Triggering the Internationalization of Malaysian Quantity Surveying Firms

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Abstract

Although there is an increasing trend of services being traded across borders, quantity surveying (QS) firms in the construction sector remain under-researched. The triggers for the increasing globalization of QS firms is not clear, nor how these triggers are perceived by managers at different levels. A questionnaire was administered over 84 QS consultancy firms, and the results were analyzed using the repertory grid technique, allowing a comparison between the general respondents and a focus group of senior managers. The findings show that senior managers with significant experience realize the importance of a strong internal capability of the QS firm and the capability to develop innovative offerings, coupled with an awareness of the target market and the ability to secure revenue through key contracts. Firm- and location-specific factors were more important than other competitive advantages or foreign markets' characteristics when deciding to globalize.

Keywords: Internationalization of services, quantity surveying firms, repertory grid, Malaysia.

1.0 Introduction

The services sector has emerged as a main economic contributor to many countries (Lyles & Park, 2013), and the quantity surveying (QS) service is one of the fast growing sub-sectors. The Malaysian government has undertaken a program of autonomous liberalization of the service sector (Malaysian Ministry of International Trade and Industry, 2013); yet, Malaysian QS firms are not active in the international market (Abdul-Aziz & Wong, 2011). In their 2007 study, Abdullah and Haron (2007) found that only 13.5% of QS firms had rendered their services outside Malaysia, and only 38.5% listed marketing for projects outside Malaysia as their future direction. These findings indicate that the Malaysian QS sector is inactive in the international market (Abdul-Aziz et al., 2011). While there is an increasing trend of services being traded across borders (Mauri et al., 2013), the globalization of QS firms has remained under-researched (Abdul-Aziz & Wong, 2011).

In this research, eclectic theory assists in the identification and evaluation of factors influencing both the firm's initial act of international operations and the growth of such operations by integrating three general concepts. The three general concepts explain why firms undertake international operations, where the operations take place, and how and why multinational firms could earn more profits than the local firms in host countries. This study aims to apply eclectic theory assisted by repertory grid technique to identify those triggers for the globalization of Malaysian QS firms.

This research is important, as in many developing nations, greater liberalization of the service sector is seen to bring significant benefit (Konan & Maskus, 2006) and yet despite increasing cross-border trade, globalization of service firms in the construction industry remains poorly researched. The lack of research is despite the size and economic importance of the construction industry in many nations. Therefore, this research has two aims. First, it aims to evaluate QS professionals' views on the importance of factors that trigger the internationalization of QS service firms. Second, it aims to establish differences in opinion between more and less experienced QS professionals.

The rest of the paper is structured as follows. First, we provide an overview of the globalization processes for service firms. Second, we outline the methodology and sampling used in the study. Third, we present the results of the study and discuss the similarities and differences with existing research and the implications of these findings for similar firms.

2.0 Review of the Literature on the Globalization of Service Firms

Globalization has been described by many researchers as an outward movement of a firm's international operations and it is normally regarded as one of six processes (Mithat et al., 2013; Lu & Beamish, 2001; Javalgi & Martin, 2007; Hessels & Parker, 2013). The first is the sequential and orderly process of increasing international involvement and the associated changes in organizational forms. The second is the process of adapting a firm's

operations, such as strategy, structure, and resources, to the international environment. The third is the process by which firms increase their awareness of the influence of international activities on their future, and establish and conduct transactions with firms from other countries. The fourth is the process in which specific attitudes or orientation are associated with successive stages in the evolution of international operations. The fifth is the crossing of national boundaries in the process of growth. The sixth is the process through which a firm moves from operating solely in its domestic marketplace to the international market. Eclectic theory is often used to understand globalization (Cleeve 2009).

2.1 Eclectic Theory

Eclectic theory is a transaction cost-based theory derived from multiple theoretical approaches such as the theory of the firm, trade theory, organizational theory, and location theory (Cleeve 2009). It provides an insight into the cross-border operations and the behavior of individual firms to explain and analyze the economic rationale for international operations and the organizational issues that are related to multinational firms' activity. There are three main determinants postulated by eclectic theory that affect a firm's propensity to take on international operations. The first is the extent to which a firm possesses or can acquire assets which its competitors do not possess. The second is the firm's decision to sell or lease these assets to other firms, or to make use of the assets itself. The third, is how profitable it is to exploit these assets along with the indigenous resources from foreign countries instead of those from the home country. For example, when a firm possesses more ownership-specific advantages, it will be more likely to make use of the advantages itself. Also, the more attractive the foreign market is than home country, the greater the likelihood a firm will engage in international operations if given the incentive to do so (Xiao et al. 2013; Javalgi & Martin 2007). Multifaceted eclectic theory expounds that the extent and pattern of a firm's international operations are affected by three factors: ownership-specific advantage, location-specific advantage, and internalization advantage. However, Dunning (1980) states that when a firm possesses specific organizational skills or technologies it also possesses a competitive advantage in the marketplace. The more the ownership-specific advantages possessed by a firm, the greater the inducement to internalize them. Furthermore, Dunning indicates that location-specific factors are essential to succeed in international operations. The conceptual framework of this study applies the dichotomization of the firm- and location-specific factors in eclectic theory. Javalgi and Martin (2007) indicate that Dunning's (1980) eclectic theory is a critical antecedent to the overall service sector. Therefore, firm-specific factors, competitive advantages, and location-specific factors are collected to assist quantity surveying firms in venturing overseas.

2.2 Firm-Specific Factors

Firm-specific factors are the background forces facilitating or inhibiting the initial acts of cross-border activities by a firm. They are derived from specific tangible and intangible assets and the ability of the firm to become more competitive.

Firm Size: Firm size is one of the most common variables to be examined within the context of globalization (Chandran & Rasiah, 2013; Chen et al., 2012). The propensity of a firm to venture overseas increases with the size of the firm, a phenomenon that has also been explained by resource theory (Lyles & Park, 2013).

Firm Age: Firm age is measured as the natural logarithm of years since the firm's foundation year. Globalization occurs in older firms more often than in younger counterparts (Sapienza et al. 2006). Older firms have a higher chance of survival than younger firms following the internationalization of their services (Shamsuddoha et al., 2009).

Firm Performance: The performance of a firm is interpreted by comparing it with its performance history and the performance of peers (Shang & Poon, 2013). The decision of a manager to conduct business abroad is based on the firm's performance (Surroca et al., 2010).

Firm Goals: The two main motivations of firms to globalize are economic orientation (e.g., increasing revenue and profit) and learning orientation (e.g., learning new technologies and skills) (Kotha et al., 2001). Together with the overall mission and goals of the organization, these two orientations cause the different perceptions of service firms toward entering foreign markets (Mithat et al., 2013).

Management Attitudes: The degree of internationalization of a service firm is affected by management team attitudes, such as towards risk and client requirements (Mithat et al., 2013). Due to the low capital-investment requirements of the service sector, management attitudes (e.g., towards internationalization and the ability to accomplish this) tend to have the strongest impact on the decision to expand internationally (Javalgi & Martin, 2007).

2.3 Competitive Advantages

In eclectic theory, Dunning (1980) indicates that the more competitive advantages a firm possesses, the greater its propensity to enter the international market. Recent research indicates a self-reinforcing cycle where greater innovation is apparent in more internationalized firms, further supporting their internationalization successes relative to domestically focused firms (Doloreux & Laperrière, 2014). In fact, a firm's management attitude towards globalization is often directly influenced by its competitive advantages (Javalgi & Martin, 2007).

Skills and Resources: Distinctive capabilities of a firm are characterized by the superior skills of the personnel that set them apart from competing firms, whereas superior resources are required for a firm to exercise its capabilities (Bharadwaj et al., 1993; Sun & Lee, 2013). In many cases, this will enable the firms to develop and deploy innovative approaches, often supported by larger firms (Mas-tur & Soriano, 2014).

Intangible Assets: Intangible assets are the central determinants of a firm's sustainable competitive advantage including a) reputation (Javalgi et al., 2002); b) international experience (Suárez-Ortega & Álamo-Vera, 2005); and, c) network relationships (Kotha et al., 2001; Abdul-Aziz & Wong, 2011).

2.4 Location-Specific Factors

Location-specific factors are related to the potential risks and actual risks of the market under consideration. These factors can be advantageous and are available to all firms operating in the market in question (Hessels & Parker, 2013). By wisely utilizing the location-specific advantages, the competitive advantages of firms can be greatly enhanced within the market entered (Dimitratos et al., 2004; Javalgi & Martin, 2007).

Host Country Factors: Eclectic theory suggests that the attractiveness of host country plays a key role in a firm's decision to expand internationally. According to Javalgi and Martin (2007), a firm's managerial attitude towards globalization is determined by four host country market characteristics. These characteristics are first, market size (Tatoglu et al., 2003; Elango, 2003); second, social environment including different laws, culture and customs, language, and regulatory differences (Calantone et al., 2006); third, trade barriers (Hessels & Parker, 2013); and fourth, incentives and likelihood of on-going application of benefits (Cleeve, 2009), restrictions on ownership, and regulation or differences in legal systems (Lovelock & Yip, 1996).

Home Country Factors: There are three main home country factors. These factors are first, environmental conditions of the home market, domestic competition, and the size and growth of the home market (Dimitratos et al., 2004); second, the image of the home country (Jaffe & Nebenzahl, 2001); and third, assistance from the home country and political efforts to become members of international communities (Shamsuddoha et al., 2009; Xiao et al., 2013; Mithat et al., 2013).

2.5 The Malaysian Industry

In Malaysia, the services sector has been targeted as the new engine of growth due to its ability to impact all aspects of a country's growth. The more mature the economy, the higher the assumption of GDP share by the services sector. The services sector recently superseded the manufacturing sector as the main contributor to the Malaysian economy (Abdul-Rahman et al., 2011). As Malaysia is moving towards becoming a developed nation by 2020, the services sector share in GDP is expected to reach 65% (Abdul-Aziz et al., 2011). During the Ninth Malaysia Plan, the services sector registered 6.8% growth, compared to 5.5% in the previous plan. Recognizing the trend of rapidly increasing momentum and expansion of services trade, Malaysia has worked to liberalize its services sector progressively through various approaches for example, bilaterally, regionally, and multilaterally via trade agreements (Abdullah & Haron, 2006). This measure will purportedly encourage the development of the local service providers, which will, in turn, prepare them for challenges while venturing internationally. By providing

greater market access, the liberalization of the services sector allows more opportunities for investors or entrepreneurs. In support of the liberalization scheme, the government has established institutions and organizations to provide support and incentives for export and investments and provided access to financing and capacity building programs. Changes to allowing foreigners to own businesses in Malaysia or work in partnership with locals has been used to develop the management skills of Malaysian business owners and assist them to establish business links overseas (Abdul-Aziz et al., 2011).

In recent years, the Malaysian government has liberalized several services subsectors, enabling foreign firms' entry into Malaysia to encourage growth, improve standards and quality, and raise the competitiveness of domestic firms. On 7 October 2011, further liberalization of seven broad sectors was announced in the Competition, Standards and Liberalization Strategic Reform Initiatives (SRI) (MIDA, 2015). Following this announcement, 15 of 17 sub-sectors were liberalized. The remaining two (engineering and architectural services, along with the new sub-sector, quantity surveying services) will be liberalized once the amendment legislation giving effect to the liberalization is passed (Abdul-Aziz et al., 2011). Following liberalization, the Malaysian quantity surveying (QS) sector anticipates a significant increase in foreign competitors within their national territories.

Historically, however, the Malaysian QS sector has neglected international markets. While exporting services is now becoming necessary to sustain business, only 21 QS firms have been involved in overseas projects (PSDC 2015). The exporting activities of the QS sector remain low compared to other major sub-sectors such as engineering and architectural. Figure 1 shows the breakdown of exporters in Malaysia. The lack of globalization of QS firms is a long-term challenge for the sector; Abdullah and Haron (2006) found that by 2006 only 13.5% of QS firms had rendered their services outside Malaysia, and only 38.5% had listed international marketing as their future direction. The strong domestic focus indicates that the Malaysia QS sector has remained relatively inactive in international markets since that time (Abdul-Aziz et al., 2011).
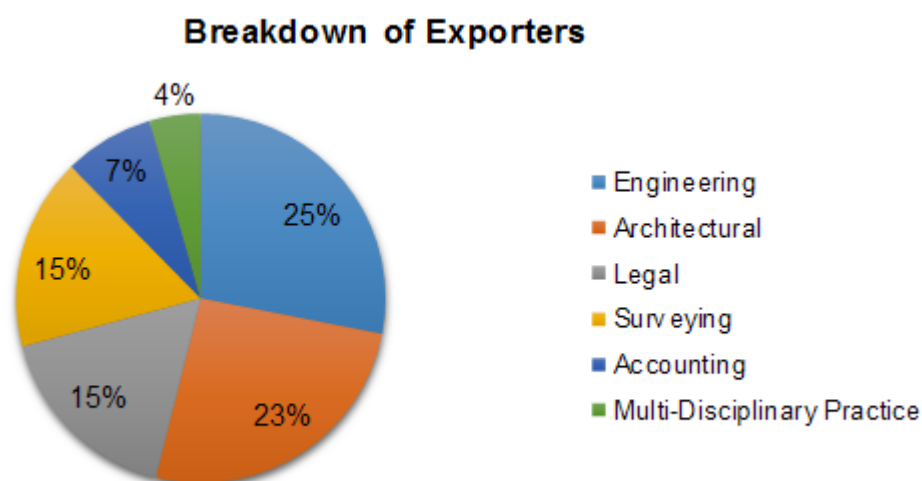

Figure 1: Breakdown of Malaysian service exporters (PSDC, 2015)

Business networks play an important role in firms' decisions to venture overseas. The Malaysian Network Model (Abdul-Aziz & Wong, 2011) proposes that a firm uses its networks to enter a foreign market that is new to the firm (i.e., international extension), further involve itself within established markets (i.e., international penetration), and integrate with the domestic business community of host country (i.e., international integration). QS firms and other suppliers of professional services working as part of a network can significantly impact on the quality of outcomes (Abdul-Rahman et al., 2014). Abdul-Aziz and Wong (2011) detail how Malaysian contractors use their business networks to secure international contracts, develop quality outcomes, and establish themselves in a new foreign market, using a range of methods to secure projects abroad relying on business networks – for example, government-to-government agreements, invitation by clients in home or host markets, trade delegation, recommendation to host clients by home and host country firms, and third-party or broker. Although business networks ease the process of internationalization, networks alone are insufficient to ensure successful internationalization (Abdul-Aziz & Wong, 2011). Firms must still invest significant resources and capability to secure international projects; alternatively, service firms often collaborate to ensure the resources possessed are sufficient to meet requirements (Lin et al., 2012).

The Malaysian government has developed a range of programs to encourage local companies to develop and market their products and services outside Malaysia. These market development programs help to overcome managers' mental barriers, developing positive attitudes towards international marketing of their services, improving managers' perceptions towards foreign market conditions, and enhancing international market knowledge (Abdul-Aziz et al., 2011). Programs include the Malaysia Services Exhibition (MSE), Specialized Marketing Missions, trade fairs, Malaysia Export Exhibition Centre (MEEC), Incoming Buying Mission, and Incoming Trade Delegation. In addition, the Malaysian government also provides tax incentives and financial assistance in the form of soft loans and grants, structured to assist local service firms to improve their capability, capacity, and productivity so that they can compete with foreign competitors. The governmental financial assistance is usually designed to provide support to firms in the early phases of internationalization to improve their competitiveness while reducing the risks associated with trade and political issues. Therefore, firms are incentivized to commit more resources to internationalization (Abdul-Aziz et al., 2011).

3.0 Research Design and Procedures

Our research design involved three key activities. First, we developed a questionnaire based on constructs derived from the literature. Second, we administered this questionnaire with a range of respondents. Third, we conducted statistical analysis of the data using clustering techniques to distinguish patterns in the responses. These steps are explained more fully in the following sections. As we were examining what our respondents thought about the various factors relating to the internationalization of quantity surveying firms, we opted to use the Repertory Grid technique. This approach, based on Kelly's personal construct theory (Fransella 2003), allowed us to develop an

understanding of the respondents' cognitive construction systems as they considered the topic of study and in particular to establish where there were common understandings of key factors in the study (Tan & Hunter 2002)

Step one: Development of the repertory grid questionnaire

Personal construct theory was developed from the argument "every human is a scientist for himself" put forward by George A. Kelly in 1955 (Fransella 2003). The basic postulate of this theory is that a person's processes are psychologically channelled by the way they anticipate events. Therefore, the function of the personal construct system is to interpret the current situation and to anticipate future events. In personal construct theory, every person develops a personally organized system of interpretation, or value system, to understand the world they live in. The value system is made up of that person's life experience, knowledge, emotion, and personality attributes. The idiosyncratic views of people define unique personalities. Therefore, everyone has an interpretation of an event, in the same way that every person has a definition of a good car. From a philosophical perspective, personal construct theory is a part of 'constructive alternativism', and it assumes all of our present interpretations of the universe are subject to revision or replacement. As individuals' value systems change over time, each person's interpretative framework is dynamic rather than static. People change their assessments, decisions, or choices as time passes, or other events take place. What seems good now will not necessarily be good in the future.

The repertory grid technique was a tool devised by Kelly in 1955 based on personal construct theory and was used to test the personality of humans (Abdul-Rahman et al., 2011; Kelly, 1991). Although it was widely used by psychologists, it was not until the 1960s that researchers applied the repertory grid technique in non-clinical areas. The technique is an effective way to represent a customer's perceptions of certain products because the views of people about what is going on around them can be captured and measured using representations created through the repertory grid method (Peters 1994). The repertory grid technique is designed according to personal construct theory and extracts personal constructs in a systematic way, enabling the result to be construed without bias. The method consists of three major components: elements, constructs, and linking mechanisms (Fransella, 2003).

Elements are the aspects considered important within the domain of study and define the entities upon which the administration of the repertory grid is based. In this research, elements were the experts' (i.e., quantity surveyors with international work experience) tacit knowledge. In choosing elements, two principles were followed. First, the elements needed to be homogenous (Peters 1994); that is, they needed to be drawn from the same group so that an apple can be compared to an apple instead of a banana. Second, the elements needed to be representative of the area under investigation, so that the respondents could relate to the elements (Peters 1994). This research focuses on the globalization of quantity surveying services; thus, only those quantity surveyors with experience abroad were chosen. The elements provided the object of the study.

Constructs represent the values, judgment, and interpretation of elements. In this research, the constructs were factors influencing the globalization of quantity surveying services so that the judgment and decision-making processes of quantity surveyors towards globalization could be elicited. The repertory grid technique allows several

methods to elicit constructs (Tan & Hunter, 2002), and minor variations and combinations can be made by the researcher. The primary approaches are supplied constructs, triads of elements, full context form, laddering, and group construct elicitation. In this research, the supplied constructs approach was used to supply a valid set of constructs for interviewees. In this way, the individual repertory grids could be compared statistically due to the similarity of constructs. These constructs were used to understand differences and similarities between the elements.

Linking mechanisms link elements and constructs and show the interpretation of respondents towards the relationship between elements and constructs (Tan & Hunter, 2002). There are three methods of linking elements to constructs: dichotomizing, ranking, and rating. In dichotomizing, a bipolar pair of constructs is offered. In ranking, the given set of constructs are ranked by respondents. In rating, each construct is rated by respondents on the given rating scales, allowing a nuanced interpretation by respondents. In this study, ratings are used to link elements to constructs.

A grid questionnaire was designed to facilitate analysis using the repertory grid technique. It consisted of four pages and was divided into two sections. Section A focused on the respondents' background and Section B contained questions focused on addressing the research objectives. In the grid questionnaire format, 60 pairs of bipolar situations were provided, of which respondents were required to rate their preference.

Step two: Administering the questionnaire

The questionnaires were printed and posted to 84 different consultants within QS firms that are known to have expanded internationally (nine Singaporean firms, four Japanese firms, 39 Malaysian firms, seven Australian firms, three Korean firms, one Denmark firm, five UK firms, and 16 Chinese firms). To identify potential respondents, members of the research team worked with the Board of Quantity Surveying Malaysia (BQSM) and the Royal Institution of Chartered Surveyors (RICS) Malaysian Chapter. All of the companies identified were registered with BQSM and RICS. Only those QS consultants who had worked abroad or who were involved in international projects were chosen as interviewees. In total, 66 responses were received with a response rate of 78.57%. However, when the responses were validated by the research team, it was determined that only 35 sets contained complete and valid data (41.7% response rate overall); the remaining responses had some sections that the respondents did not complete or that were improperly completed. The valid data were analyzed using WebGrid 5.0, SPSS 19 and RepV.

Step three: Identifying patterns with grid analysis

The data matrix generated by using the administered grid is potentially as complex as the rating system allows. The size of the matrix depends on the final number of elicited or supplied elements and constructs used (Peters, 1994). This information is always synthesized to retain the basic structure without losing too much information. Where constructs have been elicited from respondents, there are often dissimilarities and an inductive clustering process is used to identify patterns. However, in this study, the use of a consistent set of constructs, which were supplied to

the respondents, enabled a statistical analysis of the grids. The most commonly used statistical methods for this process include principal component analysis or one of the various forms of cluster analysis.

Principal Component Analysis: Principal Component Analysis (PCA) has been the most widely used type of analysis for the repertory grid technique because the results are recognized within the scientific and psychological communities (Fransella, 2003). PCA reduces the dimensionality of a dataset by combining several variables (i.e., elements or constructs) into a lesser number of hypothetical variables (i.e., components or factors) (Slater, 1964). The components can be used as the axes where the constructs are plotted based on their factor loadings (Kelly, 1991). The combination of variables with the greatest variance is represented along the first axis, that is, the first principal component. Since the first component is not able to represent the whole dataset, the second axis (the second component), is drawn to maximize the variance of the remaining data. As the second component is determined by maximizing the variability not captured by the first component, the second component is independent of the first component. An overview of PCA use is provided by Slater (1964).

Cluster Analysis: Cluster analysis shows the ways in which variables (i.e., elements or constructs) are grouped as cluster trees, that is, as groupings of similar objects. Distance coefficients are used to measure the relationship between variables in cluster analysis. The purpose of cluster analysis is to identify the cluster in an unknown or unclassified group (Peters, 1994). Since the grouping is unknown, the method used to classify the data and identify the groups becomes quite flexible, and the grouping effectiveness is often determined by whether or not there is a logical reason or justification for those clusters. Three primary types of clustering algorithms are commonly used: Joining (Tree) clustering, Two-way joining, and K-means clustering. K-means clustering splits the items into a given number of clusters, in such a way that the within-cluster sum of squares is minimized. A full discussion of the clustering algorithm is provided by MacKay (2003).

We first used PCA but noted inconsistencies. We then used hierarchical clustering analysis but noted it was sensitive to researcher bias. Eventually, we settled on K-means clustering to generate the clusters of constructs for further analysis; therefore, the K-means clustering results were used in the further analysis. Comparisons of core constructs between general groups and focus groups were made. In this study, elements were represented by the inputs of the expert knowledge of the 35 respondents.

4.0 Results

Table 1 summarizes the respondents' profiles. People in different job positions normally have different considerations while making decisions. The commonality corollary of personal construct theory indicates that when two persons are in the same managerial position, they share the same point of view while making decisions. Most respondents (57.14%) had worked as quantity surveyors for 5-15 years. The construction corollary states that a person interprets their experience to make a decision. In this study, the respondents who were involved in more international projects were expected to provide more detailed insights due to their additional experience. Many

respondents (54.29%) were involved in one international project per year, with only 14.29% of respondents involved in more than three international projects per year. The countries and regions where the international business was conducted included Abu Dhabi, Australia, Bahrain, Cambodia, Canada, China, Dubai, Hong Kong, India, Iraq, Maldives, Netherlands, Philippines, Qatar, Singapore, South Africa, Sudan, Syria, Thailand, United Kingdom, Vietnam, and Yemen.

Table 1: Profiles of Respondents

Job Position	Number of Elements	Percentage (%)
Executive director	1	2.86
General manager/ Associate director/ Project director/ Technical director/ Senior executive	10	28.57
Team leader/ Executive/ Project executive/ Assistant director/ Contract manager/ Senior project co-ordinator	17	48.57
QS/ Senior QS	7	20.00
Education Level		
SPM/ O-Level	1	2.86
Diploma/ Matriculation/ A-Level/ STPM	1	2.86
Degree/ Advanced Diploma	31	88.57
Master/ MBA/ PhD	2	5.71
Years in Construction Industry (years)		
<5	5	14.29
5-15	20	57.14
>15	10	28.57
Years as Quantity Surveyor (Years)		
<5	5	14.29
5-15	20	57.14
>15	10	28.57
Number of International Projects Involved / Year		
1	19	54.29
2	6	17.14
3	5	14.29
>3	5	14.29

In this study, the constructs were the factors influencing the QS firms' decision-making regarding globalization. There were 60 constructs in the repertory grid as shown in Table 2. (Details about the formation of these constructs is provided in §§2.2, 2.3, and 2.4.)

Table 2: Constructs for Globalization of QS Services

	Firm-specific Factors (discussed in §2.2)
1.	Size of firms
2.	Specialized service
3.	Firm age
4.	Size of client base
5.	Manager's desire towards operating internationally
6.	Manager's perception of firm's ability to globalize its service
7.	Performance of firm in recent years
8.	Client requirement
9.	Firm's desire to minimize risks
10.	Organizational missions and goals
11.	Necessity of higher performance
12.	Necessity of new demand
13.	Necessity of revenue increment
14.	Necessity of profit increment
15.	Importance of learning new technologies
16.	Importance of broadening firm's skills
17.	Importance of broadening firm's geographical spread
	Competitive Advantages (discussed in §2.3)
18.	Financial capital
19.	Human capital
20.	Unique resources of firms
21.	Distinctive skills of firms
22.	Specific technologies
23.	Employees with international experiences
24.	Network relationship
25.	Management experience
26.	Domestic reputation
27.	International reputation
28.	International experience of firm
29.	Knowledge about foreign market
30.	Quality of services provided
31.	Innovative work processes and ideas
32.	Competitive fees
33.	International quality certification
34.	Stability of revenue
	Location-specific Factors (discussed in §2.4)
	a) Host Country Factors
35.	Political environment of foreign market
36.	Legal system of host country
37.	Host government regulation
38.	Foreign ownership requirement of host country
39.	Size of foreign market
40.	Financial and fiscal control of host country
41.	Local content requirement of host country
42.	Size of foreign demand
43.	Potential growth rate of foreign market
44.	Distance of host market
45.	Exchange rate
46.	Difference in language between home and host countries
47.	Difference in business practice between home and host countries
48.	Difference in industrial development between home and host countries
49.	Incentives provided by host government
50.	Size of project offered by host market
	b) Home Country Factors
51.	Domestic competition situation
52.	Performance of peers in recent years
53.	Importance of competitor's action to venture overseas
54.	Size of domestic market
55.	Growth rate of local industry
56.	Growth rate of economic development of home country
57.	Importance of encouragement from home country
58.	Image of home country
59.	Importance of international membership of home country
60.	Importance of multicultural society of home country

4.1 Perceptions Relating to the Internationalization of QS Firms

Analysis of the elements and constructs: In this research, our aim was to understand how the 35 respondents (representing the 35 elements) perceived the internationalization of QS firms. PCA was conducted to determine the distribution of elements. Hierarchical cluster analysis and K-means clustering were performed to determine the focus group.

4.2 Principal Component Analysis (PCA)

Figure 2 shows the construct loadings on the principal components that together accounted for 34.8% of the variance. The elements and constructs were plotted in relation to the two components. The distribution of all elements was mixed in groups regardless of their professional background. The main reason for this kind of inconsistency was that the total variance percentage for first and second components was 34.8%. To reflect the overall picture, the total variance percentage accounted for using this approach should be 50% (Abdul-Rahman et al., 2011). The correlation between a component and a variable estimates the shared information. In the context of PCA, this type of correlation is called a loading. In this study, given that this was an introductory treatment of principal component analysis, we treated a factor as significant if its loading exceeded +0.40. Based on this, the significant factors were a) foreign ownership by the host country; b) local content requirement; c) exchange rate; d) language of the host country; e) difference in business practice; f) difference in industrial development; g) domestic competition; and, h) economic development of the home country. These factors contributed to 13.64% of the first principal component's variance. However, these eight significant factors had larger means than other factors; factors with smaller means should be considered more significant. Therefore, the results generated using PCA were discarded because of these inconsistencies and alternative clustering approaches were employed.

	PC_1	PC_2
big firm	-1.43	-1.37
large financial capital	-0.24	-0.96
many employees	-2.85	-0.02
possession of unique resources	-2.26	-0.33
possession of distinctive skills	-1.84	-0.47
possession of specific technologies	-1.73	-0.77
provision of specialized service	-0.89	-1.24
many internationally experienced employees	-1.53	-0.39
wide network relationship	-1.36	-0.01
sufficient management experience	-2.55	-0.23
good domestic reputation	-2.22	0.00
good international reputation	-1.92	-0.25
frequent international experience of firm	-2.23	-0.68
big client base	-3.03	2.31
sufficient knowledge of foreign market	-3.34	-0.36
provision of good quality service	-2.45	-0.46
innovative work process and ideas	-1.81	0.68
provision of competitive fees	-2.04	2.70
possession of international quality certification	-2.06	-0.10
young firm age	0.17	1.51
good firm performance in recent years	-2.52	0.74
good peer performance in recent years	-2.33	0.92
client requirement	-2.41	0.93
stable revenue	-1.16	-0.44
strong manager's desire	-1.43	0.96
manager's perception of firm's ability is important	-2.19	-1.22

strong desire to minimize risk	-3.22	1.46
clear organizational goals and missions	-1.24	-0.46
high performance is needed	-2.19	1.35
new demand is needed	-2.99	1.14
revenue increment is needed	-1.63	-0.31
profit increment is needed	-1.30	-0.52
learning new technologies is important	-1.61	-1.04
broadening firm's skills is important	-1.90	-0.60
broadening firm's geographical spread is important	-3.48	0.79
stable foreign market politics	-4.28	0.35
similar legal system of host country	-4.20	1.43
strict host government regulation	0.14	3.94
restricted foreign ownership by host country	1.14	4.49
large size of foreign market	-2.81	0.93
strict financial and fiscal control by host country	-3.03	3.67
strict local content requirement	0.98	3.98
high foreign demand	-1.96	-0.92
high potential growth rate of foreign market	-2.57	-2.12
near location	-2.65	0.84
high exchange rate	2.15	0.17
different language of host country	1.21	2.14
significant difference in business practice	2.74	2.88
significant difference in industrial development	2.66	2.11
high incentives by host country	-1.59	-2.88
small project offered by host market	0.00	3.94
intense domestic competition	1.46	3.34
peer's action to venture overseas is important	-0.13	0.32
small domestic market	-2.21	-0.26
rapid industry growth	-0.92	-1.06
rapid economic development of home country	1.30	1.63
encouragement of home government is important	-1.06	-0.31
good image of home country	-2.27	0.49
home country as a member of international organization is important	-2.05	-0.30
multicultural society of home country is important	-2.46	3.09

Figure 2: Construct loadings on principal components

4.3 Hierarchical Cluster Analysis (HCA)

Hierarchical cluster analysis was performed to move the analysis forward following the inconsistencies using PCA. First, a repertory grid was generated by RepV as shown in Figure 3. The poles of constructs are on either side of the grid, and the elements are listed below the grid. How each element was rated is clearly illustrated in the grid; the consistency of rating between respondents is shown by the consistency in the shading along each row (i.e., if all respondents consistently rated as a 1 or 2, the row is shaded light; if they consistently rated with 4 or 5, the row is shaded in grey). If respondents were inconsistent with their rating of a construct, the row has a mixture of light and dark shadings. The cluster analysis is shown in Figure 3, in which the order of constructs and elements is different from Figure 3. The similarities and differences in elements and the ratings of constructs are reflected in the new order that they are presented in; for example, elements q29 and q33 are closely matched together without q24 because they are located furthest apart. Also, the dendrogram (tree-like lines), with the percentage of similarities located next to the elements and constructs, shows how well they are matched to their counterparts.

The scale above the dendrogram next to the elements indicates that the percentage of similarities among elements was determined by using the HCA approach. Overall, the elements were closely matched to each other with the minimum percentage of matching at approximately 70%. Most of the elements registered higher similarities with others (e.g., q4 and q31 were 90% alike); whereas the similarity between q16 and q3 was about 85%. By interpreting the dendrogram and percentage scales, the elements were clustered into different groups based on their similarity ratings. Although easy and efficient, the cluster analysis in HCA allows personal judgment to be applied to determine where to "cut" the dendrogram. In this case, the elements can be categorized into any cluster as long as the percentage of similarity among the members of that particular cluster is high. The problem with this method is that the elements in each cluster can be subjectively changed. Although hierarchical cluster analysis is commonly used in clustering elements and constructs, the personal judgments involved in the analysis makes it vulnerable to bias introduced by the researchers. Therefore, K-means clustering was conducted.
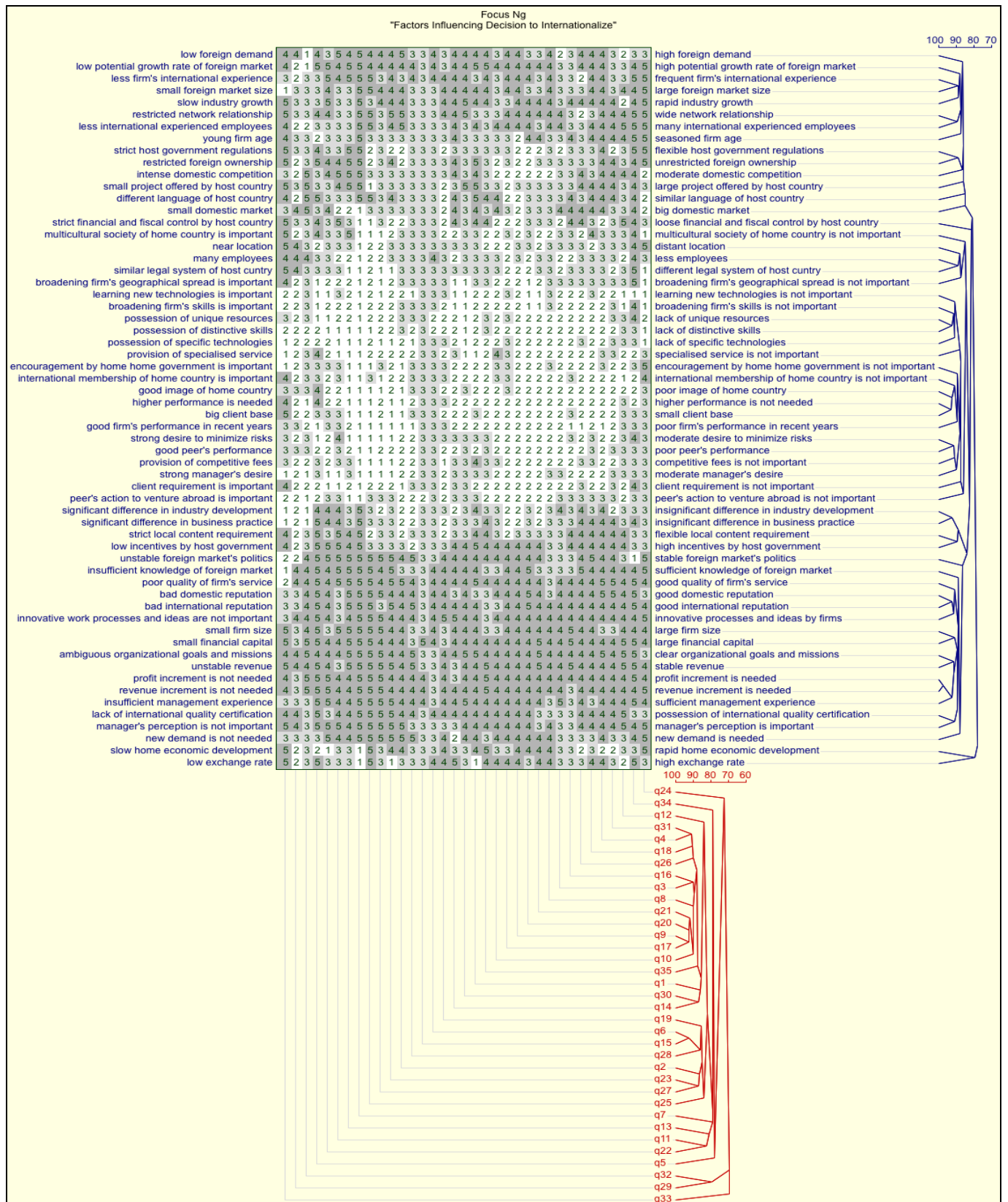
Figure 3: Cluster analysis of elements and constructs with the dendrogram showing the clustering. The light or dark shading shows consistency in ratings by respondents; light shading indicates ratings of 1 or 2 while grey shading indicates ratings of 4 or 5.

4.4 Using K-means Clustering

K-means Clustering allows the user to determine the number of clusters to be formed. The clusters are then generated automatically without human intervention. The process classifies the data into the required number of clusters in a way that minimizes the distance between each case and the center of the cluster it is a member of. K-means clustering provides an objective basis for the clustering. Using this approach, we ran seven separate attempts, specifying from three to nine clusters. Table 3 shows the distribution of elements in each cluster type.

The result of K-means clustering was compared to the professional background of elements to ensure that the clusters formed made sense. During this analysis, we found that q1, q4, q11, and q18 were constantly clustered together. We elected to use the 8-cluster type as the differences between clusters were obvious and interpretable. Clusters 1, 3, and 8 related to different positions/hierarchical levels held by respondents within their company, where q24 is QS, q12 and q34 were managers, and q33 was a senior executive, which shows the reliability and validity in differentiating and grouping the elements.

Table 3: Seven Types of Clustering Attempts in K-means

Clusters	Elements
3-Cluster Type	
1	q5, q7, q13, q23, q25, q27
2	**q1**, q2, q3, **q4**, q6, q8, q9, q10, **q11**, q12, q14, q15, q16, q17, **q18**, q19, q20, q21, q22, q24, q26, q28, q29, q30, q31, q32, q35
3	q33, q34
4-Cluster Type	
1	q7, q13, q23, q25
2	q2, q3, q6, q8, q9, q10, q12, q15, q16, q17, **q18**, q19, q21, q28, q29, q31, q32, q35
3	q33, q34
4	**q1**, **q4**, q5, **q11**, q14, q20, q22, q24, q26, q27, q30
5-Cluster Type	
1	q33, q34
2	q24
3	**q1**, q2, q3, q6, q8, q9, q10, q12, q14, q15, q16, q17, **q18**, q19, q20, q21, q26, q28, q29, q30, q31, q32, q35,
4	q7, q13, q23, q25, q27
5	**q4**, q5, **q11**, q22
6-Cluster Type	
1	q33, q34
2	q2, q20, q23, q25, q27
3	q24
4	q7, q13
5	**q1**, **q4**, q5, **q11**, **q18**, q22, q26, q30
6	q3, q6, q8, q9, q10, q12, q14, q15, q16, q17, q17, q21, q28, q29, q31, q32, q35
7-Cluster Type	
1	q12, q34
2	q2, q9, q17, q20, q23, q25, q27
3	q3, q6, q8, q10, q15, q16, q19, q21, q28, q29, q31, q32, q35
4	q33
5	**q1**, **q4**, q5, **q11**, q14, **q18**, q22, q26
6	q24, q30
7	q7, q13
8-Cluster Type (Chosen)	
1	q24
2	q2, q9, q17, q20, q23, q25, q27
3	q12, q34
4	**q1**, **q4**, **q11**, q13, **q18**, q30
5	q5, q14, q22, q26
6	q3, q6, q8, q10, q15, q16, q19, q21, q28, q29, q31, q32, q35
7	q7
8	q33
9-Cluster Type	
1	q33
2	q6, q15, q19, q29, q32
3	q34
4	q13
5	q5
6	q24
7	q7
8	q23, q25, q27
9	**q1**, q2, q3, **q4**, q8, q9, q10, **q11**, q12, q14, q16, q17, **q18**, q20, q21, q22, q26, q28, q30, q31, q35

Focus Group: Elements in cluster 4 of the 8-cluster type were chosen as the focus group. The data provided by the focus group were analyzed and compared to the general group. Cluster 4 consisted of elements q1, q4, q11, q18, and q30. These elements showed similarities in their professional background as they were all company directors. Furthermore, five of the six have more than 15 years of experience in QS firms. Elements q1, q4, and q18 were the most experienced, with about 30 years of experience; q11 and q13 had 20-years and 16-years of experience, respectively. Nevertheless, the percentage of match between q30 and the others in the selected cluster was more than 80%. The q30 pattern of decisions was clustered with the most experienced professionals, showing that young professionals may share a similar mind-set to the most experienced professionals in this industry.

5.0 Analysis of Constructs

The constructs in this study refer to the factors influencing globalization of QS services. The constructs of the general group and focus group were analyzed by employing cluster analysis and descriptive statistics.

The analysis of the general group used the data obtained from 35 elements, analyzed using descriptive statistics and K-means cluster analysis (as PCA and HCA provided less useful analyses than K-means clustering); all reporting on the analysis is based on the K-means clustering. A total of 60 constructs were analyzed in this section to determine which factors have the highest influence. The results were then compared with the focus group.

Cluster Analysis: The constructs were re-ordered and grouped by similarity to give the distribution of constructs shown in Figure 4. The constructs located in the white and black areas in the grid show that there was consistency in these ratings. While the constructs in the white areas were rated with 1 or 2, we can see that where a row is predominantly shaded white, respondents tended to be consistent in their evaluation of these constructs. In contrast, where the row for constructs is shaded gray, it means that respondents rated this as 4 or 5. Constructs that were inconsistently rated show a mixture of gray and white shadings over the row. However, the constructs in the black areas had their poles switched between each other; for example, the construct "large firm size" was switched from the left to the right side of the grid, while its counterpart, "small firm size", was switched to the left side. Consequently, the ratings for pairs of constructs were changed between 1 and 5, and 2 and 4. Nevertheless, switching did not affect the clustering of constructs. Constructs in the white and black areas were considered as important factors because of the consistency in their ratings, which means these constructs were considered as significant. Extreme ratings (1 or 5) were uncommon; constructs found in black and white areas tended to be rated as 2 or 4 by most respondents.

Clusters were made based on the analysis and the constructs in the first box are: a1) high potential growth rate of foreign market; b1) frequency of firm's international experience; c1) large foreign market size; d1) rapid industry growth; and e1) wide network relationship.

The constructs in the second box are: a2) broadening of firm's skills; b2) possession of unique resources; c2) possession of specific technologies; d2) provision of specialized service; e2) encouragement by home government; f2) international membership of home country; g2) good image of home country; h2) higher performance; i2) big client base; and j2) good firm performance in recent years.

The constructs in the third box are a3) stable foreign market politics; b3) sufficient knowledge of foreign markets; c3) provision of good quality service; d3) good domestic reputation; e3) good international reputation; f3) innovative work processes and ideas by firms; g3) large firm size; h3) large financial capital; i3) clear organizational goals and missions; j3) stable revenue; k3) profit increment; l3) revenue increment; m3) sufficient

management experience; n3) possession of international quality certification; and o3) manager's perception towards firm's ability.

Figure 4: Cluster Analysis of Constructs – General Group. The highlighted areas where the ratings are colored white show ratings of 1 or 2; where the ratings are highlighted in gray, this shows general ratings of 4 or 5. The clustering exposes three groupings of consistently rated constructs.

Descriptive Statistics: The distribution of constructs was presented using cluster analysis. Similar to the clustering of elements, this analysis allowed us to decide the number and size of clusters. The mean values of the constructs

ranged from 1.7429 to 3.3714. This study marks "1" as the most significant construct and "5" the least; thus, the constructs with lower means are the most significant constructs. The results are shown in Table 4.

Table 4: Classifications of Constructs – General Group

Primary Constructs (mean from 1.00 to 1.99)		Mean value	Standard Deviation
☐ Large financial capital		1.8286	.70651
☐ Possession of distinctive skills		1.9429	.59125
☐ Possession of specific technologies		1.9714	.70651
☐ Sufficient management experience		1.9429	.68354
☐ Good international reputation		1.9714	.66358
☐ Provision of good quality service		1.8000	.67737
☐ Innovative work process and ideas		1.9143	.56211
☐ Stable revenue		1.7429	.65722
☐ Manager's perception of firm's ability is important		1.9429	.76477
☐ Clear organizational goals and missions		1.7429	.61083
☐ Revenue increment		1.8571	.55002
☐ Profit increment		1.8571	.55002
☐ Learning new technologies		1.8857	.75815
Secondary Constructs (mean from 2.00 to 3.00)			
Higher-ranked Constructs (2.00-2.30)	☐ Big firm	2.0286	.70651
	☐ Possession of unique resources	2.2000	.67737
	☐ Provision of specialized service	2.1714	.78537
	☐ Wide network relationship	2.2000	.83314
	☐ Good domestic reputation	2.0000	.72761
	☐ Big client base	2.2571	.81684
	☐ Sufficient knowledge of foreign market	2.0857	.88688
	☐ Possession of international quality certification	2.0857	.65849
	☐ Good firm's performance in recent years	2.0000	.76696
	☐ Client requirement	2.2286	.73106
	☐ Strong manager's desire	2.2000	.79705
	☐ High performance is needed	2.0857	.74247
	☐ New demand is needed	2.2000	.83314
	☐ Broadening firm's skills	2.0286	.74698
	☐ Stable foreign market's politics	2.0571	.99832
	☐ High potential growth rate of foreign market	2.1143	.86675
	☐ Rapid industry growth	2.2571	.74134
	☐ Good image of home country	2.1714	.70651
Medium-ranked Constructs (2.31-2.60)	☐ Many internationally experienced employees	2.3429	.83817
	☐ Frequent international experience of firm	2.3143	.83213
	☐ Provision of competitive fees	2.3429	.76477
	☐ Good peer's performance in recent years	2.3143	.58266
	☐ Strong desire to minimize risk	2.3143	.83213
	☐ Broadening firm's geographical spread	2.4000	.94558
	☐ Large size of foreign market	2.4286	.77784
	☐ High foreign demand	2.4286	.85011
	☐ High incentives by host country	2.3143	.79600

	☐ Peer's action to venture overseas is important	2.4000	.65079
	☐ Encouragement of home government is important	2.3429	.83817
	☐ Home country as a member of international organization is important	2.3143	.75815
Lower-ranked Constructs (2.61-3.00)	☐ Many employees	2.8000	.71948
	☐ Similar legal system of host country	2.6857	.96319
	☐ Near location	2.8857	.79600
	☐ High exchange rate	2.6571	1.08310
	☐ Significant difference in industrial development	2.8857	.90005
	☐ Rapid economic development of home country	2.8000	1.02326
	☐ Multicultural society of home country	2.6857	.99325
Not Important Constructs (3.00-6.00)	☐ Seasoned firm age	3.3714	.73106
	☐ Flexible host government regulation	3.0857	.95090
	☐ Unrestricted foreign ownership by host country	3.3714	.97274
	☐ Loose financial and fiscal control by host country	3.0286	1.01419
	☐ Flexible local content requirement	3.3143	.83213
	☐ Similar language of host country	3.4286	.91670
	☐ Insignificant difference in business practice	3.0286	.95442
	☐ Large project offered by host market	3.3714	.91026
	☐ Moderate domestic competition	3.2000	.90098
	☐ Big domestic market	3.1714	.82197

The primary group consisted of 13 constructs, while the secondary group consisted of 37 constructs, of which 18 were higher-ranked, 12 were medium-ranked, and seven were lower-ranked; therefore, 83.33% of the 60 constructs were considered significant. Standard deviations determined the consistency of evaluation; a construct with lower standard deviations was evaluated by respondents more consistently than other constructs. The standard deviation ranged from 0.55002 to 1.08310; thus, the constructs were also classified as those that were most consistent (0.55-0.69), consistent (0.70-0.89), and least consistent (0.90-1.10) with results shown in Table 5.

Table 5: Consistencies of Constructs – General Group

Most Consistent Constructs	☐ Possession of unique resources
	☐ Possession of distinctive skills
	☐ Sufficient management experience
	☐ Good international reputation
	☐ Provision of good quality service
	☐ Innovative work process and ideas
	☐ Possession of international quality certification
	☐ Good peer performance in recent years
	☐ Stable revenue
	☐ Clear organizational goals and missions
	☐ Revenue increment
	☐ Profit increment
	☐ Peer's action to venture overseas is important
Consistent Constructs	☐ Big firm
	☐ Large financial capital
	☐ Many employees
	☐ Possession of specific technologies

		Provision of specialized service
		Many internationally experienced employees
		Wide network relationship
		Good domestic reputation
		Frequent international experience of firm
		Big client base
		Sufficient knowledge of foreign market
		Provision of competitive fees
		Seasoned firm age
		Good firm performance in recent years
		Client requirement
		Strong manager's desire
		Manager's perception of firm's ability
		Strong desire to minimize risk
		High performance is needed
		New demand is needed
		Learning new technologies
		Broadening firm's skills
		Large size of foreign market
		Flexible local content requirement
		High foreign demand
		High potential growth rate of foreign market
		Near location
		High incentives by host country
		Big domestic market
		Rapid industry growth
		Encouragement of home government is important
		Good image of home country
		Home country as a member of international organization is important
Least Consistent Constructs		Broadening firm's geographical spread
		Stable foreign market's politics
		Similar legal system of host country
		Flexible host government regulation
		Unrestricted foreign ownership by host country
		Loose financial and fiscal control by host country
		High exchange rate
		Similar language
		Insignificant difference in business practice
		Significant difference in industrial development
		Large project offered by host market
		Moderate domestic competition
		Rapid economic development of home country
		Multicultural society of home country

The comparison was made using Table 4 and Table 5 to determine the primary constructs that were most consistently chosen, specifically a) possession of distinctive skills, b) sufficient management experience, c) good international reputation, c) provision of good quality service, d) innovative work process and ideas, e) stable revenue, f) clear organizational goals and missions, g) revenue increment, and h) profit increment.

5.1 Results from the Focus Group Consisting of More Experienced Consultants

The focus group consisting of experienced professionals was selected using the K-means clustering approach (q1, q4, q11, q13, q18, and q30). These professionals had similar backgrounds and all were directors in their companies. Five of the six had more than 15 years of experience in the construction industry and the quantity surveying sector. The data provided by these six were analyzed using cluster analysis and descriptive statistics and the result obtained was then compared with the general group. Figure 5 shows the clustering of constructs. Two clusters were generated in this analysis. Factors in the first cluster are a) sufficient knowledge of foreign market, b) possession of distinctive skills, c) possession of specific technologies, d) broadening firm's skills, and e) possession of unique resources. This first cluster relates to distinctive skills and capabilities that make them competitive. Constructs in the second clusters include a) profit increment, b) possession of international quality certification, c) revenue increment, d) higher performance is needed, e) high potential growth rate of foreign market, f) large project offered by host country, g) clear organizational goals and missions, h) good quality of firm's service, i) high incentives by host government, j) high foreign demand, and k) manager's perception of firm's ability is important. This second cluster of concepts appears to most closely relate to having a clear understanding of the international market, with a particular focus on local requirements driving demand, sufficiently large contracts for stability, and any required certifications. The most consistent primary constructs in the focus group are a) good international reputation, b) provision of good quality service, and c) innovative work process and ideas.
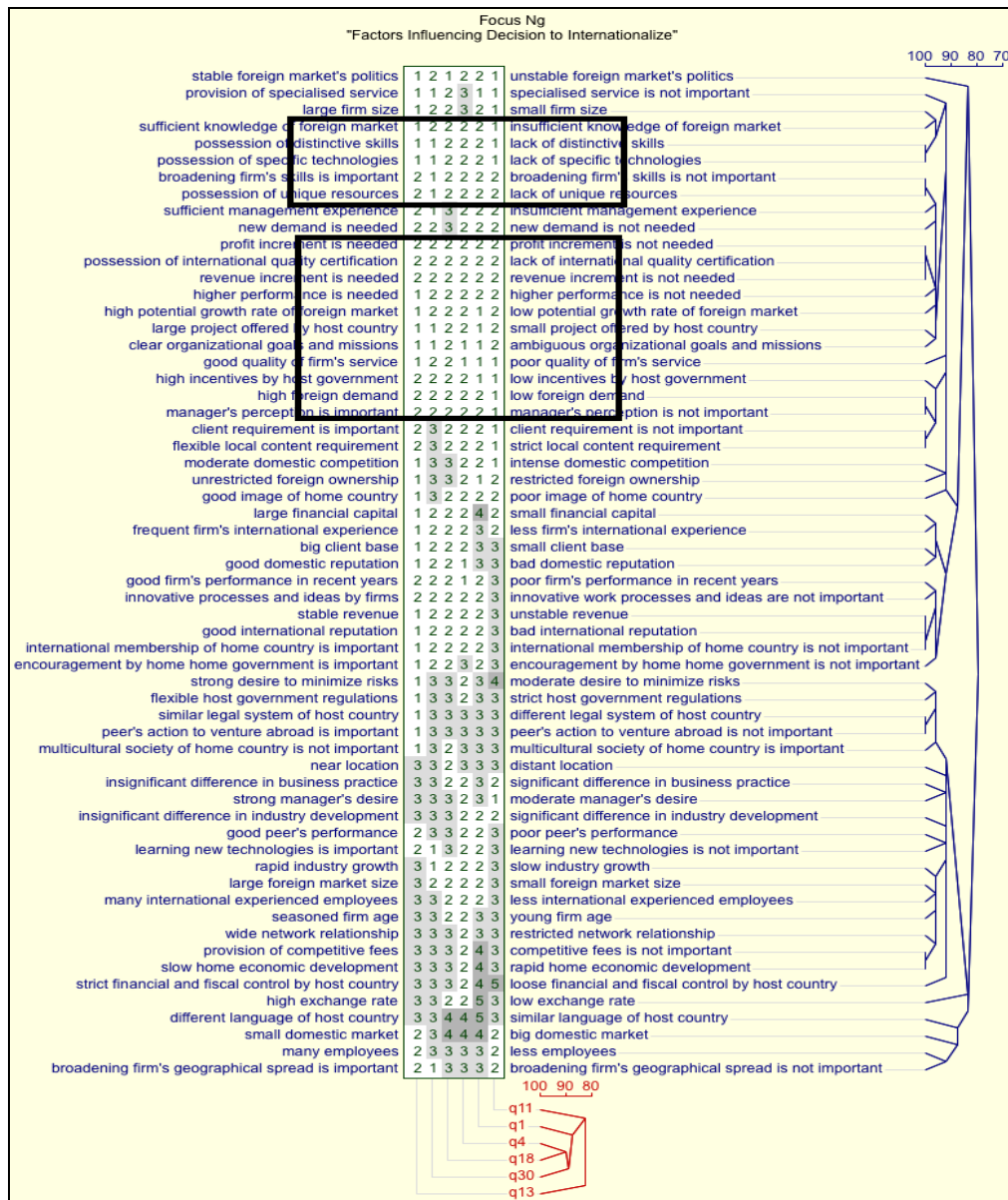
Figure 5: Cluster Analysis of Constructs – Focus Group

6.0 Discussion

While Abdullah and Haron (2006) found few QS firms had ventured beyond the Malaysian borders, we found that many of their internationally based competitors were already well-positioned. In the analysis of the general group, 50 out of 60 constructs were considered significant while in the focus group there were 51 constructs classified as primary and secondary. These constructs could generally be applied by QS services towards managing their move towards globalization. Moreover, several constructs were derived from the main construct; for example, the constructs "profit increment", "revenue increment", "learning new technologies", and "broadening firm's skills" were derived from the main construct "organizational goals and missions". Therefore, when the main construct was assumed to be significant, respondents considered all of the group to be significant. Also, the results showed that there were more 'most consistent' constructs in the focus group than in the general group. The smaller number of respondents in the focus group than in the general group caused the variance to be lower, which in turn resulted in lower standard deviation and therefore the consistency of constructs was higher in the focus group. However, there were 13 primary constructs in the general group whereas there were eight in the focus group, which might be because the focus group was more conservative during the interviews. This interpretation is supported by the few occurrences of extreme ratings (i.e., "1" or "5") among the focus group.

The three most consistent primary constructs were found in both the general group and focus group: a) good international reputation, b) provision of good quality service, and c) innovative work process and ideas. These three constructs were classified as the firm's competitive advantages. Interestingly, the primary constructs obtained from both groups showed that the intentions of QS firms towards globalization were strongly driven by competitive advantages, supporting results from Abdul-Aziz et al. (2011). Except for "clear organizational goals and missions" and "high potential growth rate of foreign market", the other primary constructs in the focus group were all classified as competitive advantages. Further, eight of the 13 primary constructs obtained from the general group fell in the category of competitive advantages. On the other hand, firm-specific constructs had a moderate effect in triggering the globalization of QS firms.

Most of the firm-specific constructs were ranked as secondary constructs for both groups, except for "organizational goals and missions", which was ranked as a primary construct. Likewise, location-specific constructs also had little impact on the decision of QS firms to globalize their services. In the general group, none of the location-specific constructs was ranked as a primary construct. Instead, only four were categorized as higher-ranked but secondary constructs (viz., "stable foreign market's politics", "high potential growth rate of foreign market", "rapid industry growth", and "good image of home country"). The focus group showed slightly different results with one location-specific construct ranked as a primary construct and three identified as higher-ranked secondary constructs. Furthermore, most location-specific constructs were deemed insignificant; for example, nine of 10 insignificant constructs in the general group and all the nine significant constructs in the focus group were classified as location-specific constructs. Dunning (1980) contends that a firm's international efforts are significantly influenced by the characteristics of the market entered. A local firm supplying its home market has

different growth pathways; for example, it can diversify services or products, develop a new businesses venture, acquire existing enterprises, or it can venture into foreign markets. A firm will choose the last route to become an international enterprise when it makes economic sense to do so. It must possess additional ownership advantages to compensate for the costs of operating in a foreign environment and also to enable it to operate alongside the domestic firms based in the market entered. However, as clearly shown in this study, the characteristics of foreign markets do not influence QS firms in making a decision to venture overseas. The reason for the insensitivity of the internationalizing QS services to the characteristics of the market they enter was not identified by Abdul-Aziz et al. (2011) and may require further study. This insensitivity may also reflect added advantages relating to the benefits of the internationalization experience and the support this provides to improve tactical development of innovative processes and offerings in the more experienced firms, supporting findings from Doloreux and Laperrière (2014).

The results from the focus group also indicate a strong perception of risks and stability when venturing abroad. While Mas-tur and Soriano (2014) indicate the importance of the size of the organization in developing innovative approaches, our research indicates that experienced senior managers perceive innovation in processes and ideas to be important; they have a strong sense of stability in the organization that seems to provide a foundation for this. The firm must have sufficient skills and distinctiveness to be competitive; at the same time, it must also be able to work with and understand government frameworks in the international market and be able to carry out a large key project, providing it with stability in revenue. In this way, while the data appear to indicate that size is important in developing innovation in processes, the firm must be sufficiently stable in its internal attributes and its ability to work within the international market, to fully exploit the benefits of innovative approaches.

From these results, we can advance three key propositions. First, the presence of a more experienced and forward-thinking senior manager (e.g., such as was represented in our focus group) will enable the QS firm to plan its international foray more successfully. These more experienced managers perceive challenges and opportunities differently to the less experienced colleagues, particularly relating to their ability to manage organizational goals and objectives more effectively. Second, these senior managers have a clear understanding of the importance of innovative work processes and ideas. Therefore, when a firm is of suitable size, these senior managers would be more able to implement and adapt the processes and culture to encourage further innovation, and thereby support the QS firm in being more competitive. Third, the analysis revealed two key clusters of concepts senior managers deem important: distinctive skills and capabilities that make them competitive; and, a good understanding of the international market, local requirements driving demand, sufficiently large contracts for stability, and any required certifications.

7.0 Conclusion and Recommendations

The aim of this study was to determine the factors that trigger QS firms to globalize their services, using eclectic theory assisted by the repertory grid technique. With the liberalization of QS services becoming increasingly popular globally, the findings from this study will inform QS firms as they strategize their internationalization

process. The repertory grid technique was employed to determine the core constructs. We found that competitive advantages play the most important role for a QS firm in making decisions to globalize its service, more so than firm-specific factors and location-specific factors. Although globalization is a risky activity and the characteristics of foreign markets are significant factors for an international organization, we found that the characteristics of foreign markets is not deemed as a primary concern of QS firms when deciding to venture overseas. While the reasons for the lack of importance of foreign market characteristics were not determined in the present study, it may be due to some unique characteristics of QS services and future research on this reason will be required. Experienced managers see the opportunities and risks in a different light, and appear to emphasize a strong foundation for the firm in terms of skills and capabilities, while also ensuring that they understand the market, are innovative in offerings, and have the ability to derive sufficient revenue (e.g., through the use of a large project that provides a solid basis for revenues). The development of innovative processes and offerings is also important, based on the capability within the organization. While the present research focuses only on correlations and clusters and understanding the perceptions of managers, it would be difficult to assert that these are causal relationships. Therefore, further research would need to establish the strength and causality of these relationships, with structural equation modelling being a possible method to achieve this.

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Appendix A

Grid Questionnaire

Which of the following situations will encourage you to venture overseas? Please **CIRCLE** the situations below according to the following guidance.

1= very strongly incline toward left   **4**=strongly incline toward right
2=strongly incline toward left   **5**= very strongly incline toward right
3=neutral

Situations (Left)	Ranking					Situations (Right)
Large size of firm	1	2	3	4	5	Small size of firm
Large financial capital	1	2	3	4	5	Small financial capital
Many employees	1	2	3	4	5	Less employees
Possession of unique resources	1	2	3	4	5	Lack of unique resources
Possession of distinctive skills	1	2	3	4	5	Lack of distinctive skills
Possession of specific technologies	1	2	3	4	5	Lack of specific technologies
Provision of specialized service	1	2	3	4	5	Specialized service is not important
Many employees with international experiences	1	2	3	4	5	Less employees with international experience
Wide network relationship	1	2	3	4	5	Restricted network relationship
Sufficient management experience	1	2	3	4	5	Insufficient management experience
Good domestic reputation of firm	1	2	3	4	5	Bad domestic reputation of firm
Good international reputation of firm	1	2	3	4	5	Bad international reputation of firm
Frequent international experience of firm	1	2	3	4	5	Less international experience of firm
Big client base	1	2	3	4	5	Small client base
Sufficient knowledge about foreign	1	2	3	4	5	Insufficient knowledge about foreign

market						market
Provision of good quality of service by firm	1	2	3	4	5	Provision of poor quality of service by firm
Innovative work processes and ideas by firm	1	2	3	4	5	Innovative work processes and ideas are not important
Provision of competitive fees by firm	1	2	3	4	5	Competitive fees is not important
Possession of international quality certification	1	2	3	4	5	Lack of international quality certification
Young firm age	1	2	3	4	5	Seasoned firm age
Good performance of firm in recent years	1	2	3	4	5	Poor performance of firm in recent years
Good performance of peers in domestic market	1	2	3	4	5	Poor performance of peers in domestic market
Client requirement is important	1	2	3	4	5	Client requirement is not important
Stable revenue of firm	1	2	3	4	5	Unstable revenue of firm
Strong manager's desire	1	2	3	4	5	Moderate manager's desire
Manager's perception of firm's ability to internationalize is important	1	2	3	4	5	Manager's perception of firm's ability to internationalize is not important
Strong desire to minimize risk	1	2	3	4	5	Moderate desire to minimize risk
Clear organizational goals and missions	1	2	3	4	5	Ambiguous organizational goals and missions
Higher performance is needed	1	2	3	4	5	Higher performance is not needed
New demand is needed	1	2	3	4	5	New demand is not needed
Revenue increment is needed	1	2	3	4	5	Revenue increment is not needed
Profit increment is needed	1	2	3	4	5	Profit increment is not needed
Learning new technologies is important	1	2	3	4	5	Learning new technologies is not important
Broadening firm's skill is important	1	2	3	4	5	Broadening firm's skill is not important
Broadening geographical spread of firm is important	1	2	3	4	5	Broadening geographical spread of firm is not important
Stable political environment of foreign market	1	2	3	4	5	Unstable political environment of foreign market
Same legal system of host country as home country	1	2	3	4	5	Different legal system of host country from home country
Strict host government regulation	1	2	3	4	5	Flexible host government regulation
Restricted foreign ownership by host country	1	2	3	4	5	Unrestricted foreign ownership by host country
Large size of foreign market	1	2	3	4	5	Small size of foreign market
Strict financial and fiscal control by host country	1	2	3	4	5	Loose financial and fiscal control by host country
Strict local content requirement	1	2	3	4	5	Flexible local content requirement
High foreign demand	1	2	3	4	5	Low foreign demand
High potential growth rate of foreign market	1	2	3	4	5	Low potential growth rate of foreign market
Near location	1	2	3	4	5	Distant location
High exchange rate	1	2	3	4	5	Low exchange rate
Difference in language between home and host countries	1	2	3	4	5	Similar language
Significant difference in business practice between home and host countries	1	2	3	4	5	Insignificant difference in business practice between home and host countries
Significant difference in industrial development between home and host countries	1	2	3	4	5	Insignificant difference in industrial development between home and host countries
High incentives provided by host government	1	2	3	4	5	Low incentives provided by host government
Small size of projects offered by host market	1	2	3	4	5	Large size of projects offered by host market
Intense domestic competition	1	2	3	4	5	Moderate domestic competition
Competitor's action to venture overseas is important	1	2	3	4	5	Competitor's action to venture overseas is not important
Small domestic market	1	2	3	4	5	Big domestic market
Rapid industry growth	1	2	3	4	5	Slow industry growth

Rapid economic development of home country	1	2	3	4	5	Slow economic development of home country
Encouragement and support from home government is important	1	2	3	4	5	Encouragement and support from home government is not important
Good image of home country	1	2	3	4	5	Poor image of home country
Home country as a member of international organization is important	1	2	3	4	5	Home country as a member of international organization is not important
Multicultural society of home country is important	1	2	3	4	5	Multicultural society of home country is not important