

Entrepreneurial competency, competitive advantage and performance of informal women micro-entrepreneurs in Kelantan, Malaysia

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Advantage and performance of informal women

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Abstract

Purpose – The purpose of this study is to examine the effect of entrepreneurial competencies on competitive advantage and to investigate the effect of competitive advantage on the performance of informal microenterprises owned and managed by women micro-entrepreneurs in Kelantan, Malaysia.

Design/methodology/approach – This study used a cross-sectional design and collected quantitative data from 384 informal women micro-entrepreneurs operating in “night markets” in Kelantan, Malaysia.

Findings – The finding of the analysis using variance-based structural equation modeling indicated that commitment competency, conceptual competency, organizing competency and opportunity recognition competency have a significant positive effect on competitive advantages, and competitive advantages have a significant positive effect on the performance of microenterprises owned and managed by women micro-entrepreneurs in Kelantan, Malaysia.

Research limitations/implications – The development programs and policies should focus on improving the competencies, i.e. commitment competency, conceptual competency, organizing competency and opportunity recognition competency to improve the socioeconomic condition of low-income households in Malaysia. Informal women micro-entrepreneurs should, therefore, focus on value creating strategies to avoid potential competitors from duplicating the benefits of their strategy. This will result in a sustainable competitive advantage of microenterprises in Malaysia.

Originality/value – This study puts forward and tests the effect of entrepreneurial competencies on competitive advantages and performance of informal women micro-entrepreneurs in Kelantan, Malaysia, which provides a foundation for the design and implementation of development programs and policies that promote entrepreneurial activities in Malaysia.

Keywords Competitive advantages, Entrepreneurial competencies, Informal entrepreneurship

Paper type Research paper

Introduction

At recent times, more attention has been channeled toward informal entrepreneurship in both developed and developing nations (Ratten, 2016), particularly businesses run by women (Hipango and Dana, 2012; Colette and Johnston, 2007; Kariv, 2011). As such, this article unravels details pertaining to women micro-entrepreneurs in Kelantan; a state that



covers 5,830 square miles at the northeast of Peninsular Malaysia. Kelantan shares borders with Thailand to the north, Terengganu to the southeast, Perak to the west and Pahang to the south, as well as the South China Sea to the northeast. *Kota Bharu* is the state capital of Kelantan, which is also the royal seat, and it has approximately 1.83 million populations. The majority ethnic in Kelantan are Malays, Siamese, Chinese, Indians and indigenous people (*Orang Asli*). Based on the Census (2010), the population of Kelantan is comprised of largely Muslims (95.2 per cent), 3.8 per cent Buddhists, 0.3 per cent Christians, 0.2 per cent Hindus and 0.5 per cent followers of other beliefs or non-religious. Women entrepreneurs in Kelantan have begun their involvement in business since the middle of nineteenth century, with a majority running micro businesses. They sell dry and wet food, vegetables, fish crackers, kitchen utensils and textiles. Basically, in Malaysia, informal economy is one of the main sources for the economic system that contributes toward developing the nation (Aziz and Khan, 2015). Informal economic activities, especially the night market, appear to be a major tourist attraction in Malaysia (Rohaya, 2007). In general, the informal businesses carried out in daytime and night are called *Pasar Tani* and *Pasar Malam* (Department of Statistics, 2013).

The term “informal” is commonly associated with the legal status of the enterprise; however, the economic activities of individuals operating in the informal sector are certainly not illegal, just because entrepreneurs have decided not to formalize their activities (Rezaei et al., 2013; Ratten, 2016). Informal microenterprises, in this study, refer to small-scaled (sales turnover \leq RM300,000 or full-time employees \leq 5) economic activities, which are not registered with the Companies Commission of Malaysia (*Suruhanjaya Syarikat Malaysia*) and do not have permanent business premises and location (Aziz and Khan, 2015). These informal microenterprises, however, have a permit from the local municipal council to operate in the street and pay RM20 to RM36 per year as a compensation for cleaning the street after the operation, which normally only runs for a few hours per week. In this study, informal women micro-entrepreneurs refer to the owner and manager of the informal microenterprises operating in the weekly temporary markets in Kelantan, Malaysia (Department of Statistics, 2013).

According to Liedholm and Mead (2013), micro-entrepreneurs contribute to the development process by enhancing the household income thereby increasing the welfare, building self-confidence, bringing social stability and conveying changes in the distribution of income and demographic situations. In addition, informal microenterprises also provide more affordable goods and services to the community because they are usually lower in price. The prices are negotiable and can be control by the type of transaction (Ratten, 2016). For many of them, informal economic activities are the only way to generate income as it allows them the flexibility in where, when and how they work and subject to personal behavior (Dana, 1999). The MWFC – Ministry of Women, Family and Community Development (2014) reports that participation of women in the informal sector is higher compared to the men in Malaysia. The Department of Statistics (2013), Malaysia reports that a total of 213,600 women had participated in the informal sector in 2013 and the number had increased from the previous year. The leading micro-enterprise development initiatives designed and offered by *Amanah Ikhtiar Malaysia* (a leading micro-finance institution that offers small loans to women from poor and/or low-income households for entrepreneurial activities) have focused on women micro-entrepreneurs in the attempt to incorporate women in income-generating activities in Malaysia (Al Mamun, 2014; Al Mamun and Mazumder, 2015; Al Mamun et al., 2016; Zainol et al., 2017). Furthermore, women, in general, share the care responsibilities, i.e. they take care of all housekeeping work and their children (Marques et al., 2013; Ribeiro et al., 2012). Liberation among women is not segregated from their family

responsibilities in building career paths, in comparison to men who enjoy more freedom and the liberty to make their own decision (Ribeiro *et al.*, 2012). Among the micro-entrepreneurs, there has been a rising recognition that significant proportions of entrepreneurial activities are partly or completely operated in the informal sector (Kasseeah and Tandrayen-Ragoobur, 2014; Kasseeah and Tandrayen-Ragoobur, 2016). In Malaysia, it was reported that 11.4 per cent of nonagricultural employment was in the informal sector in 2015 compared to 11.2 per cent in 2013. Numerically, employment in the informal sector was 1.40 million employees in 2015, an increase of 79,300 employees (6.0 per cent) compared to 1.3 million employees in 2013. The status of employment in the informal sector in 2015 by own workers or self-employed is 55.1 per cent higher than employers, employees and unpaid family workers. Meanwhile, the informal sector by industry consists of 19.2 per cent in accommodation and food and beverage service activities and 10.7 per cent in wholesale and retail trade (Department of Statistics, 2015). Furthermore, informal entrepreneurial activities provide opportunities to those who are unemployed and have difficulties in finding a job (Kariv, 2011; Aziz and Khan, 2015).

The informal sector has been, therefore, considered a possible solution to cope with poverty and unemployment among the women from poor and/or low-income households in developing countries, including Malaysia, as informal entrepreneurial activities can generate employment and create wealth (Osman *et al.*, 2011; Franck, 2012; Department of Statistics, 2013) and provide creativity and innovation (Salwa, Azahari and Tamkin, 2013; Palalic *et al.*, 2017), simultaneously, increasing the total production which has a positive impact on the economy of Malaysia (Mahajar and Yunus, 2012; Mahmood and Norshafizah, 2013). Some of the reasons behind the start-up of informal microenterprises by women are redundancy and dissatisfaction in formal employment, as well as responsibilities as a mother and wife, which affect their ability to maintain full-time employment, apart from pursuing their own interest in informal economic activities (Ramadani, 2015; Ramadani *et al.*, 2015). Women who run informal and micro businesses create their own employment by engaging in informal work as street vendors, hawkers or home-based workers, which also exposes them to financial, social and health risks (Servon *et al.*, 2010; Kasseeah and Tandrayen-Ragoobur, 2014). Besides, women opt for the informal sector because of the various types of businesses that can be run without going through stringent red tapes (Ratten, 2016; Rezaei *et al.*, 2014).

Furthermore, for women in Malaysia, employment in micro-enterprise are a gateway to generate income, so that a more sustainable livelihood can be achieved (Ratten and Dana, 2017; Selamat *et al.*, 2011), simultaneously contribute to the socioeconomic well-being of their families, communities and countries (Alom *et al.*, 2016). The MWFC – Ministry of Women, Family and Community Development (2014) reports that these informal women micro-entrepreneurs lack access to financial services, information, skill and technology, which in turn leads to a low level of productivity. With involvement in informal entrepreneurial activities, women entrepreneurs appear to earn less than or equal to the income they can earn from formal employment for the same amount of time (Aziz and Khan, 2015; Kasseeah and Tandrayen-Ragoobur, 2016). Such low-productivity among informal women micro-entrepreneurs hampers the opportunity to further boost their socioeconomic condition, especially among those from low-income households, even after operating a business for a long period of time (Al Mamun, 2014). Therefore, the Malaysian Government has been continuously generating quality, resilient and successful entrepreneurship by cultivating an enterprising culture among Malaysian women through provision of financial services and enhancement of their entrepreneurial competencies (Al Mamun *et al.*, 2016; Latip and Smyrniotis, 2012).

Malaysia has constantly promoted entrepreneurship through various government interventions since 1986. The [Fifth Malaysia Plan \(1986/1990\)](#) was established to create a policy and to implement programs toward sustenance of socioeconomic development and long-term economic stability ([EPU – Economic Planning Unit, 2017](#)). With that, the Ministry of Industrial Development Authority (MIDA), which is a governmental agency for industrial coordination and promotion, was established to handle inquiries, to advise entrepreneurs and to evaluate applications for manufacturing licenses, incentives and import duty exemption. Nevertheless, the research conducted by [Dana \(1987a\)](#) discovered that Malaysia remains a relatively poor country, where the entrepreneurs appear to have less of a role in economic policy. In 1986, the Ministry of Finance had set up the New Investment Fund to facilitate loans to entrepreneurs. Unfortunately, priority was given to export-oriented projects and those that generated new productive capacity only. In comparison with Singapore, its Small Business Bureau primarily looked into financing entrepreneurs in need of financial assistance. Additionally, the researcher compared the varied financial approaches between Malaysia and Singapore, in which both offer loans, but the interest rates seem significantly higher in Malaysia ([Dana, 1987a, 1987b](#)). Therefore, to improve the overall socioeconomic well-being among the low-income and poor households in Malaysia via sustainable economic progression, both government and nongovernment development organizations have emphasized on building a supportive environment to promote entrepreneurial activities at the grass-root level ([Al Mamun et al., 2016](#); [Zainol et al., 2017](#)). For instance, potential entrepreneurs are offered many types of loans, training, advisory services and platforms for promotion. They are also offered product and services through key development organizations/micro-development programs in Malaysia, such as Amanah Ikhtiar Malaysia, The National Savings Bank, The Department of Social Welfare, KEMUBU, Agricultural Development Authority, The Council of Trust for the Bumiputera and The National Entrepreneurial Group Economic Fund ([Zainol et al., 2017](#)). Furthermore, the Malaysian Government, together with development organizations, toward realizing the significance of micro-entrepreneurship, has embraced it as a means to enhance employment and economic development in Malaysia ([Zainol et al., 2017](#)). In fact, the [Eleventh Malaysia Plan \(2016/2020\)](#) projects in becoming more citizen-centric with the focus on enhancing productivity and efficiency of the public service. The Plan highlights Focus Area E in capitalizing on local authorities for quality services at the local level. The government, hence, needs to relocate and reorganize informal businesses into designated areas that are clean, accessible and customer-friendly ([EPU – Economic Planning Unit, 2017](#)). This is because; informal businesses are considered as small businesses operated at five-footway stalls or night markets, which can also refer to the manufacturing sector or small-scale productions that exclude the use of permanent or planned building. It is therefore crucial to improve the knowledge and understanding of the level of competencies and its effect on the performance of enterprises owned and managed by women micro-entrepreneurs in Malaysia. This study therefore intends to examine the effect of entrepreneurial competencies on competitive advantage and to investigate the effect of competitive advantage on the performance of informal microenterprises owned and managed by women micro-entrepreneurs in Kelantan, Malaysia.

Literature review

The development policies and strategies in Malaysia are focused on building a platform to provide supportive products and services to promote micro-entrepreneurial activities among low-income households. The products and services can be classified into two components, i.e. access to financial services and enterprise development training. Financial services focus

on providing working capital to low-income households to start a new business or to improve the performance of an existing business (Al Mamun *et al.*, 2016; Zainol *et al.*, 2017). As such, various training programs have been organized with mostly focused on improving the level of competencies among micro-entrepreneurs in the attempt to heighten the level of competitive advantage and the performance of enterprises owned and managed by low-income households (Ramadani *et al.*, 2013; Beynon *et al.*, 2015). Moreover, the government plays an important role in introducing policies and in promoting entrepreneurship in various channels (Dana, 1987a). Furthermore, the aspects of existing knowledge, supportive environment, learning culture and current capacities among the entrepreneurs have a crucial role in their ability to learn and adopt (Ratten, 2016). As such, the study focused on Malaysian micro-entrepreneurs by highlighting several influential key factors of performance, including advancement drive, achievement oriented, commitment, decision-making ability, managing risk, tenacity, networking and optimism (Abdullah *et al.*, 2009).

This study focuses on six key areas of entrepreneurial competency as provided by Man *et al.* (2002), which are opportunity recognition competencies, relationship competencies, conceptual competencies, organizing competencies, strategic competencies and commitment competencies. Resources, by themselves, cannot be a source of competitive advantage if they are not exploited through business processes. Thus, recognizing opportunities by identifying and selecting the right opportunities for businesses are the most important ability of a successful entrepreneur (Man *et al.*, 2002; Santandreu-Mascarell *et al.*, 2013). The entrepreneurs who embody this ability are said to have entrepreneurial insight in discovering new methods with new solutions after well analyzing the problems of the business to avoid any risk of failure (Ulhoi, 2005). Therefore, an entrepreneur must be alert to any opportunity and the resources available that enable them to recognize gaps, and should have the ability to integrate the opportunity or resources that they have (Man *et al.*, 2002; Tang *et al.*, 2012). Thus, to develop the full entrepreneurial potential with its resources and capabilities, entrepreneurs must exploit the opportunity in the business (Kaur and Bains, 2013). Based on the discussion above, the following hypothesis is posited:

H1. Opportunity recognition competency has a positive effect on competitive advantage.

Relationship competencies relate to person-to-person or individual-to-group-based interactions. This is related to the context of building cooperation and trust, using connections, persuasive communication and interpersonal skills (Man *et al.*, 2002). Entrepreneurs have to use good interpersonal and communication skills to influence others and to gain support (Kaur and Bains, 2013). This key success factor is reflected in one's capability to work with others, either internally or externally, by being involved and handling relationships with employees, business partners, family, friends and customers (Ratten, 2016). Women micro-entrepreneurs should be able to gather knowledge regarding their customers and their needs to succeed in their business (Wang and Lin, 2012). Besides, Marques *et al.* (2013) asserted that women micro-entrepreneurs should place more focus on the social influence of family and friends in their entrepreneurial venture. When networking with others, entrepreneurs can have the opportunity to acquire and strengthen their business through necessary resources and related skills (Man *et al.*, 2002). Thus, an entrepreneur who has these competencies is able to have an informal relationship with other companies and with those in his or her business environment. Relationship competency regarding the information about customers, channel members and competitors is therefore crucial for generating competitive advantage and improve the performance of

microenterprises (Morgan *et al.*, 2009; Morgan, 2012). Based on the discussion above, the following hypothesis is posited:

H2. Relationship competency has a positive effect on competitive advantage.

Conceptual competencies are related to different conceptual abilities that are reflected in the behavior of the entrepreneurs, such as making decisions automatically about business opportunities or absorbing and comprehending complex information for enterprise improvement (Man *et al.*, 2002). This concept is associated with the risk of accessing a new market with different ways of sourcing and building new capabilities (Man *et al.*, 2002) for analytical competency when the entrepreneur faces complex situations (Man *et al.*, 2002). It demonstrates the cognitive process in decision-making skill, the ability to weigh risks, to think analytically, to be creative and to be innovative with the capacity to minimize risks (Man *et al.*, 2002). Furthermore, Compeau *et al.* (1999) claimed that one's attitude toward certain behavior has an impact upon innovative applications and viable outcomes. The cognitive process also resulted in generation of new businesses that include high innovation, risk and prediction in entrepreneurial activities (Emami, 2017; Emami and Dimov, 2016). In the field of business strategy, more effort has gone into identifying knowledge as the basis of a competitive advantage in explaining how a business can set up, develop, retain and transfer that knowledge into the business (Man *et al.*, 2002). Malaysian women entrepreneurs have the confidence, courage and strength to succeed in business; they are efficient and able to produce goods and services of high quality (Liedholm and Mead, 2013). They become more creative in promoting their products as well as in taking any risks with confidence (Bernama, 2016; Emami, 2017). From this perspective, the essence of strategy and the development of sustainable competitive advantages are the identification, development and application of key resources, and ultimately, the resource most likely to lead to a sustainable competitive advantage is the company's unique knowledge base. Therefore, this study proposes that:

H3. Conceptual competency has a positive effect on competitive advantage.

Organizing competencies determine the modes in which the business operates and performs. This competency is related to the organization of different internal and external human, physical, financial and technological resources, including team-building, managing employees, training and controlling business performance (Man *et al.*, 2002). Thus, it allows the allocation of responsibilities for different functions and processes among the branch, department, workgroup and individuals. Changes in structures and processes are increased by the competitive pressure, resulting in the companies to focus on their core competencies that support their competitive advantages (Wang *et al.*, 2011). Therefore, entrepreneurs should have the ability to lead, command, coordinate, control, manage, monitor, delegate, motivate and organize internal and external resources of the business such as prepare budgets, materials, human resources, plan and schedule work and develop programs (Man *et al.*, 2002, Kaur and Bains, 2013). Therefore, the women micro-entrepreneurs should have those abilities for set up, evaluate and implement the strategies of the firm (Nusrat and Bose, 2014). For the informal entrepreneur, organizing competencies refer to how the entrepreneurs organize themselves and their skills, and how they identify the related skills that can be developed as their talent (Hussain and Zafar, 2010). Entrepreneurial skill facilitates the working relationship between various departments in a company and enhances working efficiency among workers. This allows the entrepreneur to apply individual skills as a trigger or stimulus high flexibility and creativity toward the competitive advantage of the business in the long term (Hansen *et al.*, 2011). Hence, the

organizing competency is also a capability that presents a sustainable competitive advantage and the competitive advantage contributes toward enterprise performance in the long term. This study, therefore, formulates the following hypothesis:

H4. Organizing competency has a positive effect on competitive advantage.

Strategic competencies relate to the entrepreneurs' ability to develop a vision for their business. Most literature in the study of entrepreneurial competency points out the entrepreneurs' ability to have a vision for their business that is related to strategic management (Baum and Singh, 1994). They develop the vision by formulating and implementing strategies, planning, setting clear goals and standards, forecasting the finances needed to implement the strategies and thinking and creating ideas (Kaur and Bains, 2013; Man *et al.*, 2002). Women micro-entrepreneurs should be aware and be steps ahead of contenders to ensure that added values are integrated for enhanced business performance (Palalic *et al.*, 2017). Based on the interactions of strategic competencies, competitive advantage refers to tangible gains, similar to investment efficiency (Man *et al.*, 2008). Thus, women entrepreneurs who focus on strategic competency are likely to gain a sustainable competitive advantage, which would lead the business to achieve a higher performance. In addition, the entrepreneurs also have the ability to plan and implement tactics and strategies that influence customers or competitors in the market and tend to be proactive in creating their own growth potential (Sparrow and Makram, 2015). Therefore, the following hypothesis is formulated:

H5. Strategic competency has a positive effect on competitive advantage.

Entrepreneurs who strive to achieve long-term goals with strong devotion, taking initiatives and possessing the entrepreneurial attitude tend to have commitment competency (Man *et al.*, 2002). Therefore, to be the source of a competitive advantage, resources must also be difficult for competitors to imitate and possess (Man *et al.*, 2002). Thus, to sustain the competitive advantage, an entrepreneur needs to give full commitment when doing a job for someone to fulfill customer demand and requirement. Such entrepreneurs will make a special effort to ensure that a person is satisfied with their work and outcome. Thus, entrepreneurs possessing this competency make large personal sacrifices if they have to, including working long hours, maintaining a high energy level and motivation (Kozan *et al.*, 2012). Progress is reflected in levels/stages, while efforts of persistence lead to significant entrepreneurial activities for better performance (Tang *et al.*, 2008). Entrepreneurs place their goal commitment by the desirability and feasibility of goal accomplishment (De Clercq *et al.*, 2009; Tasnim *et al.*, 2013). In fact, they are willing to sacrifice and work diligently until success is attained. Moreover, goals and desires turn into positive challenges and motivation for one to work harder and smarter. Beyond doubt, entrepreneurs who are passionate about entrepreneurial tasks to earn competitive advantage would remain loyal to their goals with enjoyment doing so (Cardon *et al.*, 2012; Chen, *et al.*, 2009; Tasnim and Singh, 2016). This study, therefore, postulates that:

H6. Commitment competency has a positive effect on competitive advantage.

Competitive advantage and performance

Numerous studies have attempted to provide a better understanding of why competitive advantage is important to smaller businesses especially microenterprises as well as to improve the understanding of different mechanisms by which entrepreneurs can improve the performance of their business (Barney, 1991; Ramadani *et al.*, 2013). The competitiveness

of the business can be improved through the recognition of higher quality products and services, which mean that the entrepreneur needs to improve his or her competitive advantage, which is not necessarily linked to profit alone but rather by focusing on supplying better value to customers (Ratten, 2016). An enterprise is said to have a competitive advantage when it implements a value creating strategy that is not simultaneously implemented by any current or potential competitors, whereby the other competitors are unable to duplicate the benefits of this strategy. The possession of unique business practices leads some enterprises to outperform others, and thus, it represents the main source of a sustainable competitive advantage. It is, therefore, crucial to explore how a micro-enterprise creates an environment, which encourages individual commitment to continually discover the creation of reality and how it can be transferred into the business. This study suggests that enterprises should constantly adapt, reconfigure and renew their resources and capabilities to address environmental changes and business resources are important for the resource-based view of a competitive advantage (Fornoni *et al.*, 2012). The business with resources that are different and superior to its competitors has the ability to generate economic value, and it cannot be easily obtained in the open market by competitors (Helfat and Peteraf, 2015). Such economies thrive on scientific discovery and innovation, for which knowledge and technology are the key factors of production and these factors give the business a competitive advantage (Helfat and Peteraf, 2015). Studies addressing knowledge creation including tangible and intangible knowledge, experience and skills of entrepreneur comprise the business's knowledge strategy, which provides the guidelines for developing intellectual capital and, therefore, creating competitive advantages (Helfat and Peteraf, 2015). Man *et al.* (2002) argue that competitive advantages are related to factors that contribute to a business being competitive as well as to ways in which it can be achieved. It has been reported that it is more appropriate to discuss the entrepreneurial process rather than the management process in the small business context. This study, therefore, uses the approach adopted by Man *et al.* (2002) by focusing on the entrepreneurial process through the entrepreneur's behaviors and actions to emphasize the nature of competitive advantage among microenterprises.

In relation to this, the definition of business performance could vary from one business to another. In most cases, the financial performance measures areas such as the percentage of sales, profitability, capital used and returns on assets (ROA). However, Mel McKenzie and Woodruff (2009) suggest that simple measures of profits give more reliable measures than attempts to record the detailed flows of revenues and expenditures. Interestingly, researchers also tend to benchmark the business performance based on six dimensions such as workers' compensation, quality, shrinkage, productivity and operating expenses (Wright *et al.*, 2005). Enterprise performance in this study incorporates most of the criteria and dimensions noted in the Literature review, which refer to the entrepreneurs' perceived performance based on enterprise profitability, return on investment, return on sales, human capital development and satisfaction over the current performance. The identification and understanding of determinants that influence the performance of the entrepreneur is important and necessary for the creation of appropriate economic policies and competitiveness in the business (Man *et al.*, 2002). Performances can be influenced by many factors including entrepreneurial, managerial, motivation, opportunity, technical-functional roles, general managerial experience and business education. In line with earlier studies, this study hypothesizes the following:

- H7. Competitive advantages have a significant positive effect on the performance of informal microenterprises in Kelantan, Malaysia.

H8. Competitive advantages mediate the relationship between entrepreneurial competencies and the performance of informal microenterprises in Kelantan, Malaysia.

Research methodology

This study used a cross-sectional design and data were collected using questionnaires completed by informal micro-enterprise women using the convenient sampling method selected from a sampling frame of “night market” businesswomen in Kelantan, Malaysia. The sampling frame represents a listing from the local municipal council of Kota Bharu, Kelantan and is highly representative of the District Council in Kelantan. A total of 384 informal micro-enterprise women from the sampling frame who operate businesses in the “night markets” from the different districts in Kelantan were requested to fill up the questionnaires. These informal micro-enterprise women are not registered with the Companies Commission of Malaysia (Suruhanjaya Syarikat Malaysia), as they do not have permanent business premises and location. However, these women are registered with the local municipal council (Kota Bharu) under different districts in Kelantan, whereby, they bear the cost of RM20-RM36 per year for payment depending on the different District Councils, in relation to the business locations. The questionnaire was designed using simple and unbiased wordings whereby respondents could easily comprehend the questions and provide answers based on their own perception. Questions were adopted from earlier studies with minor modifications where needed. The questionnaire was divided into several sections. Respondents indicated on a five-point scale (1 = strongly disagree to 5 = strongly agree) on how accurately each statement described their business.

Due to the exploratory nature of this study, this study used the variance-based structural equation modeling, which is the partial least squares (PLS) estimation with the primary objective of maximizing the explanation of variance in the structural equation model's dependent constructs. This method was chosen because the component-based least square is a robust causal modeling technique. It allows for the estimation of measurements and path coefficients simultaneously. The findings of this analysis based on the recommendation of [Hair et al. \(2013\)](#) were suitable for PLS modeling.

Summary of findings

Among the selected 384 women microenterprises in Kelantan, Malaysia, the respondents' businesses have different years of business operation ranging from 1 year to 26 years and above. The survey has the highest percentage (32.8 per cent) of response from the business with 6 to 10 years of business operation. It is slightly more than the respondents with one to five years of business operation with 125 respondents (32.6 per cent). The respondents were divided into five categories of ages. For the first category in the 20-30 years old, there are 99 respondents at 25.8 per cent. Then, for the second category (31-40 years old), there are 107 respondents at 27.9 per cent, followed by the third category (41-50 years old), which accounted for 28.1 per cent and reported as the largest age group of respondents. For the fourth category of 51-60 years old, there were 62 respondents at 16.5 per cent, while seven respondents were more than 61 years old indicating the lowest percentage with the oldest respondents currently engaged in the informal “night markets” in Kelantan.

The majority of women microenterprises were from the Malay ethnicity at 98.2 per cent, followed by 1.6 per cent Chinese, 0.3 per cent Indian and no engagement from other ethnicities. In the marital status category, the largest numbers of respondents were married with the highest percentage of 77.1 per cent. This is followed by 45 respondents with the

single status (11.7 per cent), and the final is 11.3 per cent of respondents, consisting of 43 single mothers operating their businesses. The respondents with an average monthly income of RM1,001-RM2,000 had the highest frequency, at 283 respondents or 47.7 per cent out of the 384 respondents. There were only 13 respondents (3.4 per cent) whose average monthly income was more than RM4,001 (Table I).

The demographic profile of the respondents shows that around 67 per cent of the women micro-entrepreneurs have been operating for more than five years. Nearly 57 per cent and 90 per cent of the micro-entrepreneurs' monthly incomes are below RM2,000 and RM3,000, respectively, (whereas the mean monthly household income of the bottom 40 per cent of the households, also known as low-income households in Malaysia was RM2,537 in 2014) (EPU – Economic Planning Unit, 2016). This is a clear indication that even after operating for a relatively significant amount of time, an enormous proportion of the women micro-entrepreneurs are still barely surviving, which highlights the issue of understanding the state of entrepreneurial competencies and its effect on competitive advantages and performance of informal women micro-entrepreneurs in Kelantan, Malaysia.

Demographic profile	<i>n</i>	(%)
<i>Age</i>		
20-30 years old	99	25.8
31-40 years old	107	27.9
41-50 years old	108	28.1
51-60 years old	62	16.5
61 years old and above	7	1.8
Total	384	100.0
<i>Year of business</i>		
1-5 years	125	32.6
6-10 years	126	32.8
11-15 years	76	19.8
16-20 years	36	9.4
21-25 years	16	4.2
26 years and above	5	1.3
Total	384	100.0
<i>Ethnicity</i>		
Malay	377	98.2
Chinese	6	1.6
Indian	1	0.3
Others	0	0
Total	384	100.0
<i>Marital status</i>		
Single	45	11.7
Married	296	77.1
Single mother	43	11.2
<i>Monthly income</i>		
Below RM1,000	36	9.4
RM1,001-RM2,000	283	47.7
RM2,001-RM3,000	127	33.1
RM3,001-RM4,000	25	6.5
RM4,001 and above	13	3.4
Total	384	100.0

Table I.
Profile of the
respondents

Construct validity and reliability analysis

The variables for conceptual competency, organizing competency, opportunity recognition competency, relationship competency, strategy competency, enterprise performance and competitive advantage are more than 0.7, while for commitment competency, it is more than 0.6, which is 0.631. As the Cronbach's alpha value for all items are more than 0.6, this study considers all items as reliable. For the composite reliability, the indicators have different loadings for all items, which are more than 0.8, except for commitment competency, which is at 0.798. According to [Hair et al. \(2013\)](#), it is considered reliable if the indicators are higher than 0.7. Convergent validity signifies that a set of indicators represents one and the same underlying construct, which can be demonstrated through their unidimensionality. According to [Hair et al., 2011](#), average variance extracted (AVE) value for all items is more than 0.5, which indicates sufficient convergent validity (see [Table II](#)). [Table II](#) shows that all the items for AVE are more than 0.5.

As presented in [Table III](#), all items used to measure conceptual competency, enterprise performance, opportunity recognition competency, relationship competency and strategic competency are more than 0.7, except for one item of commitment competency (0.697), one item of competitive advantage (0.564) and two items of relationship competency (0.698 and 0.699). According to [Hair et al. \(2014\)](#), indicators are assumed to be reliable, when the absolute standardized outer loadings are higher than 0.7. Therefore, even though the 4 components' loading shows the value is less than 0.7, it is still higher than 0.5; hence, it is assumed as reliable.

The cross-loading values are far below the outer loadings, which suggest good discriminant validity. [Hair et al. \(2014\)](#) mention that discriminant validity can be determined by examining the cross loadings of the indicators. The Fornell–Larcker criterion in [Table III](#) is largely unable to detect a lack of discriminant validity. Furthermore, the Heterotrait-Monotrait ratio (HTMT) is an estimate of the correlation between constructs, which parallels the disattenuated construct score creation. Using a value of 0.9 as the threshold, this study concluded that there is no evidence of a lack of discriminant validity and all the constructs meet the criteria.

Path coefficients

[Table IV](#) shows that the path coefficients between entrepreneurial competency, i.e. opportunity recognition competency, relationship competency, conceptual competency, organizing competency, commitment competency and competitive advantage, have a

Variables	No. of items	Cronbach's alpha	Composite reliability	AVE
COMM	3	0.631	0.798	0.570
CONC	4	0.849	0.897	0.686
ORGA	5	0.809	0.867	0.566
OPPO	4	0.809	0.874	0.635
RELA	6	0.824	0.875	0.585
STRA	5	0.845	0.888	0.614
COM AD	5	0.706	0.819	0.535
ENTE	5	0.836	0.883	0.602

Notes: COMM: Commitment competency; CONC: Conceptual competency; ORGA: Organizing competency; OPPO: Opportunity recognition competency; RELA: Relationship competency; STRA: Strategic competency; COM AD: Competitive advantage; ENTP: Enterprise performance

Table II. Reliability measures

Table III.
Outer model loading
and cross loading

Item code	COMM	COMD	CONC	ENTE	ORGA	OPPO	RELA	STRA
COMM-1	0.741	0.292	0.161	0.336	0.448	0.301	0.378	0.355
COMM-2	0.697	0.183	0.168	0.160	0.232	0.251	0.286	0.294
COMM-3	0.821	0.275	0.170	0.231	0.369	0.237	0.431	0.249
COMA-1	0.167	0.564	0.203	0.272	0.234	0.205	0.243	0.056
COMA-2	0.255	0.709	0.296	0.198	0.194	0.225	0.168	0.213
COMA-3	0.252	0.808	0.296	0.265	0.304	0.272	0.194	0.194
COMA-4	0.305	0.817	0.225	0.397	0.455	0.244	0.315	0.257
CONC-1	0.147	0.293	0.181	0.181	0.274	0.383	0.336	0.367
CONC-2	0.177	0.339	0.872	0.214	0.251	0.378	0.293	0.364
CONC-3	0.149	0.232	0.818	0.097	0.224	0.262	0.256	0.311
CONC-4	0.259	0.248	0.809	0.212	0.311	0.293	0.346	0.417
ENTP-1	0.307	0.352	0.209	0.780	0.273	0.313	0.331	0.203
ENTP-2	0.276	0.273	0.162	0.802	0.193	0.242	0.244	0.126
ENTP-3	0.202	0.223	0.154	0.739	0.038	0.161	0.181	0.110
ENTP-4	0.220	0.332	0.139	0.759	0.133	0.178	0.230	0.129
ENTP-5	0.278	0.342	0.172	0.797	0.223	0.242	0.291	0.115
ORGA-1	0.335	0.351	0.252	0.208	0.766	0.324	0.310	0.368
ORGA-2	0.352	0.321	0.214	0.193	0.698	0.305	0.306	0.327
ORGA-3	0.310	0.239	0.217	0.065	0.699	0.281	0.236	0.329
ORGA-4	0.361	0.322	0.179	0.179	0.803	0.298	0.342	0.312
ORGA-5	0.443	0.358	0.258	0.208	0.790	0.342	0.349	0.299
OPPO-1	0.262	0.263	0.289	0.237	0.342	0.808	0.413	0.352
OPPO-2	0.238	0.264	0.414	0.254	0.304	0.813	0.401	0.240
OPPO-3	0.333	0.262	0.245	0.286	0.371	0.814	0.420	0.284
OPPO-4	0.284	0.209	0.350	0.165	0.300	0.752	0.426	0.330
RELA-1	0.438	0.318	0.272	0.325	0.418	0.579	0.738	0.245
RELA-2	0.390	0.284	0.270	0.285	0.340	0.418	0.861	0.203
RELA-3	0.401	0.286	0.263	0.275	0.314	0.324	0.792	0.194
RELA-4	0.296	0.207	0.301	0.210	0.189	0.308	0.700	0.211
RELA-5	0.327	0.218	0.339	0.156	0.273	0.293	0.722	0.262
STRA-1	0.307	0.228	0.358	0.149	0.294	0.246	0.152	0.761
STRA-2	0.285	0.207	0.332	0.156	0.291	0.303	0.198	0.826

(continued)

Item code	COMM	COMD	CONC	ENTE	ORGA	OPPO	RELA	STRA
STRA - 3	0.266	0.126	0.361	0.082	0.305	0.322	0.212	0.764
STRA - 4	0.363	0.183	0.359	0.148	0.400	0.334	0.310	0.781
STRA - 5	0.323	0.222	0.323	0.146	0.402	0.289	0.273	0.784
<i>Fornell-Larcker criterion</i>								
COMM	0.755							
COMA	0.341	0.732						
CONC	0.219	0.342	0.828					
ENTP	0.335	0.402	0.217	0.776				
ORGA	0.482	0.429	0.319	0.235	0.753			
OPPO	0.349	0.315	0.405	0.299	0.414	0.797		
RELA	0.493	0.351	0.371	0.338	0.415	0.519	0.765	
STRA	0.397	0.255	0.440	0.180	0.433	0.376	0.290	0.784
<i>HTMT</i>								
COMM								
COMA	0.488							
CONC	0.302	0.442						
ENTP	0.434	0.493	0.249					
ORGA	0.642	0.531	0.384	0.266				
OPPO	0.488	0.416	0.481	0.351	0.508			
RELA	0.656	0.438	0.451	0.383	0.485	0.617		
STRA	0.537	0.308	0.521	0.201	0.523	0.463	0.352	

Notes: COMM: Commitment Competency; CONC: Conceptual Competency; ORGA: Organizing Competency; OPPO: Opportunity Recognition Competency; REL:A: Relationship Competency; STRA: Strategic Competency; COMA: Competitive Advantage; ENTTP: Enterprise Performance; the Italic values in the matrix above are the item loadings and others are cross-loadings

Table III.

positive effect and statistically significant (at the chosen 5 per cent level of significance). However, the strategic competency is unexpectedly negative and not significant at the chosen 5 per cent level of significance. According to the same table, a path coefficient of competitive advantage has a positive and statistically significant effect toward enterprise performance in Kelantan (at the chosen 5 per cent level of significance).

The *p*-value for the path coefficient between entrepreneurial competencies, i.e. opportunity recognition competency, conceptual competency, organizing competency and competitive advantage, and competitive advantage toward enterprise performance is less than 0.05, indicating that entrepreneurial competencies for opportunity recognition competency, conceptual competency and organizing competency have a significant effect on competitive advantage among informal women microenterprises. Meanwhile, the *p*-value between the other competencies, such as relationship, strategic and commitment competencies, is more than 0.05, indicating that it is positive but not statistically significant. The *f*² effect size enables the analysis of the relevant constructs in explaining the selected endogenous latent constructs (Hair *et al.*, 2013).

As shown in Table IV, latent variables for entrepreneurial competency on competitive advantage have a small effect size, which indicates that besides the selected entrepreneurial competencies, other key determinants affect informal women microenterprises in Kelantan, Malaysia. It was found that only organizing competency has a small effect size compared to the other entrepreneurial competencies.

Mediating effect of competitive advantages

The mediating effect of competitive advantages between entrepreneurial competencies and enterprise performance is measured using Baron and Kenny’s four-step mediation approach. The steps, requirements for next steps and the status are presented in Table V. Accordingly, in Step 1 of the mediating effects of competitive advantages between opportunity recognition competency and enterprise performance, the coefficient of opportunity recognition competency on enterprise performance is found to be 0.311 with a *p*-value of 0.000, which satisfies the requirements and allows conducting Step 2. Step 2 tests the effect of opportunity recognition competency on competitive advantage. As the coefficient value is 0.051 with a *p*-value of 0.000, therefore, it satisfies the requirements and allows conducting Step 3. In Step 3, the coefficient of competitive advantages and enterprise performance is found to be 0.122 with a *p*-value of 0.000, which satisfies the requirements and allows conducting Step 4. Step 4 tests the effect of opportunity recognition competency and competitive advantages on enterprise performance. The coefficient value for Step 4 (effect of opportunity recognition competency on enterprise performance) is found to be 0.199 with a *p*-value of 0.000. The statistically significant (*p*-value < 0.05) displaying effect of opportunity recognition competency on enterprise performance in Steps 1 to 4 indicates

Associations	Coefficient	<i>t</i> -value	<i>p</i> -value	<i>f</i> ²
Opportunity rec. competency → competitive advantage	0.051	0.864	0.000	0.002
Relationship competency → competitive advantage	0.094	1.416	0.079	0.007
Conceptual competency → competitive advantage	0.192	3.553	0.000	0.035
Organizing competency → competitive advantage	0.266	4.779	0.000	0.062
Strategic competency → competitive advantage	-0.039	0.670	0.252	0.001
Commitment competency → competitive advantage	0.122	1.838	0.033	0.013
Competitive advantage → enterprise performance	0.122	7.634	0.000	0.193

Table IV.
Path coefficient

Associations	Coefficient	<i>p</i>	Requirements for next step	Decision
<i>Mediation: OPPO → COMA → ENTTP</i>				
Step 1: OPPO → ENTTP	0.311	0.000	Statistically significant	Satisfied
Step 2: OPPO → COMA	0.051	0.000	Statistically significant	Satisfied
Step 3: COMA → ENTTP	0.122	0.000	Statistically significant	Satisfied
Step 4: OPPO and COMA → ENTTP	(OPPO → ENTTP) 0.199	0.000	Step 1: <i>p</i> -value < 0.05 Step 4: <i>p</i> -value < 0.05	Partial mediation
<i>Mediation: RELA → COMA → ENTTP</i>				
Step 2: RELA → COMA	0.094	0.079	NOT Significant	Not satisfied
Mediation: CONC → COMA → ENTTP				
Step 1: CONC → ENTTP	0.229	0.000	Statistically significant	Satisfied
Step 2: CONC → COMA	0.192	0.000	Statistically significant	Satisfied
Step 3: COMA → ENTTP	0.122	0.000	Statistically significant	Satisfied
Step 4: CONC and COMA → ENTTP	(CONC → ENTTP) 0.101	0.051	Step 1: <i>p</i> -value < 0.05 Step 4: <i>p</i> -value < 0.05	Full mediation
<i>Mediation: ORGA → COMA → ENTTP</i>				
Step 1: ORGA → ENTTP	0.273	0.000	Statistically significant	Satisfied
Step 2: ORGA → COMA	0.266	0.000	Statistically significant	Satisfied
Step 3: COMA → ENTTP	0.122	0.000	Statistically significant	Satisfied
Step 4: ORGA and COMA → ENTTP	(ORGA → ENTTP) 0.097	0.030	Step 1: <i>p</i> -value < 0.05 Step 4: <i>p</i> -value < 0.05	Partial mediation
<i>Mediation: STRA → COMA → ENTTP</i>				
Step 2: STRA → COMA	-0.039	0.252	Not significant	Not satisfied
<i>Mediation: COMM → COMA → ENTTP</i>				
Step 1: COMM → ENTTP	0.348	0.000	Statistically significant	Satisfied
Step 2: COMM → COMA	0.122	0.033	Statistically significant	Satisfied
Step 3: COMA → ENTTP	0.122	0.000	Statistically significant	Satisfied
Step 4: COMM and COMA → ENTTP	(COMM → ENTTP) 0.237	0.000	Step 1: <i>p</i> -value < 0.05 Step 4: <i>p</i> -value < 0.05	Partial mediation

Notes: COMM: Commitment competency; CONC: Conceptual competency; ORGA: Organizing competency; OPPO: Opportunity recognition competency; RELA: Relationship competency; STRA: Strategic competency; COMA: Competitive advantage; ENTTP: Enterprise performance

Table V.
Mediating effects

partial mediation of competitive advantages between opportunity recognition competency and enterprise performance among women micro-entrepreneurs in Malaysia.

As for the mediating effect of competitive advantages between relationship competency and enterprise performance, the coefficient between relationship competency on competitive advantages is not statistically significant, and it failed to satisfy the conditions of testing the mediating effect on competitive advantages between relationship competency and enterprise performance among women micro-entrepreneurs in Malaysia.

As for the mediating effect of competitive advantages between conceptual competency and enterprise performance, Step 1 (see Table V) shows the coefficient of the conceptual competency on enterprise performance is found to be 0.229 with a p -value of 0.000, which satisfies the requirements and allows conducting Step 2. Step 2 tests the effect of the conceptual competency on competitive advantage. As the coefficient value is 0.192 with a p -value of 0.000, therefore, it satisfies the requirements and allows conducting Step 3. In Step 3, the coefficient of competitive advantages and enterprise performance is found to be 0.122 with a p -value of 0.000, which satisfies the requirements and allows conducting Step 4. Step 4 tests the effect of the conceptual competency and competitive advantages on enterprise performance. The coefficient value for Step 4 (conceptual competency on enterprise performance) is found to be 0.101 with a p -value of 0.051. The statistically significant (p -value < 0.05) displaying effect of conceptual competency on enterprise performance in Step 1 and the insignificant effect in Step 4 indicates full mediation of competitive advantages between conceptual competency and enterprise performance among women micro-entrepreneurs in Malaysia.

As for the mediating effect of competitive advantages between organizing competency and enterprise performance, Step 1 (see Table V) shows the coefficient of organizing competency on enterprise performance is found to be 0.273 with a p -value of 0.000, which satisfies the requirements and allows conducting Step 2. Step 2 tests the effect of the organizing competency on competitive advantage. As the coefficient value is 0.266 with a p -value of 0.000, therefore, it satisfies the requirements and allows conducting step three. In step three, the coefficient of competitive advantages and enterprise performance is found to be 0.122 with a p -value of 0.000, which satisfies the requirements and allows conducting step four. Step four tests the effect of the organizing competency and competitive advantages on enterprise performance. The coefficient value for step four (effect of organizing competency on enterprise performance) is found to be 0.097 with a p -value of 0.030. The statistically significant (p -value < 0.05) displaying effect of the organizing competency on enterprise performance in Steps 1 and 4 indicates partial mediation of competitive advantages between the organizing competency and enterprise performance among women micro-entrepreneurs in Malaysia.

As for the mediating effect of competitive advantages between strategic competency and enterprise performance, the coefficient between strategic competency on competitive advantages is not statistically significant, and it fails to satisfy the conditions to test the mediating effect on competitive advantages between the strategic competency and enterprise performance among women micro-entrepreneurs in Malaysia.

Finally, the mediating effect of competitive advantages between commitment competency and enterprise performance in Step 1 (see Table V) shows that the coefficient of the commitment competency on enterprise performance is 0.348 with a p -value of 0.000, which satisfies the requirements and allows conducting Step 2. Step two tests the effect of commitment competency on competitive advantages. As the coefficient value is 0.122 with a p -value of 0.033, therefore, it satisfies the requirements

and allows conducting Step 3. In Step 3, the coefficient of competitive advantages and enterprise performance is found to be 0.122 with a p -value of 0.000, which satisfies the requirements and allows conducting Step 4. Step 4 tests the effect of the commitment competency and competitive advantages on enterprise performance. The coefficient value for Step 4 (commitment competency on enterprise performance) is found to be 0.237 with a p -value of 0.000. The statistically significant (p -value < 0.05) displaying effect of commitment competency on enterprise performance in Steps 1 and 4 indicates partial mediation of competitive advantages between commitment competency and enterprise performance among women micro-entrepreneurs in Malaysia.

Discussion and conclusion

As mentioned in the introduction, this study aimed:

- to examine the effect of entrepreneurial competency, which includes commitment competency, conceptual competency, organizing competency, opportunity recognition competency, relationship competency and strategic competency on competitive advantage in informal women microenterprises in Kelantan, Malaysia; and
- to investigate the effect of the competitive advantage toward enterprise performance.

According to the first and second objectives, the findings of the study implied that entrepreneurial competency has a positive effect on competitive advantages and competitive advantage toward enterprise performance. The p -value for the path coefficient indicates that entrepreneurial competency has a significant effect on competitive advantage among informal women microenterprises in Kelantan, Malaysia. This is based on the result that the entrepreneurial competencies, i.e. opportunity recognition competency, conceptual competency, organizing competency and competitive advantage and competitive advantage toward enterprise performance, are less than 0.05. Meanwhile, the p -value between relationship competency, strategic competency and commitment competency is more than 0.05, indicating that it is positive but not statistically significant. Findings of this study also revealed that competitive advantages partially mediate the relationship between opportunity recognition competency, organizing competency and commitment competency, and competitive advantages fully mediate the relationship between the conceptual competency and the performance of informal microenterprises owned and managed by women micro-entrepreneurs in Kelantan, Malaysia.

The contribution of this study allows the related party to improve the understanding of the entrepreneurial competency on competitive advantages. Furthermore, it shows how competitive advantages play a role in enterprise performance. Women entrepreneurs, therefore, need to emphasize their competitive advantage by focusing on entrepreneurial competencies, which are expected to improve enterprise performance among informal women microenterprises in Malaysia. Thus, women entrepreneurs should identify their competencies, especially commitment competency, conceptual competency, organizing competency and opportunity recognition competency and focus on their competitive advantage, which is a value creating strategy that cannot be simultaneously implemented and duplicated by other potential competitors. Therefore, women entrepreneurs need to have a business resource that is valuable, rare and perfectly imitable. In addition to that, women entrepreneurs should know the knowledge and technology that would give them a competitive advantage. This including knowledge creation, i.e. tangible and intangible knowledge, experience and

skills of entrepreneur, comprises the business knowledge strategy, which provides the guidelines for developing intellectual capital, and therefore, it creates a competitive advantage in the business through exploration and exploitation.

Based on the findings of this study, the government and socioeconomic developmental organizations in Malaysia should focus on building industry specific platforms to build entrepreneurial competencies among the women informal micro-entrepreneurs at the local and national levels. This will allow micro-entrepreneurs to share their ideas, knowledge and experiences, which can improve the overall knowledge and competencies. A common industry specific training and development program for women micro-entrepreneurs can provide a supportive environment to build competencies as well as social capital, which ultimately can lead to a better performance and overall socioeconomic development in Malaysia.

Several limitations in this study influence the validity of the findings. First, the data collection was limited to only informal women microenterprises involved in the “night markets”. Therefore, the results cannot be generalized to individuals involved in other industries. Extending the study to engage other industries may add further to support the findings. Furthermore, it was also limited to informal microenterprises in Kelantan according to the scope of the study. As a result, the findings of this study could incur the threat of a single-source bias and cannot be generalized to the states with different cultures. As such, caution needs to be taken when involving all the states in Malaysia. Time and resource constraints caused the sample size of the study to include only 384 respondents from Kelantan. Although the findings of the study have added to the understanding of the importance of entrepreneurial competencies on competitive advantage toward enterprise performance, there is a need for further research in comparing these findings with similar predictors in other states.

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