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## EXPLORING THE EFFECT OF INTERNET MARKETING ORIENTATION, LEARNING ORIENTATION AND MARKET ORIENTATION ON INNOVATIVENESS AND PERFORMANCE: SME (EXPORTERS) PERSPECTIVES

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**Abstract.** This study explores the relationship between Internet Marketing Orientation, Market Orientation, Learning Orientation, Innovation Capabilities and Performance. The study also investigates the role of Internet Marketing Orientation integration in the linkage between Market Orientation-Innovativeness and Learning Orientation-Innovativeness. From an analysis of usable survey data from 101 Bumiputera SMEs-Exporters, three dimensions of Market Orientation (Customer Focus, Inter-Functional Coordination, Information Dissemination), two dimensions of Learning Orientation (Shared Knowledge, and Vision and Commitment to Learning), one dimension of Internet Marketing Orientation and one dimension of Innovation Capabilities and Performance are extracted from the factor analysis results. The results of regression analysis show that Customer Focus, Shared Knowledge and Vision, and Internet Marketing Orientation directly influenced SMEs' Innovation Capabilities. However, Internet Marketing Orientation is more influential in developing innovation capabilities among SMEs compared to others. While, Shared Knowledge and Vision is the crucial factor in enhancing the business performance among SME (exporters). The relationship among a firm's Internet Marketing Orientation, Learning Orientation, Market Orientation and Innovation Capabilities and Performance are considered a crucial research area in developing countries. The implications for Malaysian SMEs are discussed.

**Keywords:** Learning Orientation; Market Orientation; Internet Marketing Orientation, Innovation Capabilities; Performance; Malaysia Small and Medium-sized Enterprises (SMEs)-Exporters.

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## Introduction

Malaysian SMEs are a vital component of the country's economic development even though their share of total exports is approximately 20 per cent lower than that of other countries in the region, such as the Philippines, Hong Kong and Taiwan (SMIDEC 2002). SMEs face many challenges in the current globalised environment, for example, lack of financing, low productivity, lack of managerial capabilities, and poor access to management and technology (Wang 2003). As reported in the BNM Report (2008), SMEs contribute 99.2 per cent to Gross Domestic Product (GDP) and provide employment for about 56 per cent of the total employment in Malaysia. According to the SMIDEC Report (2004), SMEs in Malaysia are still largely dependent on the domestic market and confronting the challenges of market access, advancement of technology, innovation and creativity, access to information and human development. As stated by Alam *et al.* (2011), less than thirty per cent of SMEs in Malaysia have a web presence and use information technology on a daily basis. This report indicates that there is still low IT acceptance and usage among SMEs in Malaysia.

Otero-Neira *et al.* (2009) suggest that SMEs should consider the environmental factors in which they operate and coordinate innovations planned through understanding the synergistic process between the market, product, management style and business culture in developing innovation capabilities that will yield better organisation performance. According to Calantone *et al.* (2002), there is a positive relationship between Learning Orientation, Market Orientation and Innovativeness. Learning Orientation is considered as a mechanism that directly influences a company's ability to sustain and organize its structure in order to compete in the market (Baker, Sinkula 1999). Learning Orientation involves a commitment to sharing the company's vision, open-mindedness, sharing information, commitment to learning and enhancing knowledge, which is based on market orientation and leads to product and services development, technology enhancement and new market exploration (Slater, Narver 1994a). Market Orientation is a term used by marketers as an indicator of the extent to which an organization implements its marketing concept. A market-oriented organization has superior capabilities in achieving higher profits compared to a non-market oriented organization (Agarwal *et al.* 2003). Market Orientation is important to firms because of its positive association with performance and it is seen as a form of innovative behaviour among firms (Kohli, Jaworski 1990). SMEs are now taking an increasingly active part in the global business network and participating in many interlinked supply chains. This makes information technology in marketing one of the key issues for SMEs in their daily functional operations (Sharma, Bhagwat 2006).

While Learning and Market Orientation, as well as their antecedents and consequences, have been investigated within industrialized western business environments, their applicability and generalizability in a non-western context have not been adequately researched. Thus, these constructs are valid and important to be studied in different environments and economies. Despite the attention given by academics, research interests in this particular area within the small business sector have been scanty and there are very limited studies that look into the interrelationships among Learning Orientation,

Market Orientation, Innovativeness and Performance and the indirect relationship in terms of an organization's size, market and technology dynamism in SMEs (Keskin 2006). According to Kuratko and Hodgetts (2001), and Gudmundson *et al.* (2003), small enterprises play a very significant role in experimentation and innovation, which leads to the growth of new technology adoption and productivity.

The aim of this study is to assess the patterns of Learning Orientation, Market Orientation, Internet Marketing Orientation, Innovative Capabilities and Performance within the small enterprises as well as to test and extend the model developed by Calantone *et al.* (2002). In addition, a considerable amount of studies have examined the relationship between Market Orientation and Learning Orientation with firm Innovativeness but there has been a dearth of studies in this area in Southeast Asia, especially in developing countries (Suliyanto and Rahab 2012) such as Malaysia. There remains a gap in the empirical research investigating the relations between Market Orientation, Learning Orientation, and firm Innovativeness in SMEs (Keskin 2006).

According to Chye *et al.* (2010), in Malaysia, state agencies are encouraged to initiate more SMEs, particularly entrepreneurship development programmes in cultivating the sense of innovativeness among Malaysian enterprises. The innovation adoption rather than managerial influence incubates entrepreneurial growth and it is considered as an important source of SME development and economic prosperity to Malaysia. They suggested that further studies are needed, especially to extend the innovativeness and performance studies among SMEs in order to improve organization performance. MARA (Majlis Amanah Rakyat (MARA) or the council of trust for the indigenous people in Malaysia reported that there is still a lack of Bumiputera involvement in specific commercial and industrial enterprises compared to other races. To cater to the needs of the nation's commercial and industrial sectors, their participation is crucial in order to raise the social and economic status of Malaysia. Currently, there is no study that relates the Internet Marketing Orientation on firm Innovativeness. Therefore, this study expects to add some value to marketing and management studies and provide some suggestions for SMEs.

The objectives of this paper are to investigate the relationship between Market Orientation, Learning Orientation, Internet Marketing Orientation, Innovation Capabilities and Performance in the case of Malaysian Bumiputera small medium enterprises. The study also explores the most important factors of Learning Orientation, Market Orientation and Internet Marketing Orientation contributing to firm Innovativeness. The unique contribution of this study initiative is that it examines the importance of a firm's Market Orientation, Learning Orientation and Internet Marketing Orientation in the following sub-sectors of Bumiputera SMEs-Exporters – manufacturing, trading and services in terms of Market Orientation, Learning Orientation and Internet Marketing Orientation and the effect on a firm's Innovation Capabilities and Performance.

This study seeks to go beyond the assessment of the existing direction of the relationship by investigating the following research questions:

1. Whether or not the proposed hypotheses regarding Internet Marketing Orientation, Market Orientation and Learning Orientation influence firm's Innovation Capabili-

- ties and Performance among Bumiputera SMEs-Exporters and which factor has the most influential role on the firm's Innovation Capabilities and performance?
2. Does Internet Marketing Orientation strengthen the relationship between Market Orientation, Learning Orientation and Firm Innovation Capabilities?
  3. Does Innovation moderate the relationship between its antecedents and business Performance?

## **1. Literature review**

### **1.1. Market orientation**

Market Orientation is a business philosophy, through which the company will identify and satisfy customer needs and integrate the marketing concept throughout the organization. According to Narver and Slater (1990), Market Orientation refers to the firm's commitment to the creation and delivery of superior value to customers and the coordination of activities and processes to achieve this purpose. Gray *et al.* (1998) explain that market oriented organization behaviour will determine customers' needs, analysing competitors action and shared information about the market throughout the organization. Kohli and Jaworski (1990) defined market orientation in terms of three specific information-processing activities of firms: organization-wide generation of information, the dissemination of this intelligence across the organization and the coordinated response and future customer needs and preferences. They explained that the concept relies on the role of information that can be maximized when it is shared among virtually all functions in an organization in a coordinated manner.

To become a market-oriented company, a firm needs to conduct activities to obtain information about customers, competitors and markets as well as examine the information from a business perspective. A firm also needs to determine how to deliver superior customer value and implement actions to provide value to customers (Cravens *et al.* 2002). In order to do so, the communication system plays a very important role. Improved communications and information implies a greater variety and volume of interaction between the firm and its customers and across the firm's boundaries, which, consequently, assists the creation of successful relationship marketing. It is logical to expect that market orientation activities will have an impact on firms' innovativeness.

Since the marketing concept is the cornerstone of marketing discipline and managerial practice, there has been considerable interest in recent years among marketing scholars in the construct of market orientation, which focused on assessing customer needs, improving customer satisfaction, and creating customer value. The link between market orientation and company performance is widely highlighted and it is contended that market orientation is important to firms because of its positive association with performance. Some studies found that market orientation is positively associated with business performance (Pelham 1997; Pelham, Wilson 1996; Pitt *et al.* 1996; Pulendran *et al.* 2000; Ruekert 1992; Kara *et al.* 2005; Kirca *et al.* 2005; Sin *et al.* 2005; Kaynak, Kara 2004; Verhees, Meulenbergh 2004; Langerak 2003; Shergill, Nargundkar 2005; Anwar 2008; Greenley 1995; Kohli, Jaworski 1990; Narver, Slater 1990). Firms with a

higher degree of market orientation engender a firm wide culture, processes, behaviours and skills to respond to customer needs and satisfaction levels and monitor competitor capabilities and actions (Prasad, Ramamurthy, Naidu 2001).

Past researchers have also focused on the construct development of Market Orientation, antecedents to market orientation, and the impact of market orientation on firms' performance. (Hooley, Cox 2000; Jaworski, Kohli 1993; Narver, Slater 1990; Pelham 1997). Except for the study by Prasad, Ramamurthy and Naidu (2000), little empirical research has focused on how the role of the Internet relates to Market Orientation. The conclusion derived from a study by Gray *et al.* (1998) on New Zealand firms, shows that more market oriented firms are more likely to have written codes of ethics, be more efficient and effective in new product development programmes and make greater use of information technology such as the Internet. Baker and Sinkula (1999) and Wei, Wang (2011) stressed that Market Orientation covers the degree that firms acquire, distribute and use the information from the marketplace and that it is considered as input for the innovation process. Even though Market Orientation is considered the antecedent of innovation (Hurley, Hult 1998; Sulianto and Rahab 2012; Idrissa *et al.* 2012, many studies highlight that the effect of Market Orientation on Innovativeness among organisations is mediated by learning-orientation (such as Liu *et al.* 2002).

In this study, firms with a high Market Orientation are hypothesized to have Innovation Capabilities that affect the Performance.

**H1:** Firms with greater Market Orientation will positively influence the firm's Innovation Capabilities and influence the firm's Performance.

## **1.2. Learning orientation**

Senge (1990) defines organizational learning as the ability of an organization to expand its capacity continuously for the future. This relates to the employees or people in the organization that continually expand their capacity through nurturing learning, thinking and openness in order to achieve the desired results. While, Lee and Tsai (2005: 328) suggest that the meaning of organizational learning is "the paradigm of organizational learning needs to shift from single-loop or double-loop learning to triple-loop learning or unlearning, from knowledge creation through incremental changes to knowledge creation through radical changes, from system thinking to creative thinking and from continuous improvement to creative and innovative improvement".

Organizations that are committed to invest in learning are associated with the development of long-term strategic orientation, which is important for survival in the market. These organizations encourage their employees to pursue knowledge that will yield long-term gain and motivate them to learn (Calantone *et al.* 2002). According to Keeble and Wilkinson (1999), Learning Orientation depends on combining diverse knowledge that becomes incorporated into the organization's routines, which is further enhanced by shared knowledge among all the parties involved in the organization. When an organization values and promotes learning, this will further enhance knowledge acquisition in the surroundings (Sinkula *et al.* 1997; Slater, Narver 1994). Sinkula *et al.* (1997) added

that organizations with the value of willingness or 'open-mindedness' will critically evaluate and learn ways to change and accept better ideas as well as the ability to adapt to the rapid technology change and turbulent market (Calantone *et al.* 2002). In addition, Sinkula *et al.* (1997) explained that the important base for proactive learning in the organization is a shared vision among its members and a common direction allows for the easier implementation of creative ideas and in overcoming problems that arise in an organisation (Calantone *et al.* 2002; Hurley, Hult 1998). Moreover, an organization with shared vision will strengthen its position and achieve competency.

According to Hurley and Hult (1998), a Learning Orientation will establish a culture to innovate in the organization. Lee and Tsai (2005) stressed that a learning orientation has a positive significant impact on innovativeness. The higher levels of commitment to learning will lead to small business enterprises being more innovative (Tajeddini, Mueller 2009). He added that a learning approach with managerial support towards organizational creativity is an important factor for a creative quality process that provides value innovation in the organization. Drucker (1993) argued that knowledge is considered a crucial resource and that production factors are considered second resources. Thus, knowledge is the key to business performance and success. Knowledge should be shared and communicated well throughout the organization in order to improve business (Beeby, Booth 2000; Szulanski 2000; Dodgson 1993).

Therefore, it is hypothesized that:

**H2a:** A Learning Orientation will positively lead to a firm's Innovative Capabilities and influence the firm's Performance.

### **1.3. Internet marketing orientation**

Today, in the global business environment, there is intense competition among firms in the same industry. In order to survive in the current competitive market, a firm needs to be innovative (Deshpande, Farley 1999). An increasing number of firms have started to form a relationship with their suppliers, partners, agents and customers that is supported by electronic communication. How organizations enhance their innovativeness is a crucial factor and needs to be studied by academicians and practitioners. Shared information is one of the key tenets of marketing and modern business partnerships. Sharing information represents the most significant change implied by new marketing and it is a very important factor in the sales process. Therefore, improvement in the flow of information within the organization and across the organization's boundaries will assist in the creation of successful marketing. It is difficult to attain and realize the benefits of marketing without the application of modern computing and communication technology.

The current technology acts as a tool that makes it possible for organisations to enhance their capability and to forge networks of relationships across the globe. Thus, for a firm to be able to remain at the forefront, SMEs should provide a differentiation feature from its competitors. In the global marketplace, network relationships and effective maintenance have become vital for the survival of future firms. The growing

importance of information technology in manufacturing and service enterprises in the developed and developing countries, leads to fundamental issues, such as what are the major impacts of the Internet on firms in differentiating them from larger and organized companies, developing and maintaining customer relationship, how it supports a marketing mix, etc. (Sharma, Bhagwat 2006). The challenge for firms now is to create the right ICT environment by exploiting new media and technology in enhancing the growth of companies, developing a customer relationship that requires maintaining a competitive advantage in a digital economy. SME managers should use various techniques of Internet marketing to get business gains and build an IT based culture (Seyal *et al.* 2000; Sparkes, Thomas 2006).

Information technology plays a vital role in the sustained growth of business organizations and it is defined as technologies dedicated to information storage, processing and communication (Ang, Koh 1997). The key concept of the Internet is connectivity that interlinks computers throughout the world operating on a standard protocol. Franklin (1997) discussed that to keep up with the competition, companies need to speed up communications between trading partners, establish better relationships with customers, suppliers and partners, and reduce expenditure. In the technology environment, communication is critical, and accuracy and timeliness of information and speed of response are important to a successful relationship. The Internet-extranet facilitate and support those elements by allowing partners to communicate, exchange information, purchase goods or services, conduct information searches, manage and monitor their business details, subscribe to services and perform other activities.

Thus, among the principal gains that firms can anticipate from the Internet are shared information and data, reductions in operating costs, savings in time and resources, improvements in customer services and a general improvement in business-to-business relationships (Vlosky *et al.* 2000). The use of IT in the internal context can make a contribution to innovation (Drayse 2011). The Internet's competitive value for a particular organization will reflect the interaction of customer connectivity and external competitive forces with internal network access and core applications. It enables customers to engage in a higher degree of self-service. The Internet can be a source of information and feedback in building a strong customer relationship. Internet tools can also assist companies in gathering essential information. Marketers recognize that the more information they can gather on customers through the Internet helps to customize the offerings extended to their customers and prospects. Prasad *et al.* (2001) and Trainor *et al.* (2011) indicated that the Internet-marketing integration influence the performance and marketing competency of a company. The Internet and other technology solutions could help create products and services that meet the diverse wants of a widely scattered customer base.

Therefore, it can be expected that greater Internet Marketing Orientation in a firm would influence the firm's Innovation Capabilities and Performance.

**H3:** Greater Internet Marketing Orientation will positively lead to a firm's Innovation Capabilities and influence the firm's Performance.

**H4:** Greater Internet Marketing Orientation will strengthen the relationship between Market Orientation, Learning Orientation and Innovation Capabilities.

#### 1.4. Innovation capabilities

The ability to develop new ideas, a new way of thinking, and to implement and utilise these abilities is known as innovativeness, particularly when the organisation manages to introduce new products to the market or opens up new markets through combining strategic orientation (Wang, Ahmed 2002). Hult *et al.* (2002) indicated that innovativeness is a key component in the success of firms and it relates to the openness to new ideas and a willingness to adopt, imitate and implement new technologies and ideas as well as commercialise them in order to offer better and distinct products and services to their customers than their competitors (Tajeddini *et al.* 2006). According to Hult *et al.* (1997), the concept of innovativeness is based on two perspectives. The first perspective is based on the rate of adoption of innovation and the second perspective relates to the organisation's willingness to change. Hult *et al.* (2004) added that although there are various studies (such as Deshpande, Farley 1999, 2002, 2004; Otero-Neira *et al.* 2009) on innovativeness as dependent variables that significantly influence the firm performance, there are still limited studies on the antecedents of innovativeness (Hult *et al.* 2004; Tajeddin *et al.* 2006; Keskin 2006).

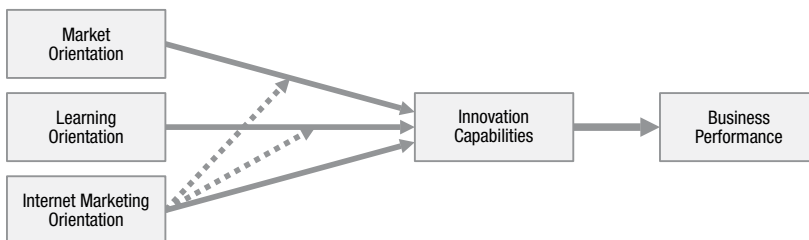
## 2. Research model and hypotheses

Figure 1 shows the research model of this study. The framework assumes that market orientation, learning orientation and Internet marketing has a direct link with firm innovativeness.

The study suggests that the following hypotheses in the context of SMEs are based on the factor analysis results:

**H1:** Firms with greater a) Customer Focus, b) Inter-functional Coordination, and c) Information Dissemination will positively influence the firm's i) Innovation Capabilities and ii) Performance.

**H2:** Firms with greater a) Shared Knowledge and Vision, and b) Commitment to Learning will positively influence the firm's i) Innovation Capabilities and ii) Performance.



**Fig. 1.** The proposed conceptual framework



- H3:** Firms with greater Internet Marketing Usage will positively influence the firm's i) Innovation Capabilities and ii) Performance.
- H4:** Greater usage of Internet Marketing Orientation will strengthen the relationship between a) Customer Focus, b) Inter-functional Coordination, c) Information Dissemination, d) Shared Knowledge and Vision, e) Commitment to Learning and Innovation Capabilities.

### **3. Methodology**

The database for this research was obtained from the Bumiputera SMEs manufacturing and services firms in Malaysia. A total of 187 companies were identified for the actual survey and selected from the listing of SME MARA Directory of Bumiputera exporters. Since the main objective of this study is to clarify the domain constructs, the unit of analysis is conducted at the organizational level of analysis. A survey was employed as the main method of data collection using a structured form of questionnaire and conducted based on a cross-sectional design. Philips (1981) suggested consulting company personnel for the completion of the questionnaires to avoid some of the obstacles or problems that arise from data collection. Therefore, the top management, the senior executives, or owner managers' perceptions of the study variables were measured. We made an effort to contact the most senior managers in the organization presuming that they possess substantial knowledge of the firms' operations and marketing strategies. The findings from this research can be used as input into managerial decision-making. In addition, these people are regarded as the main source of information because they are directly responsible for planning and management of the company.

For the purpose of the study, personal interviews and telephone interviewing are preferred using structured questionnaires, due to their ability to control item definitions. This control is important because of the novelty of the research subject. As suggested by Malhorta and Birks (2003), interviews are the best way to approach business research with managers and top management who possess the most comprehensive knowledge of the organization's strategy and performance, especially in technology adoption (Cottam *et al.* 2001). The interviewers can clarify doubts and it can offer a rapid way to obtain correct information. When the target executives were absent or unavailable for the interviews, the research assistants had to ask for an appointment or about the availability of the person next in seniority.

The data collection instrument is a structured questionnaire, which was first developed and pre-tested among a small group of respondents – academics who have significant expertise in entrepreneurship, marketing and IT. The questionnaire contains two parts: Part I deals with the firm's perception of Market Orientation, Internet Marketing Orientation, Learning Orientation, Innovation Capabilities and Performance. The Market Orientation and Performance measurement is adopted from Narver and Slater's (1990) scale, which has three components: customer orientation, competitor orientation, and inter-functional coordination. Learning Orientation and Innovation Capabilities scales were adapted from Calantone *et al.* (2002). The variable of Internet Marketing Orienta-

tion (Internet usage in marketing activities) was measured using statements borrowed from Prasad, Ramamurthy and Naidu (2001), and covers a broad spectrum of applications, ranging from external focus and internal focus in marketing activities.

The business performance is measured using a subjective approach that is commonly used in research when it is impossible to obtain data (e.g., Greenley 1995; Slater, Narver 1994a, 1994b). This approach consisted of asking respondents for their assessment of their company's performance competency. The subjective measures are closely correlated with the objective measures (Dess, Robinson 1984; Robinson, Pearce 1988; Venkatraman, Ramanujam 1986) and the items are borrowed from Prasad *et al.* (2001), Jaworski and Kohli (1993), and Slater and Narver (1994a, 1994b). Most of the above items were adapted and modified to make items suitable for the study. All the items are measured using six-point Likert scale items with anchor points 1 = strongly disagree and 6 = strongly agree. The six-point scale is used to anchor each statement. It is chosen in order to avoid the clustering of responses at the neutral point and remaining non-committal (Quee 2002). Part II obtains information on the firms' characteristics in terms of the number of employees, age, type of customer, ownership, market area, decision making orientation, i.e., collate and store information, active business/marketing plan and formal information system.

In order to ascertain whether the measures retained construct validity (i.e., measure what they are supposed to) exploratory factor analysis using principal components and varimax rotation technique was conducted to examine the underlying dimension of Market Orientation, Learning Orientation, Internet Marketing Orientation, Innovation Capabilities and Performance. In determining the factor/s, common decision rules employed in empirical research were applied: (i) minimum eigenvalue of 1; (ii) KMO measure of sampling adequacy greater than 0.5 and the Bartlett's test of sphericity should be significant, which indicates that the items for consumption factors are appropriate for factor analysis; (iii) minimum factor loading of 0.5 for each indicator variable. A cut-off value of 0.5 and higher is assigned such that only items with loadings of at least 0.50 are retained in order to obtain a power level at 80% at 0.05 significant levels (Hair *et al.* 1998). Items with loadings exceeding 0.50 on two or more dimensions are removed and have to be retested (King, Teo 1996); (iv) simplicity of factor structure; and (v) exclusion of single item factor structure. Reliability analysis was carried out to eliminate items that were not strongly related to other items in the construct and construct reliability was assessed using Cronbach's alpha. As suggested by Nunnally (1978), a reliability of a construct between 0.6 and 0.8 is acceptable.

Multiple regression was used to test the possible relationship of the constructs in the proposed model. The multiple regression technique was chosen for the analysis of the data because this technique simultaneously develops a mathematical relationship between two or more independent variables and the interval scaled dependent variable (Malhorta 2004). Before conducting multiple regression analysis, the data was examined to ensure that the four basic assumptions of multiple regression were adhered to as suggested by Hair *et al.* (1998). The measure of the effect of the independent variable is a regression coefficient. The conceptual model in this study contains moderating and

mediating variables. Testing for both variables in this study followed Baron and Kenny's (1986) approach, where the moderator and independent variables are measured on a continuous scale. They believed that the moderator could alter the independent-dependent variable relation. The measure of the effect of the independent variable is a regression coefficient. Hierarchical multiple regression is the preferred statistical method for examining moderator's effects when either the predictor or the moderator variable, or both, are measured on a continuous scale. Testing the linkages of the mediator involves four steps. The first step is to show that there is a significant relationship between the predictor and the outcome/criterion. The second step is to identify that the predictor is related to the mediator. The third step is to show that the mediator is related to the outcome variable. The final step is to show that the strength of the relationship between the predictor and the outcome is significantly reduced when the mediator is added to the model.

## **4. Findings**

### **4.1. Descriptive statistic**

#### **SME (exporters) profile**

The 101 participating SME (exporters) represent four different types of products and services with the majority being represented by finished products and followed by consumer goods. Consumers are their main customer group and they market their products in Europe (38.9%), Asia other than China (21.9%), China (12%), USA and Canada (5.9%) and Australasia (3%). 39.6% of the firms are between 5–9 years followed by 25.9% age less than 5 years and 24.8% between 10–14 years. About 30.7% have 5–10 employees, 11–24 (22.8%) and less than 5 (16.8%). Even though 70% of them have a marketing unit but about 39.6% of their staff have 0–20% marketing experience and only 24.8% of their employees have 21–40% experience in marketing. In all, 90% of them indicate that they collate and store customer information and have active business or marketing plan. Only half (50.1%) of them have formal information system.

#### **Factor analysis**

The factor analysis results on the Market Orientation construct resulted in three factors explaining 60.9% of the overall variance. One of the factors was excluded for further analysis because it only has a single item. After deleting it, a clean factor structure with three factors emerged following six iterations. The Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy is 0.837 and the Bartlett's test of sphericity is significant, which indicates that the items for consumption factor are appropriate for factor analysis. The factor loadings for these items are between 0.53 and 0.83. The three factors extracted from factor analysis are labelled as **Customer Focus** (21.9% of the total variance), **Inter-Functional Coordination** (20.9% of the total variance) and **Information Dissemination** (18.0% of the total variance).

The factor analysis results on Learning Orientation, produced two distinct factors explaining 56.7% of the overall variance. The Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy is 0.828 and the Bartlett's test of sphericity is significant, indicating

that the items for organizational structure are appropriate for factor analysis. The factor loadings for these items are between 0.59 and 0.84. The two factors extracted from factor analysis are labelled as **Shared Knowledge & Vision** (30.6% of the total variance) and **Commitment to Learning** (26.1% of the total variance).

Factor analysis performed on Innovation Capabilities, Internet Marketing Orientation and Performance constructs produced a clean factor structure with only one factor emerging on each construct. For Innovation Capabilities, the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy is 0.81 and the Bartlett's test of sphericity is significant, which indicates that the items for **Innovation Capabilities** factor are appropriate. The factor explained 66.3% of the total variance. Its loadings for these items are between 0.70 and 0.86. The Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy for **Internet Marketing Orientation** is 0.92 with significant Bartlett's test of sphericity. The factor explained 68.2% of the total variance. Its loadings for these items are between 0.78 and 0.89. Lastly, the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy for **Performance** is 0.89 with significant Bartlett's test of sphericity. The factor explained 74.8% of the total variance. Its factor loadings are between 0.82 and 0.90. Later, we conducted the reliability test for the above variables, Cronbach's coefficient alpha was utilized in this study due to its popularity in marketing studies. The reliability test for all the dimensions recorded excellent reliability with a coefficient alpha of above 0.84 to 0.95, which is the cut-off point of reliability recommended for theory testing by Nunnally (1978).

## **4.2. Regression analysis**

The multiple regression analysis (stepwise method) was performed to empirically test the hypotheses postulated in the study. This enables us to better assess the contribution of independent variables to innovativeness and performance. Additional procedures are employed to detect outliers and not to violate the assumptions of the multiple regressions.

As stated earlier, Hypothesis H1ai, H1bi, H1ci, H2ai, H2bi and H3i propose that Market Orientation, Learning Orientation and Internet Marketing Orientation have a direct influence on Innovation Capabilities. Table 1 shows the multiple regressions and the overall regression equation is significant at the 0.01 level. Only H1ai, H2ai and H3i are supported. **Internet Marketing Orientation** is more influential in explaining Innovation Capabilities with the beta value higher than Customer Focus (Market Orientation) and Shared Knowledge & Vision (Learning Orientation).

Table 2 shows the hierarchical regression result, the Internet Marketing Usage as a moderator in the relationship between Customer Focus (Market Orientation), Shared Knowledge & Vision (Learning Orientation) and Innovation Capabilities. The hierarchical regression tested hypotheses 4ai, 4bi, 4ci, 4di and 4ei. The hierarchical regression shows that Internet Marketing Orientation does not moderate the relationship between the Market Orientation and Learning Orientation variables and Innovation Capabilities. Thus, all the hypotheses are rejected. Instead, Internet Marketing Orientation has a direct relationship to a firm's Innovativeness.

**Table 1.** Regression analysis – the influence of market orientation, learning orientation and Internet marketing orientation on innovation capabilities

Dependent Variable	Independent Variables	Unstd. Beta	Std. Beta	t	Sig.	VIF
Innovativeness	Constant	4.227				
	Internet Marketing Orientation	0.108	0.342	3.626	0.000	1.445
	Customer Focus	0.230	0.236	2.756	0.007	1.187
	Shared Knowledge & Vision	0.205	0.235	2.357	0.020	1.607
R = 0.633, R Square = 0.401, F = 21.678, Sig. F = 0.000						

**Table 2.** Regression analysis – the moderating effect of Internet marketing orientation on the relationship between customer focus, shared knowledge & vision and innovation capabilities

Independent Variables	Std. Beta 1	Std. Beta 2	Std Beta 3
Customer Focus	0.249	0.236	0.674*
Shared Knowledge & Vision	0.419	0.235	0.131
Internet Marketing Usage /IMO		0.342	0.977
Customer Focus x IMO			1.029
Shared Knowledge & Vision x IMO			0.217
R = 0.644, R Square = 0.415, Adjusted R Square = 0.377, F = 11.101, Sig. F = 0.000			

**Note:** \*p<0.05.

Hypothesis H1a<sub>ii</sub>, H1b<sub>ii</sub>, H1c<sub>ii</sub>, H2a<sub>ii</sub>, H2b<sub>ii</sub> and H3<sub>ii</sub> propose that Customer Focus (Market Orientation), Shared Knowledge & Vision (Learning Orientation) and Internet Marketing Orientation have a direct influence on Performance. However, Table 3 shows that only H2a<sub>ii</sub> is supported. Thus, Shared Knowledge & Vision (Learning Orientation) is a crucial factor that will influence the business Performance among Bumiputra SMEs (exporters).

In order to test the mediation effect of the intervening variables, Frazier, Barron and Tix (2004) and Baron and Kenny (1986) suggest that a series of regression models should be performed and estimated. The results from the first equation and second equation indicate that only the **Shared Knowledge & Vision** variable fulfilled the first and second requirement for mediation.

**Table 3.** Regression analysis – the influence of customer focus (market orientation), shared knowledge & vision (learning orientation) and Internet marketing orientation on performance

Dependent Variable	Independent Variables	Unstd. Beta	Std. Beta	t	Sig.	VIF
Performance	Constant	10.179				
	Shared Knowledge & Vision	0.559	0.412	4.503	0.000	1.000
R = 0.412, R Square = 0.170, F = 20.275, Sig. F = 0.000						

**Table 4.** Regression analysis – the influence of innovation capabilities on performance

Dependent Variable	Independent Variables	Unstd. Beta	Std. Beta	t	Sig.	VIF
Performance	Constant	7.453				
	Innovation Capabilities	0.937	0.603	7.522	0.000	1.000

R = 0.603, R Square = 0.0364, F = 56.581, Sig. F = 0.000

**Table 5.** Summary of mediating effects of innovativeness

Significant Variable	Beta Coefficient in Regression II ((Performance) DV on IV)	Beta Coefficient in Regression IV ((Performance) DV on IV & MV)	Results
Shared Knowledge & Vision	0.412	0.532 (p = 0.00)	No Mediation

To determine mediation, Baron and Kenny (1986) further suggest that the effect of independent variables in the last equation must be less than the effect in the second equation. The findings show that Innovation Capabilities do not mediate the relationship between Shared Knowledge & Vision and Performance. Thus, no mediation confirms that the effect is not significant, as illustrated in Table 5.

## 5. Discussions

Innovation, involving creating new products/services in order to meet current and new market demand, is important to the development of SMEs. Thus, marketing activities through IT, learning through exchange of ideas and experiences as well as knowledge are crucial to improve organizational productivity, to apply new ways/technologies/strategies in expanding the firm’s profitability through the usage of new technology channelled to find market opportunities and incorporating better management systems that can improve operational efficiency.

SMEs should focus on how technologies and know how affect cooperative information sharing. This would provide SMEs with the opportunity to benefit from information resources and provide a ready network of potential business partners. The study’s findings are related to a previous study by Bhatt and Grover (2005), and Santhanam and Hortono (2003). They stressed the role of IT in enhancing organizational performance and provided a basis of gaining competitive advantage. Alam *et al.* (2011) indicated that some of the barriers in the adoption of information technology among SMEs in Malaysia are lack of trust and support in information technology development, high set up cost, inadequate legal protection for B2B and supply chain partners as well as no common technology standard. They added that there is a need for training and education to be provided on both technical and management skills in the current electronic commerce environment.

As highlighted earlier, Internet-marketing orientation is crucial for SMEs to be innovative in the market. Thus, the government and related bodies need to support by provid-

ing loans and subsidies (Alam *et al.* 2011) to encourage more SMEs to adopt information technology in their marketing activities and reap the associated benefits. Thus, it is suggested that the managers of SMEs should acquire a basic understanding of technology and be able to manage it in their business. This goes hand in hand with other skills in marketing and human relations. In the context of the supply chain, larger firms should assist SMEs in the form of technology management and training. Government related agencies, such as MARA, must ensure training and informative programmes that are capable of promoting and supporting efforts relating to the new technology channel and SME managers should induce the changes in their own organizational environment.

Among the biggest assets of any company are its customers, and it is crucial for SMEs to focus on their customers and ensure that they are well taken care of. By focusing on customers, SMEs can build a positive reputation, gain referrals and new business ventures. Thus, innovative SMEs can attract new customers and add more business to a business. Moreover, through customer focus, SMEs can develop an effective long-term relationship and manage its people through information instead of going through people to get the information needed. As suggested by Wong (2005) and Zahra (1991), the amount and quality of communication of knowledge is significantly important in any organization. The flow of information is critical and communication qualities as well as quantity are essential for successful small and medium enterprises initiative to innovation. Thus, in the context of sharing knowledge and customer focus, SMEs should continually monitor the industry trends and changes as well as identify environmental opportunities and threats. The understanding of customer needs and constant monitoring of the firm's strategies or decisions are important for SMEs to inculcate enterprises innovative activities. Therefore, gathering feedback from customers as well as from employees is essential for SMEs to be innovative and successful, as highlighted in a previous study done by Wei *et al.* (2006), Wei and Wang (2011). Customer focus and shared knowledge among members of SMEs are also important factors in enhancing innovativeness among them. Opportunities should be provided with continuous involvement among members in SME organizations to allow development of innovation ability among SMEs (Street, Cameron 2007).

In practice, SMEs can have beneficial effects on the firm's innovativeness and growth. Firms that apply Internet marketing and nurture knowledge sharing and shared vision as well as customer focus conducive to intra-preneurial activities, which are more likely to have better innovative capabilities, will, indirectly, lead to higher growth, profitability and performance. Open and quality communication, existence of formal controls, intensive environmental scanning, management and organizational support and values will all help small medium organizations become more intra-preneurial. Intra-preneurial enterprises are those that engage in new business venturing are innovative, continually renew themselves and are proactive. Innovative capabilities can be particularly critical for the survival and development of SMEs, especially in Malaysia and other developing economies. Sharing knowledge among the technical, marketing and organizational members will enable effective communication with one another and coordination of their joint activities. In turn, learning serves to incorporate new information into the knowledge base by which the competences of SMEs are improved and new ones will be developed.

The findings of the study demonstrate a positive relationship between Shared Knowledge & Vision (Learning Orientation) and Performance, which is consistent with previous literature. Thus, Learning Orientation is the key to business performance and success. In order for Bumiputera SMEs to remain at the forefront and maintain a competitive advantage, SMEs must have good capacity to retain, develop, organize, transfer and utilize their resources and knowledge. As indicated by Szulanski (2000), Beeby and Booth (2000), knowledge among employees should be successfully communicated, disseminated and utilized effectively in order to improve business performance. This study's findings also support the study by Strandskov (2006) whereby the author indicates that firms with specific based theory and relationship specific factors from the business network are important factors in enhancing business performance. This is related to shared knowledge and vision, that is, a more resource based organizational culture and the combination of human resources, capital and functional experiences will enhance the performance of any organization.

Shared knowledge and vision in enterprises will lead them to accumulate a combination of resources and skills that allow them to achieve competency and better performance. Moreover, shared knowledge and vision consists of effort in sharing lessons and experience, continually judging the quality of decisions and activities, and employees committed to organizational goals. These items are organizational culture dimensions that will influence the enterprise performance. Ginevicius and Vaitkunaite (2006) further explain that strategic direction and coordination as well as agreement are important factors that are positively related to organizational performance. Thus, managers in SMEs that seek to improve their business performance need to gain organizational commitment to learning culture among their staff that share the right vision and purpose across the organization.

The development of the competency among SMEs is dependent on learning, which requires diverse knowledge and integrates the enterprise with effective information internally and externally, through understanding their target customers and encouraging the exchange of information between enterprises and customers and workers. Having knowledge and the ability to understand and predict customers' needs, by strengthening the learning environment and accepting new ideas in enterprise will definitely benefit from having greater capacity to understand the market and achieving the company's goal. Calantone *et al.* (2002) stressed that shared vision leads to an increase in the quality of learning and that workers will be able to perform, as well as develop strategies and ideas. A culture of trust and sharing knowledge enables SMEs to achieve breakthrough levels of business performance. This performance achievement is realized through a shared knowledge and vision of success. All levels of enterprise should be trained to be skilled in collaborating in a network-centric environment.

## Conclusions

This study contributes to managerial implications for managers of SMEs and encourages them to invest in terms of time, money and commitment in order to enhance innovativeness. Adoption of new technologies is important for SMEs' to be competitive and survive in the market. Technology adoption in SMEs involves familiarisation and managers should promote the usage accordingly. Higher usage of information technology



in marketing activities will lead to the better ability of SMEs to achieve innovativeness. Evidence from the study suggests that small medium organizations should develop IT support in order to further benefit an innovative company. SME managers must take notice of the factors that influence innovation in order to optimize the innovation process.

The empirical evidence from the study confirms the general belief as stated by Drucker (1993) that Learning Orientation (Shared Knowledge and Vision) is of prime importance to SMEs' Performance. Since, Internet Marketing Orientation is important for SMEs to acquire knowledge and information to be innovative, there is greater potential for SMEs to use electronic networks. They can leverage knowledge from electronic networks from other organisations, customers and workers in order to improve their business performance. The effectiveness of Learning Orientation among SMEs depends on the quality of shared lessons, social interaction, norms and standard lines of communication that are based on trust and willingness to cooperate among members of the enterprise. This reveals that the existence of a positive relationship between a firm's openness to the external environment, such as technological forces, has greater innovative capabilities. Innovative capabilities are crucial components of a firm's strategy because it will assist in seeking new business opportunities.

The encouragement to be innovative in achieving better performance among SMEs requires an organization's commitment to continuous learning about customers, adapting and utilizing current technology and developing a learning oriented organization with the current possibilities. The study's findings stress that the Internet marketing orientation is the most influential factor for SME's innovation in Malaysia. It is considered as a basic tool to communicate with suppliers and business partners in the current information era. IT integration in marketing will enable SMEs to enhance their innovation capabilities and improved their performance through positive attitude as well as initiatives to continuous learning about consumers, technology, competitors and their supply chain. The Malaysian Government needs to offer programs that can strengthen the SMEs' present in the international market. They need to promote initiatives for innovations that can add value which can assist them especially exporters to achieve competitive advantage.

Like any other study, our study has several limitations; first, the study is based on cross-sectional data. Second, it should be noted that our study scope is limited to the Malaysian Bumiputera SME-Exporters. The performance implications of the study may be different in other larger companies or countries. Moreover, the sample is considered small due to a low response rate in our study, thus, care should be exercised in generalizing the results. These will limit its generalization and it may not be applicable to other countries. Thus, recognizing this limitation, an extension of this research to an international context and to other larger or micro organisations is encouraged.

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