Assistance.
- **Hypothesis2b:** The relationship between Entrepreneurial Skills and Business Performance will be moderated by Government Assistance.

e. **Techniques of analysis**

For data analysis purposes and text clarity data obtained were analysed using the Statistical Package for the Social Sciences (SPSS) programme. The Cronbach’s Alpha analysis was determined the reliability of measures. The statistical methods for hypotheses testing are Multiple Regressions Analysis and Hierarchical Regression Analysis.

4.0 **Results and analysis**

4.1 **Questionnaire collection**

A total of 302 sets of questionnaires was distributed to the indigenous agripreneurs specifically the local farmers in Sabah. Out of the 302
questionnaires, only 106 were managed to be collected because of the time and budget constraints. 

4.2 Reliability measurement

The data collected was subjected to reliability analysis to establish the reliability of the measures. The variables are assessed for reliability using the Cronbach’s Alpha in the questionnaires in this research. Table 1 provides summary for all the variables in the analysis.

<table>
<thead>
<tr>
<th>No.</th>
<th>Variables</th>
<th>Cronbach’s Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Entrepreneurial Attitudes</td>
<td>0.62</td>
</tr>
<tr>
<td>2</td>
<td>Entrepreneurial Skills</td>
<td>0.86</td>
</tr>
<tr>
<td>3</td>
<td>Business Performance</td>
<td>0.63</td>
</tr>
<tr>
<td>4</td>
<td>Government Assistance</td>
<td>0.81</td>
</tr>
</tbody>
</table>

The analysis recorded reliability Cronbach’s Alpha that ranges from 0.62 to 0.86. All dimensions are very well within the acceptable range of 0.6 to 0.9. The variables showed acceptable Cronbach’s Alpha values of more than 0.6. The overall result is good with outputs indicating strong Cronbach’s Alpha values.

4.3 Multiple regression for entrepreneurial behaviour and business performance

Table 2: Multiple regression for entrepreneurial behaviour and business performance

<table>
<thead>
<tr>
<th>R</th>
<th>R²</th>
<th>F</th>
<th>Sig. F</th>
<th>Durbin-Watson</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.131</td>
<td>0.017</td>
<td>0.894</td>
<td>0.412</td>
<td>2.078</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Variables</th>
<th>Beta</th>
<th>t</th>
<th>Sig.</th>
<th>Tolerance</th>
<th>VIF</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>4.731</td>
<td>0.000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Entrepreneurial Attitudes</td>
<td>0.132</td>
<td>0.832</td>
<td>0.407</td>
<td>0.545</td>
<td>1.833</td>
</tr>
<tr>
<td>Entrepreneurial Skills</td>
<td>-0.206</td>
<td>-1.300</td>
<td>0.196</td>
<td>0.427</td>
<td>1.635</td>
</tr>
</tbody>
</table>

Table 2 shows the statistical summary results of the Multiple Regression of Entrepreneurial Behaviour and Business Performance.

a. Hypotheses Testing – Multiple Regression

Hypothesis 1a: There is a positive relationship between Entrepreneurial Attitudes and Business Performance.

The results in Table 2 shows that there is no significant relationship between Entrepreneurial Attitudes (β = 0.132, t = 0.832, p = 0.407) and Business Performance. Therefore, it is concluded that Entrepreneurial Attitudes is not a strong determinant of Business Performance. Thus, the above hypothesis is rejected.

Hypothesis 1b: There is a positive relationship between Entrepreneurial Skills and Business Performance.
As indicated by Table 2 shows that there is no significant relationship between Entrepreneurial Skills ($\beta = -0.206$, $t = -1.300$, $p = 0.196$) and Business Performance. Therefore, it is concluded that Entrepreneurial Skills is not a strong determinant of Business Performance. Thus, the above hypothesis is rejected.

b. Hypothesis testing – hierarchical regression (Government assistance)

<table>
<thead>
<tr>
<th>Variables</th>
<th>Step 1</th>
<th></th>
<th>Step 2</th>
<th></th>
<th>Step 3</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Sig.</td>
<td>B</td>
<td>Sig.</td>
<td>B</td>
<td>Sig.</td>
</tr>
<tr>
<td>Entrepreneurial Attitudes</td>
<td>0.132</td>
<td>0.407</td>
<td>0.081</td>
<td>0.104</td>
<td>-</td>
<td>0.369</td>
</tr>
<tr>
<td>Entrepreneurial Skills</td>
<td>-0.206</td>
<td>0.196</td>
<td>-</td>
<td>0.981</td>
<td>1.08</td>
<td>0.000</td>
</tr>
<tr>
<td>*Government Assistance</td>
<td>0.957</td>
<td>0.000</td>
<td>1.75</td>
<td>0.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Entrepreneurial Attitudes *Gov.</td>
<td>0.526</td>
<td>0.378</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Assistant</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Entrepreneurial Skills *Gov.</td>
<td>-1.50</td>
<td>0.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>R Square Changes</td>
<td>0.017</td>
<td>0.888</td>
<td>0.015</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sig. F Change</td>
<td>0.412</td>
<td>0.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Hypothesis 2a: The relationship between Entrepreneurial Attitudes and Business Performance will be moderated by Government Assistance

Hypothesis 2b: The relationship between Entrepreneurial Skills and Business Performance will be moderated by Government Assistance

As illustrated in Table 3, the F changes for Step 2 and 3 regressions are significant. Government Assistance is significant (Sig. = 0.000). Meanwhile the interaction between Entrepreneurial Attitudes and Government Assistance (Sig. = 0.378) is not significant and lastly interaction between Entrepreneurial Skills and Government Assistance (Sig. = 0.000) is significant. Therefore, overall it is concluded that Government Assistance has moderating effect.

5.0 Discussion

5.1 Relationship between entrepreneurial attitudes and business performance

The results of Multiple Regression Analysis showed that there was no significant relationship between Entrepreneurial Attitudes and Business Performance. This exhibits a stronger entrepreneurial attitude appear that
will more likely change the way they organise their enterprise and tend to have higher income growth (Nybakk & Hansen, 2008).

5.2 Relationship between entrepreneurial skills and business performance

The results of Multiple Regression Analysis showed that there was no significant relationship between Entrepreneurial Skills and Business Performance. The degree of efficiency and reliability of the Entrepreneurial Skills in dealing with matters pertaining to indigenous agripreneurs showed no positive correlation to the Business Performance. The finding was consistent with the finding of McElwee (2005) that skills are not all that is required.

5.3 Moderating effect of government assistance

The results of the Hierarchical Regression Analysis in Table 3 indicated that overall results of Government Assistance moderated the independent variables and dependent variable. It can be explained that it was essential for the indigenous agripreneurs specifically in the rural areas to receive support from the government. Besides Ministry of Agriculture and Agro-Based Industry Malaysia, other government departments such as Rural Development Department and other association such as from politicians could help the indigenous agripreneurs to generate income.

The results were supported by the findings of Sydenham (2001), Dominic (2003) and Heidi (2004), where they also agreed on the importance of external support services such as the government support. Therefore, external support especially from the government is very important for the local farmers to improve their standard of living. Support and services include consultation, seeds, equipment and capital. Therefore, Government Assistance was the moderator strongly associated with the Business Performance of indigenous agripreneurs (Esham & Usami, 2007).

5.4 Implications of the research

Results from this research may help to shed light on various problems experienced by the indigenous agripreneurs and their business. The information generated may help to identify ways to improve the success factors for the indigenous agripreneurs.

The Ministry of Agriculture and Agro-Based Industry Malaysia should conduct regular training and courses to the indigenous agripreneurs to identify the problems and to improve their skills and business performance.

It is important to note that business network can help the indigenous agripreneurs to sustain their business, encourage them to get involved with the activities and make use of that information for action plans and improvement.

5.5 Limitations of the research

There were two limitations in this research, namely time and budget constraints. Due to this, only 106 questionnaires were collected for this research.

The second limitation was the sample size that was considered small. A larger sample size would be able to represent more indigenous agripreneurs and provide more accurate and conclusive results.
5.6 **Suggestions of future research**

The results of 106 questionnaires suggested that successful indigenous agripreneurs are entrepreneurial innovation projects are the result of a five-stage process model. This entrepreneurial new service development process model differs somewhat from the proposed process models, focusing on large service corporations. Besides a more flexible and informal process for entrepreneurial services, the development cost and the final market price are strongly related to success.

Further research should be made to develop sustainable and replicable models and tools to improve the success factors for the indigenous agripreneurs.

6.0 **Conclusion**

The shift in mindset and practices will only be made possible through the availability of accurate information on the importance and potential of this agriculture sector. Building from this, the researcher hopes that information regarding the agribusiness development can be dissimilated through this research to various stakeholders and interested parties.

Nevertheless, the research in this area is not conclusive. Further investigations should be carried out using more advance tools and larger samples, in order to draw more definite conclusions.

**References**


