

Identifying Elements of Exploring Entrepreneurial Opportunities to Create Entrepreneurial Ideas for Community College Students

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ABSTRACT

Economic, technological and environmental changes today have the potential to provide space in exploring entrepreneurial opportunities and commercializing entrepreneurial ideas. However, this economic landscape is not seen as an entrepreneurial opportunity that can be fully utilized where only a handful of graduates take the opportunity to venture into entrepreneurship as a career. Therefore, this study aims to identify and determine the most important elements in the process of exploring entrepreneurial opportunities. Mixed method research was used in this study using Sequential Explanatory Design involving (i) Modified Delphi Technique (ii) Nominal Group Technique and Interpretive Structural Modeling. Experts involved were 12 entrepreneurial lecturers from higher institutions. There were seven elements of entrepreneurial opportunities exploration construct measured. The findings have shown that analyzing the available entrepreneurial opportunities in the market is the most important element and should be given priority while prior knowledge is in line with current needs as a last step in entrepreneurial opportunities exploration. Therefore, the findings of this study will be the most important source of reference for educators in order to optimize the selection of measures enabling the entrepreneurial activity in producing competitive technical entrepreneurs.

Keywords

Entrepreneurial opportunities exploration; Entrepreneurial Ideas; Technical Entrepreneur

Introduction

The entrepreneurial opportunities that exist are limitless even as the world is chased by technological changes through the 4.0 industrial revolution. Economic, technological and environmental changes have created many entrepreneurial opportunities to the would-be entrepreneurs in the expansion and commercialization of ideas (Ratten & Usmanij, 2020; Bhatia et al., 2021; Nasharudin, 2014; Dadi, 2014; Schwab, 2017; Gumel, 2018). Besides, this situation will help grow businesses especially the online businesses (Ismail et al., 2019). This can be seen by the more widespread use of e-commerce as one of the ways to conduct business in a digital network (Economic Planning Unit, 2020; Ismail et al., 2019).

However, this economic landscape is not seen as an entrepreneurial opportunity that can be fully utilized. Only a handful of youths and graduates seize the opportunity in leveraging the economic activities which in turn will increase the national productivity (Olugbola, 2017). Through the Global Entrepreneurship Monitor (GEM) 2017/2018 report, it is shown that Malaysia is among the countries that are still lagging behind in terms of intention to become an entrepreneur which is 17.6% compared to other ASEAN countries namely Indonesia (28.1%), Vietnam (25%) and Thailand (37.4%) (Global Entrepreneurship Research Association, 2018). Graduates are still looking for jobs that are equivalent to their skills area. In turn, the inability to explore new fields and only focus on finding work has contributed to one of the factors of the rising unemployment rate. The Malaysian Labor Force report in August 2020 showed the unemployment rate is at 4.7

percent, in which this rate is higher by 1.4 percent (221.4 thousand people) compared to the same month in the previous year (August 2019: 3.3%) (Department of Statistics Malaysia 2020). In fact, enterprises in Malaysia generate approximately 9.9 million job opportunities which account for 66 percent of all jobs in Malaysia (Ministry of Entrepreneur Development, 2019). In fact, self-employment can be the best option for job seekers through entrepreneurial opportunities (Ministry of Finance Malaysia, 2020).

According to Olugbola (2017), among the factors identified as the cause of an entrepreneurial opportunity not being taken are i) lack of skills to carry out entrepreneurial activities, ii) low level of motivation and iii) less or never attending entrepreneurship training. In addition, the inability of the entrepreneurial opportunity recognition and exploitation is dependent on the readiness of an entrepreneurial (Hassan et al., 2020). Besides, Ali and Buang (2018) argued that a person who is able to identify opportunities will be able to create self-readiness based on the ability to generate ideas and act to realize those ideas. Therefore, this study is seen as timely in identifying and evaluating the key elements in the process of exploring entrepreneurial opportunities. The rank and priority of elements presented will help and guide academicians to plan entrepreneurial activities and training in understanding the needs that influence the process of exploring entrepreneurial opportunities.

Literature Review

Kirzner (1997) defines entrepreneurial opportunities as market needs that cannot be met accurately, resources or capabilities that are not used or underutilized. According to Shane and Venkataraman (2000), entrepreneurial opportunities are generally understood as situations in which new goods, services, raw materials, and organizing methods can be introduced and sold at greater than their cost of production. Therefore, opportunity exploitation can be described as an act of developing product or service due to recognized business opportunity, acquiring the right start-up team, developing the business plan, identify the products or services market and customers, sourcing of financing that will make the venture work and set up a new venture (Kuckertz et al., 2017).

Generally, opportunity starts with simple ideas, planning and metamorphoses into business plan due to entrepreneur's actions (Gumel, 2018). However, Ardichvili et al. (2003) argued that the opportunity development process starts at the point when the alertness of an entrepreneur has reached a level where factors such as creativity, experience, knowledge, and social networks coincidentally reached top level. In addition, Pihie (2007) explained that before starting a business, an entrepreneur must make an assessment and analysis of entrepreneurial opportunities that can be used in the business later (Pihie, 2007). This argument is reinforced by Barringer and Ireland (2012) who asserted that most new businesses fail not because they are not hard working but they fail to make analysis of entrepreneurial opportunities, competitors, needs and environment in translating ideas to be applied in their business. Ahmad (2009) argued that among the weaknesses in evaluating entrepreneurial opportunities are lack of evaluation of the real objectives of the business, do not understand market conditions, lack of understanding of the aspects of technical requirements especially in the development and production of new products, financial weaknesses, non-unique business and not taking into account or care about issues related to business legislation.

Furthermore, the use of knowledge and information gained plays an important role in exploiting opportunities and identifying market gaps (Wood, 2005). This view is supported by Wang et al. (2013), which stated that the existing understanding and knowledge such as technological knowledge can generate better new ideas that are in turn, able to identify the entrepreneurial opportunities. In fact, Shane (2000); Ardichvili et al. (2003); Wurim (2013) also supported that existing knowledge such as market knowledge, addressing current markets and addressing customer problems play an important role in the process of exploring entrepreneurial opportunities.

In addition, information obtained from the entrepreneurs and traders in the same industry, customers and discussions with suppliers can contribute to ideas in the exploration of market opportunities. Wurim (2013) argued that entrepreneurial opportunities can be identified by obtaining information from players of the same industry before venturing into the field of entrepreneurship. In addition, a positive relationship between the sizes of the network will help to identifying and generating entrepreneurial ideas in the specific area Wurim (2013). This is also supported by Radulovich et al. (2018) and Manev et al. (2005), whom stated that with uncertain

environmental conditions, these social network relationships lead to more accurate information, resource and understand future trends, such as SME target markets, thus assisting entrepreneurs in identifying entrepreneurial opportunities through valuable information (Wang et al., 2013; Banerjee, 2020). Meanwhile, Dimov (2007) also stated that through social experience and assistance from these social network relationships, entrepreneurs are able to identify entrepreneurial opportunities and in turn help entrepreneurs in the process of entrepreneurship learning. Therefore, in exploring entrepreneurial opportunities, there is a need to gain information and knowledge formally and informally among individuals in society (Ratten & Usmaniji, 2020). This view is also reinforced by Giones et al. (2013) who mentioned that the information obtained should be able to assist entrepreneurs to understand the resources required, thus help them to plan further actions. However, Okkonen & Suhonen (2010) stressed that the sharing of information obtained through these social network relationships should be evaluated first and it is important to be vigilant in the process of exploring entrepreneurial opportunities.

Once the entrepreneurial opportunity is identified, then it is important to consider and think of some questions that should be taken into account such as whether the entrepreneurial opportunity meets the needs of customers today; do one have any proof that the product produced will be accepted?; does the market exist?; does the product output is better than the existing competitors?; is it potentially profitable? and how much does it cost to achieve that potential success? (Pihie, 2007). In addition, the competitive environment and the profitability determinants also need to be assessed and analyzed in detail in the opportunity exploration process. Through the Five Strengths model, Micheal Porter explains the factors that need to be considered and analyzed are buyer strength, supplier strength, and competition in the market, threats from new enterprises and threats from existing products or services (Nellis & Parker, 2006).

The fact is, a creative personality is able to explore and identify entrepreneurial opportunities, initiate change and create something new, thus being able to start a business (Shane & Nicolaou, 2015; Rwamtoga, 2011). Furthermore, Wang et al. (2013) also agreed that self-efficacy, existing knowledge, social networks and perceptions of opportunities in an industrial environment can differentiate a person's ability in identifying business opportunities. Thus, by looking at the market today and refining the needs and wants of customers, entrepreneurs are able to explore and evaluate entrepreneurial opportunities. In general, new explorations to identify environmental opportunities are able to assist entrepreneurs in contributing to sustainable creation that can shape future progress (Rosmani & Nor Aishah, 2018).

Methodology

This study employed a mixed method approach of Sequential Explanatory Design. In this study context, the Modified Delphi Technique (MDT) approach was applied first for the development of indicators through the MDT questionnaire instrument. The questionnaires were

distributed to the respondents (experts) to answer. Then, using the findings of MDT, the Nominal Group Technique (NGT) approach was carried out. Evaluation and propagation of ideas was carried out through face-to-face discussion workshops and then supported by using Interpretive Structural Modeling (ISM) software that is Concept Star for model design and development.

Modified Delphi Technique

The Modified Delphi research approach was used for the purpose of gaining expert consensus on exploration of entrepreneurial opportunities items that were applied in entrepreneurship education to produce technical entrepreneurs. In carrying out this phase, researchers would first identify the experts involved to assist in this study. In this study, a total of 12 specialists were involved, including the lecturers from the Community College and the Institute of Teachers in Malaysia whose expertise was in the field of entrepreneurship. This phase involved literature review, instrument development, expert review of instrument refinement, data collection through designated experts and data analysis.

The Modified Delphi technique proposed by Wiersma and Jurs (2009) was applied in this study as it was a procedure for finding consensus among the selected experts using a face-to-face questionnaire (Wiersma & Jurs, 2009) as well as the best way to get a high-quality feedback on problems and questionnaires from a team of experts (Mohd Said, 2015). In this study, the first round of interviews in the actual Delphi method was not required and the modified Delphi process was continued into the second round of the subject exploratory questionnaire. This is because the issues in the first round of the Delphi method have been sufficiently defined by the researchers through a literature review related to the entrepreneurship and PBL, particularly technical entrepreneurs. Generally, a modified Delphi did not consult the expert panel to generate answers in the round 1 (Avella, 2016). Table 1 provided an overview of the implementation procedures for the modified Delphi study while Table 2 summarized the implementation, data collection and analysis of the modified Delphi.

Table 1: Implementation phase of Modified Delphi

Round 1	Round 2	Round 3
<ul style="list-style-type: none"> Explained the issues, problems and identify the literature review items. Selected a Delphi panel (experts in entrepreneurship) Prepared the questionnaire 	<ul style="list-style-type: none"> Distributed the questionnaire Feedback analysis: agreements, assumptions and conflicting opinions Prepared and distributed questionnaires based on the 	<ul style="list-style-type: none"> Distributed the questionnaire Feedback analysis: agreements, assumptions and conflicting opinions Final interpretation and conclusion

	findings for the 3rd round	
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Table 2: Summary of Modified Delphi Technique

Implementation Phase	Method of Data Collection	Analysis Technique
Round 1	Past studies, literature review	None
Round 2	Questionnaire	Range of Quartile (ROQ)
Round 3	Questionnaire	Range of Quartile (ROQ)

Nominal Group Technique and Interpretive Structural Modeling

NGT workshops were conducted to identify the key elements that need to be present in the design of the entrepreneurial opportunity exploration model. In this session, a panel of experts discussed and agreed to explore and reach a consensus on the necessary elements of the key study. The final list of elements was obtained through the experts voting session. Researchers used the NGT approach through a questionnaire containing a preliminary draft obtained from the indicators development through the Modified Delphi Technique (MDT) phase. During the NGT workshop, researchers played the role of facilitator in the brainstorming session.

The implementation of NGT is regulated by facilitators who are fair and equitable in receiving information and ideas from the members (Perry & Linsley, 2006; O'Neil & Jackson, 1983). The brainstorming session began by introducing all the experts, explaining the objectives of the brainstorm and stating the background information and the purpose of the study. Through NGT, each member was required to voluntarily pitch ideas, avoid some members dominating the discussions and avoid individual pressure to follow the views of other members (O'Neil & Jackson, 1983; Lomax & McLeman, 1984; Aizat et al., 2006). However, any criticism was not allowed

Modified Scale	Level of Consensus	Result
0 - 1	High consensus	Accepted
1.01 - 1.99	Moderate consensus	Accepted
≥ 2	No consensus	Rejected

(Holtzaple & Reece, 2010).

The facilitator will read the initial list of each element based on the main study components to be

discussed with the experts to see the appropriateness and accuracy of the elements, especially in terms of meaning and sentence structure before reaching the experts agreement. A panel of experts were asked to provide subsequent views which would be translated on the model development questionnaire that had been prepared.

Consensus and appropriateness values in the likert scale marked by each expert panel will determine the score value of each element evaluated. The value of this score will be translated into percentage in order to interpret the data whether each element assessed is appropriate and usable or vice versa. This condition is in line with Deslandes et al. (2010) and Dobbie et al. (2004) who asserted that an element is acceptable if the total percentage of scores given by the expert panels is equal to or exceeds 70 percent. NGT voting is not to remove or drop the elements that have been agreed, but aims to set the position according to the priority of each element. Scales 1 to 5 are used for the purpose of ordering elements according to priority based on the interpretation of the scale, namely 1- Strongly Disagree, 2- Disagree, 3- Less Agree 4- Agree and 5- Strongly Agree.

Data Analysis

Modified Delphi Technique

Data analysis for the modified Delphi in this study used the Statistic Package for the Social Science (SPSS) software for each round in which the data were obtained through the distributed questionnaires. Furthermore, the analysis results from the SPSS are presented in the form of descriptive statistics namely percentage score, mode score, median score and ROQ that represented the expert consent decisions in this study. Descriptive statistics were used to describe variables in a phenomenon and they needed to be interpreted logically in a specific way (Balnaves & Caputi, 2001; Piaw, 2006; Vogt, 2007). One possible way was to use descriptive statistical methods called a measure of central tendency (MCT). According to Minghat (2012) the MCT involved several calculations, such as the percentage score and frequency to obtain a panel view of the questionnaire items, the mean score used to describe the order of priority of the items contained in the questionnaire, the median score used to identify the statements needed in shaping the items of the questionnaire and ROQ was used to determine the relationship between each item and the expert panel.

Subsequently, the surveys data from the Likert scale obtained through the second and third rounds were translated into a modified Delphi data and analyzed using Excel software. This data analysis technique was known as the Modified Delphi Technique. Comments and suggestions expressed by a panel of experts were also taken into account to improve and refine items related to PBL.

In this modified Delphi, there were two important aspects: Range of Quartile (ROQ) and the process of obtaining ROQ values. ROQ is composed of Q1, Q2 and Q3 values and is usually represented in the form of Q3-Q1. In general, the value of Q1 was the first quartile value while Q3 was the third quartile value. Levels for modified Delphi

scales were 0, 1 and 2 where ROQs with values 0 to 1 indicated that the level of expert agreement was high and the items developed were acceptable (Peck & Devore 2012). Table 3 shows a summary of the three point modified Delphi and the calculation method for ROQ as follows:

$$\begin{aligned} &= \text{Quartile 3} - \text{Quartile 1} \\ &= Q3 - Q1, \text{ where } Q1 = n/4, \\ &Q3 = 3n/4 \end{aligned}$$

Table 3: Three point Modified scale

Source: Peck & Devore (2012)

Nominal Group Technique and Interpretive Structural Modeling

The data from the Modified Delphi Technique (MDT) were used for model design and development. For model design and development, it involved the Nominal Group Technique (NGT) and the Interpretive Structural Modeling (ISM) software namely Concept Star. NGT approach involved discussion and evaluation from the experts on the elements in the questionnaire. The findings from the final list of NGT sessions were analyzed using ISM software, Concept Star. The analysis was based on expert panel votes conducted repeatedly until all the study elements had been voted on. Furthermore, ISM produced a diagram or direct graph (diagraph) to illustrate the relationship between the elements and subsequently structured these complex issues in a hierarchical structure model (Porter et al., 1980) graphically. Generally, ISM helped in determining the sequence and purpose of complex relationships between elements in the system (Kusrini et al., 2019).

Results

Indicator for the exploration of entrepreneurial opportunities

Table 4 showed the details of case study data for the exploration of entrepreneurial opportunities indicator. Based on the findings, there were eight items under the indicator of exploring entrepreneurial opportunities in realizing entrepreneurial ideas. The items developed (see Table 4) were as follows: 1) analyse opportunities; 2) analyse risks; 3) market needs; 4) information from industry players; 5) information from customers; 6) discussion with suppliers; 7) prior knowledge and 8) prior knowledge (ICT). On the whole, the expert panel agreed on a high level of consensus on items representing the exploration of entrepreneurial opportunities indicator for both rounds with ROQ scores of 0 and 1 while mod and median values were 4 and 5. Therefore, all items are accepted upon obtaining agreement or consensus from all experts.

Table 4: The detail data of Modified Delphi Technique (MDT) for the second and third round of exploring entrepreneurial opportunities

Exploring Entrepreneurial Opportunities									
No	Indicator/Items	Round Two				Round Three			
		M	Med	ROQ	Consensus Level	M	Med	ROQ	Consensus Level
1	Analyse opportunities: Analyze entrepreneurial opportunities in business operations	5	5	1	High	5	5	1	High
2	Analyse risks: Analyze business risk in business operations	5	5	0.75	High	5	5	0.75	High
3	Market needs: Be sensitive to the current needs of the market	5	5	0.75	High	5	5	0.75	High
4	Information from industry players: Obtain business related information from players in the same industry	5	5	1	High	4	4.5	1	High
5	Information from customers: Obtain information from customers/potential customers related to entrepreneurial opportunities	5	5	0.75	High	4	4.5	1	High
6	Discussion with suppliers: Have discussions with suppliers in identifying entrepreneurial opportunities	5	4.5	1	High	5	5	0.75	High
7	Prior knowledge Apply prior knowledge in line with current needs	5	5	0	High	5	5	1	High
8	Prior knowledge (ICT): Apply the prior knowledge with respect to the specifics latest technology	5	5	1	High	5	4.5	1	High
ROQ = Range of Quartile, Med = Median, M = Mod									

elements was obtained through the discussion and agreement of the expert panels in the NGT workshop conducted.

Model design and development

NGT workshops were conducted to identify the key elements that need to be present in the design of the entrepreneurial opportunity exploration model. A panel of experts discussed and agreed to explore and reach a consensus on the necessary elements of the key study components. Table 5 shows that the initial number of entrepreneurial opportunity exploration elements was eight while the final number was seven elements. The final list of

Table 5: Comparison of the number of start and end lists of entrepreneurial opportunities exploration elements

Indicator	List of elements (early)	List of elements (final)
Exploration of entrepreneurial opportunities	8	7

Table 6 shows the final list of elements for the exploration of entrepreneurial opportunities according to priority based on the expert panel agreement. Based on Table 6, of the eight initial lists of elements, only seven elements were selected after improvements were made by the panels involved. There is one element that is dropped which is "*prior knowledge (ICT): prior knowledge with respect to the specifics of the latest technology*". Through the findings of the study, the majority of the expert panel agreed that being sensitive to the present needs is the most important element and should be given prior attention in the process of exploring entrepreneurial opportunities. After identifying and exploring today's market needs, then it is continued by obtaining information from customers or potential customers related to entrepreneurial opportunities that can be explored or created. The final phase in the process of exploring entrepreneurial opportunities is to analyze business risks in conducting business operations after various information is obtained from various sources. Experts are of the opinion that every piece of information obtained should be analyzed first in order to predict any possible business risks in the future.

Next, Figure 1 shows the entrepreneurial opportunity exploration model. This model is a model structure that connects the elements of entrepreneurial opportunity exploration based on the voting of expert panels. These elements form a network of relationships that show the process arrangements in the entrepreneurial opportunities exploration according to the exploration relationships importance and priority. In the figure, element 1 (Analyzing entrepreneurial opportunities available in the market) has 6 driving powers and 1 dependency power. This means that element 1 has 6 times influencing level towards other elements, in which element 1 affects elements 5, 6, 2, 3, 4 and 7 while element 1 also has 1 time power to be influenced by other elements i.e. the element itself. This indicates that element 1 has a high influence and it should be given priority before the other elements in the process of exploring entrepreneurial opportunities.

In the exploration of entrepreneurial opportunities, the panel of experts agreed that analyzing the available entrepreneurial opportunities in the market is the most important element and should be given priority. This is because by making an analysis of the entrepreneurial opportunities available in the market can help entrepreneurs to get ideas and initial information related to the business that they will venture soon. Pihie (2007) also argued that before starting a business, an entrepreneur should make an assessment and analysis available of entrepreneurial opportunities that can be used in business later.

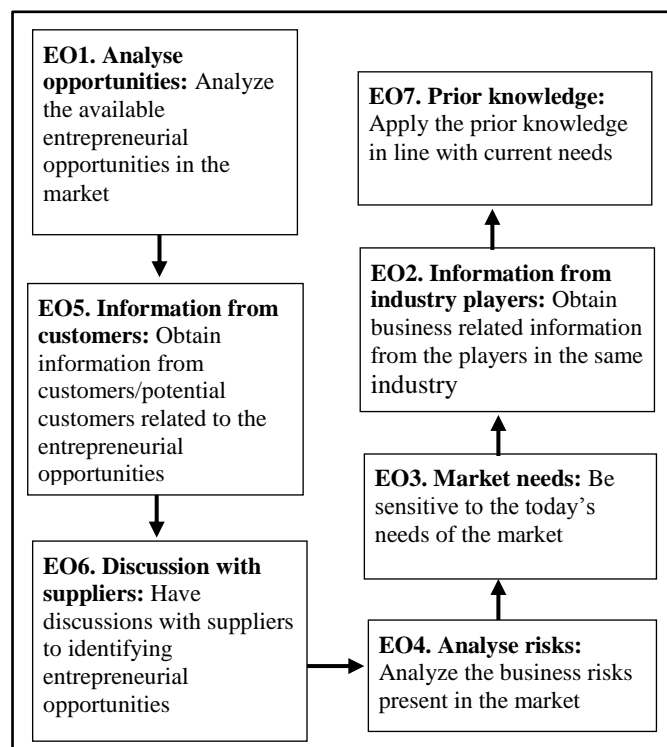


Figure 1: ISM-based model for exploring entrepreneurial opportunities

Table 6: The detail data of Nominal Group Technique (NGT) of entrepreneurial opportunities exploration elements

Elements	Experts									Score	%	Results	Rank
	1	2	3	4	5	6	7	8	9				
Exploration of entrepreneurial opportunities													
Analyse opportunities: Analyze the entrepreneurial opportunities available in the market	4	4	5	5	4	4	5	5	5	41	91.1	Accepted	3
Analyse risks: Analyze the business risks present in the market	4	4	5	5	4	4	5	5	4	40	88.9	Accepted	4
Market needs: Be sensitive to the present needs of the market	5	5	5	5	4	5	5	5	5	44	97.8	Accepted	1
Information from industry players: Obtain business related information from players in the same industry	5	4	4	4	5	4	5	4	5	40	88.9	Accepted	4
Information from customers: Obtain information from customers/potential customers related to entrepreneurial opportunities	5	5	5	4	5	5	5	4	5	43	95.6	Accepted	2
Discussion with suppliers: Have discussions with suppliers to identify entrepreneurial opportunities	4	5	4	5	4	4	5	4	5	40	88.9	Accepted	4
Prior knowledge: Apply existing knowledge in line with current needs	5	4	4	5	4	4	5	5	5	41	91.1	Accepted	3

Discussion

Overall, ISM-based model has shown that analyzing the available entrepreneurial opportunities in the market (**EO1**) is the most important and priority step in entrepreneurial opportunities exploration. After that, obtaining the information from customers or potential customers related to the entrepreneurial opportunities (**EO5**) then, leading the discussions with suppliers to identify entrepreneurial opportunities (**EO6**). After getting the information from customers, potential customers and supplier, then analyzing business risks needs to be conducted (**EO4**) and it is also

crucial to be sensitive of today's needs of the market (**EO3**) so as not to affect the business development. Next, obtaining business related information from the players in the same industry (**EO2**) and applying the prior knowledge in line

with current needs (**EO7**) as a last step in entrepreneurial opportunities process. Overall, the results of the analysis demonstrate that the entrepreneurial opportunities process is not simply recognition but identify, perception, discover potential opportunities, evaluation and creation (Ardichvili et al., 2003). This means that entrepreneurial opportunities exploration plays an important role before creating a new business, venture, market, or product. Before making any innovation decision, entrepreneurs need to be able to precisely and accurately identify so called "new opportunities", otherwise, it may cause financial loss (Wang et al., 2013). It is because the entrepreneurial opportunities exploration process is cyclical, and it is important to note the chances of recognizing additional opportunities or the chance of adjusting the initially identified opportunity (Ardichvili et al., 2003).

Analyzing the available entrepreneurial opportunities in the market has emerged as the important step in entrepreneurial opportunities exploration as it comes

in the first element of ISM model. This clearly indicates that the information from the analysis could help entrepreneurs in understanding the market needs and available resources well. Thus, a business created to meet the new market opportunity is more likely to be successful than the one created out of a product idea that does not fit the market (Khin & Lim, 2018). This finding supports previous studies which have found that entrepreneurs must discover opportunities analyse first such as marketing and then use their knowledge in marketing and finance to exploit and utilize opportunities existing in the market before others (Ge et al., 2016). In addition, other factors need to be analyzed such as the strength of buyers, the strength of suppliers, competition in the market, threats from new enterprises and threats from existing products or services (Ratten & Usmanij, 2020; Nellis & Parker, 2006). The current findings also parallel to the recent results indicating that before starting a business, an entrepreneur should make an assessment and analysis of available entrepreneurial opportunities that can be used in business later (Pihie, 2007). Taken together, these findings suggest that before starting to develop new businesses, entrepreneurs must analyze the available entrepreneurial opportunity including competitors, customers need, current markets and environment in translating ideas to be applied in their business.

The second most important step in entrepreneurial opportunities exploration is getting information from customers or potential customers and then lead to discussion with supplier to identify entrepreneurial opportunities. This findings support previous studies which have found that opportunities can be recognized by being alert and by identifying through searching the collected relevant information from communication with customers will be seen as addressing their needs (Gumel, 2018). The current findings are also parallel to the recent results indicating that entrepreneurial opportunities exploration can be identified by obtaining information from players of the same industry before venturing into the field of entrepreneurship (Wurim, 2013). This is also supported by Radulovich et al. (2018) and Manev et al. (2005), which stated that with uncertain environmental conditions, these social network relationships lead to a more accurate information and resource findings such as SME target markets thus assisting entrepreneurs in identifying entrepreneurial opportunities through valuable information (Wang et al., 2013). Meanwhile, Dimov (2007) also supported that through social experience and assistance from these social network relationships, entrepreneurs are able to identify entrepreneurial opportunities and in turn help entrepreneurs in the process of entrepreneurship learning. However, Okkonen and Suhonen (2010) stressed that the sharing of information obtained through these social network relationships should be evaluated first and it is

Conclusion

On the whole, the results of this study have provided valuable new insights regarding the exploration of entrepreneurial opportunities to create in order to realize and commercialize entrepreneurial ideas. In particular, this study revealed that analyzing opportunities, information from customers, discussion with suppliers, analyzing risks, market needs, and information from the industry players and

important to be vigilant in the process of exploring entrepreneurial opportunities.

Next, the study revealed that be alert with the markets need also influences the process of exploring entrepreneurial opportunities. Clearly this findings are in line with previous research. Gumel (2018) believed that identification of the right customers and market of the product or service are important to the process of opportunity exploitation. According to Wang et al. (2013), the entrepreneurial activity contains not only new product innovation but also the recognition of new market opportunities such as customers' needs. In other words, investigating and be alert of the new market in the exploration of entrepreneurial opportunities process is important and will help to create new ideas for business development. Thus, market knowledge will help entrepreneurs to identify market, customers, and the ability to source the material resources for the successful take-up of a new venture (Ardichvili et al., 2003; Shane & Venkataraman, 2000) and will also be useful in exploiting market imperfections (Maine et al., 2015). Such statement indicates that the higher of alertness, the higher the possibilities an entrepreneur will recognize an opportunity and get more valuable information.

Finally, the study revealed that it is also crucial to apply prior knowledge as a last step in exploration entrepreneurial opportunities process. According to Park et al. (2017), people who obtained knowledge from a social network (supplier, customer, industry) and prior experience will have a better opportunity in finding new markets than those who do not. The information and knowledge gained can help identify opportunities that can be explored in the market today. Clearly, this finding is in line with previous research by Shane (2000); Ardichvili et al. (2003); Wurim (2013), which stated that the existing knowledge such as market knowledge, addressing current markets and addressing customer problems can benefit the ideas development and exploration of entrepreneurial opportunities. This is consistent with Wang et al. (2013) in their study, which showed that the existing knowledge is able to influence a person for the exploration of entrepreneurial opportunities in an industrial environment. Besides, Foss et al. (2013) have also agreed that the entrepreneurs' prior knowledge has been accepted as one the effective factors in the process of opportunity recognition and opportunity exploitation. In general, research has supported that discovery and creation of entrepreneurial opportunities relies on various forms of information and knowledge accumulated by the entrepreneurs (Fletcher et al., 2013; Wood, 2005).

applying the prior knowledge had a significant effect on the exploration of entrepreneurial opportunities. It has also been determined that analyzing the available entrepreneurial opportunities in the market is the most important step in exploring entrepreneurial opportunities, followed by information from customers, discussion with suppliers, analyzing risks, market needs, information from industry players and applying the existing knowledge. The implications are for the entrepreneurs and the TVET education system in Malaysia whether students especially

community college, educators, institutions or government. In addition, the findings on the exploration of entrepreneurial opportunities model confirmed the importance of various views as a source of valuable information to understand the process of exploring entrepreneurial opportunities and helped to realize entrepreneurial ideas.

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