



**RELATIONSHIP BETWEEN RESEARCH & DEVELOPMENT,
TECHNOLOGY, ENTREPRENEURIAL LEADERSHIP, NETWORKING
AND INNOVATION CAPABILITY AMONG TOURISM SME IN
KELANTAN**

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Bachelor of Entrepreneurship (Tourism) with Honours

A report submitted in partial fulfilment of the requirements for the degree of

Bachelor of Entrepreneurship (Tourism) with Honours

Faculty of Hospitality, Tourism and Wellness

UNIVERSITI MALAYSIA KELANTAN

2020

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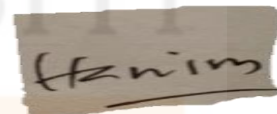
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ACKNOWLEDGEMENT

We are grateful and would like to express our sincere gratitude to our supervisor Madam Fadhilahanim Arvan binti Abdullah for her invaluable guidance, continuous encouragement and constant support in making this research possible. We really appreciate his guidance from the initial to the final level that enabled us to develop an understanding of this research thoroughly. Without her advice and assistance it would be a lot tougher to complete. We also sincerely thank you for the time spent proofreading and correcting our mistakes. Our sincere thanks to Puan Hazyati binti Hashim as our lecturer for the Final Year Project who helps us in many ways and always supports this study.

For team members; Nur Rajatul Azwah, Noor Safira bint Rumzi, Nurul Afila binti Muhammad dan Nuraqila Athirah binti Rasdi for had given much cooperation in the success of this research. We acknowledge our sincere indebtedness and gratitude to our parents for their love, dream, prayer and sacrifice throughout our life. We were really thankful for their sacrifice; patience and understanding that were inevitable to make this work possible. Their sacrifice had inspired us from the day we learned how to read and write until what we have become now. We cannot find the appropriate words that could properly describe our appreciation for their devotion, support and faith in our ability to achieve our dreams.

Lastly we would like to thank any person who contributes to our final year project directly and indirectly. We would like to acknowledge their comments and suggestions, which was crucial for the successful completion of this study.

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LIST OF SYMBOLS AND ABBREVIATIONS

Symbols

%	Percent
α	Alpha
\geq	More than or equal to
$>$	More than
(-)	Negative
n	Frequency
r	Pearson Correlation Coefficient
N	Population Size
S	Sample Size

Abbreviations

SME	Small and Medium Enterprise
TSME	Tourism Small and Medium Enterprise
TOD	Technology opportunities
CIS	Community Innovation Survey
R&D	Research and Development
FMM	Federation of Manufactures
COO	Chief Operating Officer
MATRADE	Malaysia External Trade Development Corporation
SPSS	Statistical Package for the Social Sciences

ABSTRACT

This research focused on the determinant relationship between research and development (R&D), technology, entrepreneurial leadership and networking towards innovation capability among tourism SME in Kelantan. A quantitative research was conducted to achieve these research objectives. Simple random sampling is used and responses from 380 respondents are collected. To analyze all the data, descriptive analysis, reliability testing and Pearson correlation are used. This research found that Research and Development, entrepreneurial Leadership, technology and networking have positive correlation towards innovation capability. Tourism SMEs encouraged to innovate by fostering innovation capability of them, and establishing an innovation framework that was successfully researched.

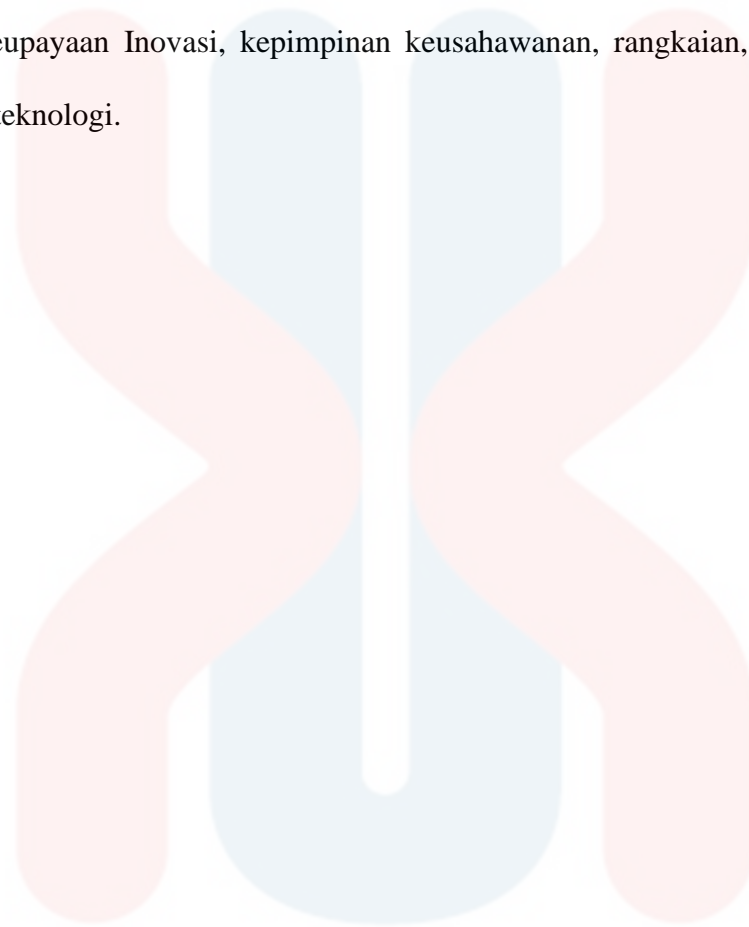
Keywords: Innovation Capability, entrepreneurial leadership, networking, Research & Development, technology.

ABSTRAK

Penyelidikan ini memfokuskan pada hubungan penentu antara penyelidikan dan pengembangan (R&D), teknologi, kepimpinan keusahawanan dan jaringan ke arah kemampuan inovasi di kalangan PKS pelancongan di Kelantan. Penyelidikan kuantitatif dilakukan untuk mencapai objektif kajian ini. Persampelan rawak mudah digunakan dan tindak balas daripada 380 responden dikumpulkan. Untuk menganalisis semua data, digunakan analisis deskriptif, ujian kebolehpercayaan dan korelasi Pearson. Penyelidikan ini mendapati bahawa Penyelidikan dan Pembangunan, Kepimpinan keusahawanan, teknologi dan rangkaian mempunyai hubungan positif terhadap kemampuan inovasi. PKS pelancongan

didorong untuk berinovasi dengan memupuk kemampuan inovasi mereka, dan membangun kerangka inovasi yang berjaya diteliti

Katakunci: Keupayaan Inovasi, kepimpinan keusahawanan, rangkaian, penyelidikan dan pembangunan, teknologi.



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CHAPTER 1

INTRODUCTION

1.1 BACKGROUND OF THE STUDY

Small and medium-sized businesses (SMEs) are widely acknowledged as the foundation for economic, development, and job growth. Small businesses, on the other hand, are still reticent to embrace and integrate new technology. (Dahnil et al., 2014). Small and mid-size enterprises (SMEs) are businesses that maintain a certain threshold such as revenues, assets or a number of employees. Each country has its own concept of small and medium enterprises (SMEs). In the economy, small and medium enterprises (SMEs) play an important role in employing large numbers of people and helping to shape innovation (Liberto, 2020).

Liberto, (2020) also SMEs are defined as businesses having sales, assets, or a particular number of employees that fall below a certain threshold, according to the Small and Medium-Sized Enterprises Act (SMEA). Each country defines what it means to be a small or medium-sized firm differently (SME). Certain size requirements must be met, and the company's industry is occasionally taken into account. Despite their tiny size, small and medium-sized enterprises (SMEs) play an essential role in the economy. They outnumber major firms, employ a huge number of people, and are typically entrepreneurial in nature, helping to shape innovation.

Because of the globalization of markets, which has created a more competitive environment, rapid technical developments, and shorter product and technology lifecycles,

many businesses, particularly SMEs, are focusing on innovation as a major driver for long-term competitive advantage. (Dadfar et al.,2013). SMEs are less innovative than large enterprises on average. Furthermore, small firms (10-49 people) are half as likely as large enterprises to have an online buying website and one-third as likely to use Enterprise Resource Planning (ERP), a software platform that integrates fundamental company activities in real-time. In the shifting of market conditions and competitive instruments, as well as the achievement of competitive strategies, innovation plays a critical role. According to Higgins (1995), innovation is the key to gaining a competitive advantage. As can be shown, SMEs play an essential role in industry innovation, nevertheless, empirical research on the topic of SMEs' innovation in the tourism industry is woefully lacking. (Yüzbaşıoğlu, 2014).

Firms' R&D activities and inventive new products are referred to as innovation capability as cited by Tajvidi et al. (2015) and Kirner et al. (2009). Firms' technological innovation is also thought to be based on R&D activity and technological expertise. However, the literature suggests that formal R&D activities do not lead to innovation in small and medium-sized businesses, but rather to informal day-to-day business development and customer connections as cited by Tajvidi et al. (2015); Hirsch-Kreinsen, (2008); Forsman and Temel, (2011). Marsili and Salter (2006) In addition, the majority of SMEs lack a clear documented innovation plan, with less than half of those companies allocating funds to innovation.

Furthermore, Santamaria et al. (2009) claimed that small-business innovation is the product of technology inquiry, learning, appraisal, and adaptation. Because development activities are woven into daily business operations in small businesses, it's difficult to tell the difference between daily business development and innovation cited by Tajvidi et. al. (2015) and Forsman, (2008). In SMEs, not only is the innovation process hidden from outside

observers of the firm's operations, but even internal firm personnel are unaware of the innovation development strategy when they are dealing with it themselves (Tajvidi et al. 2015; Hansen and Serin, 2010). All of the activities involved in gathering information about customers in a market and spreading that information within the firm are referred to as customer orientation (Narver, 1990).

Building on an extended literature review, we highlighted diversified constructs of innovation competency and innovation capability by using different dimensions in an SME context: owner/manager characteristics, network integration, culture and structure, technology and research and development (R&D). We also utilized criteria based on comprehensiveness and parsimony to reduce and combine similar constructs described with different titles.

1.2 PROBLEM STATEMENT

SMEs can be developed but only a little attention is given precisely that there needs to be research for SMEs. Although the Malaysian economy makes a significant contribution, the Malaysian SMEs are still struggling to establish and install open innovation systems, the less open innovation that affects their overall performance and competitiveness on both local and international markets. Malaysia is the highest middle class income country since 1980, ranked 72nd in business innovation according to the Global Innovation index survey. Kaufmann and Tödting (2002) said that Malaysian SMEs have encountered problems like weak technical cooperation and lost emphasis on R&D which have constrained their various innovation activities and have influenced their innovation output.

Moreover, Tehseen et al. (2017) suggest that SMEs in the services sector are most vulnerable to poor growth in open innovation, in particular in retail services. One of the main

factors behind this slow growth in open innovation is the slow implementation of innovation and knowledge basis systems. Based on estimates, Malaysia's SMEs fail to build a good system of open innovation that could boost performance due to the abovementioned problems.

Several scholars have considered SME specificities as a determinant context element (Gronum, 2012; Keizer et al., 2001; Motwani et al., 1999). A small firm is not a scaled-down counterpart of a larger firm, as Man and colleagues (2002) point out. Larger and smaller businesses differ in terms of organisational structures, environmental responses, management styles, and, most crucially, competitive strategies with other firms. The prevalent paradigm of SME specificities clearly demonstrates the need to analyse SMEs based on their unique traits and behaviours (Julien 1993; Volery, Mazzarol, 2015) that significantly influence their innovation strategies (Gronum et al., 2012; Motwani et al., 1999). Thus, SMEs' innovation capability should be analysed and unambiguously consider SME specificities and characteristics (Damanpour, Wischnevsky, 2006; Motwani et al., 1999; Salerno et al., 2014; Terziowski, 2010).

A firm can increase its innovation capability and innovate its products, services or processes by research and development (R&D) and need to make it harder for competitors to imitate them. Due to market characteristics such as the short life cycle and high new product entry rate, innovation capability is a critical element in achieving superior innovation performance. The aim of this research is to determine the factors of innovation capability in Small and Medium Enterprise (SMEs) in Malaysia.

1.3 RESEARCH QUESTION

1. What is the relationship between research and development (R&D) and innovation capability?
2. What is the relationship between technology and innovation capability?
3. What is the relationship between networking and innovation capability?
4. What is the relationship between entrepreneurial leadership and innovation capability?

1.4 RESEARCH OBJECTIVE

1. To examine the relationship between research and development (R&D) and innovation capability.
2. To examine the relationship between technology and innovation capability.
3. To examine the relationship between networking and innovation capability.
4. To examine the relationship between entrepreneurial leadership and innovation capability.

1.5 SCOPE OF STUDY

This study focused on factors of innovation capability in tourism SME. To do our research we concentrate on tourism SME in Kelantan to get different responses which accommodation & hotel, travel agency, food & beverage, transportation and craft that are located in Kelantan.

1.6 SIGNIFICANT OF STUDY

This shows that innovation capability is affected under the various issues in SMEs. The main driver of productivity and long-term growth is creativity. Supporting innovation within small and medium-sized businesses has been promoting inclusive growth by reducing productivity disparities and wage gaps between small and medium-sized enterprises.

On average, small and medium-sized businesses are less creative. Some small businesses are however extremely creative and can achieve efficiency higher than large firms. Better innovation output is accomplished by organisations, which efficiently improve and leverage their strategic internal capital (e.g. managers' and employee skills, ICT, research and development, etc.).

Governments encouraged innovation in SMEs by promoting a sound business climate, supporting small and medium-sized companies to efficiently grow and leverage their internal strategic capital and created an innovation framework successful at the marketing of research and including a wide variety of SMEs.

1.7 DEFINITION OF KEY TERMS

SMEs

As a crucial element in the micro, small and medium enterprises (MSMEs) market, the importance of information transfer has become more renowned. Transfer of knowledge is the transfer of knowledge from one person or business to another through some channel(s) (Abou

Hashish, 2017). It also extends to events that include the sharing of people's experiences and work-related skills (Tassabehji et al., 2019).

Innovation Capability

The efficiency of the mainstream is combined with the inventiveness of the new stream in an innovation capability. This is accomplished by utilizing their knowledge base (Cohen & Levinthal, 1990). As a result, innovation capability is described as the ability to consistently come up with new ideas for the benefit of the company and its stakeholders, turn information and ideas into new products, processes, and systems. Innovation capability is more than just the ability to run a new stream business or manage mainstream capabilities.

Research and Development (R&D)

Businesses make the most of R&D, according to Frankort (2016). Innovation knowledge transfer, when businesses have formed an active relationship in a related technology sector, though still operating in separate product markets. In general, small and medium-sized companies that are highly profitable with inventions seem to incur some percentage of greater R&D costs than those that do not (Baumann and Kritikos, 2016)

Technology

The opportunities for the technology include the collection of possibilities for technology advancements (Klevorick et al., 1995; Olsson, 2005; Song et al., 2017). Discovery of technology opportunities (TOD), referred to as evaluating technology opportunities, focuses

on helping researchers recognize, extract and analyze new Song et al., 2017), and it has piqued the curiosity of both academics and industry (Porter and Detampel, 1995; Cho et al., 2016).

Networking

Networks are not like collaborative partnerships because they involve direct or indirect value creation activities in the wider business ecosystem (Ebersberger et al., 2012; Nieto & Santamaria, 2010; Vanhaverbeke & De Zutter, 2012; Zeng, Xie, & Tam, 2010); Zhang, Ma, Wang, Li, & Huo, 2016).

Leadership

Leadership can directly affect organizations' innovative capability (Chen et al., 2016) or affect the development of circumstances that promote innovation, especially those related to organizational learning (García-Morales et al., 2012). Two are particularly distinguished among the conditions that foster innovation: the formation of a learning culture (Chen et al., 2015; Wu, 2016) and the production of an organizational structure that leads to learning (Chen et al., 2015; Wu, 2016) (Huxham and Vangen, 2000). In contrast, both constructs are closely connected to so-called "learning organizations" (Senge, 1990).

1.8 SUMMARY

Chapter 1 begins by introducing both the context in which this research was carried out and the background. This is accompanied by the problem statement which has been found. Next, research objectives and questions are found. It then continues to illustrate the significance of the research. The definition of words is explained briefly. In doing so, the chapter briefly mentions how this study proposal would contribute to the determination of factors of innovation capability in SMEs.



CHAPTER 2

LITERATURE REVIEW

2.1 INTRODUCTION

This chapter provides a study of literature related to research. It specifies a deeper understanding of the innovation capability as a dependent variable and research and development (R&D), technology, networking and entrepreneurial leadership as independent variables. It also addresses the relationship between dependent variables and independent variables. This chapter also discusses the conceptual framework and also the summary end of the chapter.

2.2 INNOVATION CAPABILITY

An innovation capability is thus defined as the ability to transform knowledge and ideas into new products, processes, and systems for the benefit of the firm and its stakeholders on a continuous basis. Innovation capability is more than just the ability to successfully run a new business stream or manage mainstream capabilities. The ability to innovate entails combining these two operating paradigms.

Organizations must learn to transform their capability of knowledge, skill, and process to achieve complete innovative capability, with the exception of two important factors of competence exploitation and competence exploration. A market-oriented (that is, customer-led) firm with innovative capability connects with the outside-in process through transformative learning. A large number of external specialties absorb the combinations of the

complexes (Day, 1994; Lichtenthaler, 2009). Therefore, innovative capability has both a spanning and a mediating role. Definitions quite similar to Schumpeter's are often used by the Community Innovation Survey (CIS) carry out through central statistics departments throughout the European Union. CIS distinguishes among product innovation, innovation in methods, innovation in companies and innovation in the industry. Product innovation is the beginning of new products or services that are significantly enhanced to the market despite their capabilities. Substantially enhanced production technology or production process or distribution channel is the introduction of a process in innovation .

The empirical analysis of Pechlaner, Fischer, and Hammann (2005) also indicates that cooperation through information and experience transfer improves the company's creative potential. They also said that "descended leaders," that is, administrators of tourist organizations, had to organize the process of transfer to ensure the flow of information and to reduce the cost of transactions for the companies involved. This literature review points to some critical conditions for creative ability. First of all, collaboration and networks seem to be very relevant because interaction within collaborative systems facilitates information flow and knowledge transfer, skills, thoughts, and suggestions. Secondly, small businesses do not have the skills needed to consult or use complex and 'non-focused' information, such as test results.

The process of innovation, also known as innovation control, is defined as an involved and conscious control procedure of an organization and the execution of activities that lead to innovation (Hansen and Birkinshaw, 2007). The process of innovation has four stages: the first is idea creation, which is the process of generating ideas for new products (goods and/or services in general). The second is the selection of ideas offered by the screening of reviews of those new concepts based on a strategic orientation organization and taking into account

the resource allocation conditions and goals of the organization. Third, the production of ideas provides a segment focused on known best practices to turn ideas into viable goods. The last is Concept diffusion, the offering segment for end users to produce new creative goods. The aim of the innovation management/innovation process is to ensure that a company is able to provide end users with new innovative products and services on an on-going basis, as well as innovation in the business model to preserve the competitiveness of the organization through sustained success in innovation.

2.3.1 RESEARCH AND DEVELOPMENT (R&D)

For major global companies and foreign SMEs, this can be observed. In Germany, approximately 3% of creative companies with no foreign R&D activities expected to launch it in 2006/2007 in 2005 (Rammer and Schmiele 2008).

Businesses can get access to local science and technology tools by setting up international R&D subsidiaries and are thus able to procure, absorb and incorporate expertise from abroad into their innovation process (home-base augmenting strategy). It has been stressed that an effective innovation strategy needs to balance the use of existing knowledge with the exploration of non-local knowledge for new knowledge (Levinthal and March, 1993). It has also been shown in this respect that putting together existing pieces of knowledge often leads to innovations.

2.3.2 TECHNOLOGY

Previous studies on the relationship between technology, innovation capability, and export performance in small businesses have failed to produce consistent results. This could be due to the fact that the innovation process in small businesses appears to have blurred borders: a number of variables combine and concur, making the process varied and difficult to define. A specific R&D process is rarely carried out in small units: most innovation is exogenous and takes the form of incremental — often imitative — changes to existing products or processes. As a result, the traditional metric for assessing a firm's innovation capability, R&D as a percentage of sales, makes little sense in this context. In the history of technological advancement, the government has played a significant role (Pavitt, 1976).

Government measures shape technological advancement (Abernathy and Chakravarty, 1979). In particular, "newly industrialising and developing nations have created governmental interventions within their borders to accelerate IT innovation" (King et al., 1994, p. 139). From various viewpoints, people discuss the issue of government innovation. First, technology advancement is defined as a joint effort by the government and other types of organisations (Funk and Methe, 2001). Government is seen as a particular form of actor capable of inspiring numerous technology players with different interests and abilities to engage in the process of innovation and ensuring that they function effectively together (Beerepoot and Beerepoot, 2007). The theory of stakeholders falls within this school, which assumes innovation by various stakeholders, including the government, as a socio-technical mechanism. Shin (2008), for example, found that the interests and forces of various stakeholders dictated the mechanism of adoption of technology.

In the public sector, the relationship between leadership and innovation is still developing. Much New Public Management research on innovation has focused on the role of individual entrepreneurship in driving change (Walker et al., 2011), whereas the Network

Governance or New Public Governance version emphasizes 'co-creation' as producing innovation through new government–society interactions, particularly to solve wicked problems (see Ansell and Gash, 2008; Klijn and Koppenjan, 2016). Leadership qualities of both senior administrators and politicians appear to be related to innovation in the public sector. Effective combinations of politicians and senior administrators are also likely to be important for innovation. In short, we believe that there is a positive relationship between innovation-supportive leadership activities and innovation capability. Leadership styles that promote innovation (by enabling and assisting administrators in developing and implementing Lewis et al. 5 innovative ideas) are thought to be positively associated with self-rated innovation capability.

2.3.3 ENTREPRENEURIAL LEADERSHIP

Entrepreneurial leadership is the process of shaping organisations by directly engaging stakeholder leadership and generating value by putting together a specific innovation and [resource package to respond to a recognised opportunity (Darling, et. al., 2007). Gupta, et al. (2004) described EL tools that generate visionary scenarios for assembling and mobilising a supporting cast of participants dedicated to the vision of discovering and leveraging the development of strategic value. Strong business leadership may also boost the efficiency of an organisation (Kistyanto, et. al., 2018; Wardoyo, et. al., 2018). There are five dimensions of Musa and Fontana (2017) entrepreneurial leadership:

- (i) The strategic component and also with the opportunity to give sections describes the organisational structure in a holistic manner that takes into account its resources, staff, and strategy, as well as the business model embraced by an organisation.

- (ii) The Communicational component of the offer segment with the sharing of such a view of future possibilities within the organisation. This deals with the need to reassure members of the organization, conflict management and the promotion of information management through knowing feelings in social relationships (Subramanian & Nilakanta, 1996; Szulanski, 1996).
- (iii) Providing a segment that influences two motivations and cognition of individuals within the organization with the motivational component of human behavior within the organisation. Gupta, et al. (2004) suggested that entrepreneurial leadership through constructive reinforcement is all about handling and instituting transformative and social adoption.
- (iv) Personal and/or organisational component, based on innovation, stability, proper distribution of resources (job fit), and discipline factors.

Process of innovation or innovation management as an involved and aware control process of an organisation and execution of activities leading to innovation (Hansen and Birkinshaw, 2007). There are four stages of the process of innovation: the first is the segment providing idea creation with the process of generating ideas for new products (goods and/or services, in general). The second is the collections of ideas provided by the screening of feedback of those innovative concepts based on a strategic orientation organisation and taking into account the resource distribution requirements and priorities of the organisation. Third, the production of ideas provides a segment focused on known best to turn ideas into viable goods. The last is Concept diffusion, the offering segment for end users to produce new creative goods. The aim of the innovation managerial process is to ensure that a company is able to consistently deliver new innovative products to end users, as well as change in the business strategy to preserve the competitiveness of the organisation through sustained success in innovation.

2.3.4 NETWORKING

The network has been conceptualized from a variety of perspectives. It can also be viewed as a combination of a large number of actors and the pattern of connection that binds them together (Iacobucci and Hopkins, 1992), or as a specific structure that connects relationships between a group of individuals, people, or events (Knoke and Kuklinski, 1982). A business network, as a type of network, can be defined as a collection of two or more linked relationships, with each exchange relationship involving companies that are conceived of as collective actors (Emerson, 1981). Business networks can be thought of as either sets of connected companies in their most basic form (Miles and Snow, 1992) or as sets of connected, collaborative relationships between organizations (Hakansson and Johanson, 1993). Thorelli (1986) defined a business network as a long-term relationship between two or more organizations, with no market or organizational hierarchy of the structures through which such relationships take shape. Powell (1987) identified the network as an intermediary mode of transaction that is a combination of market and hierarchy and involves cooperative actions.

While research has recognised the significance of business for industry in corporate innovation, the structural characteristics of business networks and their effect on innovation have only recently been examined by researchers (Schilling and Phelps, 2007). The correlation

between business network and company productivity has been shown in previous studies (Powell and Brantley, 1992; Uzzi, 1996; Sacks et al., 2001). As Nohria and Eccles (1992) suggest, businesses would be able to exchange relevant technological knowledge and engineering know-how across networks of educational, social or transactional relationships, thereby obtaining competitive benefits. In particular, by exploiting collaborative partnerships, R&D creativity can be enhanced (Baum et al., 2000). Helper (1990) showed frequent exchanges of technical information and other knowledge among network members with close links in his analysis of the Japanese automotive industry, suggesting possible advantages brought to the innovation of a member by a business network.

In summary, the positive innovation effect of business networks has been traced back to the ability of inter-organizational cooperation to promote the exchange of information and collaborative learning processes between participating companies. In turn, this potential is said to be highly dependent on the overall structure of the network (Capaldo, 2007). In addition, structural characteristics such as strength, density, non-redundancy, between- weakness, reciprocity and multiplicity largely reflect the overall network structure.

Table 2.1 List of Journals Related to Innovation Capability

Journal	Year	Location	Method	Author	Respondent	Findings
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Journal of environmental management and tourism 10	2019	Indonesia	Quantitative	Yunita Sari, Mahrinasari, Ahadiat Ayi, Marselina Marselina	168 starred hotels in southern Sumatra	Investigate the impact of innovation capabilities on product and process development .
Journal of business Venturing 26 (4),	2011	Germany	Qualitative	Nina Rosenbusch, Jan Brinckmann, Andreas Bausch	42 empirical studies on 21,270 firms	This conclusion emphasizes the necessity of meticulously managing the innovation process for entrepreneurs and small businesses.
The Department of Manufacturing Engineering and Engineering Management, City University of Hong Kong,	2010	Hong Kong	Quantitative	Richard C.M. Yam, William Lo, Esther P.Y. Tang, Antonio K.W. Lau	generation and diffusion of knowledge among RIS actors that takes place outside the boundary of the firm	According to the basic premise that firms that better utilise sources of information (SI) available within their regional innovation system (RIS) perform better due to the effect this has on

						enhancing the firm's innovation system (FIS), the study reported in this paper investigates the relationship between the RIS and the firm's innovation system (FIS).
Scandinavian Journal Of Hospitality And Tourism 10.	2010	London, UK	Qualitative	Martin Ronning	12 supplier	Tour operators function as a distributive channel for the supplier.
Journal Of Business Research Turk	2018	Artvin, Turkey	Qualitative	Fikret SÖZBİLİR	456 participating managers working in 274 firms listed among the top 500 companies in Turkey	According to the findings, there is a difference in innovation performance between managers with a master's degree and managers with other training/education levels.

Journal of Knowledge Management	2018	Torino, Italy	Qualitative	Armando Papa, Luca Dezi, Gian Luca Grefori, Jens Mueller, Nicola Miglietta	129 firms operating in a wide array of sectors	The findings show that knowledge acquisition improves innovation performance and that HRM helps to mitigate the relationship between knowledge acquisition and innovation performance.
Journal Of Business Management	2018	Bogotá, Colombia	Qualitative	Diego Armando Marín-Idárraga, Juan Carlos Cuartas-Marín	Small and medium-sized enterprises in Bogotá, Colombia.	The results make a relevant contribution to the literature on strategic management by showing that competitive intensity and organizational slack induce innovation and positively impact performance

Journal Of Business Research 62	2009	Taipei , Taiwan and Tainan Taiwan	Qualitative	Chung-Jen Chen, Jin-Wen Huang	146 Firms	The results show that knowledge management competency mediates the relationship between strategic human resource practices and innovation performance.
International Journal of Academic Research In business and Social Sciences	2018	Surabaya, Indonesia	Qualitative	Nurul Indawati, Andre Dwijanto Witjaksana, Anang Kistyan to	The employee of private companies and state-owned enterprises in Surabaya	Hypotheses H1a-H1d have a positive association between entrepreneurial leadership (EL) and the innovation process, according to the findings of this study. Hypotheses H2b and H2c (between Idea Selection and Innovation Performance and Idea Development) are likewise supported by the findings.

Journal of High Technology Management Research	2009	South Africa	Quantitative	Niek D du Preez , Louis Louw , Heinz Essmann.	3012	Investigates the evolution of innovation process models found in the literature, and consolidates latest development into an integrated innovation process model.
Future Studies Research Journal: Trends and Strategic.	2012	Brazil	Qualitative	Allan Claudius Queroz Barbosa and Leandro Pinheiro Cintra.	From Human Resources Management.	Discusses the interfaces and articulations between the constructs Innovation, Competencies and Organizational Performance, considering their influence and operational capability in the organizational context.

Journal of Innovation & Knowledge (JIK)	2018	China	Quantitative	Rajapatirana, R.P. Jayani; Hui, Yan	Tested 379 senior managers of insurance companies.	Based on an empirical study covering the insurance business in Sri Lanka, to investigate the relationship between innovation capability, innovation type, and many dimensions of company performance, including innovation, market, and financial performance.
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2.4 HYPOTHESIS

2.4.1 Relationship between research and development (R&D) towards innovation capability SMEs in Kelantan.

The internationalisation of R&D is a rising phenomenon among companies today (UNCTAD, 2005). R&D is firmly internal, but if they improve the efficiency of creativity, they are complementary at various locations. A number of R&D complementarities have been shown to have a positive impact on the growth of innovation competencies. Internal R&D was found to supplement contract R&D (Schmiedeberg, 2008), external acquisition of technology (Cassiman and Veugelers, 2006) and R&D collaboration for various sectors and partners (Schmiedeberg, 2008; Cassiman and Veugelers, 2002, 2005; Schmidt, 2005; Arora and Gambardella, 1990). The current literature offers only sparse proof of whether foreign R&D is an advantage to the success of innovation by companies, according to Adalikwu (2011). Based on the paragraph above, there is a relationship between research and development (R&D) and innovation capability SMEs in Kelantan

2.4.2 Relationship between technologies towards innovation capability SMEs in Kelantan.

The OECD (National Innovation Systems, OECD, 1997) defines the national system of innovation as technology and knowledge flows among individuals, businesses and institutions that are central to the national level innovation process. In recent decades, several important studies have been performed in this field, including with all that by Freeman (1987), Porter (1990), Lundvall (1992), Nelson et al. (1993), OECD (1997), Edquist et al. (1997), and

Carlsson et al (2002). The relation between innovation and competence and economic outcomes at the national level has been defined in these studies (Porter, 1990; Nelson et al., 1993) and their findings have been widely adopted in the field of national science & technology policy research.

Technology can be conceptualised as a studying mechanism by creativity (Cohen and Levinthal, 1989; Garvin, 1993; Dodgson, 1993; Hitt et al., 2000). Learning results in developing the information and skills businesses need to select, instal, operate, manage, adapt, improve, and develop their software (Hamel and Prahalad, 1990), i.e. a company's TICs.

Based on the paragraph above, there is a relationship between technology and innovation capability of SMEs in Kelantan.

2.4.3 Relationship between networking towards innovation capability SMEs in Kelantan.

From multiple viewpoints, the network has been conceptualised. It also can be seen as a combination of a big number of actors and the pattern of connections that bind them together (Iacobucci and Hopkins, 1992), or a particular structure that links relationships between a group of individuals, people or events (Knoke and Kuklinski, 1982). Innovation activities in a network are usually improved by the efficient exchange of information, the greater the amount of knowledge exchanged amongst members, the greater the ability for individual members to draw on that knowledge and generate value. Networks should be taken as significant variables affecting the output of innovation because embedded frameworks can shape sophisticated economic activity, as Granovetter (1985) suggested. Uzzi (1996) also noted that systemic embeddedness, which involves trust, fine-grained knowledge transfer, and

mutual problem solving structures, is also the basis of these problems of firm competitiveness, learning and creativity, and social ties.

To conclude, the positive influence of business networks on innovation skills has been traced back to the ability of inter-organizational cooperation to promote the exchange of information and collaborative learning processes between participating organisations. In turn, this potential is said to be highly dependent on the overall structure of the network (Capaldo, 2007).

Based on the paragraph above, there is a relationship between networking and innovation capability SMEs in Kelantan.

2.4.4 Relationship between entrepreneurial leadership towards innovation capability SMEs in Kelantan.

Several entrepreneurial leadership reports, as per Currie, et. In this article "innovation, proactive, and vision are three integrated dimensions of leadership and entrepreneurship" al. (2008) said that product innovation and entrepreneurial lead are a systemic, complementary life process. In conjunction with Shane, et. In the journal Entrepreneurial Leadership: Constructing Cross-Cultural Constructs, al. (2000), Entrepreneurial leadership and product creativity have a very similar relationship in the development of a superior product. And Mehrad, et. Al. (2011) notes that in product and process creativity, entrepreneurial leadership is apparent.

Basrowi (2009) notes that it is also possible to apply the ability of people in creativity in entrepreneurship, the ability of a person to lead that should be compensated by a specific

action, also known as innovation's entrepreneurial component. Able to inspire, visionary, constructive, inventive, risk taking, achievement driven, persistence are characteristics of entrepreneurial leadership. Radical and gradual innovations are components of product innovation. In order to build possibilities and achieve the organization's dream, leaders should dare to think differently. Almost every part of the job is affected by leadership and is based on it. That is, leadership determines an organization's performance in developing the capability and expertise to win the market, which is a competitive advantage that is sustainable.

Based on the paragraph above, there is a relationship between entrepreneurial leadership and innovation capability of SMEs in Kelantan.

2.5 UNDERPINNING THEORY

2.5.1 THEORY RESEARCH AND DEVELOPMENT (R&D)

An uncertain economy and also the market climate today, means that many businesses are searching for new ways to conduct their business with some creativity to make a profit and keep ahead of the competition (Laforet, 2008). Innovation is now known around the world as a prime source of competitive advantage (Hegde and Hicks, 2008). R&D is a technique for creating inventions that, under separate intellectual property rights, can be commercialised. R&D helps businesses to develop new technologies and/or expand on current technologies acquired through technology transfer (Zhouying, 2005). In order to achieve different objectives, R&D efforts are required (Robinson and Propp, 2008). For any forward-thinking business focused on technology, R&D is an endless operation. Innovative production of current goods is recommended to stay ahead of the improvement that could be made by rivals. In addition, R&D may be needed to satisfy the request when a prospective customer contacts

a company outlining its requirements for a product (Lawson et al., 2006). The achievement of a company's R&D initiative is closely linked to the product's uniqueness, both product functions and technological aspects (Kratzer et al., 2005). Study is not a cost, but expenditure (Boer, 2005). A substantial amount of money is spent on R&D around the world to ensure future sustainability (Precup et al., 2006). The increasing complexity and inter-disciplinary nature of the R&D method, in turn, has increased the cost of research from various points of view. Therefore, without collaborators to share the expense, research becomes less desirable (Howells et al., 2003).

2.5.2 THEORY LEADERSHIP

Entrepreneurial leadership is the process of shaping organisations by directly engaging stakeholder leadership and generating value by putting together a specific innovation and resource package to respond to a recognised opportunity (Darling, et. al., 2007). Gupta, et. Uh, et. Al. (2004) described EL tools that generate visionary scenarios for assembling and mobilising a supporting cast of participants dedicated to the vision of discovering and leveraging the development of strategic value. Strong business leadership may also boost the efficiency of an organisation (Kistyanto, et. al., 2018; Wardoyo, et. al., 2018). There are five dimensions of Musa and Fontana (2017) entrepreneurial leadership:

- (i) The strategic component and also with the opportunity to give sections describes the organisational structure in a holistic manner that takes into account its resources, staff, and strategy, as well as the business model embraced by an organisation.
- (ii) The Communicational component of the offer segment with the sharing of such a view of future possibilities within the organisation. This deals with the need to reassure members of the organization, conflict management and the promotion of

information management through knowing feelings in social relationships (Subramanian & Nilakanta, 1996; Szulanski, 1996).

- (iii) Providing a segment that influences two motivations and cognition of individuals within the organisation with the motivational component of human behaviour within the organisation. Gupta, et. Uh, et. Al. (2004) suggested that entrepreneurial leadership through constructive reinforcement is all about handling and instituting transformative and social adoption.
- (iv) Personal and/or organisational component, based on innovation, stability, proper distribution of resources (job fit), and discipline factors.

The process of innovation or innovation management is defined as the involvement and awareness of an organization's control process and the execution of activities leading to innovation (Hansen and Birkinshaw, 2007). The process of innovation has four stages: the first is idea creation, which is the process of generating ideas for new products (goods and/or services in general). The second is a collection of ideas generated by screening feedback on those innovative concepts based on an organizational strategic orientation and taking into account the organization's resource distribution requirements and priorities. Third, the production of ideas provides a segment centered on well-known best practices for transforming ideas into viable goods. The final segment is concept diffusion, which is an offering segment for end users to create new creative goods. The goal of the innovation management process is to ensure that a company can consistently deliver new innovative products to end users, as well as change in business strategy to maintain the organization's competitiveness through sustained success in innovation.

2.5.3 THEORY NETWORKING

The straightforward occurrence or presence of external linkages has tended to concern innovation networking (typical examples include, Oerlemans et al., 1998; Bougrain and Haudeville, 2002; Freel, 2003).

Similarly, the view that "more is better" in innovation policy is reflected in a lot of attention to public-private cooperation and, to a lesser degree, the growth of the networking and collaboration capabilities of incumbent companies (e.g., Guy, 2007).

It is often forgotten that various innovations can correlate with various networks. On the other hand, comprehensive case studies (e.g. Gilsing and Nooteboom, 2004, 2006) and work on smaller, highly specific samples (e.g. Powell et al., 1996) have tended to indicate a more complicated relationship between innovation and networking as researchers follow a more nuanced concept of innovation and take into account both the relational features and the substance of innovation.

Recent confirmation indicates that different kinds of innovation have been dependent on different kinds of inputs of information (To dtling et al., 2008). Yet, too often, innovation initiatives are overly crude ones. In empirical literature, for example, a common finding is that networking is positively connected not only to the implementation of innovations but also to the novelty of innovations (Freel, 2003; Nieto and Santamaria, 2007), where novel innovations are often defined as " new to the market " and, in this sense, only production is concerned with novelty. In connection, a parallel statement posits a positive relationship between networking and the complexity of processes of innovation. Innovation immersive paper is based here and it is proposed that "the more complicated the learning process, the more interactions it probably needs" (Johnson and Lundvall, 1993, p.)

2.6 THEORETICAL FRAMEWORK

Theoretical framework can be defined as the structure that can hold or support a theory of a research study and not only that; it also can introduce and describe the theory that explains why the research problem under study exists

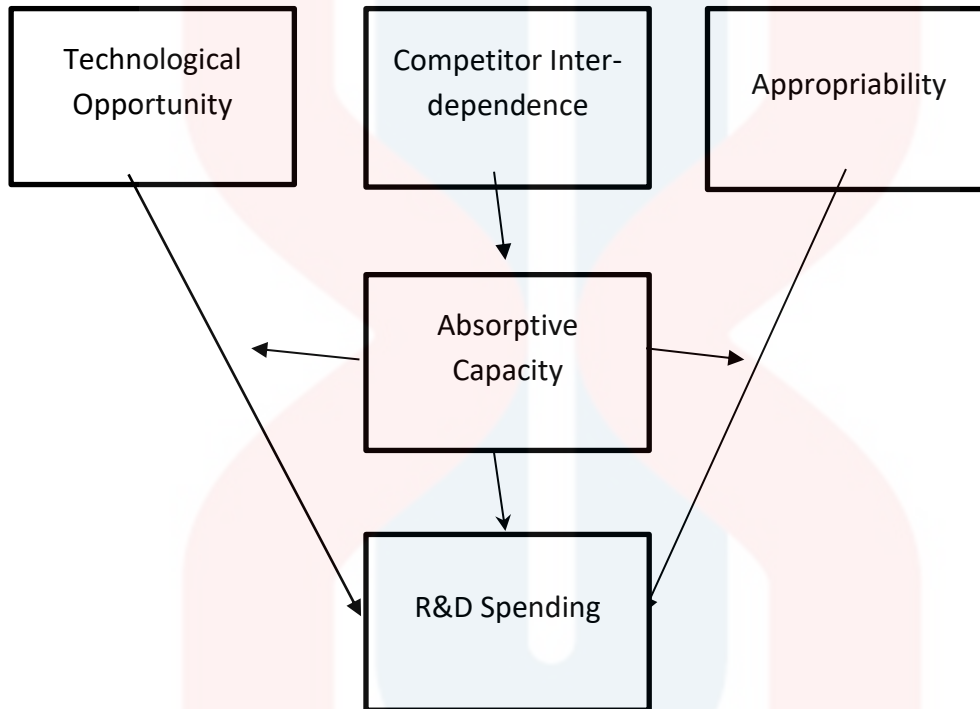


Figure 2.1 : Model of absorptive capability and R&D incentives.

Diagram 1 summarizes the theoretical, in a diagram that aims to model absorptive capability and R&D incentives. There are two factors that have affected a firm's incentives to learn and therefore, it's incentives to invest in absorptive capability via its R&D expenditures.

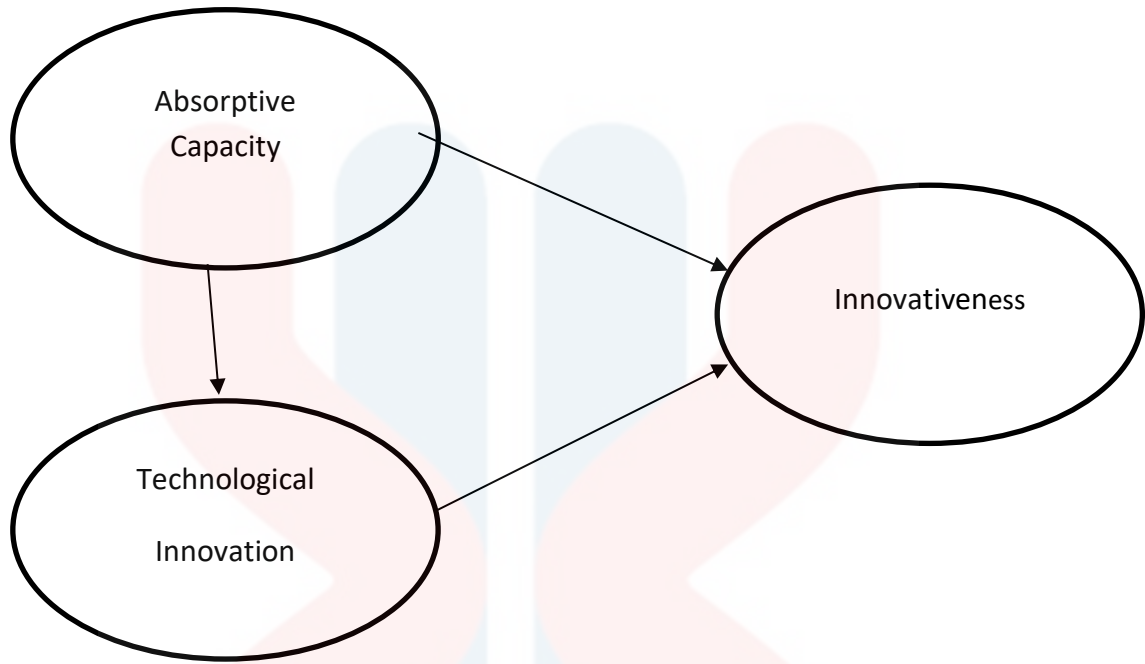


Figure 2.2: Proposed Research Model

Diagram 2 shows the relationships between technological innovation capabilities, absorptive capability and innovativeness. Based on diagram 2 it contributes to literature by proposing a conceptual model which demonstrates the effects of technological innovation capabilities and absorptive capability on innovativeness and the effect of absorptive capability on technological innovation capabilities.

2.7 CONCEPTUAL FRAMEWORK

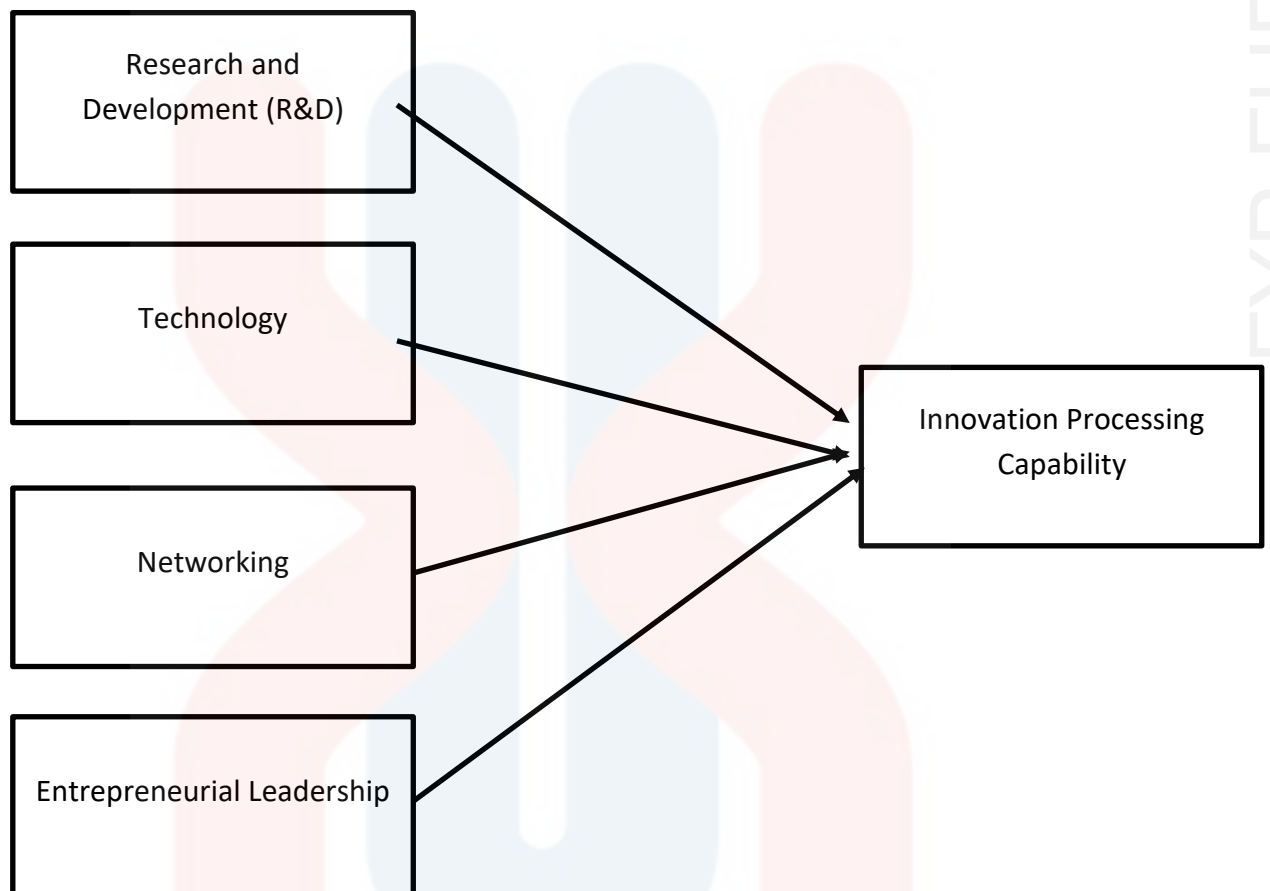


Figure2.3: Conceptual Framework

For this chapter, figure 1 has shown that all the independent variables and also the dependent variables have been used in this research. The dependent variables are affected by the independent variables. As figure 1 has shown, the independent variables have four factors which are research and development (R&D), technology, networking and entrepreneurial leadership that have a relationship with the dependent variables which is innovation capability.

2.8 SUMMARY

In chapter 2, the overview of research is a variable that includes dependent variable and independent variable on research important factors in innovation activities, both internal and external. On the one hand, action learning is an internal process in SMEs, whereas reaction learning is a result of the system of inter-SMEs interactions. The dependent variable is innovation capability and the independent variable is research and development (R&D), technology, networking and entrepreneurial leadership.

CHAPTER 3

RESEARCH METHODOLOGY

3.1 INTRODUCTION

This research focuses on innovation in the nature-based tourist business. The question is whether cooperation or more cooperation is preferable specifically a specific type of cooperation, might help small-scale tourism businesses that offer nature-based products and services become more innovative. Because this is a study of relationships and interactions inside a system, a case methodology is applicable. Theoretically, a system with the tour operator as the accelerator for inventive processes is deductive to some extent. The goal is to conduct an empirical examination of the propositions. As a result, rather than being exploratory or descriptive, this case study is very instructive.

This chapter explained the research using a method. This chapter covers every aspect of the study, including research design, population, and an, sample size, sampling method, data collection procedure, and research instrument and data analysis, also summary of this chapter. Finally, this chapter provides a detailed explanation of the summary of the research.

3.2 RESEARCH DESIGN

All strategic used to aid this research are referred to as research design. This refers to a clear and logical approach for attempting to answer pre-determined research questions through data gathering, interpretation, analysis, and discussion. Qualitative data and quantitative data are the two sorts of study designs. It is critical to conduct study on the design of research. This study's design technique is a quantitative descriptive study, which is a quantitative method. The components in this study are examined via a questionnaire survey. that lead to the involvement of employee SMEs in the service industry. This research used a descriptive quantitative method because it's more scientific, objective, fast, focused and acceptable. In other words, a descriptive study determines the frequency with which something occurs or categories information while also accurately portraying the qualities of a specific individual, scenario, or group.

3.3 POPULATION

The study's target population are the SMEs in Kelantan. This study looks at the main industries, manufacturing and service, with a focus on established firms and high-tech sectors, in line with literature recommendations for more diversity in the industry spectrum in growing countries. Following the aforementioned definition of SMEs, this study examined three key comprehensive directories to identify possible respondents of SMEs in Malaysia: the Federation of Manufactures (FMM), SME Corporation Malaysia (SME Corp. Malaysia), and the Malaysia External Trade Development Corporation (MATRADE).

Target population for a survey is the whole set of units for which the survey data are used to make a result. The target population also can be defined for those units for which the

findings of the survey are going to be generalized. For this research they focus on populations which fully fill certain criteria (e.g., industry, age, gender and so on). This research has been conducted in SMEs in Kelantan. The populations for this study are 907065 organization SMEs in Kelantan according to Krejcie & Morgan table (1970) where the researcher will organize some questions through Google form on the user of SMEs service. Based on table Krejcie & Morgan (1970) the appropriate sample size for population of 907,065 is 381 company SMEs in Kelantan.

Table 3.1

Table for Determining Sample Size of a Known Population

N	S	N	S	N	S	N	S	N	S
10	10	100	80	280	162	800	260	2800	338
15	14	110	86	290	165	850	265	3000	341
20	19	120	92	300	169	900	269	3500	346
25	24	130	97	320	175	950	274	4000	351
30	28	140	103	340	181	1000	278	4500	354
35	32	150	108	360	186	1100	285	5000	357
40	36	160	113	380	191	1200	291	6000	361
45	40	170	118	400	196	1300	297	7000	364
50	44	180	123	420	201	1400	302	8000	367
55	48	190	127	440	205	1500	306	9000	368
60	52	200	132	460	210	1600	310	10000	370
65	56	210	136	480	214	1700	313	15000	375
70	59	220	140	500	217	1800	317	20000	377
75	63	230	144	550	226	1900	320	30000	379
80	66	240	148	600	234	2000	322	40000	380
85	70	250	152	650	242	2200	327	50000	381
90	73	260	155	700	248	2400	331	75000	382
95	76	270	159	750	254	2600	335	100000	384

Note: N is Population Size; S is Sample Size *Source: Krejcie & Morgan, 1970*

Source : Krejcie & Morgan (1970)

3.4 SAMPLE SIZE

The sample size we used in this study is 381 company SMEs in Kelantan. According to Krejcie & Morgan table, sample size of population is 381 because according to SMEs cord that is 5.1% of SME located in Kelantan from 907065 establish SME. According to Bartlett, Kotrllk and Higgins inappropriate, inadequate or excessive sample size can have an impact on study quality and accuracy. One of the advantages of using smaller groups of individuals to make inferences about larger groups that would be prohibitively expensive to research is the capacity to use smaller groups of people to draw assumptions about larger groups that would be prohibitively expensive to investigate advantages of the quantitative technique, according to the study.

3.5 SAMPLING METHOD

In our research, we choose non-probability sampling as the method to get the result. Non probability sampling is a subset of people selected from a population. Convenience sampling is a non-probability sampling strategy in which samples are chosen from the population only on the basis of their accessibility to the researcher. Each person is chosen non-random and entirely by chance, so that each person has the same probability of being set during the sampling process as any point and each subset of individuals has the same likelihood of being selected for the survey. This technique is used to ensure a relatively equal representation of the variables for the study. The SMEs that are involved in service use in Kelantan are being picked randomly. Studies show that random sampling methods can minimize sample selection bias and ensure that the population is not overrepresented or underrepresented. Based on the total population of SMEs that are involved in Kelantan, the sampling is to collect the survey

data.

3.6 DATA COLLECTION

Data collecting is one of the gathering methods that measures all of the information about a variable of interest in a systematic manner that allows one to answer specified research questions, test hypotheses, and assess outcomes. For the purpose of this study, primary data and secondary data collection methods are being used. Primary data collection involves data collection directly from subjects by the research or taught data collector. Among the primary data collection methods, survey methods are being chosen for this study. Researchers also had chosen questionnaires as a data collection instrument to achieve the objectives in this study. Because it is relatively cheap, rapid, and efficient, questionnaires are one of the greatest ways to utilize in this epidemic. (McLeod, 2014).

The researchers create questionnaires using Google form and distribute the Google form link via email. The gathered data have been analyzed with the selected method. In the meantime, secondary data is acquired from other sources. To back up the findings and analysis, secondary data is used. The secondary data utilized in this study are literature, journal report, and article and Google scholar

3.6.1 PILOT STUDY

A pilot analysis is an important step in a research project because it identifies potential problem areas and flaws in the research instrument as well as a prepared statement to conclude the study. Prior to the distribution of questionnaires, the researchers conducted a pilot analysis. This pilot study was conducted at Universiti Malaysia Kelantan with 30 students to assess the

reliability of the results.

3.7 RESEARCH INSTRUMENT

The questionnaire is the most significant tool in survey research. It is a set of standardized questions, also known as items, that follow a predetermined framework in order to collect information from individuals or employees on one or more specific themes. The questionnaire is frequently administered in a uniform manner to all survey participants J. Lavrakas, (2008). The survey form, question sequence, and response are all predetermined and written down. The questionnaire was created in a straightforward manner using a Likert scale. The respondent would choose from a 5-scale choice. The Likert scale used contained a 5-scale choice for the respondent to choose which

1) strongly disagree, 2) disagree, 3) moderate, 4) agree, 5) strongly agree. Respondents are asked to rank their responses based on the question.

Table 3.1 : Likert Scale

Question	1	2	3	4	5
	Strongly Disagree	Disagree	Moderate	Agree	Strongly Agree

Source: Developed for the research

Table 3.2 : Questionnaire Design

		Sources	Reliability and validity
	DV : innovation capability	David H. Cropley University of South Australia, Australia	
	IV : technology	Gary C. Moore, Izak Benbasat, (1991)	0.7
	: Research & development (R&D)	- Knight and Kim (2009) - from Beleska-Spasova et al. (2012 - Beleska-Spasova et al. (2012)	0.7
	: Networking	Zongling Xu, Business School, Shantou University, Shantou, China	0.8
	: Entrepreneurial leadership	Ur Rehman et al. Journal of Global Entrepreneurship Research (2019)	

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3.8 DATA ANALYSIS

The research variables' standard deviation and correlation coefficients are used. The goal of this study is to establish a link between information sharing, absorptive capability, and innovative capability. The direct and indirect effects are calculated using a structural equation model. A data collection may have multiple possible fit models, just as more than one theory may explain a societal event. However, it is not always clear which explanation is the most appropriate. As a result, we employ model competition to select the best comparable model. Two competing models, the entirely mediating model and the direct effect model, are pitted against the hypothetical partially mediating model.

Data analysis is the process of illustrating, condensing and recapping, and evaluating data by systematically applying statistical and perhaps logical procedures. Various analytic methodologies, according to Shampoo and Resnik (2003), allow inductive inference to be made from data while also distinguishing the signal from the noise. In this study, descriptive statistics were utilized to conduct the tests.

This research used the Social Science Statistical Program (SPSS) to analyze the data collected. SPSS (Statistical Package for Social Sciences) was a statistical analysis software tool that could be used interactively or in batches. This system was one of the most widely used statistical structures, but it was notoriously difficult to operate and evaluate using a straightforward manner. This was a user-friendly programme in the meantime. The Statistical Package for Social Sciences (SPSS) could compile tabulated files from nearly any folder, including maps and distribution plots.

3.8.1 CORRELATION & REGRESSION

In quantitative study, researchers have utilized the well-known statistical tool regression and correlation, but their desires have not been met or, if they have, the instrument has not been used properly due to a lack of appropriate information on regression and correlation analysis. This study was written to give a clear picture of correlation regression and how it is used to evaluate the results of investigation. Correlation and regression can be used to investigate the relationship between two or more variables. If the value of one variable alters the value of the other, the two variables are said to be linked. The term "change" here refers to a rise or decrease in the variable's value. The correlation or regression methods can be used to investigate relationships between variables. This type of association analysis can be done for quantitative or qualitative variables, although this paper only looks at quantitative variables. Those variables which are measurable and thus have units are quantitative variables. According to the objective/nature of the study and variables included in the study, the study of a relationship between two quantitative variables at a time is called simple regression or simple correlation, and the study of a relationship between more than two quantitative variables is called partial correlation, multiple correlations, or multiple regressions. (Sthapit, Yadav, Khanal, & Dangol, 2017). Strength of relationship between two or more variables is studied by using Correlation.

Correlation is a statistical technique for determining the strength of correlations between variables. The correlation value is somewhere between -1 and +1. Closer the correlation value near zero, the weaker the association between the variables; similarly, a correlation value close to one indicates a stronger (closer) relationship between variables. Hence correlation is a value which tries to explain the degree of association between variables whereas regression tries to explain the relationship between variables using a mathematical function. (Gupta & Kapoor, 2014).

3.8.2 RELIABILITY TEST

The extent to which a scale gives consistent findings if repeated measurements are free of random is what reliability refers to. (Malhotra & Peterson, 2006). Cronbach's Alpha is the dependability coefficient's average value. It's a metric for determining the internal consistency of a system. The Cronbach's coefficient alpha (α) ranges between 0.00 and 1.00 as shown in Table 3.2. Higher levels indicate greater internal consistency, and values above 0.70 are considered acceptable (George and Mallery, 2003).

Table 3.3: Cronbach's Alpha Value

Cronbach Alpha	Internal Consistency
$\alpha \geq 0.9$	Excellent
$0.9 > \alpha \geq 0.8$	Good
$0.8 > \alpha \geq 0.7$	Acceptable
$0.7 > \alpha \geq 0.6$	Questionable
$0.6 > \alpha \geq 0.5$	Poor
$0.5 > \alpha$	Unacceptable

Source: (George and Mallery, 2003)

3.8.3 RESULT OF RELIABILITY TEST

Reliability is a metric for determining the measure's internal consistency, which is concerned with the measure's homogeneity. When multiple attempts at measuring something yield the same result, a measure is deemed trustworthy. (Zikmund et al, 2013). Cronbach's

Alpha is a measurement of dependability is a common method for verifying the internal consistency of multiple-item scales of the variables. The alpha coefficient varies from 0 to 1, with 0 suggesting no consistency and 1 representing total consistency. (Zikmund et al, 2013). Low reliability is defined as reliability less than 0.60, acceptable reliability is defined as reliability between 0.60 and 0.70, and good reliability is defined as reliability greater than 0.80. The investigation will employ Cronbach's Alpha coefficients greater than 0.70. The greater the Cronbach's Alpha value, which should be close to 1, the more reliable the internal consistency is.

Table 3.4: Reliability Analysis

Variable	Cronbach's Alpha	Number of Items	N
Innovation Capability	0.919	7	373
Entrepreneurial Leadership	0.933	7	377
Technology	0.932	7	378
Research & development	0.933	7	376
Networking	0.929	7	379

Based on Table 3.4, the value of Cronbach's Alpha of Innovation Capability is 0.919. The value of Cronbach's Alpha for the Independent Variable of Entrepreneurial leadership is

0.933, technology is 0.932 and Research and Development is 0.933. Last variable of networking is 0.929. Hence, the Cronbach's Alpha for the research is more than 0.70 which indicates that the measurement scales for the four Independent variables and dependent variables are good in reliability analysis.

3.8.4 PILOT TEST

Before conducting the actual questionnaire, a pilot test has been done to find out possible errors done in the questionnaire such as at the ambiguous questions. It provides opportunities for the researcher to find out and remedy a wide range of the potential problems that will occur by preparing the questionnaire and correcting it before the actual questionnaire is conducted.

The totals of 30 questionnaires were distributed to University Malaysia Kelantan students, with feedback obtained to enhance the question's clarity. The reliability test was performed using SPSS statistic 26 after the questionnaire was obtained. Cronbach's Alpha is the most popular technique in reliability analysis for investigating a scale's internal consistency. Cronbach's Alpha is the reliability coefficient average values that obtained from standardized items is particular research. Table 4.3.1 shows the result of the reliability of Cronbach's Alpha for the variables.

Table 3.5: Result of reliability Cronbach's Alpha for the variable

Variable	Cronbach's Alpha	Number of Items	N
Innovation Capability	0.926	7	30

Entrepreneurial Leadership	0.895	7	30
Technology	0.916	7	30
Research & development	0.866	7	30
Networking	0.910	7	30
Overall Variable	0.972	7	30

Table 3.5 shows the Cronbach's Alpha values of the questionnaire were in a good and excellent internal consistency which is (0.8) to (0.9). The total number of variables has been tested using Cronbach's Alpha. First is the dependent variable which is Innovation Capability found to be excellent (7 items; $\alpha = 0.926$). Next is the independent variable. The independent variable which is entrepreneurial leadership is found to be excellent (7 items; $\alpha = 0.895$). Second Independent variable is Technology found to be good with (7 items; $\alpha = 0.916$). Third independent variable is research & development was found to be excellent with (7 items; $\alpha = 0.866$) and the last variable is networking which is found to be excellent with (7 items; $\alpha = 0.910$). All the variables have seven (7) items as the current Cronbach's Alpha result is already above the acceptable level.

3.9 SUMMARY

Though the abilities presented may sound familiar, they must be revisited and reinvented from the perspective of the Malaysian Conventions and Exhibition Industry. Communication may be an all-too-familiar skill. What is novel here is the potential to develop goodwill across cultural and national divides. Industry leaders appear to recognize the importance of fluid settings and push for the development of strategic thinking competencies for industry employees. Surprisingly, the pilot study found that operations lacked creative

competences such as event planning, matchmaking, and even freight forwarding, which is a combination of hard and soft skills.

Future research is encouraged to expand this study in order to establish a model that will aid the nation's efforts to promote business tourism as a major source of revenue. There are many tough competitors, both regionally and internationally, and these skills would bode well for the economy.



CHAPTER 4

RESULT

4.1 INTRODUCTION

This chapter will address the descriptive analysis, reliability test, inferential analysis, and research purpose. The research questions will be interpreted and answered in each analysis. Tables and graphs are used to help explain the outcome. The demographic profile of the respondents will be described using descriptive analysis. The Cronbach's Alpha approach will be utilized for the reliability test since reliability is crucial in assessing whether the samples obtained are legitimate and consistent. Few inferential analyses, on the other hand, utilized to figure out how the sample data influences the independent and dependent variables.

4.2 RESULT OF DESCRIPTIVE ANALYSIS

Descriptive statistics are used to explain the fundamental characteristics of a study's data. It is also described as a summary statistic that quantitatively explains or summarizes the main features of a collection of data. Based on the data obtained from the 380 respondents in Section A, a descriptive analysis was performed for background information summaries in respondents' demographic profiles.

4.2.1 Area

Table 4.1 shows the area distribution of 380 respondents collected from the data collection.

Table 4.1: The Area of Respondents

AREA	FREQUENCY(n)	PERCENT (%)
Pasir Mas	25	6.6
Kota Bharu	123	32.4
Tumpat	29	7.6
Bachok	35	9.2
Tanah Merah	50	13.2
Pasir Puteh	41	10.8
Kuala Krai	55	14.5
Machang	22	5.8
Total	380	100.0

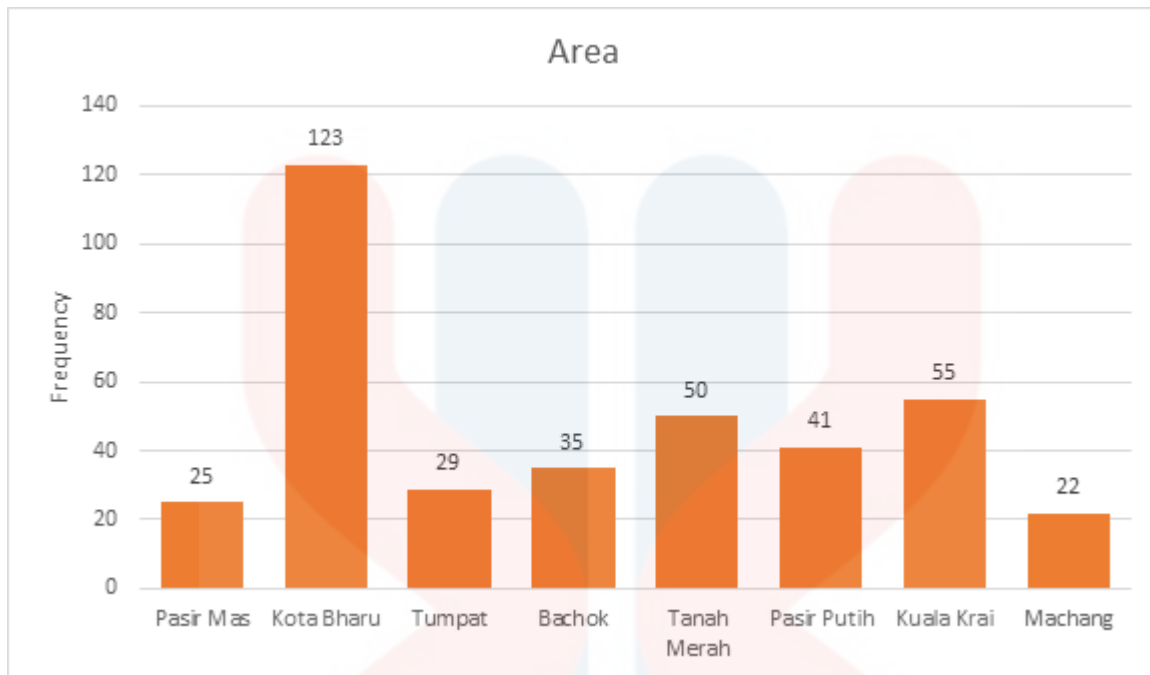


Figure 4.1: The Frequency of Area

Based on Figure 4.1 above, the graph shows the area distribution of 380 respondents. Kota Bharu is clearly shown the highest number of respondents in Kelantan with frequency 123 at 32.4 percent. Kuala Krai and Tanah Merah show slight differences between respondents where Kuala Krai's frequency is $n=55$ (14.5 percent) and Tanah Merah frequency 50 at 13.2 percent. The following area is Pasir Putih where the frequency is 41 at 10.8 percent then followed by Bachok $n=35$ and 9.2%. The third number from the bottom is Tumpat where the frequency of respondents is 29 at 7.6 percent. The second last lowest is Pasir Mas $n=25$, 6.6 percent. The lowest area of respondents is Machang, $n=22$ 5.8 percent.

The reason why Kota Bharu has the largest collection of respondents is that Kota Bharu is a fast-growing area and city where many SMEs are related to tourism. That's why respondents of Kota Bharu can answer our survey.

4.2.2 Number of Employees

Table 4.2 shows the number of employees in TSME based on the total of 380 respondents collected from the data collection.

Table 4.2: The Number of Employees

	Frequency (n)	Percent (%)
5>20	176	46.3
21>50	135	35.5
51>200	67	17.6
>200	2	0.5
Total	380	100.0

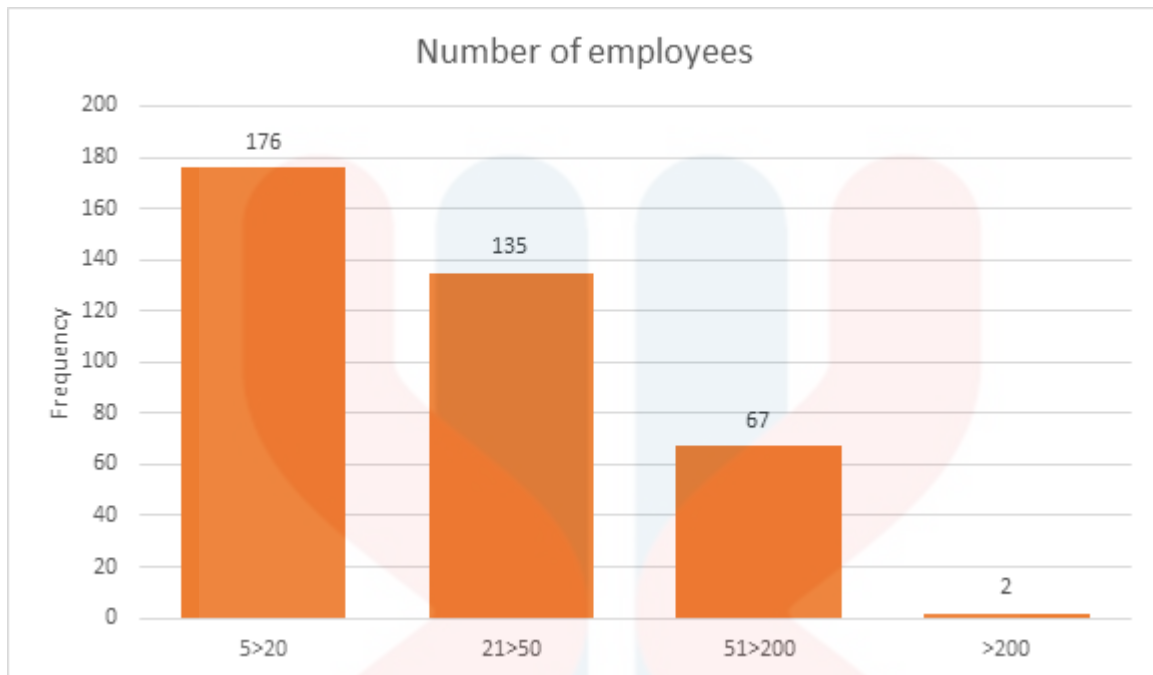


Figure 4.2: The Number of Employees

Figure 4.2 shows the number of employees in TSME, collected from 380 respondent data collections. The highest frequency was 5> 20 employees of which 46.3% was 176 frequency (n = 176). The second-highest number followed was 21> 50 employees were 35.5% and frequency 135 (n = 135). The third highest was 51> 200 employees at 17.6% and a frequency of 67 (n = 67). The lowest number of employees was > 200 employees at 0.5% and a frequency of 2 (n = 2).

4.2.3 Company's Total Revenue

Table 4.3 shows the total revenue from the last year of finance from the 380 respondents collected from the data collection.

Table 4.3: Total Revenue

	Frequency (n)	Percent (%)
RM0 – RM20,000	32	8.4
RM20,001 - RM100,000	89	23.4
RM100,001 – RM300,000	118	31.1
RM300,001 – RM500,000	86	22.6
RM500,001 – RM1,000,000	48	12.6
RM1,000,001 – RM20,000,000	7	1.8
Total	380	100.0

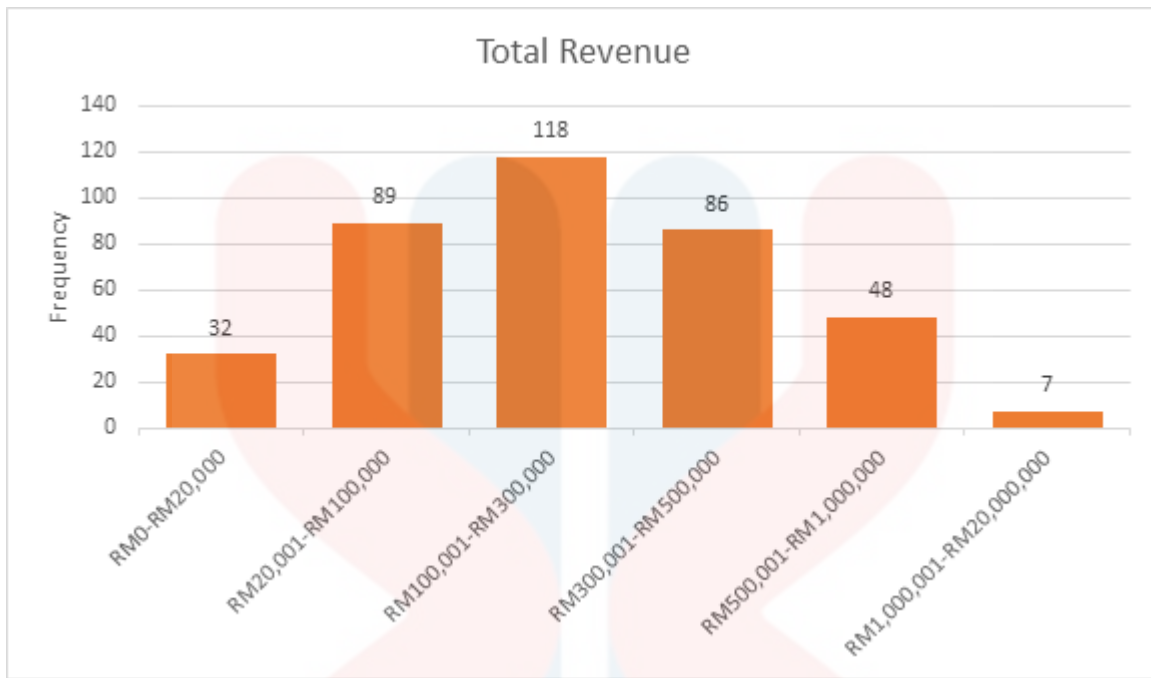


Figure 4.3: Total revenue

Figure 4.3 above shows the frequency of total revenue from the last year of finance of the respondents. The highest total revenue collected from the data collection is RM100,001–RM300,000, the frequency is 118 (31.1%). The second and third highest are slightly different where the second is RM 20,001–RM100,000 where the frequency is $n=89$ (23%) and the third is RM300,001-RM500,000 ($n=86$)(22.6%). Then followed by RM500,001-RM1,000,000 where the frequency is 48 (12.6%). The second lowest of total revenue is RM0-RM20,000 where the frequency is 32 (8.4%). The lowest total revenue is RM1,000,001-RM20,000,000, the frequency is 7 (1.8%).

4.2.4 Company's Revenue Foreigners

Table 4.4 shows the revenue generated by foreigners in TSME of a total of 380 respondents collected from the data collection.

Table 4.4: Revenue Foreigners

	Frequency (n)	Percent (%)
None	78	20.5
25% or less	153	40.3
26% - 50%	95	25.0
Over 50%	54	14.2
Total	380	100.0

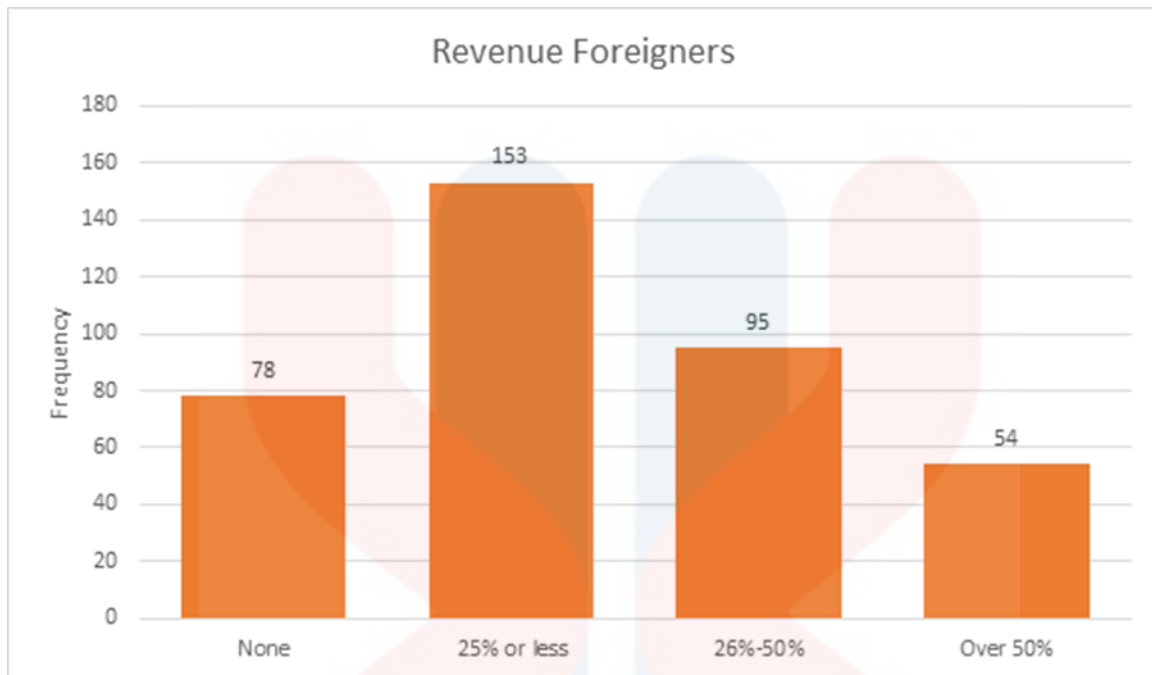


Figure 4.4: Revenue Foreigners

The graph in Figure 4.4 shows the frequency of revenue generated from foreigners. The highest percentage is 40.3% ($n = 153$) which is 25% or less than the revenue of foreigners. The second highest foreign revenue is 26% -50% where the percentage is 25% ($n = 95$). Then followed by TSME which had no revenue generated from the foreigners by a frequency of 78 (20.5%). Revenue foreigners for over 50% are the lowest percentage at 14.2% and $n = 54$.

4.2.5 Company's main activity

Table 4.5 shows the company's main activity distribution of a total of 380 respondents collected from the data collection.

Table 4.5: Company's Main Activity

	Frequency	Percent
Accomodation & Hotel	58	15.3
Travel agency	54	14.2
Transportation	56	14.7
Food & beverage	88	23.2
Craft	40	10.5
Others	84	22.1
Total	380	100.0

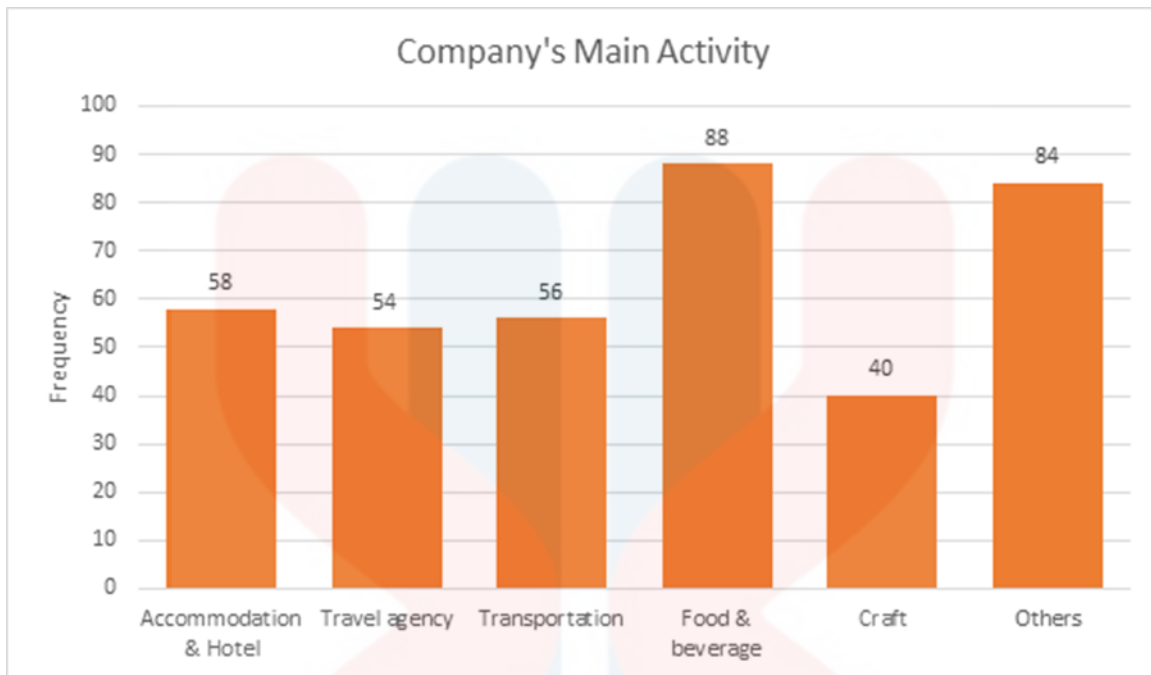


Figure 4.5: Frequency of Company's Main Activity

Figure 4.5 shows the frequency of main activities performed by a TSME collected from 380 data collection respondents. The highest frequency and percentage is food & beverage where $n = 88$ 23.2%. Others are slightly different with food & beverage, which is $n = 84$ and 22.1%. For accommodation & hotel, transportation and travel have 2 frequency differences namely $n = 58$ (15.3%), $n = 56$ (14.7%) and $n = 54$ (14.2%) respectively. The lowest frequency in the main activity in the company is Craft where $n = 40$ (10.5%).

4.2.6 Type of digital innovation

Table 4.6 shows the type of digital innovation that each 380 respondents are using in their business.

Table 4.6: Type of digital innovation

	Frequency	Percent
Social Media	114	30.0
Website	104	27.4
Gateway payment	54	14.2
Market place	107	28.2
Others	1	3
Total	380	100.0

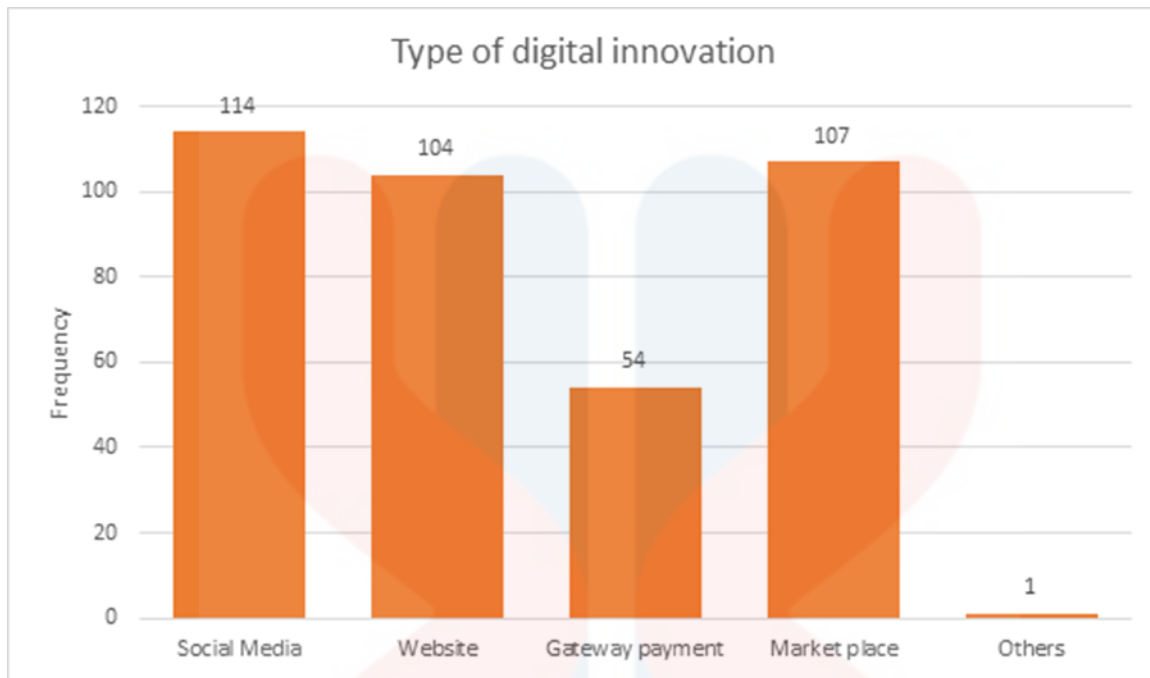


Figure 4.6: The Frequency of type of digital innovation

Based on Figure 4.6, the graph of social media is the highest among the rest. The frequency is $n=114$ (30%). The second highest type of digital innovation is the marketplace where $n=107$ (28.2%). Then followed by Website, $n=104$ (27.4%). The frequency of the second-lowest type of digital innovation is Gateway payment where the $n=54$ (14.2%). The lowest is others whose frequency is only 1 to 3%.

The percentage of social media types as the highest digital innovation is because in modern times now everyone has a mobile phone and of course everyone has social media. From this social media approach, it is easier to attract interest and give awareness to customers about the available products. After all, the current situation that is plaguing the world now is a strong impetus for all SMEs to do business online through social media.

4.3 RESULT OF INFERENTIAL ANALYSIS

4.3.1 Normality Analysis

The normality test determines the sample size distribution. This is required to determine whether the sample collected falls within an acceptable range and the sample's skewness. If the samples are not normally distributed, the non-parametric technique will be used for subsequent tests; otherwise, the parametric technique will be used.

Table 4.4: Table of Normality Analysis

Construct	Items	Mean	Std. Deviation
Section B: Innovation Capability	DVB1	4.26	.895
	DVB2	4.00	1.074
	DVB3	4.12	1.025
	DVB4	4.25	.975
	DVB5	4.15	1.008
	DVB6	4.13	1.029
	DVB7	3.96	1.092
Research & development	IVCRD1	4.15	1.005
	IVCRD2	4.14	1.039
	IVCRD3	4.09	1.014
	IVCRD4	4.16	1.019
	IVCRD5	4.05	1.038
	IVCRD6	4.15	.992
	IVCRD7	4.10	1.008
Networking	IVCN1	4.11	1.008
	IVCN2	4.13	.971
	IVCN3	4.20	1.017
	IVCN4	4.09	1.032
	IVCN5	4.20	.988
	IVCN6	4.11	1.059

	IVCN7	4.09	1.003
Entrepreneurial Leadership	IVCEL1	4.08	1.063
	IVCEL2	4.20	.978
	IVCEL3	4.18	1.028
	IVCEL4	4.15	1.020
	IVCEL5	4.08	1.072
	IVCEL6	4.18	.990
	IVCEL7	4.18	.987
Technology	IVCT1	4.10	1.062
	IVCT2	4.15	1.046
	IVCT3	4.15	1.062
	IVCT4	4.16	1.037
	IVCT5	4.16	1.036
	IVCT6	4.14	1.055
	IVCT7	4.03	1.114

DVB4, with a value of 4.25, has the greatest mean for the variable of innovation capability, while DVB7, with a value of 3.69, has the lowest.

IVCRD4 has the highest mean for the variable of research and development, with a value of 4.16, and IVCRD5 has the lowest mean, with a value of 4.05.

The greatest mean value in the networking construct is IVCN3, with a mean value of 4.20; the lowest mean value is IVCN7, with a mean value of 4.09.

The greatest mean value in the concept of entrepreneurial leadership is IVCEL2, with a mean value of 4.20; the lowest mean value is IVCN5, with a mean value of 4.08.

IVCT4 and IVCT5, both with a value of 4.16, have the greatest mean for the technology

variable, and IVCT7 has the lowest mean, with a value of 4.03.

4.3.2 Pearson Correlation Analysis

Pearson Correlation Analysis

The Correlation Coefficient of Pearson attempts to classify the interaction strength and significant relationships between the IVs (factors of innovation capability) and DV (Innovation capability). Pearson Correlation was chosen because it allows for the assessment of the strength of a linear relationship between two variables using a single number in the range of 1. The Pearson Correlation table is shown in the table below.

Table 4.5: Table of Pearson's Correlation Coefficient

Size of Correlation	Interpretation
0.90 to 1.0 (-0.90 to -1.0)	Very high positive (negative) correlation
0.70 to 0.90 (-0.70 to -0.90)	High positive (negative) correlation
0.50 to 0.70 (-0.50 to -0.70)	Moderate positive (negative) correlation
0.30 to 0.50 (-0.30 to -0.50)	Low positive (negative) correlation
0.00 to 0.30 (-0.0 to -0.30)	Little if any correlation

Source: Hinkle, Wiersma, & Jurs (2003)

It is also helpful to test the problem of multicollinearity among variables by using Pearson's Correlation analysis. It usually occurs when there is a high correlation between IVs.

Therefore, the coefficient value should exceed 0.90. to avoid this problem.

The correlation analysis of the relationship between innovation capability and R&D, networking, entrepreneurial leadership, and technology is shown in Table 4.6 using Pearson's Correlation Coefficient.

Table 4.6: Result of Pearson Correlation Analysis

	Technology	Research & Development	Networking	Entrepreneurial Leadership	Innovation Capability
Technology	1				
Research & Development	.892	1			
Networking	.876	.899	1		
Entrepreneurial Leadership	.866	.901	.913	1	
Innovation Capability	.878	.892	.876	.866	1

Table 4.6 shows that innovation capability and technology is significantly correlated at $r = 0.878$, $p < 0.01$. Based on Hinkle, Wiersma and Jurs (2003), this indicates a high positive correlation between innovation capability and technology.

Innovation capability and Research & Development is significantly correlated at $r = 0.892$, $p < 0.01$. This indicates a high positive correlation between Research & Development and innovation capability.

There is a statistically significant correlation between innovation capability and networking with $r = 0.876$, $p < 0.01$. The correlation coefficient shows a high positive correlation between networking and innovation capability.

There is a statistically significant correlation between innovation capability and entrepreneurial leadership with $r = 0.866$, $p < 0.01$. The correlation coefficient shows a very high positive correlation between entrepreneurial leadership and innovation capability.

In conclusion, innovation capability, Research & Development, networking and entrepreneurial leadership are significantly correlated with technology, and are in high relationships.

4.5 DISCUSSION BASED ON RESEARCH OBJECTIVE

Table 4.7 shows the summary for hypothesis testing in this study.

Table 4.7: Hypotheses test

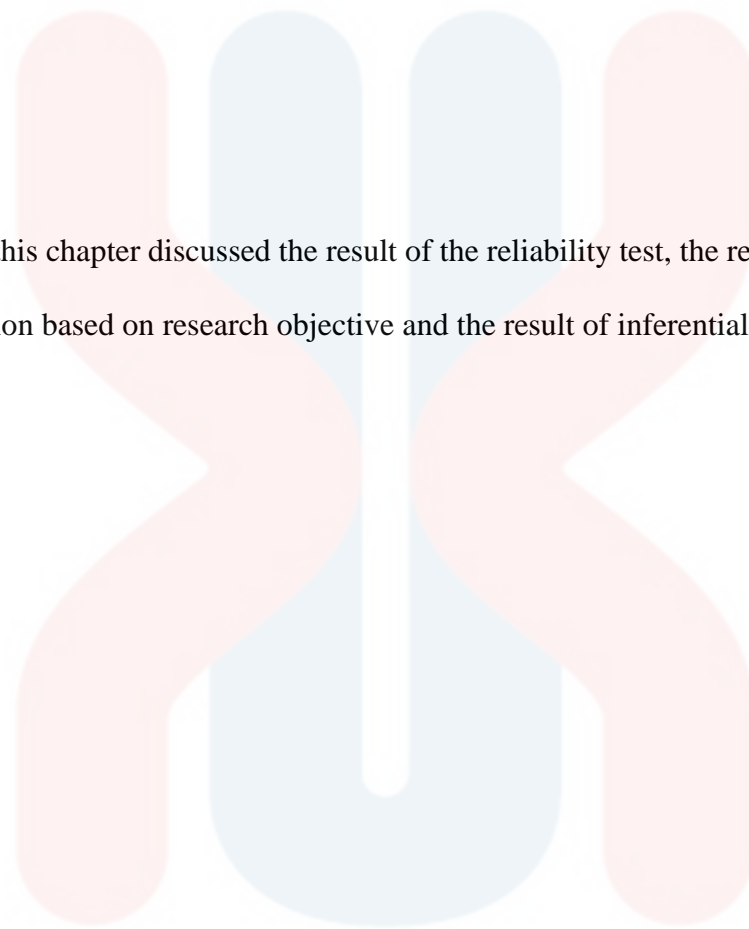
Hypothesis		Pearson's Correlation Results
H ₁	The relationship between research and development and innovation capability	0.892**
H ₂	The relationship between technology and innovation capability	0.878**
H ₃	The relationship between networking and innovation capability	0.876**
H ₄	The relationship between entrepreneurial leadership and innovation capability	0.866**

According to table 4.7, the direction of the relationship is a high positive between all the

independent variables and dependent variables. Research and development, technology, networking and entrepreneurial leadership are positively correlated with innovation capability.

4.6 SUMMARY

In short, this chapter discussed the result of the reliability test, the result of descriptive analysis, discussion based on research objective and the result of inferential.



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CHAPTER 5

CONCLUSION

5.1 INTRODUCTION

This chapter discusses the result shown in Chapter 4. Other than that, this chapter also explains about the recommendation that can be used about this study in the future and also at the end of this chapter the researchers will conclude about this study to the public.

5.2 RECAPITULATION OF THE FINDINGS

The results are presented in this section in a way that reflects the study's most important findings. The summary of the findings includes a discussion for each of the findings, as well as anchor verbiage that justifies rather than distorts the findings' intent. Based on the study's objective, the following is a summary of the findings:

5.2.1 DISCUSSION ON OBJECTIVE 1

Table 5.1: discussion on objective 1 (Research and development (R&D))

Research objective 1	To determine the relationship between research and development (R&D) and innovation capability.
Research question 1	What is the relationship between research and development (R&D) and innovation capability?

Hypothesis 1	There is a relationship between research and development (R&D) and innovation capability SMEs in Kelantan.
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It is already stated in Chapter 1 that the first objective of this study is to examine the relationship between research and development (R&D) and innovation capability. Based on the data collected and output in Chapter 4, it shows that it is significantly correlated. The result of the relationship between the independent variable and dependent variable indicates the reflection by H1.

Most of the respondents agreed that research and development (R&D) influences innovation capability as they tend to share their experience for answering questionnaires. This indicates a high positive correlation between Research & Development (R&D) and innovation capability.

5.2.2 DISCUSSION ON OBJECTIVE 2

Table 5.2: Discussion on objective 1 (Technology)

Research objective 2	To determine the relationship between technology and innovation capability.
Research question 2	What is the relationship between technology and innovation capability?
Hypothesis 2	There is a relationship between technology and innovation Capability SMEs in Kelantan.

The second research objective focuses on examining the relationship between technology and innovation capability. The data analysis results in Chapter 4 show that innovation capability and technology is significantly correlated. The outcome of the relationship between the independent variable and dependent variable indicates the reflection by H2.

The result of the technology that has been influenced towards innovation capability and the result shows is positive. This indicates a high positive correlation between innovation capability and technology.

5.2.3 DISCUSSION ON OBJECTIVE 3

Table 5.3: Discussion on objective 1 (Networking)

Research objective 3	To determine the relationship between networking and innovation capability.
Research question 3	What is the relationship between networking and innovation capability?
Hypothesis 3	There is a relationship between networking and innovation capability SMEs in Kelantan.

The third objective is to examine the relationship between networking and innovation capability. Based on the data collected and output in Chapter 4, it shows that there is a significant relationship between innovation capability and networking. The result of the relationship between the independent variable and dependent variable indicates the reflection by H3.

The out-turn of the networking that has been influenced towards innovation capability and the result shows it is effective. The correlation coefficient shows a high positive correlation between networking and innovation capability.

5.2.4 DISCUSSION ON OBJECTIVE 4

Table 5.4: Discussion on objective 1 (Entrepreneurial leadership)

Research objective 4	To determine the relationship between entrepreneurial leadership and innovation capability.
Research question 4	What is the relationship between entrepreneurial leadership and innovation capability?
Hypothesis 4	There Is a relationship between entrepreneurial leadership and innovation capability of SMEs in Kelantan.

The fourth objective is to examine the relationship between entrepreneurial leadership and innovation capability. Based on the data collected and output in Chapter 4, it shows that there is a statistically significant correlation between innovation capability and entrepreneurial leadership. The result of the relationship between the independent variable and dependent variable indicates the reflection by H4.

The respondents agreed that entrepreneurial leadership influences innovation capability. This indicates a high positive correlation between entrepreneurial leadership and innovation capability. The correlation coefficient shows a very high positive correlation

between entrepreneurial leadership and innovation capability.

5.3 LIMITATIONS

The researchers are always aware of the limitations of their study. The first limitation is that face to face interviews are not possible. Conducting face to face interviews is a popular qualitative research method. One advantage of this approach is that it enables the collection of accurate data from individuals. When we conduct a face-to-face interview, it not only aids the questioner in determining who their respondents are, but it also aids in the collection of other data. These interviews can take anywhere from half an hour to two hours or more and can be conducted in person or over the phone. When conducting a face-to-face interview, the questioner must be able to read the respondent's body language and match the answers.

The researcher's second limitation is that time. Because of the pandemic Covid-19 that is happening right now, the researchers cannot meet their respondents to help answer the questionnaires. They have to use an online platform to help them to get their data from respondents. Basically, respondents will take some time to open the question, to analyze and also to answer them. So it will take time to get an answer and the researcher will lack time because of the submission deadline.

To overcome this limitation is very difficult because of the things that cannot be avoided because it is one of the pandemics. Nevertheless, a future study should be extra careful to conduct face to face interviews and as well as the submission deadlines have to make it longer so the researcher can have a good result or data.

5.4 RECOMMENDATIONS

The first recommendation in this study is the researchers need to do more research about innovation capability and the factor of it in SMEs business. For more understanding about this topic, researchers need to do more research about this topic including reading more articles, books, interviews and so on.

Next is, the researchers can construct the same research but with the new context and new location and also re-assessing and expanding theory, framework and model that has been addressed in this research.

Build upon findings of the next research. These may relate to findings of this study that were not anticipated. Moreover, suggesting future research to address unanswered aspects of this research problem.

Finally, future research may consider the examination by incorporating subjective investigation wherein the respondents are met or permitted to make remarks toward the finish of the review or answer some open-finished inquiries.

5.5 SUMMARY

Finally, this chapter addresses the four parts of the quantitative study, and the goal of this study is to determine the relationship between research and development (R&D) and innovation capability, the relationship between technology and innovation capability, the relationship between networking and innovation capability, and the relationship between networking and innovation capability.

This study employed a framework based on the Absorptive Capacity Model and R&D Incentives (Cohen and Levinthal, 1990) in conjunction with Social and Behavioral Sciences

(Huseyin Ince et al., 2016) to investigate the relationship between the four independent variables, which are research and development (R&D), technology, networking, and entrepreneurial leadership, and the dependent variables. The outcome will provide an outline of the level of influence of independent variables on the dependent variable.

According to the findings, it is shown that these four independent variables were influencing the factors of innovation capability among SMEs in Kelantan. Following the summary of the liable knowledge, the whole objective of this research has been answered.



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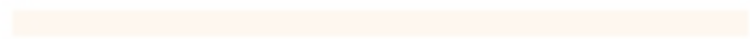
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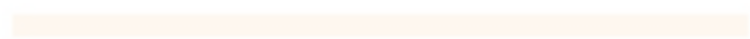
up' challenge for developing countries: Some lessons of experience.



UNIVERSITI



MALAYSIA



KELANTAN

APPENDIX

SECTION A: SMES BUSINESS PROFILE/*PROFIL PERNIAGAAN SME*

1. In which area do you currently work?

Di daerah manakah anda bekerja sekarang?

- Kota Bharu
- Pasir Mas
- Tumpat
- Bachok
- Tanah Merah
- Pasir Putih
- Kuala Krai
- Machang

2. What is your company's approximate number of employees?

Berapakah jumlah anggaran pekerja di syarikat anda?

- 0<5
- 5-20
- 21-50
- 51-200
- >200

3. In the last financial year, what was your company's approximate total revenue?

Dalam tahun kewangan yang lepas, berapakah jumlah anggaran pendapatan syarikat anda?

- RM0 - RM 20,000
- RM 20,001 - RM 100,000
- RM 100,001 - RM 300,000
- RM 300,001- RM 500,000
- RM 500,001 - RM 1000,000
- RM 1000,001 - RM 20 000,000
- More than 20 million

4. How much of your company's revenue is generated by foreigners?

Berapa jumlah pendapatan syarikat anda yang dijana oleh rakyat luar negara?

- None/Tiada
- 25 % or less/25% atau kurang
- 26% - 50%
- Over 50 %/Melebihi 50%

5. What is your company's main activity (please select only one response):

Apakah aktiviti utama syarikat anda? (sila pilih satu jawapan)

- Accommodation & hotel
- Travel agency
- Transportation
- Food & beverage
- Craft
- Others / Lain-Lain

6. Do you agree on using digital innovation that can improve your business performance?

Adakah anda bersetuju menggunakan inovasi digital yang dapat meningkatkan prestasi perniagaan anda?

- Yes
- No

7. What type of digital innovation you are use in improving your business performance?

Apakah jenis inovasi digital yang anda gunakan dalam meningkatkan prestasi perniagaan anda?

- Social Media
- Website
- Gateway Payment
- Market place
- Other ____

SECTION B: QUESTIONNAIRE & DESCRIPTION/SOAL SELIDIK & PENERANGAN

1.0 INNOVATION CAPACITY

The questionnaires below are designed to measure innovation capacity. Please rate the response accordingly from Scale-1 (Strongly Disagree) to Scale-5 (Strongly Agree)

Soal selidik di bawah direka untuk mengukur inovasi kapasiti. Sila beri maklum balas yang sewajarnya dari Skala-1 (Sangat Tidak Setuju) hingga Skala-5 (Sangat Setuju)

1- Strongly Disagree/Sangat Tidak Setuju

2- Disagree/Tidak Setuju

3- Moderate/Kurang Pasti

4- Agree/Setuju

5- Strongly Agree/Sangat Setuju

1	We have the capabilities to exploit new knowledge for innovations. / Kami mempunyai keupayaan untuk memanfaatkan pengetahuan yang baru untuk inovasi.	1	2	3	4	5
2	We have the capabilities to improve the quality of existing products and services. / Kami mempunyai keupayaan untuk meningkatkan kualiti produk dan perkhidmatan yang sedia ada.	1	2	3	4	5
3	Creativity is encouraged in our firm. / Kreativiti digalakkan di firma kami.	1	2	3	4	5
4	We have the capabilities to recognize new opportunities. / Kami mempunyai keupayaan untuk mengenali peluang baru.	1	2	3	4	5
5	Our company identifies and applies new technological trends in our industry. / Syarikat kami mengenal pasti	1	2	3	4	5

	<i>dan menerapkan trend teknologi yang baru dalam industri.</i>					
6	We believe that R&D can improve the quality of our existing products and processes. / <i>Kami percaya R&D boleh meningkatkan kualiti produk dan pengeluaran yang sedia ada.</i>	1	2	3	4	5
7	Whenever we have needed to develop new skills or technologies to offer new products, we have been able to do so efficiently. / <i>Setiap kali kami perlu mengembangkan kemahiran atau teknologi baru untuk menawarkan produk baru, kami dapat melakukannya dengan cekap.</i>	1	2	3	4	5
8	We have the capabilities to generate new innovations which differ from competitors' offerings. / <i>Kami mempunyai keupayaan untuk menghasilkan inovasi baru yang berbeza daripada pesaing.</i>	1	2	3	4	5
9	Risk taking is encouraged in our firm. / <i>syarikat kami sedia menanggung risiko</i>	1	2	3	4	5

SECTION C: RESEARCH & DEVELOPMENT(R&D), TECHNOLOGY, NETWORKING, AND ENTREPRENEURIAL LEADERSHIP

2.0 Technology/Teknologi

The questionnaires below are designed to measure innovation capacity technology in your business.. Please rate the responses accordingly from scale -1 (Strongly Disagree) to Scale-5 (Strongly Agree)

Soal selidik di bawah direka untuk mengukur inovasi kapasiti teknologi dalam perniagaan anda. Sila beri maklum balas yang sewajarnya dari Skala-1 (Sangat Tidak Setuju) hingga Skala-5 (Sangat Setuju)

1- Strongly Disagree/Sangat Tidak Setuju

2- Disagree/Tidak Setuju

3- Moderate/Kurang Pasti

4- Agree/Setuju

5- Strongly Agree/Sangat Setuju

1	Innovation technology improves the quality of work I do. <i>inovasi teknologi meningkatkan kualiti kerja yang saya lakukan.</i>	1	2	3	4	5
2	Innovation technology makes it easier to do my job/ <i>inovasi teknologi menjadikan tugas saya lebih mudah.</i>	1	2	3	4	5

3	Innovation technology is compatible with all aspects of my work. <i>inovasi teknologi sesuai dengan semua aspek pekerjaan saya.</i>	1	2	3	4	5
4	Innovation technology improves my job performance. Inovasi teknologi meningkatkan prestasi kerja saya.		2	3	4	5
5	Overall, I believe that innovation technology is easy to use <i>Secara keseluruhan, saya percaya bahawa teknologi inovasi mudah digunakan.</i>	1	2	3	4	5
6	My firm is able to master and absorb the basic and key technologies of business/syarikat saya mampu menguasai bidang teknologi dalam perniagaan	1	2	3	4	5
7	Using a technology enables me to accomplish tasks more quickly/ <i>menggunakan teknologi membolehkan saya menyelesaikan tugas dengan lebih cepat</i>	1	2	3	4	5

2.1 Networking/Rangkaian

The questionnaire below is designed to measure innovation capacity networking in your business. Please rate the responses accordingly from scale -1 (Strongly Disagree) to Scale-5 (Strongly Agree)

Soal selidik di bawah direka untuk mengukur inovasi kapasiti rangkaian dalam perniagaan anda. Sila beri maklum balas yang sewajarnya dari Skala-1 (Sangat Tidak Setuju) hingga Skala-5 (Sangat Setuju)

1- Strongly Disagree/Sangat Tidak Setuju

2- Disagree/Tidak Setuju

3- Moderate/Kurang Pasti

4- Agree/Setuju

5- Strongly Agree/Sangat Setuju

1	Frequent communications with contacts in the same business are important to my firm./ <i>Komunikasi yang kerap dengan kenalan dalam perniagaan yang sama adalah penting bagi syarikat saya.</i>	1	2	3	4	5
2	Frequent communications with contacts in downstream business (distributor) are important to my firm. / <i>Komunikasi yang kerap dengan pengedar adalah penting bagi syarikat saya.</i>	1	2	3	4	5
3	Frequent communications with contacts in upstream business (Supplier) are important to my firm. / <i>Komunikasi yang kerap dengan pembekal dalam perniagaan adalah penting bagi syarikat saya.</i>	1	2	3	4	5
4	Frequent communications with business partners are important to my firm./ <i>Komunikasi yang kerap dengan rakan niaga adalah penting bagi syarikat saya.</i>	1	2	3	4	5
5	Frequent communications with contacts in other business are important to my firm./ <i>Komunikasi yang kerap dengan kenalan dalam perniagaan lain adalah penting bagi syarikat saya.</i>	1	2	3	4	5
6	Frequent communications with customers are important to my firm./ <i>Komunikasi yang kerap dengan pelanggan adalah penting bagi syarikat saya.</i>	1	2	3	4	5
7	Frequent communication with R&D and Financial Institution are important to my firm. / <i>Komunikasi yang kerap dengan pihak R&D dan Kewangan adalah penting bagi syarikat saya.</i>	1	2	3	4	5

2.2 Entrepreneurial Leadership

The questionnaire below is designed to measure innovation capacity entrepreneurial leadership in your business. Please rate the responses accordingly from scale -1 (Strongly Disagree) to Scale-5 (Strongly Agree)

Soal selidik di bawah direka untuk mengukur inovasi kapasiti kepimpinanan keusahawanan dalam perniagaan anda. Sila beri maklum balas yang sewajarnya dari Skala-1 (Sangat Tidak Setuju) hingga Skala-5 (Sangat Setuju)

- 1- Strongly Disagree/Sangat Tidak Setuju**
- 2- Disagree/Tidak Setuju**
- 3- Moderate/Kurang Pasti**
- 4- Agree/Setuju**
- 5- Strongly Agree/Sangat Setuju**

1	Leadership has a significant influence on organizational performance./ <i>Kepemimpinan mempunyai pengaruh yang signifikan terhadap prestasi organisasi.</i>	1	2	3	4	5
2	Organizational learning significantly mediates between leadership styles and organizational performance./ <i>Pembelajaran organisasi banyak mempengaruhi antara gaya kepemimpinan dan prestasi organisasi.</i>	1	2	3	4	5
3	Innovative culture significantly mediates between leadership styles and organizational performance./ <i>Budaya inovatif menjadi perantara</i>	1	2	3	4	5

	<i>antara gaya kepimpinan dan prestasi organisasi.</i>					
4	Leadership styles have a significant influence on organizational learning. / <i>Gaya kepimpinan mempunyai pengaruh yang signifikan terhadap pembelajaran organisasi.</i>	1	2	3	4	5
5	Leadership styles have a significant influence on innovative culture. / <i>Gaya kepimpinan mempunyai pengaruh yang signifikan terhadap budaya inovatif.</i>	1	2	3	4	5
6	Effective leadership plays an important role to determine the success or failure of any kind of organization. / <i>Kepimpinan yang berkesan memainkan peranan penting untuk menentukan kejayaan atau kegagalan sesebuah organisasi.</i>	1	2	3	4	5
7	Effective leadership can help to improve the organizational performance in that situation where organizations face a lot of new issues and challenges. / <i>Kepimpinan yang berkesan dapat membantu meningkatkan prestasi organisasi dalam keadaan di mana organisasi menghadapi banyak masalah dan cabaran baru.</i>	1	2	3	4	5

2.3 Research & Development (R&D)

The questionnaires below are designed to measure innovation capacity research & development in your business . Please rate the responses accordingly from scale -1 (Strongly Disagree) to Scale-5 (Strongly Agree)

Soal selidik di bawah direka untuk mengukur inovasi kapasiti penyelidikan & pembangunan dalam perniagaan anda. Sila beri maklum balas yang sewajarnya dari Skala-1 (Sangat Tidak Setuju) hingga Skala-5 (Sangat Setuju)

1- Strongly Disagree/Sangat Tidak Setuju

2- Disagree/Tidak Setuju

3- Moderate/Kurang Pasti

4- Agree/Setuju

5- Strongly Agree/Sangat Setuju

1	R&D innovation plays a key role in our business strategy/ Inovasi R&D memainkan peranan penting dalam strategi perniagaan kami	1	2	3	4	5
2	Our company acquires new technologies/ Syarikat kami memperoleh teknologi baru	1	2	3	4	5
3	Our company is recognised for products that are technologically superior/ Syarikat kami dikenali untuk produk yang berteknologi unggul	1	2	3	4	5
4	Our company, in product development, employs some of the most qualified industry experts in the country/ Syarikat kami, dalam pengembangan produk, mempekerjakan beberapa pakar industri yang paling berkualiti di negara ini	1	2	3	4	5
5	Our company manufactures products designed through R&D (Research and Development) efforts that meet customer needs/ Syarikat kami mengeluarkan produk yang dirancang melalui usaha R&D (Penyelidikan dan Pengembangan) yang memenuhi keperluan pelanggan	1	2	3	4	5
6	This R&D unit ensure the quality of processes for designing new products or services/ Unit R&D ini memastikan kualiti proses untuk merancang produk atau perkhidmatan baru	1	2	3	4	5

7	Innovation in technology R&D can store data to track work improvement/ Inovasi dalam teknologi R&D dapat menyimpan data untuk mengesan peningkatan kerja	1	2	3	4	5
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