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To cite this article: Rajan Natarajan, Nelson Oly Ndubisi & Obaid Al-Shuridah (2020) Antecedents to high (low) performances by international technology ventures, *Journal of Global Scholars of Marketing Science*, 30:4, 423-436, DOI: [10.1080/21639159.2020.1775493](https://doi.org/10.1080/21639159.2020.1775493)

To link to this article: <https://doi.org/10.1080/21639159.2020.1775493>



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Published online: 15 Sep 2020.



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Antecedents to high (low) performances by international technology ventures

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ABSTRACT

Given that innovation can be critical to the survival of international technology ventures (ITVs), this study investigates the relationships among organizational learning, international marketing dynamism (IMD), and innovation performance in ITVs based in Dubai (UAE). Based on a review of extant literature, a questionnaire was developed and administered among these ITVs. The resulting data were analyzed using SmartPLS version 3. Of the nine hypothesized direct and indirect relationships, seven receive support. The results indicate that three of four hypothesized relationships between organizational learning dimensions and IMD were supported. The relationship between IMD and new product performance (innovation performance) was supported. Moreover, IMD mediates the relationship between three of four organizational learning dimensions and innovation performance. The findings and implications of this research are discussed, and conclusions are stated.

ARTICLE HISTORY

Received 14 April 2020

Revised 5 May 2020

Accepted 26 May 2020

KEYWORDS

International marketing dynamism; innovation performance; international technology ventures; organizational learning; open systems

关键词


国际营销动态; 创新绩效; 国际技术投资; 组织学习; 开放系统

国际科技企业高(低)绩效的先决条件

鉴于创新对国际科技企业 (ITVs) 的生存至关重要, 本研究调查了迪拜(UAE)ITVs的组织学习, 国际营销动态 (IMD) 和创新绩效之间的关系。在对现有文献进行回顾的基础上, 编制了一份调查问卷, 并对这些ITVs进行了调查。结果数据使用SmartPLS版本3进行分析。在九个假设的直接和间接关系中, 七个得到支持。结果表明, 组织学习维度与IMD之间的四种假设关系中有三种得到了支持。支持IMD与新产品绩效(创新绩效)之间的关系。此外, IMD还介导了四个组织学习维度中的三个维度与创新绩效之间的关系。讨论了本研究的发现和意义, 并给出了结论。

Introduction

“International technology ventures (ITVs)” are technology-based firms (McCann, 1991) with global or transnational activities including cross-border transactions of goods and services between two or more countries. ITVs have taken a quantum leap in the internet era, especially starting with the latter half of the 1990s. While some of these ventures are B2C, many of them are well ensconced in the B2B context. Regardless of this

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categorization, the survival of ITVs, in the short as well as the long run, can hinge critically on their *innovation performance*. Thus, studying ITVs from the vantage point of this aspect and how it relates to the two other key factors at play in ITVs, viz. *organizational learning* and *international marketing dynamism* (IMD), is important. Further, since ITVs, by virtue of their collaborative nature, tend to be open systems as opposed to traditional closed systems, these key factors must be viewed as operating under such an open environment.

The global interest in the emerging markets of developing economies has been steadily increasing in the 21st millennium. While the primary focus has been on the so-called BRIC countries (Brazil, Russia, India, and China), the rapidity of economic development in relatively smaller areas or countries (e.g., Singapore, the UAE) cannot be overlooked. The emerging prominence of Dubai (UAE) in innovation-interest and futuristic development is particularly notable. Dubai based ITVs come from a broad spectrum of industries, namely construction software, banking software, data analytics, payment technology, internet protocol based networking, and other information and communication technologies (including design, manufacture, and sale) for healthcare, education, and public sectors.

Theoretical background

This section elaborates on three key antecedents to pave the way for the development of relevant hypotheses. An absolute prerequisite to such elaboration, however, is a discussion of *open systems*, the widely prevalent environment across ITVs.

Open systems

Open systems theory refers to the proposition that organizations are generally strongly influenced by their environment-internal and external. *Open Systems* (referring to self-maintenance through exchange of resources with environment) is one of Boulding's (1956) nine classifications of systems (see Boulding, 1956 for the rest of his classifications). An open system is that which interfaces and interacts with its environment, by receiving inputs from and delivering outputs to the outside. It recognizes influences from outside sources, the changing ideals, values, and expectations of the public, suppliers, distributors, competitors, consumers, employees, and other actors whose actions or inactions have significant impact on the organization (Emery, 2004). Businesses depend on employees, suppliers, customers, and even on the competition for innovative ideas, innovation diffusion, key information, research & development, and of course, revenue and profit; as such they do not operate in a social vacuum. They influence and are influenced by these environmental actors, a process that facilitates learning. Open system organizational structures enabled by its permeable boundaries promote effective problem solving by continuous feedback and response; when there is enough feedback, more clearly directed planning, intelligent design, useful products, and necessary services result.

As Emery (2004, p. 49) proposes and Figure 1 demonstrates, an open system (L_{11}) acts upon the environment (L_{22}) through the planning function (L_{12}), and the environment acts upon the system through the function of learning (L_{21}). A system (e.g., an

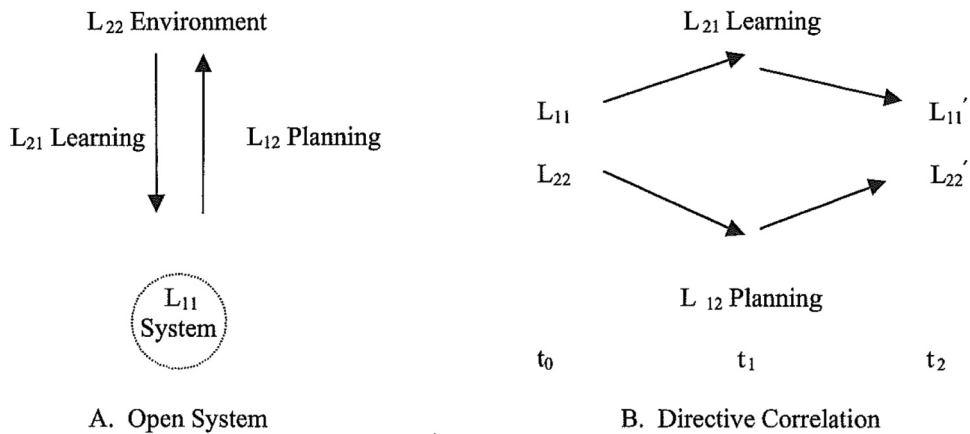


Figure 1. Transaction of system and environment. Source: Emery (2004)

organization) is defined by its expression of the unique relationship between the entity and its environment, and how the behavior of the system is governed and how the parts are arranged (Emery, 2004). Open systems also provide necessary conditions for the subsequent occurrence of a certain event or goal that the environment and the system should at a given time be in correspondence for an adaptive relationship (Sommerhoff, 1969). They act together to produce desirable outcomes. For example, from the original condition (t_0), both system and environment make changes (at t_1), resulting in a new set of conditions consisting of a changed system and environment (at t_2) (Emery, 2004, p. 50). Put in context, both organization and environment influence each other, and together produce outcomes that are desired by them.

Traditional theories erroneously look at organizations as closed, isolated systems, notwithstanding they (organizations) interact with the environment and derive (operand and operant) resources from it. *Operand resources* are tangible resources on which an operation or act is performed to produce an effect (e.g., raw materials, financial assets) and *operant resources* are generally intangible resources which are employed to act on operand resources (e.g., ingenuity, skills, knowledge, capacities) (Constantin & Lusch, 1994). According to Vargo and Lusch (2004), skills and knowledge are the most important types of resources. Any time an organization uses resources from its environment—including personnel—in its production, its system is open to outside forces. An organization’s survival lies in its ability to acquire and maintain necessary resources (Casciaro & Piskorsky, 2005), and therefore firms in dearth of resources internally should seek to establish relationships with others in order to obtain these resources (Shook et al., 2009). A business that regularly interacts with its environment and exchanges and processes information & feedback is deemed an open system organizational structure.

Some of the outside forces that influence business organizations include social changes, political changes, market characteristics, socio-cultural forces, new knowledge and learning, and even employees’ personal problems. Indeed, when an organization frequently interacts with its environment, and exchanges and processes feedback, it is thought to have an open system organizational structure. Open systems have open or porous boundaries that allow feedback exchanges from inside and outside the business.

They pay careful attention to their external environment, internal environment, and (internal and external) customer needs and reactions. Open systems promote organizational learning.

Organizational learning

Organizational learning is predicated on open system theory. Organizational learning processes are concerned with the growth and changes to knowledge (Duncan & Weiss, 1979). Market knowledge can be gained from a number of sources including general knowledge, customers, competitors, and peers within the organization. As a key component of organizational learning, organizational knowledge is stored in organizational memory. Walsh and Ungson (1991) provide an integrative framework for thinking about organizational memory by proposing the existence of five internal retention facilities: individuals, culture, transformations, structures, and ecology. In this study, we focus on how organizational learning impacts IMD and innovation performance in international markets.

Al-Hawamdeh (2002) echoing Polanyi (1958) wrote that knowledge in the form of skills and competencies is normally acquired through training and interaction with the environment or experience. As stated earlier, businesses do not operate in a social vacuum (Emery, 2004); instead they influence and are influenced by environmental actors from whom they also learn. Open system organizational structures promote effective problem solving by continuous feedback and response resulting in better understanding of the organization's structure within the environment and the dynamics of interaction between them. That opens the door for better communication, more feedback, and increased learning.

Learning organizations are dynamic. Individuals' actions lead to organizational interactions with the environment, the environment responds, and these responses are interpreted by individuals who learn by updating their beliefs (Lee et al., 1992). Organizational learning occurs by detecting a mismatch of outcome to expectation, which disconfirms theory in use (Argyris & Schon, 1978). Extant literature delineates two forms of learning in organizations, adaptive learning and generative learning. In adaptive learning, the organization moves to error correction, which does not involve a change to the organizational norms guiding the firm's behavior (Sinkula et al., 1997). This type of learning is also referred to as a single-loop learning which is common in most organizations. If, however, the correction leads to a change in organizational norms and if the learning results from proactive organizational behavior not in direct response to environmental events, then the learning is said to be double-loop or generative (Argyris & Schon, 1978; Sinkula et al., 1997). Adaptive, single-loop learning is deemed sufficient to motivate tactical adjustments to operations, production, and planning. Generative, double-loop learning is typically a prerequisite for more fundamental strategic shifts in these areas. Generative learning is pivotal because it reflects an organization's capacity to change its "view of the world" by unlearning obsolete perspectives, systems, and procedures and proactively replacing them with new knowledge and approaches that are capable of creating and/or maintaining competitive advantage (Dickson, 1996; Ndubisi & Natarajan, 2016).

Organizational learning as a concept has a broad analytical value because of its emphasis on dynamic, changing relationships and emergent phenomena (Dodgson,

1993). Although organizational learning has long been a part of the organizational life, its emergence as a significant economic variable is as a result of factors such as the speed of technological changes, globalization trends, and growing corporate competitiveness (Easterby-Smith et al., 1998). Organizational learning processes are seen as specifically concerned with the growth and changes to knowledge (Duncan & Weiss, 1979), and knowledge is a key component of organizational learning (Dodgson, 1993; Huber, 1991). Huber (1991) describes four knowledge constructs – knowledge acquisition, information distribution, information interpretation, and organizational memory as integrally linked to organizational learning. More recently, knowledge contributing (sharing one's own knowledge) and knowledge adopting (importing knowledge from another source) have been identified as the core of the organizational learning process (Goodman & Darr, 1998). The factors that influence knowledge importing and adopting, as well as the consequences thereof, are of significant interest to organizational learning researchers. Research on the consequences of organizational learning by international/internationalizing small firms in general, and ITVs in particular, is limited; yet learning organizations are thought to be resilient and successful in marketing innovations and competing in foreign markets. To fill this gap, as stated earlier, the present study examines the relationships among organizational learning, IMD, and innovation performance.

International marketing dynamism (IMD)

Markets are essentially dynamic. Therefore, the marketing efforts to deal with this dynamic nature must also be dynamic; hence the dictum, “marketing is dynamic. Market dynamism for an organization refers to the effectiveness & efficiency of its marketing efforts to deal with the dynamic nature of its market(s). That is, how quickly and successfully the organization copes up with changing market conditions (Achrol, 1991). When these actions take place at the international level or the global arena, the marketing dynamism called for is described as international marketing dynamism or simply IMD.

Dynamic behavior varies both across markets and over time. Such variations include changes in customer segments, offering (product or service) demand, technology, competition, and legal aspects, each involving a host of factors. In highly dynamic markets, firms may have to modify their products or services continuously to remain competitive. In less dynamic markets, the above factors remain relatively stable, and therefore less product or service modifications are required.

Learning orientation capabilities provide firms the ability to be sensitive to market information, to react to environmental change, and to modify organizational routines continuously. As such, in highly dynamic market environments, the big firms develop greater knowledge management capabilities to serve their markets more effectively (e.g., Ndubisi & Natarajan, 2016). Stated another way, their IMD will typically be high thereby motivating quicker adaptation to market changes. By the same token, in less dynamic market environments, IMD likely will be low and results in management not selecting the strategy of developing a higher level of knowledge management capabilities, because the investment of such capabilities would be unnecessary and thus resulting in an inefficient use of resources. In light of the foregoing and the fact that ITVs are technology ventures that typically operate in a highly dynamic market environment, the IMD called for in an ITV will have to be high proportionately.

Innovation performance

Whereas the importance of innovation in the business world has always been recognized, such importance has greatly intensified in the 21st century. With technology advancing at mind boggling rates, all organizations have been forced to innovate since the advent of the new millennium. Innovation has begun to occur not just in new offering (product/service) development but also in aspects of operations & management in the nooks & corners of organizations. Given the continually evolving complexities of the business world, markets & competition in particular, organizations are constantly faced with the question, “How can we do such and such in a newer and better way to deal with the current environments?” Constant innovation is needed just to keep up (and hopefully, be one step ahead) with the competition let alone flourishing in the marketplace. Prompted by this realization, Natarajaan (2016) recommends, “Innovate or perish!”

This perspective applies to international markets and therefore to international organizations. Yet the relevant literature pays scant attention to explaining the trajectory and drivers of innovation performance in international markets. Whereas measurement of financial performance, customer satisfaction etc. is routinely done, the assessment of aspects of innovation (e.g., the rate of new/evolved product introduction, new/evolved product performance etc.) does not appear widespread. Given the characteristics of ITVs, such assessment is critical as it will have salient impact on the design & implementation of effective competitive strategies for the chosen foreign markets.

Research framework

The present study models the relationships among organizational learning, IMD, and innovation performance. The study investigates the effect of general learning, learning from customers, learning from competitors, and learning from peers on IMD and innovation performance, as well as the mediation effect of IMD in the relationship between the different sources/types of learning and innovation performance. [Figure 2](#) summarizes the proposed model.

The study frames and tests the following nine hypotheses – five direct effects (H₁-H₅) and four indirect effects, H₆-H₉).

H₁: A positive relationship occurs between general learning and IMD.

H₂: A positive relationship occurs between learning from customers and IMD.

H₃: A positive relationship occurs between learning from competitors and IMD.

H₄: A positive occurs relationship between learning from peers and IMD.

H₅: A positive relationship occurs between IMD and innovation performance.

H₆: An indirect relationship exists between general learning and innovation performance (via IMD).

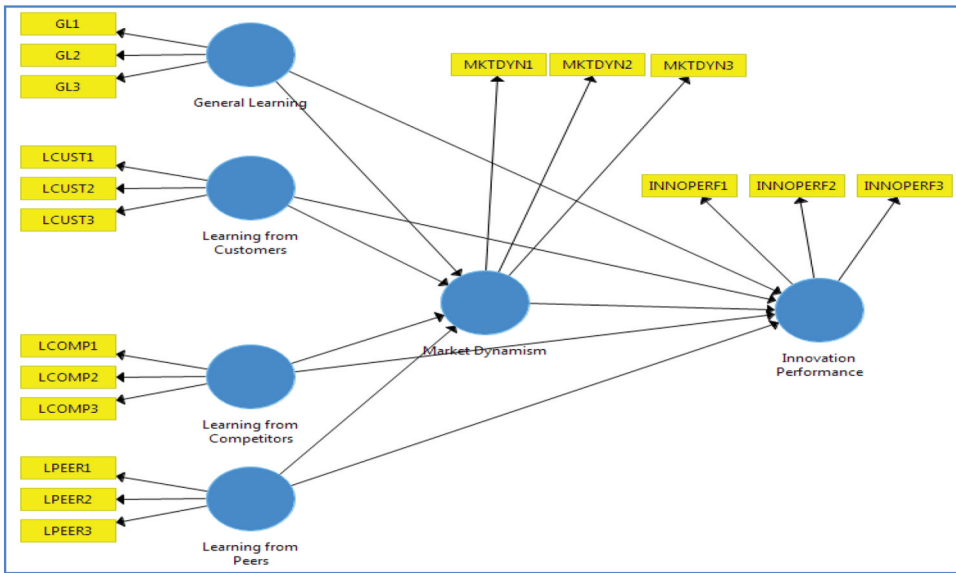


Figure 2. The proposed model. Note: Marketing Dynamism refers to IMD

H₇: An indirect relationship exists between learning from customers and innovation performance (via IMD).

H₈: An indirect relationship exists between learning from competitors and innovation performance (via IMD). H₉: An indirect relationship exists between learning from peers and innovation performance (via IMD).

H₉: An indirect relationship exists between learning from peers and innovation performance (via IMD).

Method

The sampling frame for the study was ITVs in Dubai, United Arab of Emirates. Dubai was chosen for its ultra-modern business environment, although we believe that it is reasonable to assume that the global outlook and collaborative spirit that pervade ITVs are, in general, commonalities across ITVs in the world. In other words, the choice of the sampling frame may not be a matter of concern or contention. The primary reason behind such collaborations is to gain resources and influence to support their initiatives (Xin & Pearce, 1996). In transitional economies, technology ventures use strategic alliances and collaborations to complement internal product innovation efforts (Li & Atuahene-Gima, 2001). The list of ITVs was supplied by the Dubai Chamber of Commerce and Industry. All the ITVs listed in the sampling frame were invited to participate in the survey, 101 accepted the invitation and participated in the survey which was purely voluntary. Out of this number, 81 usable responses were received and analyzed. The key informant method was applied following Campbell’s (1955) guideline for selecting respondents on the basis of their knowledge of the research issues,

their formal role in the organization, and willingness to respond. Consequently, marketing or international marketing managers were requested to complete the survey form.

Questionnaire items were either developed or modified from existing sources. Organizational learning is conceptualized in this study as generic, market, or product knowledge gained by members of the organization from peers, customers, or competitors (i.e. within or outside the organization). In line with this working definition, we categorize organizational learning into general learning, learning from customers, learning from competitors, and learning from peers. Each category was operationalized by adapting items from Sinkula et al. (1997) and developing new items. Sample questions include: *general learning* (e.g., the basic values of this organization include general learning as key to improvement; the sense around here is that employee general learning is an investment; learning in general is seen in this organization as a key commodity necessary to guarantee its survival); *learning from customers* (e.g., we get ideas about new products and services from our customers; we regularly talk to our customers; we regularly discuss our customer's needs with them); *learning from competitors* (e.g., we regularly discuss about what our key competitors are doing; if our key competitors change their strategy we respond immediately; we respond rapidly to the moves made by our competitors); and *learning from peers* (e.g., we take time to discuss our competitive strategy with other managers in our organization; information about market performance is freely communicated to everybody; information about the business performance is freely communicated to all who work here).

IMD items were adapted from Sinkula et al. (1997) and include, frequency of change in the mix of product/brands in the international market, change in sales strategies in the international market, and change in sales promotion/advertising strategies. Innovation performance was measured by adapting items from Venkatraman and Ramanujam (1986) and include for example, new product development/introduction in the international market this year compared to performance in the past two years, sales volume in the international market this year compared to performance in the past two years, and increase in market share in the international market this year compared to performance in the past two years. The assessment of the measurement model resulted in a parsimonious set of variables with acceptable high loadings and low crossloadings.

Data analysis & results

SmartPLS software (Ringle et al., 2005) was used to evaluate both the measurement and structural models for the proposed model.

Measurement model

Table 1 includes the findings for evaluating the measurement model. Item-loadings were adequate (≥ 0.53), exceeding the minimum threshold of 0.50 and contributing to content validity (Picon et al., 2014). Reliability and validity were ascertained. All constructs displayed composite reliability where values were above the 0.70 threshold. The measurement model demonstrated appropriate construct (convergent and discriminant) validity. All constructs demonstrated a convergent validity where the average variance extracted (AVE) values were above 0.5.

Table 1. Convergent validity.

Construct/Indicators	Loading	p-values	Composite Reliability	Average Variance Extracted (AVE)
General Learning	0.683	0.005	0.794***	0.564***
GL1	0.813	0.000		
GL2	0.751	0.003		
GL3				
Learning from Customers	0.826	0.000	0.851***	0.658***
LCUST1	0.902	0.000		
LCUST2	0.691	0.000		
LCUST3				
Learning from Competitors	0.760	0.000	0.784***	0.550***
LCOMP1	0.657	0.000		
LCOMP2	0.797	0.000		
LCOMP3				
Learning from Peers	0.795	0.000	0.823***	0.620***
LPEERS1	0.961	0.000		
LPEERS2	0.551	0.000		
LPEERS3				
Marketing Program Dynamism (IMD)	0.840	0.000	0.823***	0.612***
MKTDYNM1	0.825	0.000		
MKTDYNM2	0.666	0.000		
MKTDYNM3				
Innovation Performance	0.531	0.000	0.752***	0.512***
INNOVPERF1	0.703	0.000		
INNOVPERF2	0.871	0.000		
INNOVPERF3				

Table 2. Discriminant validity.

	GL	LCUST	LCOMP	LPEER	MKTDYN	INNOPERF
GL	0.751					
LCUST	0.125	0.811				
LCOMP	0.130	0.414	0.741			
LPEER	0.194	0.126	0.520	0.787		
MKTDYN	0.263	0.419	0.639	0.594	0.781	
INNOPERF	- 0.067	- 0.103	0.297	0.581	0.378	0.715

Diagonal values (**bold**) represent the square root of the average variance extracted for each construct (AVE). Off-diagonal values represent the correlations (shared variance) among the constructs. The diagonal values should be greater than the off-diagonal ones to demonstrate discriminant validity.

General Learn (GL); Learn from Customers (LCUST); Learn from Competitors (LCOMP); Learn from Peers (LPEER); Marketing Program Dynamism or IMD (MKTDYN); Innovation Performance (INNOPERF)

Table 2 includes the discriminant validity assessment as suggested by Fornell and Larcker (1981) where each construct related more strongly to its own items than to items in other constructs, providing an evidence of discriminant validity.

Structural model

After evaluating the measurement model, the structural model was evaluated using the bootstrapping calculation technique with 5000 resamples to evaluate the hypothesized direct relationships as well as the mediation hypotheses (Henseler et al., 2009). Figure 3 and Table 3 show the results of the bootstrapping including path coefficients, t-values, and p-values. Three out of the four hypothesized direct relationships between the dimensions of organizational learning (namely learning from customers, learning from competitors, and learning from peers) and IMD receives support ($p < 0.05$). The relationship between general learning and IMD ($p > 0.05$) does not receive support. This lone

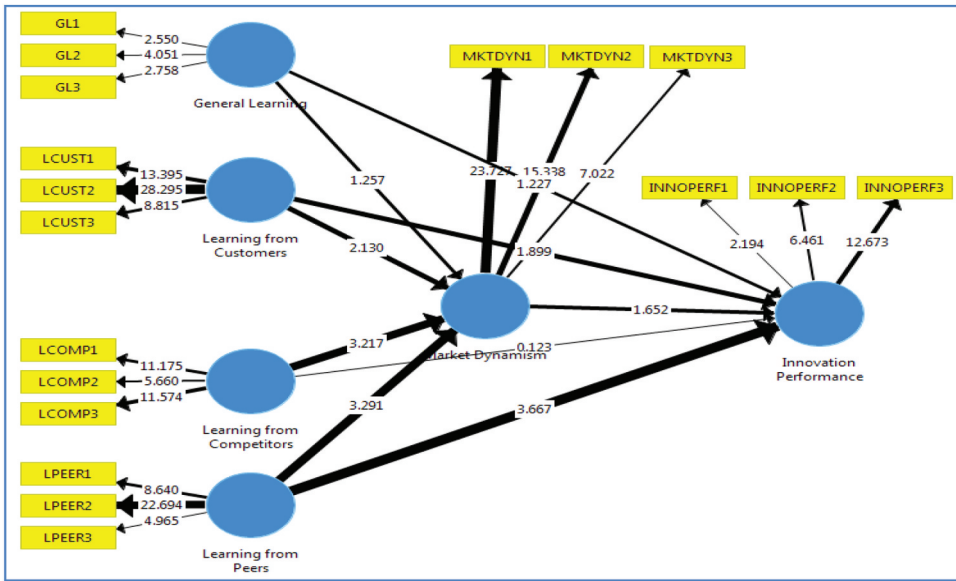


Figure 3. The results of bootstrapping (t-values).

Table 3. Testing the direct relationship hypotheses.

Direct Relationship	Coefficient	t-value	p-value	Supported
H ₁ : General Learning → Marketing Prog. Dynamism	0.116	1.257	0.102	No
H ₂ : Learning from Customers → Marketing Prog. Dynamism	0.212	2.130	0.018	Yes
H ₃ : Learning from Competitors → Marketing Prog. Dynamism	0.347	3.217	0.001	Yes
H ₄ : Learning from Peers → Marketing Program Dynamism	0.364	3.291	0.001	Yes
R ² = 0.557	0.209	1.652	0.047	Yes
H ₅ : Marketing Program Dynamism → Innovation Performance				
R ² = 0.420				

Marketing Program Dynamism refers to IMD.

non-significant relationship holds little surprise since generic learning, which has little or no relevance to the international market(s) of the firm and to the firm’s ability to hone its marketing skills there, may not account for the firm’s IMD. However, expectedly, firms that learn from customers, competitors, and employees can enhance the dynamism of their international marketing programs. The relationship between IMD and innovation performance (H₅) was supported ($p < 0.05$). Thus, ITVs can boost innovation performance by implementing dynamic and resilient marketing programs.

Table 4 includes the findings regarding the mediation hypotheses. Clearly, IMD is not a mediator of the relationship between general learning and innovation performance;

Table 4. Testing the mediation hypotheses.

Relationship	Indirect Effect		Direct Effect	Total Effect	Mediation
	IND → M	M → D			
H ₆ : GL → Marketing Prog. Dynamism → INNOPERF	0.116 ^{NS}	0.209**	0.189 ^{NS}	0.165 ^{NS}	No
H ₇ : LCUST → Marketing Prog. Dynamism → INNOPERF	0.212**	0.209**	0.190 *	0.235 **	Partial
H ₈ : LCOMP → Marketing Prog. Dynamism → INNOPERF	0.347***	0.209**	0.018 ^{NS}	0.091 ^{NS}	Full
H ₉ : LPEER → Marketing Prog. Dynamism → INNOPERF	0.364***	0.209**	0.514****	0.590****	Partial

NS = Not Significant; * $p < 0.10$; ** $p < 0.05$; *** $p < 0.01$ **** $p < .001$, using 1-tailed t-test.

note (as stated earlier) that the relationship between general learning and IMD was not significant. Thus, H_6 was not supported. Regarding the relationship between learning from customers and innovation performance, IMD exhibits a partial mediation effect. The findings in Table 4 show that the indirect effect of learning from customers on innovation performance was significant, but so were the direct and total effects, indicating that IMD partially mediates the relationship between learning from customers and innovation performance. Therefore, H_7 was partially supported. The indirect effect of learning from competitors on innovation performance was significant while the direct and total effects were not significant indicating that IMD fully mediates the relationship between learning from competitors and innovation performance. Therefore, H_8 was fully supported. In testing H_9 , the results showed that IMD partially mediated the relationship between learning from peers and innovation performance. The indirect effect of learning from peers on innovation performance was significant. Learning from peers has a significant total effect on innovation performance but when the mediator is introduced the direct effect decreases – indicating partial mediation.

Implications and conclusions

In today's highly dynamic and competitive global marketplace, firms whose marketing programs are flexible & resilient enough to accommodate changing market needs and aspirations tend to perform better than firms with relatively static marketing programs. In other words, the IMD of an organization is at the core of its success. The results of this research show that innovation performance of technology ventures in international markets is anchored to their IMD. To reiterate our statement earlier in the paper, innovation is vital to its survival let alone flourishing in the brutal global marketplace. ITVs that are responsive to the current realities of the international business environment are reaping benefits. In the spirit of reciprocity, the market in turn rewards those firms whose dynamism successfully translates into marketing programs that meet and exceed customer expectations.

The findings further support the firms may enhance perspective that IMD in ITVs through learning or market intelligence/knowledge acquired from customers, competitors, and peers. In other words, both external and internal sources of market and marketing intelligence contribute to IMD. Both internal customers (employees) and external customers, as well as competitors, contribute to organizational learning. As such firms should be open to learning from different sources. These findings corroborate earlier conclusions (e.g., Goodman & Darr, 1998) which place knowledge adopting (i.e. importing knowledge from another source) at the core of organizational learning process. Indeed Emery's (2004) assertion that businesses do not operate in a social vacuum, and that, instead, they influence and are influenced by environmental actors (such as rivals, customers, and employees) cannot be stated more accurately.

Besides the direct influence of the troika sources of learning (customers, competitors, and employees) on IMD, these sources of learning also have an indirect influence on innovation performance. The effects of customer-, competitor-, and peer-originated learning on innovation performance is transmitted through IMD, such that the application of such learning leads to increased flexibility and resilience which enhance the firm's competitiveness. Dickson (1996) demonstrated how learning creates competitive advantage. He reasoned that double loop or generative learning is critical in enhancing competitiveness because it reflects an

organization's capacity to change its world view by unlearning obsolete perspectives, systems, and procedures and proactively replacing them with approaches that are capable of creating or maintaining competitive advantage. As this study shows, organizational learning enhances IMD, an approach which increases innovation performance in turn. Also, organizational learning occurs in an open organizational structure.

Open systems studies argue that organizations are generally strongly influenced by their internal and external environment with which they exchange resources. Outside sources (including the public, suppliers, distributors, competitors, consumers, employees, and other actors) influence the organization and its inputs and outputs. This study corroborates the tenets of open systems by demonstrating that organizational learning takes place when the firm is open to and actively seeks to learn from customers, competitors, and employees. This effort eventually pays off through a dynamic product portfolio and in turn through greater performance of its innovations in its international markets. As the study shows, for ITVs, an open system which interfaces and enables interactions with its international environment, from which it also learns, is a viable option. This finding could be seen as an important contribution to existing scholarships in open systems and organizational learning fields.

For managers of international business ventures and the newly internationalizing ones, the benefits of an open system and organizational learning cannot be over-emphasized. They should be genuinely open to learn from relevant sources. Research increasingly demonstrates that employees, customers, and competitors are key sources of innovations and new product ideas. Openness to these sources of knowledge puts the firm on the right pedestal to gain and apply innovative ideas. Both internal and external customers can provide privileged information on new product ideas, evolving market needs, and aspirations, and depending on the firm's openness to learning such ideas, can lead to creation of robust strategies for marketing effectiveness & efficiency. Although learning from these two sources can be acquired directly and readily depending on the level and strength of their relationships, learning from competitors may not be easily and readily available and may require greater effort to access. However, learning acquired from competitors is by no means less important. By studying the strategy of the leading firm in the industry, an organization can overcome its weaknesses and further strengthen its capabilities. In international markets in particular, where local market knowledge is often gained sequentially and incrementally as firms gain more experience, a new entrant or a newly internationalizing firm can avoid the gaffes of earlier entrants by learning from such mistakes. Therefore, managers should be genuinely open-minded and the organizations they lead should have a learning culture. Learning organizations have the capacity to reinvent themselves by modifying or replacing underperforming activities and processes with more efficient systems or structures learned from within or outside the organization.

ITVs become future exemplars of how learning organizations can apply knowledge and resources from strategic collaborations to enhance IMD and innovation performance. This is a preliminary effort or a first step in the sense that it is really a case-study of ITVs of a small yet significant region of the middle-east. Given the myriad governmental, organizational, economic, and last but not the least, cultural differences across the world, future studies should compare ITVs in not only regions in the middle-east but also across the world to arrive at more definite conclusions regarding the interplay of the three key factors mentioned in this paper.

Disclosure statement

No potential conflict of interest was reported by the authors.

Funding

The publication of this article was funded by the Qatar National Library.

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