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### Internationalization of Malaysian Service SMES: The Leveraging Role of Network Capital and the Internet-Enabled Environment in the Post Gats & Afas Era

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#### ABSTRACT

Realizing the economic importance of SMEs in the context of service-related industry, Malaysian government's commitment for service SMEs were reinforced especially in the internationalization of service SME in Malaysia; post GATS (General Agreement on Trade in Services) & AFAS (Asean Framework Agreement on Services Agreement). One of the liberalization preparation is to explore market access opportunities abroad through partnerships. Generally, this research is to establish the relationship of network capital determinants namely access to resources and knowledge, access to market opportunities and collaboration that can accelerate the degree of internationalization of service SMEs in Malaysia. It also seeks to establish that the network capital moderated by the Internet-enabled environment will accelerate the internationalization of service SMEs. A cross-sectional design was deployed together with survey method of data collection and systematic random sampling technique were utilized. The population of this study is 1,500 export-ready SMEs in the Malaysia's service sector and was obtained from the SME business directory. The study postulated and tested 7 hypotheses. Based on the outcome, all the direct hypotheses, namely; H1, H2, H3 and H4 were supported. Based on the results, all the independent variables have  $t$ -value  $\geq 1.645$ , significant at 0.05. Specifically, access to resources and knowledge ( $\beta = 0.477, p < 0.01$ ), access to market opportunities ( $\beta = 0.241, p < 0.01$ ), business collaboration ( $\beta = 0.148, p < 0.01$ ) and internet-enabled environment ( $\beta = 0.159, p < 0.01$ ) have positive influence on the degree of internationalization. Thus, H1, H2, H3 and H4 are supported. Access to resources and knowledge has the largest effect in producing the R2 for the degree of internationalization. While, the effect of other 2 predicting variables namely; access to market opportunities and business collaboration, as well as the moderating variable, internet-enabled environment is small in producing the R2 for the degree of internationalization.

**Keywords:** Export-ready Service Small & Medium Enterprise, Network Capital, the Internet-enabled Environment, Accelerate Internationalization, General Agreement on Trade in Services, Asean Framework Agreement on Services.

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## 1. INTRODUCTION

### 1.1. Background of the Study

In Malaysia, the government on realizing the economic importance of SMEs in the manufacturing-related services and other services in general, revitalized its commitment and concern for the development of SMEs. Firstly, according to MITI (2012), launching of various initiatives and implementation of a number of support programs aimed at liberalization of the sector will help the SMEs to explore market access abroad through partnerships. Secondly, having the intention of supporting and promoting SMEs in the services sector in mind, the Malaysian government set up two bodies, the NAPSEC (National Professional Services Export Council), which is responsible for the promotion of professional services, and the PSDC (Professional Services Development Corporation), this is responsible for the provision of capacity building programs to the professional services sector. The representation of various professional bodies in these two entities is a reflection of government seriousness and commitments in the promotion of services through joint collaboration between public and private sectors.

Thirdly, the Malaysian government has committed itself to General Agreement on Trade in Services (GATs) and ASEAN Framework Agreement on Services (AFAs) (SME-Corp 2014), with the hop that these two agreements will assist Malaysia's service sector undergo progressive liberalization through 4 modes of supply; namely cross-border trade, consumption abroad, commercial presence and movement of natural persons. Although, Malaysia is regarded as being defensive in the GATS negotiations due to high level of protection of the services markets (MITI 2005). Nonetheless, Malaysia has made commitments in 83 services activities including both the financial and non-financial sectors under the GATS. The services sector that was offered for liberalization comprises of business services, professional services, telecommunication services, sea transport, audiovisual and broadcasting services, construction services, financial services, health services, tourism services, computer, travel services, rental and leasing services and entertainment services (MITI 2005).

According to extant literature, both the network capital and Internet-enabled applications presents fundamentally a number of opportunities for business activities to take place. Hence, it is established that both network capital and internet provided a low cost gateway to access resources, knowledge and opportunities in both domestic and international markets, thus, accelerating the overall SMEs' internationalization process (Hamill 1997). Based on this therefore, a new paradigm needs to be developed that will require the launch of a major new research initiatives to improve the understanding of network capital and Internet-enabled SMEs' internationalization in the context of Malaysian service sector.

Notwithstanding, since literature has identified the role of network capital as crucial for business success. Therefore, the study investigated the influence of network capital on internationalization of Malaysian SMEs in the service sector, with emphasis to post GATs and AFAs era. Also, hence literature has established the impact of internet on constructs such as, firms' competitiveness and internationalization (Cvetanovic et. al., 2014), international market expansion and future growth (Akhtar, Nadeem; Azeem, Syed Muhammad;

Mir 2014), network resources (Ellison et. al., 2014) and speed of internationalization (Arenius et. al., 2003). Therefore, the study examined the moderating effects of internet-enabled environment on the relationship between network capital and internationalization of Malaysian service SMEs.

## **1.2. Problem Statement**

Despite the growing interest of Malaysian government in supporting the SMEs to internationalize and the concern of researchers to explore more on the SMEs internationalization process. However, Malaysian SMEs still lag behind in terms of networking as they could not fully access resources and knowledge, market opportunities and collaborate with business partners (Senik et. al., 2010). Thus, making a higher number of the Malaysian SMEs unable to internationalize (Nik Ab Halim & Zain 2011).

Also, despite the relevance of internet-enabled applications, yet the number of SMEs that achieved advanced stage in terms of internet usage is very low and by far lag behind larger companies in the utilization of internet-based applications (Omar et. al., 2011). Equally, according to the data from the Malaysian Small and Medium Industry Association (MSMIA) and Malaysian Services Development Council (MSDC), it is only 30% of the local SMEs that have their own websites. Whereas, some are still at the initial stage, and or not progressing much beyond email and simple information-based web-pages. More so, more than half of the SMEs indicated that they were not aware of the benefits to be gained from the internet-based applications (MITI 2012).

Considering the fact that little is known about the internationalization of Malaysian SMEs and also, little is known about the internationalization of the Malaysian SMEs in the services sector. Therefore, the study examined factors that influence the internationalization of service SMEs in Malaysia. According to the extant literature, there are several factors that can enhance the internationalization of SMEs.

Moreover, literature is limited on the effects of internet-enabled environment on the relationship between network capital and internationalization of SMEs. Hence, previous studies focused more either on effect of internet-enabled environment on firm competitiveness (Cvetanovic et. al., 2014), foreign direct investment (Gaur et. al., 2014) and market development and market penetration (Akhtar, Nadeem; Azeem, Syed Muhammad; Mir 2014). Therefore, based on the practical as well as theoretical justifications, a study is needed that will explore more on the influence of network capital determinants and internet-enabled environment on the internationalization of SMEs in the Malaysian services sector. Hence, a number of prior studies have described networking as an influential factor for SMEs' survival.

In general, this research is built on the premise that the network capital determinants, namely; access to resources and knowledge, access to market opportunities and collaboration exert greater influence on the internationalization of service SMEs in Malaysia, particularly in the post GATs and AFAs era. In addition, the study seeks to establish that the network capital moderated by the Internet-enabled environment further accelerates the internationalization of service SMEs in Malaysia.

## **1.3. Research Objectives**

Generally, the objectives of this research is to establish a relationship between the determinants of network capital, namely; access to resources and knowledge, access to market opportunities, collaboration and the degree of internationalization of service SMEs in Malaysia. In addition, the study also seeks to establish

that network capital determinants moderated by the Internet-enabled environment further accelerates the degree of internationalization of service SMEs in Malaysia.

The specific objectives of this study are:

1. To determine whether access to resources and knowledge through network capital will enhance the degree of internationalization of service SMEs in Malaysia.
2. To determine whether access to market opportunity through network capital will enhance the degree of internationalization of service SMEs in Malaysia.
3. To determine whether business collaboration through network capital will enhance the degree of internationalization of service SMEs in Malaysia.
4. To determine whether Internet-enabled environment will enhance the degree of internationalization of service SMEs in Malaysia.
5. To determine whether access to resources and knowledge enabled by the Internet environment will accelerate the degree of internationalization of service SMEs in Malaysia.
6. To determine whether access to market opportunities enabled by the Internet environment will accelerate the degree of internationalization of service SMEs in Malaysia.
7. To determine whether business collaboration enabled by the Internet environment will accelerate the degree of internationalization of service SMEs in Malaysia.

#### **1.4. Research Questions**

In an attempt to meet the objectives of the study, the following are the main research questions that need to be addressed:

1. Will access to resources and knowledge through network capital enhance the degree of internationalization of service SMEs in Malaysia?
2. Will access to market opportunity through network capital enhance the degree of internationalization of service SMEs in Malaysia?
3. Will business collaboration through network capital enhance the degree of internationalization of service SMEs in Malaysia?
4. Will Internet-enabled environment enhance the degree of internationalization of service SMEs in Malaysia?
5. Will access to resources and knowledge enabled by the Internet environment accelerate the degree of internationalization of service SMEs in Malaysia?
6. Will access to market opportunities enabled by the Internet environment accelerate the degree of internationalization of service SMEs in Malaysia?
7. Will business collaboration enabled by the Internet environment accelerate the degree of internationalization of service SMEs in Malaysia?

## **2. LITERATURE REVIEW**

### **2.1. Internationalization Process of SMEs**

The pattern of internationalization in most firms, according to Welch and Luostarinen (1988), is marked by a sequential, stepwise process of development, but in recent times, a complete departure from the gradualist path has been noticed, as some firms seek to by-pass the steps to deeper commitment, resulting in a speeding up of the whole process. Similarly, Bartlett and Ghoshal (2000) noted that firms can internationalize as a result of any of the following motivators: (1) Traditional motivation: which is a type of motivation that purely involves the desire of companies to invest abroad, through identification key suppliers or accessing of factors of production such as minerals, energy, and raw materials at a lower cost; and (2) Emerging motivation: which is a type of motivation that is purely built on the basis of market seeking behavior, which has been frequently noticed in companies that had some intrinsic advantage, typically related to their technology or their brand recognition that gave them some competitive advantage in offshore markets.

### **2.2. Concept of Network Capital**

Network capital has evolved as a concept from the formation of inter-firm network (Gulati & Gargiulo 1999) and the concept of social capital (Acevedo 2007). Gulati and Gargiulo (1999) argued that through inter-firm network a company can enter a new form of strategic alliance with other organizations: dependence and a close relation. Also, other experts such as Wellman and Frank (2001), argued that network capital is a subset of social capital and therefore, maintained that “network capital” is a form of social capital that makes resources available through interpersonal ties, as these ties can make resources available and instant for a firm to access and become more specialized. Thus, network capital operates on the basis of interpersonal life that makes resources available.

### **2.3. Network Capital as a Basis for Internationalization of SMEs**

Huggins (2010b) has defined network capital in terms of network resources. Again, Gulati and Gargiulo (1999) and Huggins (2010a) argued that network resources are an overarching concept that required better explanations and understanding on the nature or type of resources and capital to be generated by a firm through inter-firm networks. Therefore, network capital is an important factor that makes SMEs survive and favorably compete with other businesses in overseas markets (Farinda et. al., 2009), particularly as they are often faced with difficulties and limitations in terms of: access to knowledge, resources and entry into international markets (Cerrato & Piva 2012).

The strategic role of network in facilitating the development of SMEs has also been established. According to Baffour Awuah and Amal (2011), for SMEs to increase their competitiveness in the face of globalization, they have to form a network with other organizations, where they complement each other through sharing of resources and joint activity and learning to boost international intensity. Likewise, Boehe (2013) proclaimed that the purpose of networking is to support targeted collaboration (with foreign partners and/or with firms with complementary assets), facilitates international market access and increases the attractiveness of the firms’ products or services for export. The study of Debrulle and Maes (2015), has also indicated that start-up export intensity is directly driven by professional networking.



#### **2.4. Access to Resources and Knowledge and Degree of Internationalization**

The concept of network resources, according to Gulati (2007), entails those resources that are at the possession of partner firms, but can be accessed by the focal firm through its network ties with these partner firms. Also, Wellman and Frank (2001), shared the same view that network capital can give opportunity for firms to search for information on the Internet and obtain the needed resources and knowledge. Empirically, it is established that increasing network size enhances nascent entrepreneurs' opportunities to leverage resources such as financial capital, information and knowledge, and additional contacts through their network (Semrau & Werner 2014).

Likewise, Ellison et. al., (2014) empirically established that network resources/benefits (bridging social capital) is linked with both the number of actual network friends and relationship maintenance behaviors of members in the social network sites. The study of Hohenthal et. al., (2014), also revealed that experiential network knowledge and knowledge about the importance of customers and competitors in the network influence the value of business relationships in a foreign market in different ways. Correspondingly, Gaur et. al., (2014) found that firms that are affiliated with a business group, have more firm- and group-level international experience, have more technological and marketing resources, and operate in service industries are more likely to shift from exports to foreign direct investment. On the contrary, Casanueva et. al., (2014) stated that access to network resources has less influence than the mobilization of these network resources on the operating and financial performance. Similar conflicting results was reported by Tang (2011), while, the availability of foreign business resources is positively associated with the achievement of rapid internationalization, but the availability of general organizational resources indicates a negative association.

#### **2.5. Access to Market Opportunities and Degree of Internationalization**

The term opportunities was defined by Di Gregorio et. al., (2008), as appropriate cross-national combinations of resources and markets. According to literature, the relationship between access to market opportunities and degree of internationalization has been examined. This was also clearly reflected in the study of Herstad et. al., (2014), that established that the significant relationship between global innovation networks (GINs) and the degree of involvement in international collaboration, is influenced by the opportunity to generate sales from this activity. Also, the study of Caiazza (2014) established that market opportunities was a significant factor for the internationalization of Italian companies in Egypt.

Moreover, researchers such as Mort and Weerawardena (2006) established that firms leverage networking capability to identify or exploit market opportunities, facilitate development of knowledge intensive products and support international performance. The study of Zhou et. al., (2007), also indicates that social networks leverage internationally oriented SMEs to internationalize faster and profit more from their foreign investments, through accessing of knowledge about foreign market opportunities and international business know-how.

#### **2.6. Business Collaboration and Degree of Internationalization**

According to the empirical study of Costa et. al., (2015), collaborative networks can represent an important facilitator in the internationalization of SMEs. Similarly, the study of Cvetanovic et. al., (2014) demonstrated

that collaborations with foreign partners, for production and R&D activities particularly, are critically important for SMEs' internationalization. Also, Wellman and Frank (2001) established that through sustained online relationships, firm's needed resources will be obtained.

In contrast, the study of Akhtar, Nadeem; Azeem, Syed Muhammad; Mir (2014) that examined the relationship between internet collaboration and other constructs such as; product development, market development, market penetration and diversification reported inconclusive results. While, significant result was established between internet collaboration and market development and market penetration. However, insignificant relationship was found between internet collaboration and product development as well as diversification.

## **2.7. The Internet-enabled Environment and Internationalization of SMEs**

The literature on the Internet has evolved substantially from the days when incumbent firms were seen as having failed to come to terms with the new technology, to the days in which the influence of internet on a number of constructs, such marketing performance, export performance, growth and profitability have been recognized. Similarly, the role of internet in the promotion networking among business partners and acceleration of internationalization of business enterprises across the globe have been established. In the context of SMEs internationalization, it has been suggested that "technological advances...in telecommunications – especially the Internet can allow even the smallest firms wider access to customers, suppliers, and collaborators around the world" (Wright & Etemad 2001).

Prashantham and Young (2004) argued that Internet applications offers great role in the facilitation of network relationships, by enabling firms to interact more widely and intimately with one another, including customers, suppliers and collaborators. For this reason, three possibilities of applying Internet technology in the context of internationalization were identified. Firstly, information dissemination could result in (in theory) a foreign customer or client coming across a firm's Web site on the Internet, subsequently leading to an order being placed and therefore, international growth for the firm. In other words, information dissemination could directly result in international growth (Morgan-Thomas & Bridgewater 2004).

Secondly, information acquisition through the Internet – i.e., information on prospective markets, customers and business partners like suppliers, much of which is free – could lead to augmentation of extant stocks of the firm's market knowledge (Ward & Ostrom 2003). Thirdly, information sharing through the Internet could lead to strengthening of network capital, leading to an increase in the firm's stock of social capital, which in turn could lead to both greater market knowledge and knowledge-intensity, and ultimately to internationalization (Tapscott 1999).

Efficiency is an important basis of reputation for SMEs, which in turn can enhance the quality of network resources that flow to it owing to the positive disposition of network relationships towards it. According to Feeny (2001), the Internet provides SMEs with the potential to achieve greater efficiency, as a consequence of the connection across value chain activities that it allows. This is further accentuated in the case of the software industry where the 'product', i.e., software code is in digitized form. Therefore, a specific application that is pertinent in this context is collaborative product development (or project management) between an SME and its client overseas, using Internet-supported groupware, a new form of efficiency-enhancing Internet operations (Porter 2001).

In other words, leads and opportunities that may emanate from network relationships are more likely to be aligned with an SME that develops high level of intimacy in its network relationships and it is fully aware of its own long term agenda. Therefore, the Internet provides SMEs with the potentials to achieve greater coherence as a consequence of the property of intimacy. A specific Internet application, relevant not merely to customers but also business partners, is Internet-supported relationship management, in which regard Intranets and Extranets can be very useful (Feeny 2001; Peppers et. al., 1999).

In totality, the review of literature suggests that network capital (knowledge resources, market knowledge and collaboration) are important determinants of SMEs' internationalization, and that the utilization of internet applications in enhancing visibility, efficiency and intimacy with business partners that are within a network capital cycle is likely to accelerate SMEs' international growth (internationalization).

## 2.8. Research Framework and Hypotheses

The conceptual model proposed in this study on the relationship between network capital (independent variable) and the degree of internationalization (dependent variable) and moderated by the Internet-enabled environment (moderator) is as follows:

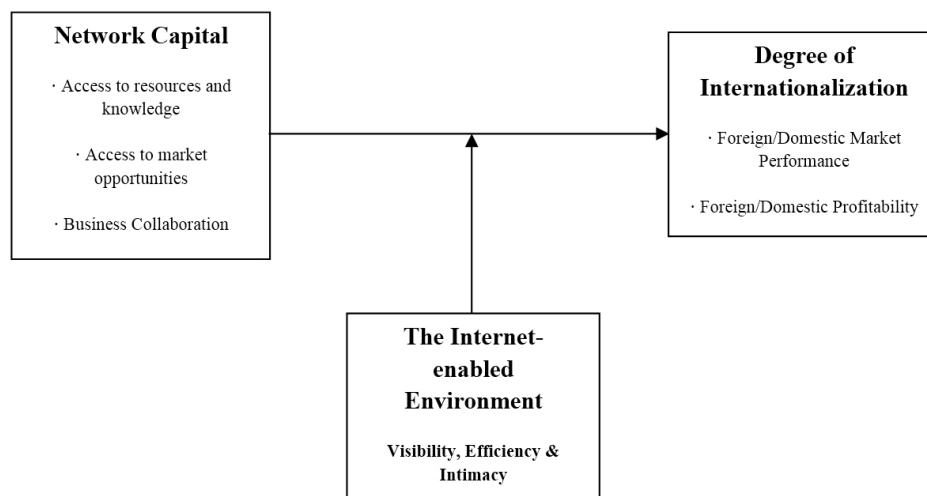


Figure 2.1: Research Framework

## 3. RESEARCH METHODOLOGY

### 3.1. Research Design

This study adopted cross-sectional research design, as it allows collection and analyzing of responses of the owners/managers of the Malaysian service SMEs about the degree of internationalization of the SMEs in relation to the predicting variable (network capital determinants, which comprises of access to resources and knowledge, access to market opportunity and business collaboration), and the moderating variable (internet-enabled environment).

Even though, Malaysia has a total of 809,126 service SMEs (SME Corp 2016). However, since there is need to reduce the population to a more sizeable number, 1,500 most active export-ready Malaysian service SMEs was used as the population of the study. Thus, the population of this study is 1,500 export-ready



SMEs in the Malaysia’s service sector and was obtained from the SME business directory (www.smeinfo.com.my). According to Krejcie and Morgan (1970), the population of 1,500 may have a sample size of 306. The study chooses owners/managers as unit of analysis for several reasons: One, owners/managers are the top management of their business enterprises and are in better position to decide the success or otherwise of the firms. Two, being the top managers, give them the power to harness organizational resources, identify potential opportunities and enter into business collaboration. Three, the owners/managers are responsible for the adoption of modern internet facilities to support the overall business activities.

Thus in order to collect the samples, this study utilized the systematic random sampling technique, which represented one of the most commonly used methods when generalization is of concern. It is a method that involves the process of randomly selecting an initial starting point on a list and thereafter every  $K^{th}$  element in the sampling frame is selected (Hair Jr et. al., 2007). For the purpose of the study, two analysis software, namely; the Statistical Package for Social Sciences (SPSS) and Partial Least Squares Structural Equation Modelling (PLS-SEM) version 3.0 were used for data analysis. The SPSS is used primarily for keying-in the data, assessment of missing values and descriptive statistics. As for the PLS-SEM, the software was used for testing the goodness of fit (measurement model) and hypotheses testing (structural model).

#### 4. ANALYSIS AND FINDINGS

##### 4.1. Assessment of Direct Relationship

The 4 direct hypotheses of the study were tested using SmartPLS3.0 bootstrapping function. Based on the results, all the independent variables have  $t$ -value  $\geq 1.645$ , significant at 0.05. Specifically, access to resources and knowledge ( $\beta = 0.477, p < 0.01$ ), access to market opportunities ( $\beta = 0.241, p < 0.01$ ), business collaboration ( $\beta = 0.148, p < 0.01$ ) and internet-enabled environment ( $\beta = 0.159, p < 0.01$ ) have positive influence on the degree of internationalization. Thus, H1, H2, H3 and H4 are supported.

Also, based on the  $R^2$  value of 0.475, the model can be described as substantial, hence, the value is greater than 0.26 suggested by (Cohen 1988). According to Ramayah et. al., (2016), even though  $p$ -value is used to indicate whether an effect exists, however, it cannot establish the size of effect. Thus, both statistical significance ( $p$ -value) and substantive (effect size) should be reported. Also, Hair et. al., (2014) emphasized the need for evaluation of change in the  $R^2$  value, in order to determine the substantive impact of the omitted exogenous construct on the endogenous construct. In the interpretation of the effect size, the study adopted Cohen (1988) criteria.

**Table 4.1**  
**Direct Hypotheses Testing**

<i>Hypotheses</i>	<i>Relationship</i>	<i>Std. Beta</i>	<i>Std. Error</i>	<i>t-Value</i>	<i>Decision</i>	<i>R2</i>	<i>f2</i>	<i>Q 2</i>	<i>q 2</i>
Hypothesis 1	ARK - > DI	0.477	0.053	9.048	Supported	0.475	0.381	0.218	0.102
Hypothesis 2	AMO - > DI	0.241	0.062	3.897	Supported		0.078		0.023
Hypothesis 3	BC - > DI	0.148	0.055	2.683	Supported		0.033		0.010
Hypothesis 4	IEE - > DI	0.159	0.071	2.257	Supported		0.047		0.014

Note: \*\*  $p < 0.01$ , \*  $p < 0.05$ .

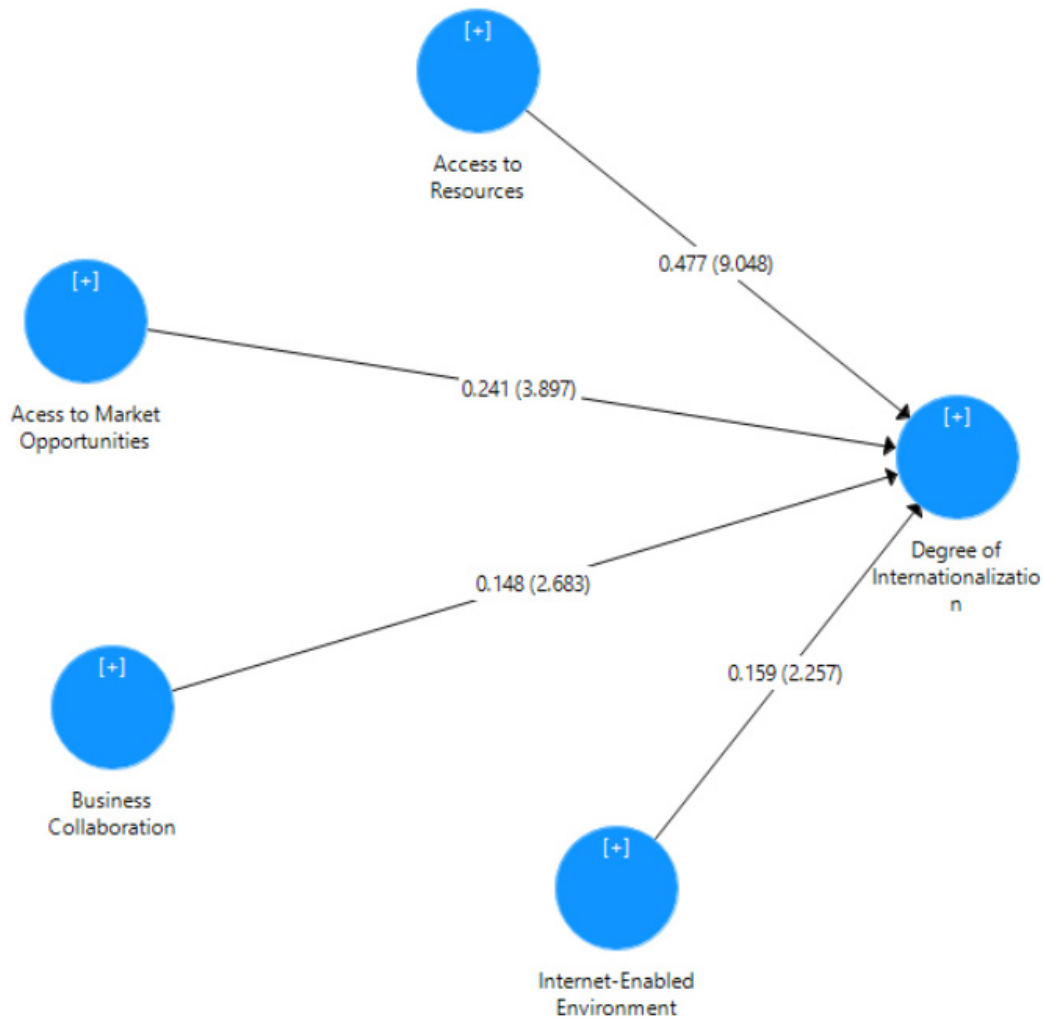


Figure 4.1: Assessments of Direct Hypotheses

Equally, according to the results of the study depicted in Table 4.6, access to resources and knowledge has the largest effect in producing the  $R^2$  for the degree of internationalization. While, the effect of other 2 predicting variables namely; access to market opportunities and business collaboration, as well as the moderating variable, internet-enabled environment is small in producing the  $R^2$  for the degree of internationalization.

Nevertheless, the study also evaluated the predictive relevance of the model through the SmartPLS3.0 blindfolding procedure and the  $Q^2$  value obtained for the degree of internationalization is 0.218, which also means that the model has sufficient predicting relevance as  $Q^2$  is greater than 0 (Fornell & Cha 1994; Hair et. al., 2014).

#### 4.2. Assessment of Moderating Effect

Based on the fulfilment of data analysis requirements Henseler and Fassott (2010), the moderating effect of internet-enabled environment on the exogenous-endogenous constructs relationships was examined separately, using a SmartPLS3.0 bootstrapping function. From the outcome of the analysis, H5 and H6 which postulated that the influence of access to resources and knowledge as well as access to market

opportunities on the degree of internationalization of service SMEs will be accelerated by internet-enabled environment were supported ( $\beta = -0.166, p < 0.01$ ) and ( $\beta = 0.158, p < 0.1$ ).

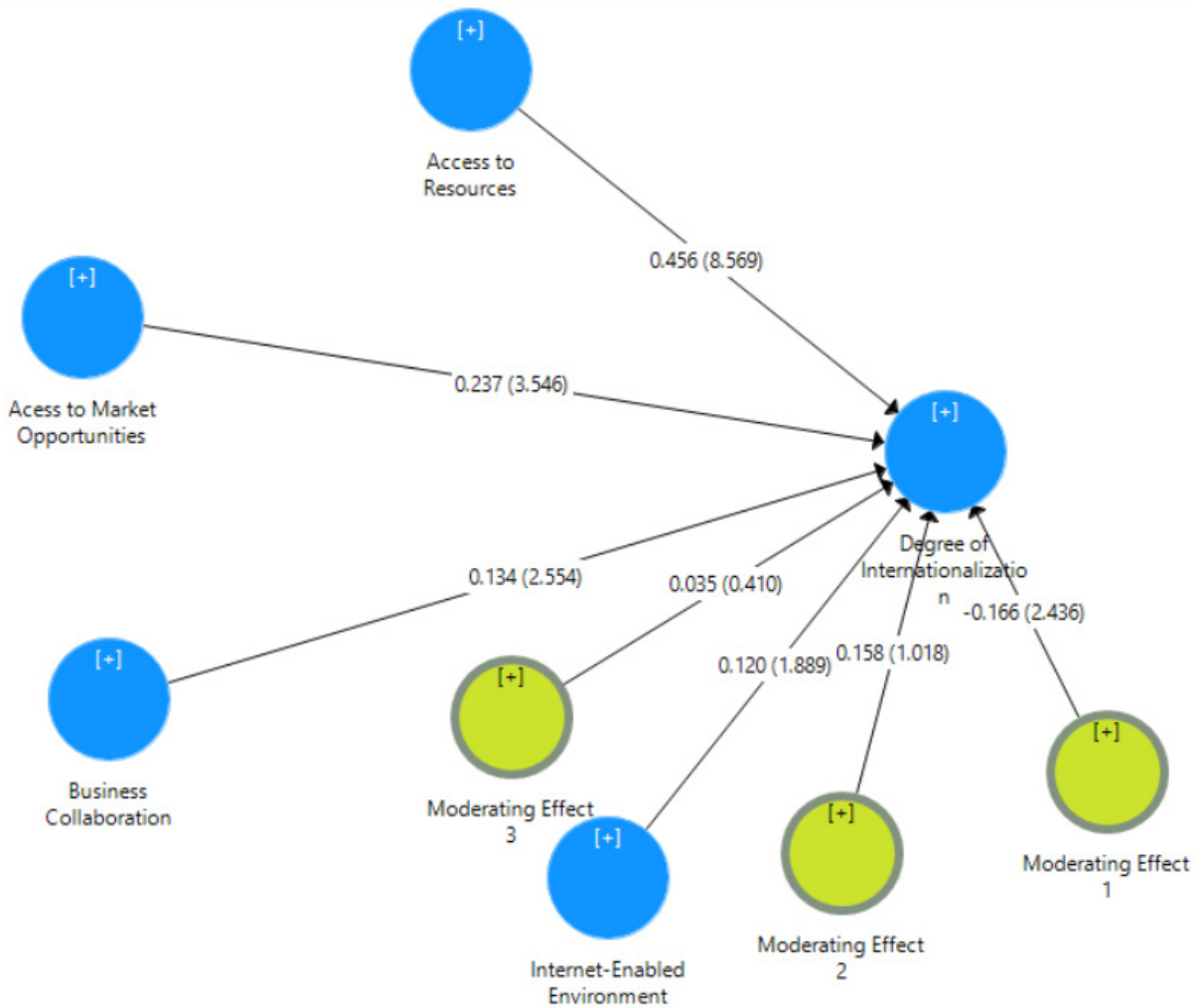


Figure 4.4: Assessment of Moderating Effect

However, the study the result could not provide statistical support on how influence of business collaboration on the service SMEs degree of internationalization was accelerated by internet-enabled environment.

Table 4.2  
Summary of Moderating Results

Hypotheses	Std. Beta	Std. Error	t-Values	Boot strapped Confidence Interval
Hypothesis 5	-0.166	0.068	2.436**	-0.047
Hypothesis 6	0.158	0.155	1.018*	0.247
Hypothesis 7	0.035	0.086	0.410	0.139

Note: \*\*  $p < 0.01$ , \*  $p < 0.1$ .

### 4.3. Summary of Research Hypotheses and Findings

**Table 4.8**  
**Summary of Hypotheses**

	<i>Hypotheses</i>	<i>Results</i>
H1	Access to resources and knowledge through network capital will enhance the Degree of Internationalization of service SMEs in Malaysia.	Supported
H2	Access to market opportunity through network capital will enhance the Degree of Internationalization of service SMEs in Malaysia.	Supported
H3	Business Collaboration through network capital will enhance the Degree of Internationalization of service SMEs in Malaysia	Supported
H4	Internet-Enabled Environment will enhance the Degree of Internationalization of service SMEs in Malaysia	
H5	Access to resources and knowledge enabled by the Internet environment will accelerate the Degree of Internationalization of service SMEs in Malaysia.	Supported
H6	Access to market opportunity enabled by the Internet environment will accelerate the Degree of Internationalization of service SMEs in Malaysia.	Supported
H7	Business Collaboration enabled by the Internet environment will accelerate the Degree of Internationalization of service SMEs in Malaysia.	Not Supported

## 5. DISCUSSION AND CONCLUSIONS

### 5.1. Access to Resources and Knowledge and Degree of Internationalization

Based on the results of the study, access to resources and knowledge ( $\beta = 0.477, p < 0.01$ ), has positive influence on the degree of internationalization of the service SMEs. Thus, H1 is supported. Although, the outcome of the study has supported the findings of researchers such as Herstad et. al., (2014) who established that the linkage between global innovation networks (GINs) and degree of internationalization was influenced by the nature of knowledge and the cumulateness of knowledge development; Boehe (2013), who found firm's resources accessed through membership in a local industry association to exert positive influence on firms' the propensity to export. However, the current study has brought new insights on how Malaysian service SMEs access network capital resources and knowledge to boost their degree of internationalization. Similarly, the findings of the study emphasized that SMEs need to participate more in business networks, as that can give them opportunity to access resources and knowledge owned by partners to overcome problem of limited resources and knowledge. Thus, leveraging the degree of internationalization.

### 5.2. Access to Market Opportunities and Degree of Internationalization

According to the results of the study, access to market opportunities ( $\beta = 0.241, p < 0.01$ ), has positive influence on the degree of internationalization. Thus, H2 is supported. This finding is in line with the outcome of Herstad et. al., (2014) that established that through networks firm may generate more market opportunities, increase sales level and enhance its degree of internationalization; Caiazza (2014) that found that access to market opportunities was a significant factor for the internationalization of Italian companies in Egypt.

Although, the finding of this study is consistent with the study of Mort and Weerawardena (2006) that established that firms can leverage networking capability to identify or exploit market opportunities, facilitate development of knowledge intensive products and support international performance, and also, Zhou et. al., (2007), who found that social networks leverage internationally oriented SMEs to internationalize faster and profit more from their foreign investments, through accessing of knowledge about foreign market opportunities and international business know-how.

However, the current finding is somehow unique, in the sense that it contributed to literature on how the degree of internationalization of Malaysian service SMEs is influenced by network capital determinant (access to market opportunities). This also means that the participation of the SMEs in business networks can give them access to more market opportunities. Thus, accelerating the speed of the degree of internationalization.

### **5.3. Business Collaboration and Degree of Internationalization**

Also, based on the results of the study, business collaboration ( $\beta = 0.148, p < 0.01$ ) exerted positive influence on the degree of internationalization. Thus, H3 is supported. The present findings concurred with that of prior studies that established positive association between business collaborative networks and the internationalization of SMEs (Costa et. al., 2015); collaborations with foreign partners, for production and R&D activities and SMEs' internationalization (Cvetanovic et. al., 2014); collaboration and SMEs internationalization process (Falize 2016); and collaborative intensity and export intensity of firms (Boehe 2013).

Therefore, the findings of the study have brought new insights, into the internationalization literature, by providing empirical evidence on the influence of network capital determinant (business collaboration) on the degree of internationalization of Malaysian service SMEs. This also implies that sustained business collaboration is of paramount importance to the internationalization of the service SMEs.

### **5.4. The Moderating Effect of Internet-enabled Environment**

According to the findings of the study, internet-enabled environment ( $\beta = 0.159, p < 0.01$ ) has positive influence on the degree of internationalization. Thus, H4 is supported. This findings also concurred with that of (Morgan-Thomas & Bridgewater 2004) who found that information dissemination could directly result in international growth, as foreign customers or clients coming across a firm's Web site on the Internet, may be tempted to place an order and thus, helping firm to attain international growth.

Similarly, based on the outcome of the study, H5 and H6 which postulated that the influence of access to resources and knowledge as well as access to market opportunities on the degree of internationalization of service SMEs was accelerated by internet-enabled environment were supported ( $\beta = -0.166, p < 0.01$ ) and ( $\beta = 0.158, p < 0.1$ ). Of course this finding is interesting, because it validated findings of prior studies that established that through sustained online relationships, firms can obtain the needed resources (Wellman & Frank 2001); integrate supply and demand process to impact firm performance (Liu et. al., 2015); and increase their competitiveness (Cvetanovic et. al., 2014).

Moreover, the present study unlike previous studies provided empirical evidence on the moderating influence of internet-enabled environment on the relationship between network capital determinants (access to resources and knowledge and access to market opportunities) and the degree of internationalization of Malaysian service SMEs.



Surprisingly, the study could not find statistical support on how influence of business collaboration on the degree of internationalization of Malaysian service SMEs is accelerated by internet-enabled environment. Even though, prior studies reported that collaboration with business partners may results to international growth of SMEs (Raymond et. al., 2005).

Based on the outcome of the study, internet-enabled environment has a critical influence in enhancing the degree of internationalization of service SMEs in Malaysia. With this the SMEs need to fully utilize internet platforms for them to access resources and knowledge as well as market opportunities to achieve business growth in both domestic and foreign market scenes.

## 5.5. Conclusions

The study postulated and tested 7 hypotheses. Based on the outcome, all the direct hypotheses, namely; H1, H2, H3 and H4 were supported. Also, from the outcome, 2 hypotheses on the moderating influence of internet-enabled environment on the overall constructs, namely; H5 and H6 were supported. However, H7 on the influence of internet-enabled environment in accelerating the influence of business collaboration on the degree of internationalization was not supported. This was attributed to the low level of networking between the SMEs and their domestic and international partners.

Nevertheless, the outcome of the study has brought new insights on the degree of internationalization of service SMEs in Malaysia. Similarly, the study has showcased the importance of network capital determinants, namely; access to resources and knowledge, access to market opportunities and business collaboration in the internationalization process of the studied SMEs. Likewise, the study has provided empirical evidence on both the direct and moderating influence of internet-enabled environment on the degree of internationalization of Malaysian service SMEs.

In addition, the study has acknowledged several government support-programs aimed at revamping the SMEs sector and therefore, called for sustenance, so that the SMEs could compete favorably in both domestic and international market scenes. Thus, becoming more profitable and playing the expected roles for Malaysia to become one of the strongest economies in Asia.

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