

Does Organizational Learning Affect an Organization's Balanced Scorecard Performance? Evidence from Thailand's Higher Education Institutions

**Pornprom Prompes¹,
Chanongkorn Kuntonbutr²,
and Natnarong Jaturat³**

Faculty of Business Administration,
Rajamangala University of Technology Thanyaburi, Thailand

¹pornprom_p@mail.rmutt.ac.th

²chanongkorn@rmutt.ac.th

³natnarong@rmutt.ac.th

Abstract - This study focused on the relationship between organizational learning and organizational success in Thailand's higher education institutions. Moreover, this study also investigated the effect of organizational learning on different aspects of organizational performance. The results were based on secondary data collected from CHE QA database consisting of 675 higher education faculties' academic quality assurance data. Structural Equation Model (SEM) was used to examine the hypothesized relationships. Results revealed that organizational learning in higher education institutions significantly impacted on their performance. Furthermore, the findings reveal that organizational learning impacted on internal process perspective performance, customer perspective performance, and innovation performance.

Keywords - Organizational Learning, Organizational Success, Balanced Scorecard, Higher Education Institutions

I. INTRODUCTION

Organizations are becoming increasingly competitive as uncertainty rises in both the task and general environments. Various scholars argue that organizations which attempting to enhance their processes must

focus on learning as the source of sustainable competitive advantage [1, 2]. Recent studies argue that organizational learning is necessary for institutions [3, 4]. Superior performance is associated with organizational knowledge which spreads through organizational learning strategies [5]. Organizational learning is not only the learning of individuals but also is the ability to continuously consolidate the organization's collective capacity to learn, unlearn old ways of doing things and discard inappropriate methods [6].

In 2015, the Southeast Asian countries integrated their efforts through the formalization of the ASEAN economic community. Since, education is an important factor in human resources development, Thailand through its Ministry of Education realizes the significance of improving the quality of education. In 1996, the Office of the National Education Commission (ONEC) initiated an educational reform project in Thailand. According to the Office of the Education Council, one critical strategy appearing in the master plan for reforming higher education in Thailand was personnel development and learning [7]. Thailand's higher education institutions are not only supported to be the lifelong learning organizations but also to speed up their own competitive advantage to challenge other

countries and make Thailand the educational hub of the Southeast Asian region.

II. REVIEW OF THE LITERATURE

A. Organizational Learning

Organizational learning studies have increased in number. Organizational learning definitions have been attributed to various concepts. Organizational learning was defined by Argyris and Schön [8] as a process of detecting and correcting errors. Considering what we aim to achieve in this paper, we are interested in the following definitions of organizational learning. Organizational learning is a change in the range of potential behaviors of a process based on information processing [9]. Huber considered that an organization learns when knowledge spreads out from one unit to others. Huber [9] proposes organizational learning as having four constructs: knowledge acquisition, information distribution, information interpretation and organizational memory. Similarly, Crossan et al. [10] proposed three levels of learning, these being individual, group and organizational.

Apart from these, organizational learning can also occur in four processes; intuiting, interpreting, integrating, and institutionalizing. Intuiting appears at the individual level. Interpreting appears at the individual and group levels. Integrating appears at the group and organization level. Institutionalizing appear at the organization level. In a more recent study, Argote [11] has adopted Huber's [9] position. Organizational learning can be comprised of three processes. These are creating, retaining and transferring knowledge. Creating occurs when organizations learn from experience and new knowledge is created in them. The retaining process happens when knowledge is memorized for later use. Knowledge can also then be transferred within and between units. Through knowledge transfer, one unit is affected by the experience of another or learns from the experience of other units.

From the above literature this study has adapted that the view that organizational learning is a compendium of constructs for processing information. Many studies have claimed that the organizational context is the indicator for the number of information processes. Three aspects of organizational learning that considered in this study: knowledge acquisition and knowledge interpretation; organizational memory; and knowledge distribution.

B. Organizational Performance

Organizational performance is a concept that has been subjected to many definitions [12]. Performance can be defined as the consequences of the organizational management or accomplishment of organizational goals [13]. Performance consists of the famous 3Es which are economy, efficiency, and effectiveness of an organization program or activity [12]. Performance prism is another performance measurement system that comprises five perspectives: stakeholder satisfaction, strategies, processes, capabilities, and stakeholder contributions [14]. Different studies measure organizational performance use various factors, for example financial performance, process performance, market performance, and innovation performance.

Kaplan and Norton [15] have proposed a method for capturing and organizing the results that an organization generates, and this known as the balanced scorecard. The balanced scorecard is an innovative and holistic approach to organizational outcomes management. Through the balanced scorecard it is possible not only to measure performance, but to manage it. The balanced scorecard incorporates four perspectives: financial perspective, customer perspective, internal processes perspective and innovation and learning perspective [16]. It is accepted that higher education institutions in all countries play a major role as knowledge conveyers and seek to promote social development.

This study considered three aspects of organizational performance: internal process perspective performance, customer perspective

performance, and innovation performance. Internal perspective performance refers to a faculty's achievement of vital goals in Thailand's higher education institutions to convey knowledge to learners [17]. Importantly, faculties' processes focus on lecturers who convey knowledge to learners. The evidence of a successful organizational process and operations is goal achievement. Customer perspective performance is the level success a faculty has in pleasing students, and output relevant to their needs [18]. Innovation performance is the faculty's success in creating new products, processes, or inventions development [19].

III. HYPOTHESES

Hypothesis 1: Organizational learning positively affects organizational performance.

Hypothesis 2: Organizational learning positively affects internal process perspective performance.

Hypothesis 3: Organizational learning positively affects customer perspective performance.

Hypothesis 4: Organizational learning positively affects innovation performance.

IV. RESEARCH CONCEPTUAL MODEL

Through a literature survey, we have delimited the concepts that we are interested in and established some possible connections between them as follows.

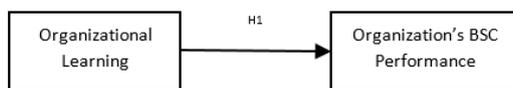


Fig. 1 Research Model 1

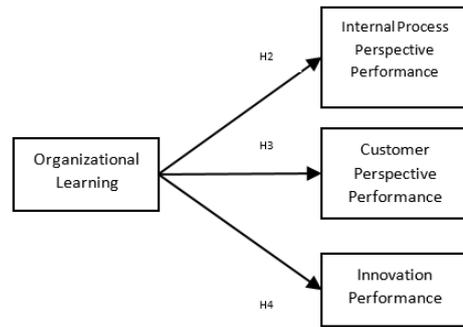


Fig. 2 Research Model 2

V. RESEARCH METHODOLOGY

A. Population and Sampling

Academic faculties in Thailand's higher education institutions were selected as the research population. The participants were chosen from the universities that have been classified into five categories encompassing all 675 faculties. 32.44% were private sector universities and institutions that come under the supervision of the Ministry of Education (MoE). 25.33% were the Rajabhat Universities. 24.59% were the public universities and institutions that are also under the aegis of the MoE. 8.89% comprised autonomous universities and finally, 8.74% of all were the Rajamangala Universities of Technology.

B. Research Instrumentation

This study used the quantitative method where data were collected from CHE-QA online system on the standard of two institutions, namely OHEC and ONES. All variables were gathered from an academic quality assurance control standard scale. Therefore, the data were secondary data in nature and assessed by the coding method to be the proxies for each study variable. Research exogenous and endogenous variables were totally measured by the higher education quality assurance codes.

VI. RESULTS

The SEM was analyzed by investigating and examining the direct effects between the latent variables and the statistical significance of the parameter estimates for the path between the

latent variables. To validate all the variables, this study employed both exploratory factor analysis (EFA) and confirmatory factor analysis (CFA). The model was based on the modified measurement model using the MLE method. The goodness-of-fit indices are shown in Tables I and II.

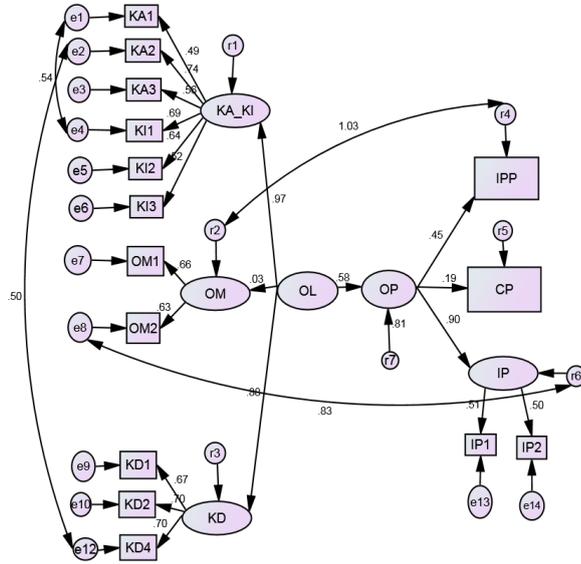


Fig. 3 Structural Equation Model for Research Model 1

TABLE I
MODEL FIT TESTING
FOR RESEARCH MODEL 1

| Model fit criteria | Value | Acceptable level value |
|--|--------|------------------------|
| Chi-Square | 235.09 | - |
| Degree of freedom (DF) | 81 | - |
| Chi-Square / Degree of freedom (CMIN/DF) | 2.90 | Less than 3 |
| p-value | 0.00 | P > .05 |
| GFI | 0.96 | ≥ 0.90 |
| AGFI | 0.93 | ≥ 0.80 |
| CFI | 0.95 | > 0.90 |
| RMSEA | 0.05 | < 0.05 |
| Hoelter | 326 | > 200 |

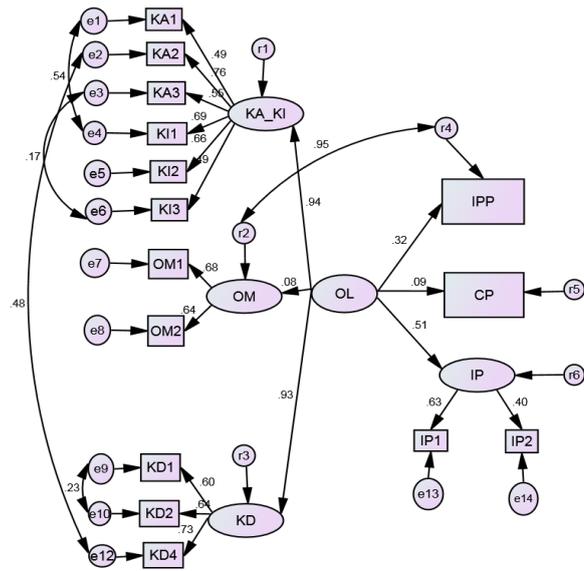


Fig. 4 Structural Equation Model for Research Model 2

TABLE II
MODEL FIT TESTING
FOR RESEARCH MODEL 2

| Model fit criteria | Value | Acceptable level value |
|--|--------|------------------------|
| Chi-Square | 242.19 | - |
| Degree of freedom (DF) | 81 | - |
| Chi-Square / Degree of freedom (CMIN/DF) | 2.99 | Less than 3 |
| p-value | 0.00 | P > .05 |
| GFI | 0.95 | ≥ 0.90 |
| AGFI | 0.93 | ≥ 0.80 |
| CFI | 0.95 | > 0.90 |
| RMSEA | 0.05 | < 0.05 |
| Hoelter | 313 | > 200 |

When testing the research hypotheses, the first step was to use CFA for research model 1. The result of hypothesis 1 was that organizational learning had a positive effect on organizational performance. The next step was using CFA for research model 2 testing. For hypothesis 2 it emerged that organizational learning had a positive effect on internal process perspective performance, while hypothesis 3 was that organizational learning had a positive effect on customer perspective performance. Finally, the find for hypothesis 4 was that organizational learning positively affects innovation performance.

VII. DISSCUSSION

The main goal of the study was to empirically examine the effect of organizational learning on organizational performance. Our findings suggested that organizational learning had a positive and significant effect on organizational performance. This result is not surprising and is consistent with many previous studies [13, 19, 20].

The other three results were that the effects of organizational learning on organizational performance aspects on BSC perspective. The first finding revealed that there was a positive and significant effect of organizational learning on internal perspective performance. This was confirmed in other studies [21, 22]. The second result indicated that organizational learning had a positive effect on customer perspective performance. This result agreed with previous studies [3, 21]. The third result found an positive and significant of organizational learning on innovation perspective, which agrees with previous analyses [23-25].

VIII. IMPLICATIONS

From the theoretical perspective, we proposed a better understanding of organizational learning and its association with organizational performance within the BSC perspective. The study provides a theoretical model that will help academicians formulate the best strategies for maximizing the influence of learning in organizations so that organizations' performance is enhanced. It is therefore suggested that organizations should devise strategies to implement organizational learning in order to achieve an excellent performance standard.

From the managerial perspective, this study shows that higher education institutions' executives can enhance performance if they support the appropriate activities in which effective organizational learning can occur. Finally, higher education institutions will be managed in the right way to achieve the

desired results.

IX. LIMITATIONS AND DIRECTIONS

The paper contributes to the existing literature in a number of ways, but there are some limitations. First, this study focuses only on higher education institutions, and hence the results may not be generalized to all other education sectors. Second, it is a cross-sectional study in that the data was collected at one point in time. The third limitation of the study is that data was collected only from secondary data. Future research should be conducted on other kinds of organization. In order to transform quality certifications into effective learning paradigms, changes in the data should be monitored regularly (longitudinal study). Future researchers should collect primary data to compare results to secondary data. They can do this by implementing a questionnaire or in-depth interviews. These could include focus groups to obtain more relevant information and details.

REFERENCES

(Arranged in the order of citation in the same fashion as the case of Footnotes.)

- [1] Munizu, M. (2013). "The Impact of total quality management practices towards competitive advantage and organizational performance: Case of fishery industry in South Sulawesi Province of Indonesia".
- [2] Terziovski, M. (2006). "Quality management practices and their relationship with customer satisfaction and productivity improvement". *Management Research News*, Vol. 29, pp. 414-424.
- [3] Dulger, M., Alpay, G., Yilmaz, C., and Bodur, M. (2016). "How does learning orientation generate product innovativeness and superior firm performance?". *International Journal of Business and Economic Development (IJBED)*, Vol. 4.
- [4] Garcia-Morales, V.J., Ruiz-Moreno, A.,

- and Llorens-Montes, F.J. (2007). "Effects of technology absorptive capacity and technology proactivity on organizational learning, innovation and performance: An empirical examination". *Technology Analysis & Strategic Management*, Vol. 19, pp. 527-558.
- [5] Senge, P.M. (2006). "The fifth discipline: The art and practice of the learning organization". Crown Pub.
- [6] Senge, P., Kleiner, A., Roberts, C., Ross, R., Roth, G., and Smith, B. (1999). "The Dance of Change Doubleday". New York, NY.
- [7] Suwandee, A. (2009). "Organizational leadership development among the middle executives of Kasem Bundit University, Thailand". PEPPERDINE UNIVERSITY.
- [8] Argyris, C. and Schön, D.A. (1978). "A theory of action perspective". Addison-Wesley Publishing Company.
- [9] Huber, G.P. (1991). "Organizational learning: The contributing processes and the literatures". *Organization science*, Vol. 2, pp. 88-115.
- [10] Crossan, M.M., Lane, H.W., and White, R.E. (1999). "An organizational learning framework: From intuition to institution". *Academy of management review*, Vol. 24, pp. 522-537.
- [11] Argote, L. (2011). "Organizational learning research: Past, present and future". *Management learning*, Vol. 42, pp. 439-446.
- [12] Abu-Jarad, I.Y., Yusof, N.a., and Nikbin, D. (2010). "A review paper on organizational culture and organizational performance". *International Journal of Business and Social Science*, Vol. 1.
- [13] Mahmood, S., Qadeer, F., and Ahmed, A. (2015). "The Role of Organizational Learning in Understanding Relationship between Total Quality Management and Organizational Performance".
- [14] Youngbantao, U. and Rompho, N. (2015). "The Uses of Measures in Performance Prism in Different Organizational Cultures". *Journal of Accounting and Finance*, Vol. 15, pp. 122.
- [15] Kaplan, R.S. and Norton, D.P. (1996). "Linking the balanced scorecard to strategy". *California management review*, Vol. 39, pp. 53-79.
- [16] Andreadis, N. (2009). "Learning and organizational effectiveness: A systems perspective". *Performance Improvement*, Vol. 48, pp. 5-11.
- [17] Wang, G.G., Dou, Z., and Li, N. (2002). "A systems approach to measuring return on investment for HRD interventions". *Human Resource Development Quarterly*, Vol. 13, pp. 203-224.
- [18] Bui, H.T. and Baruch, Y. (2012). "Learning organizations in higher education: An empirical evaluation within an international context". *Management Learning*, Vol. 43, pp. 515-544.
- [19] Jiménez-Jiménez, D. and Sanz-Valle, R. (2011). "Innovation, organizational learning, and performance". *Journal of business research*, Vol. 64, pp. 408-417.
- [20] Ellinger, A.D., Ellinger, A.E., Yang, B., and Howton, S.W. (2003). "Making the business case for the learning organization concept". *Advances in Developing Human Resources*, Vol. 5, pp. 163-172.
- [21] Fang, E.A., Li, X., and Lu, J. (2016). "Effects of organizational learning on process technology and operations performance in mass customizers". *International Journal of Production Economics*, Vol. 174, pp. 68-75.
- [22] Samad, T., McLaughlin, P., and Lu, J. (2007). "System architecture for process automation: Review and trends". *Journal of Process Control*, Vol. 17, pp. 191-201.
- [23] Aragón-Correa, J.A., García-Morales, V.J., and Cordón-Pozo, E. (2007). "Leadership and organizational learning's role on innovation and performance: Lessons from Spain". *Industrial marketing management*, Vol. 36, pp. 349-359.
- [24] Dishman, P. and Pearson, T. (2003). "Assessing intelligence as learning within an industrial marketing group: A

- pilot study”. *Industrial Marketing Management*, Vol. 32, pp. 615-620.
- [25] Zahay, D.L. and Handfield, R.B. (2004). “The role of learning and technical capabilities in predicting adoption of B2B technologies”. *Industrial Marketing Management*, Vol. 33, pp. 627-641.