

The relationship between organizational learning capability and business performance

The case of Vietnam firms

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Organizational
learning
capability

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Received 13 April 2019
Revised 3 August 2019
Accepted 17 September 2019

Abstract

Purpose – The purpose of this paper is to explore the relationship between organizational learning capability and business performance of Vietnamese firms.

Design/methodology/approach – Based on the literature review, the authors proposed five hypotheses covering the relationships between different dimensions of organizational learning capability and business performance. Data collected from a survey of 160 Master of Business Administration students working in different firms in Vietnam were analyzed to test the proposed hypotheses.

Findings – The results confirmed that organizational learning capability has positive effect on business performance. Moreover, two out of four dimensions of organizational learning capability are having positive relationship with business performance (management commitment to learning and “knowledge transfer and integration”).

Practical implications – The paper gives some suggestions for firms to improve their business performance through enhancing organizational learning capability.

Originality/value – This study provides important insights into the recognized yet under-researched relationship between organizational learning capability and business performance and confirms that organizational learning capability has a positive impact on business performance in Vietnam context.

Keywords Business performance, Organizational learning capability, Management commitment to learning, System perspective

Paper type Research paper

1. Introduction

Organizational learning is not only the notion of one of the biggest breakthroughs in business and management thinking, but also is one of the few management ideas which is sustainable (Mintzberg *et al.*, 1998; Garratt, 1999):

As our world becomes more complex and uncertain it is crucial that the capability of both individuals and organizations to learn regularly and rigorously from their work is encouraged so that they may adapt rapidly and continuously to their changing environments. (Garratt, 1999, p. 203)

It is argued that “the ability to learn faster than your competitors may be the only sustainable competitive advantage” (De Geus, 1988, p. 71). Previous research found out that organizational learning capability plays an important role and has positive impacts on



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Journal of Economics and
Development
Vol. 21 No. 2, 2019
pp. 259-269
Emerald Publishing Limited
e-ISSN: 2632-5330
p-ISSN: 1859-0020
DOI 10.1108/JED-10-2019-0041

firms' business performance (Nguyen and Barrett, 2007; Huili *et al.*, 2014; Pham, 2016). In Vietnam, organizational learning capability issue has been under researched.

This study focuses on measuring the impacts of organizational learning capability on business performance in the context of Vietnam – a developing country. The next section presents a literature review on organizational learning and its relationship with business performance. Research methods are covered in the subsequent section, followed by research results and discussion section. Conclusion of the research is the last section of the paper.

2. Literature review and research hypotheses

2.1 Organizational learning

The concept of organizational learning is currently enjoying considerable attention among both academics and practitioners seeking to improve organizations. It is a dynamic concept with its use in theory emphasizing the continually changing nature of the organization. It is also an integrative concept that can unify various levels of analysis such as individual, group, corporate, etc. (Dodgson, 1993). Reviewing the literature, there is little agreement as to what learning is; and therefore, there are different definitions and perspectives on this topic. The term organizational learning was originally introduced by Argyris and Schon (1978), involving the detection and correction of error in organizations. It was later defined as the process of improving actions through better knowledge and understanding by Fiol and Lyles (1985). Huber (1991) assumed that an entity learns if, through its processing of information, the range of its potential behaviors is changed. Nevis *et al.* (1995) defined organizational learning as “the capacity or processes within an organization to maintain or improve performance based on experience” while Dodgson (1993) described organizational learning as the ways organizations build, supplement and organize knowledge and routines around their activities, and adapt or develop organizational efficiency through improving the use of their workforce's broad skills.

In this study, the Jerez Gomez *et al.*'s (2005) definition of organizational learning is used. Organizational learning is:

[...] the capability of an organization to process knowledge – in other words, to create, acquire, transfer, and integrate knowledge, and to modify its behavior to reflect the new cognitive situation, with a view to improving its performance. (Jerez Gomez *et al.*, 2005, p. 716)

The terms organizational learning and learning organization are used interchangeably in the literature but are not functional equivalents (Thomas and Allen, 2006). Organizations that purposefully construct structures and strategies in order to enhance and maximize organizational learning have been called “learning organizations” (Dodgson, 1993). A learning organization refers to building a capacity for creating learning and knowledge in individuals and of enabling the effective dissemination of this knowledge throughout the organization. It is the product or result of a critical combination of internal change mechanisms intended to maintain or improve performance. Organizational learning might be described simply as the capacity or processes to get the above product or result (DiBella, 2001).

Also concerning the organizational learning capacity, other researchers use “organizational learning capability” term to refer to it in their research. Organizational learning capability is considered as the organizational and managerial characteristics or factors that facilitate the organizational learning process or allow an organization to learn (Goh and Richards, 1997; Chiva *et al.*, 2007). With the viewpoint that organizational learning is the product of individual and group learning applied to the accomplishment of the organization's vision and performance goals and that certain management practices and internal conditions can either help or hinder this process, Goh and Richards (1997) argued that if we can identify and assess the impact of a set of internal organizational conditions and management practices that lead to learning, we could assess an

organization's learning capability. They developed a model called organizational learning survey to measure the managerial practices that facilitate organizational learning or the conditions and enablers that can help an organization to become a learning organization. Because organizational learning occurs in different ways and in different forms as organizations continually need to learn how to survive and adapt to changing condition, it is challenging to measure learning. Goh and Richards (1997) model tried to measure the capability of the organization to add to its knowledge base in an effective manner and then to utilize it to modify its behavior over time.

2.2 Organizational learning and business performance

Organizational learning is considered as one of the fundamental sources of competitive advantage in the context of strategic management (Lopez *et al.*, 2005). It is argued that "the ability to learn faster than your competitors may be the only sustainable competitive advantage" (De Geus, 1988, p. 71). It is not so dissimilar to the argument of Stata (1989) that the rate at which individuals and organizations learn may become the only sustainable competitive advantage, especially in knowledge-intensive industries.

Theoretically, the relationship between organizational learning and business performance is embedded in organizational learning definitions themselves. A variety of definitions exist concerning organizational learning which imply the existence of a relationship between organizational learning and company's performance. For example, organizational learning is:

- the process of improving actions through better knowledge and understanding (Fiol and Lyles, 1985);
- the capacity or processes within an organization to maintain or improve performance based on experience (Nevis *et al.*, 1995);
- organizational learning occurs with an organization skilled at creating, acquiring and transferring knowledge, and at modifying its behavior to reflect new knowledge and insights (Garvin, 1993); and
- learning facilitates behavior change that leads to improved performance (Slater and Narver, 1995).

All of these definitions include a direct or indirect organizational performance contribution from organizational learning. Some of these studies are briefly discussed in this section.

Bontis *et al.* (2002) studied the relationship between the flows of learning across levels in an overall organizational learning system. With 489 respondents in their survey, their findings support the idea that there is a positive relationship between learning at all levels (individual, group and organizational) and business performance.

Jashapara (2003) used a survey with a sample of 180 UK construction firms. It showed that organizational learning in the form of double-loop learning and cooperative cultures has a positive effect on organizational performance; and that organizational learning focused on efficiency and proficiency leads to competitive advantage in the UK construction industry.

Lopez *et al.* (2005) studied the degree to which organizational learning influence business performance using a survey of 195 Spanish firms. They found that organizational learning contributes positively both to innovation and competitiveness and to economic/financial results of firms. Similarly, Montes *et al.* (2005) used empirical data gathered from 202 Chief Executive Officers in Spanish firms and found that organizational performance is improved through teamwork cohesion and organizational learning in firms. Further, one of Real *et al.*'s (2006) findings in their study is that organizational learning acts as a moderating variable from information technology to the business performance construct. It has a statistically significant positive effect on business performance.

Garcia-Morales and Llorens-Montes (2006), using a sample of 408 Spanish organizations, demonstrated that organizational learning and innovation are positively related to organizational performance. Prieto and Revilla (2006) used data from 111 Spanish firms to examine the paths between learning capability, financial performance and non-financial performance using structural equation model (SEM) technique. Their analysis showed learning capability has a positive link to both financial performance and non-financial performance.

Jimenez-Jimenez and Cegarra-Navarro (2007) used survey results from 451 firms and found that organizational learning has a positive effect on performance; and also it is a mediating variable on the association from market orientation to performance. In other research, Skerlavaj *et al.* (2007) proposed and tested a model of organizational performance improvement with the impact of organizational learning culture which was measured using organizational learning process measures. Using 203 Slovenian firms' data, they found that organizational learning has a positive direct effect on non-financial performance while it has a positive indirect impact on financial performance. Organizational learning is also found to have an indirect positive relationship with business performance in other research (Akgun *et al.*, 2007; Panayides, 2007). Pham (2016) researched on organizational learning capability and business performance also found the positive relationship between these two variables.

These empirical studies have used different ways of operationalising organizational learning constructs: followed organizational learning process like Huber's (1991) model or followed other organizational attributes such as single and double-loop learning; learning from experience; individual, group and organizational learning; etc. or followed Senge's (1990) model. They also measured business performance with either financial indicators or non-financial indicators. However, the common thing among them is that the results generally support the idea that organizational learning positively affects business performance in operational and/or financial terms.

With the above review of literature, hypothesis is proposed as follows:

- H1.* There is a positive relationship between organizational learning capability and business performance.

Organizational learning capability was operationalized by different factors in the literature. In general, it could be categorized into four major organization characteristics and management practices that are key conditions essential for learning to take place in an organization. These factors are system thinking; management commitment to learning; openness and experiment culture; and knowledge transfer and integration. Some contributing literature for building organizational learning capability construct is mentioned in Table I.

Each of the factors has its own contribution to improve firms' business performance. So, four hypotheses are proposed as follows:

- H2.* System thinking (system perspective) has positive effect on business performance.

Systems perspective: this is also called system thinking, the fifth and the most important discipline in Senge's (1990) learning organization model. It entails bringing the organization's members together around a common identity and recognizes the interconnection between different units that make up the whole organization. Every individual, department and area of the organization should have a clear view of the organization's objectives and understand how they can help in their development (Hult and Ferrell, 1997; Jerez Gomez *et al.*, 2005). Systems perspective here refers to the promoting joint actions, developing organization's member relationship based on the exchange of information, common identity and a shared vision:

- H3.* Management commitment to learning has positive effect on business performance.

Managerial commitment: refers to promoting personal efficacy and learning of organization's members and the ability for an organization to adapt to the environmental

Organizational learning capability dimensions	Some references
Management commitment to learning	Jerez Gomez <i>et al.</i> (2005), Akgun <i>et al.</i> (2007), Panayides (2007), Garvin (1993), Ulrich <i>et al.</i> (1993), Morgan and Turnell (2003), Stata (1989), McGill and Slocum (1993), Goh and Richards (1997), Nevis <i>et al.</i> (1995), Slater and Narver (1995), McGill <i>et al.</i> (1992), Farrell (2000), Slocum <i>et al.</i> (1994), Pham (2016)
Openness and experimentation culture	Morgan and Turnell (2003), Panayides (2007), Jerez Gomez <i>et al.</i> (2005), Akgun <i>et al.</i> (2007), Ulrich <i>et al.</i> (1993), Hult and Ferrell (1997), Leonard-Barton (1992), McGill and Slocum (1993), Garvin (1993), Slocum <i>et al.</i> (1994), Nevis <i>et al.</i> (1995), Goh and Richards (1997), Stata (1989), McGill <i>et al.</i> (1992), Pham (2016)
Systems perspective	McGill and Slocum (1993), Akgun <i>et al.</i> (2007), Jerez Gomez <i>et al.</i> (2005), Nevis <i>et al.</i> (1995), Stata (1989), McGill <i>et al.</i> (1992), Senge (1990), Morgan and Turnell (2003), Panayides (2007), Goh and Richards (1997), Hult and Ferrell (1997), Pham (2016)
Knowledge transfer and integration	Jerez Gomez <i>et al.</i> (2005), Akgun <i>et al.</i> (2007), Leonard-Barton (1992), Panayides (2007), Garvin (1993), Goh and Richards (1997), Hult and Ferrell (1997), Stata (1989), Nonaka (1994), Senge (1990), Pham (2016)

Source: Developed by the authors for this research

Table I.
Some contributing literature for construct definition of organizational learning capability

conditions. By recognizing the relevance of learning, management should develop a culture that promotes the acquisition, creation and transfer of knowledge as fundamental value. They should articulate strategic view of learning, ensure that organization's members understand the important of learning and become involved in its achievement, considering it an active part in the organization's success (Senge, 1990; Ulrich *et al.*, 1993; Nevis *et al.*, 1995; Slater and Narver, 1995):

H4. Openness and experiment culture has a positive relationship with business performance.

Openness and experimentation culture: refers to a climate of accepting new ideas and viewpoints, both internally and externally, allowing individual knowledge to be constantly reviewed and improved (Senge, 1990; Leonard-Barton, 1992; Sinkula, 1994). To create the culture of openness, there needs to be a previous commitment to culture and functional diversity and a readiness to accept all types of opinions and experiences and to learn from them (McGill *et al.*, 1992; Nevis *et al.*, 1995; Jerez Gomez *et al.*, 2005):

H5. Knowledge transfer and integration has a positive relationship with business performance.

Knowledge transfer and integration: refers to two closely linked and simultaneously occurred processes: internal transfer and integration of knowledge. The first process means the internal spreading of knowledge acquired at an individual level through communications and interaction among organization's members which is reinforced by an agile information system that guarantee the accuracy and availability of the information (McGill and Slocum, 1993) and team works (Stata, 1989; Nonaka, 1994; Lei *et al.*, 1999). Team learning places the group above individuals, allowing the organizational learning process – the transfer, interpretation and integration of the knowledge – to happen. This process leads to the creation of collective knowledge which is rooted in organizational culture, work processes, etc. that form the organizational memory (Huber, 1991; Jerez Gomez *et al.*, 2005).

3. Research methodology

A questionnaire was developed based on research from literature review with some small modifications for the questionnaire to be suitable with Vietnamese context. The structure of

the questionnaire survey includes three parts: Part 1 with demographic information, Part 2 about company's performance, Part 3 about four dimensions of organizational learning capability. A seven-point Likert-type scale was applied to measure items used in the questionnaire developed for this study.

The second part asked respondents about their firms' performance in comparison with competitors' performance. The questionnaire items were based on Ravinchandran and Lertwongsatien (2005) and Pham (2016) research. There were seven questions relating to market-based performance and operational performance of a company. Questions 1–4 measured market-based performance while Questions 5–7 contained measures of operational performance of respondent's firm compared to competitors.

The third part contained questions to measure organizational learning capability in four dimensions. The questionnaire items were mainly based on research of Jerez Gomez *et al.* (2005). Five questions aimed to assess company's management commitment to learning. Three questions asked about systems perspective which concerned employees' general knowledge regarding company's objectives, how each department contributes to achieve those overall objectives and whether these departments work together in a coordinated fashion. The openness and experimentation culture of the respondent's company was measured by four questions. Another four questions aimed to measure knowledge transfer and integration.

A questionnaire survey was created to collect empirical data from Master of Business Administration (MBA) classes in some universities in Hanoi. Hardcopy questionnaires were sent to universities' MBA students at their classes (about 200 students at site). Finally, 163 responses were received. Of which, 160 responses can be used for further study after data screening, which represents about 80 percent response rate.

The collected data were analyzed in the following procedure: the first is a data preparation process which can enhance the quality of data analysis. This includes data cleaning and data screening procedures. After that, the measurement models were tested using AMOS 7. Then, all the research hypotheses and research questions were tested and investigated.

In this research, data analysis was implemented using two statistic analysis software packages: SPSS and AMOS:

- SPSS was used for preparing the data (missing data treatment, testing data), and calculating Cronbach's coefficient α 's for scale reliabilities; and
- the SEM technique, using AMOS, was used for testing measurement models and testing research hypotheses and questions.

4. Results and discussion

This research used confirmatory factor analysis to refine the initial measures of each construct and test for the internal consistency of scales for organizational learning capability and business performance constructs.

As mentioned previously, most of the questions in the questionnaire for organizational learning capability and business performance constructs are taken from previous studies with some modifications. Thus, each construct of the model is tested using one factor congeneric model before doing the hypotheses test.

Because the four factors of organizational learning capability are interrelated, it is important to assess their discriminant validity. Large correlations between latent constructs, say greater than 0.80 or 0.90, suggest a lack of discriminant validity (Holmes-Smith *et al.*, 2005). Discriminant validity between these factors was also checked through the structure coefficients which are in "all implied (for all variables) correlations" table in AMOS output.

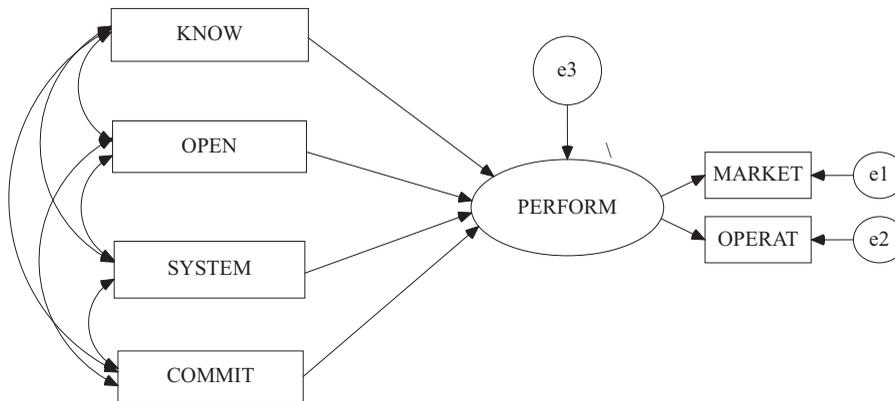
An inspection of the coefficients for all four constructs: KNOW, SYSTEM, COMMIT and OPEN (respectively stand for knowledge transfer and integration; system thinking; management commitment to learning; and openness and experiment culture) shows a clear distinction between the items comprising the respective factors and the remaining items. The four factors are considered to have discriminant validity.

The hypotheses in this section are dealt with by using the model shown in Figure 1. The model tests the relationship of the four factors of organizational learning capability (KNOW, SYSTEM, COMMIT and OPEN) and business performance (PERFORM) with its two dimensions (market-based performance – MARKET and operational performance – OPERAT).

The statistical results of running this model are shown in Table II. All goodness of fit indices and the *p*-value were within acceptable levels of the criteria, showing that the model fitted the data well.

The good fit of the model means organizational learning capability has a positive association with business performance. So, *H1* is supported by the data. Moreover, the *R*² value of 0.54 indicates that 54 percent of the variance in business performance is explained by the four factors of organizational learning capability. This is a very high value.

Concerning *H2–H5*, there are only two paths in the model which are statistically significant, which are the paths from management commitment to learning to business



Source: Compilations by the authors

Figure 1. Model for hypotheses testing

Goodness of fit indices	Acceptable level	Results
CMIN		4.746
df		3
<i>p</i>	<i>p</i> > 0.05 (at $\alpha = 0.05$ level)	0.191
CMIN/df	$1 < \chi^2/df < 3$	1.582
GFI	~0.9	0.989
RMSEA	< 0.08	0.065
CFI	~0.9	0.994
TLI	~0.9	0.969
AGFI	~0.9	0.923
RMR	< 0.05	0.031

Source: Summary results from AMOS 7.0 output for this study

Table II. Model fit summary for hypotheses testing

performance, and from knowledge transfer and integration to business performance, as shown in Table III. Other paths are not significant with *p*-values greater than 0.05. Thus, management commitment to learning is the factor which has the highest degree of positive association with business performance. The next factor having positive relationship with business performance is knowledge transfer and integration.

So, *H1*, *H3* and *H5* are supported by the data. *H2* and *H4* are not supported by the data.

5. Conclusions

It is argued that “the ability to learn faster than your competitors may be the only sustainable competitive advantage” (De Geus, 1988, p. 71). Theoretically and empirically, organizational learning has been shown to contribute positively to business performance. This study found a direct positive relationship between organizational learning and business performance, not an indirect relationship as found in Akgun *et al.* (2007) study. It confirmed findings from previous studies in this field like those of Real *et al.* (2006), Garcia-Morales and Llorens-Montes (2006), Jimenez-Jimenez and Cegarra-Navarro (2007), Skerlavaj *et al.* (2007) and Pham (2016).

In the earlier review of the literature, it was shown that previous studies have used different constructs from this study for measuring organizational learning. There had been no study suggesting which dimension of organizational learning has the strongest effect on business performance. This study explored the detailed dimensions of organizational learning capability in the relationship with business performance and found that management commitment to learning has the greatest contribution to business performance. The second dimension is knowledge transfer and integration. This not only contributes to the literature but also in the businesses implications.

This research confirmed the literature that organizational learning has a positive association with business performance. In addition, it adds to the literature by having found that of the four dimensions of organizational learning, management commitment to learning is the most important factor and has the highest degree of positive effect on business performance.

This gives a implication for managers in striving for a better performance of the firm. Organizational learning plays a very important role in organizations in achieving a better business performance. Managers should understand the important organizational learning capability dimensions in order to make use of them effectively to achieve their business performance objectives. Although there are four important dimensions: knowledge transfer and integration, systems perspective, openness and experimentation culture and management commitment to learning, only two dimensions of organizational learning capability, which are knowledge transfer and integration, and management commitment to learning, have strong positive effects on business performance. Therefore, firms need to concentrate their scarce resources on these dimensions in looking for a better business performance.

However, this study has one limitation that the questionnaire was answered by MBA students who are working at firms. It would be better for future studies to consider research designs that allow data collection from multiple respondents within a company. Further research

Table III.
Standardized
estimates of the model
for hypotheses testing

Standardized regression weights	Estimate	SE	CR	<i>p</i>
PERFORM ← OPEN	0.230	0.079	-1.553	0.121
PERFORM ← COMMIT	0.615	0.090	3.452	0.017***
PERFORM ← KNOW	0.258	0.076	1.685	0.032***
PERFORM ← SYSTEM	0.114	0.064	0.845	0.398

is needed to validate and generalize the findings to broader settings. The research could be replicated in other contexts such as in different areas and in different industries.

There have also been many different ways of measuring business performance. It is not a unidimensional but a multidimensional construct. If different dependent variables were used, the relationship between predictor variables and each dependent variable might be different and not be significant. This research use perceived business performance. Further research could use some other ways such as financial performance (profit, return on investment, return on assets, etc.) to investigate the interactions between variables in this research.

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