LINKAGE OF LEARNING ORGANIZATION AND INNOVATION THAT AFFECTS ORGANNIZATION PERFORMANCE IN THE AUTOMOTIVE PARTS INDUSTRY IN THAILAND

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Abstract - The global automotive industry continues to grow at the same time that the automotive industry in Thailand is manufacturing for export as well as serving as an important production base for automotive parts. The automotive industry is highly significant to the development of the country. This study focused on learning organization and innovation that affect organizational performance in the automotive parts industry in Thailand, which should contribute to enhanced competitive advantage in the region. The organizations that emphasize the importance of continual learning and innovation are more competitive and enjoy better organizational performance. The results of this work could be utilized to contribute to Thailand's automotive industry with regards to policy and strategic planning for the development of the industry.

Keywords - Learning organization, Innovation, Organization performance, Thailand's automotive parts industry

I. INTRODUCTION

The global automotive industry continues to grow and expand continuously. It is estimated that light-vehicle assembly will reach 100 million units globally in 2017, primarily influenced by strong demand from the global automotive industry. Demand is led by China, India and ASEAN countries, as well as the cumulative demands of consumers in the United States of America [1]. However, the trend of technological innovation in the automotive industry in the world market has come to a turning point under the current environmental protection, energy savings and global warming streams. Therefore, the world's automotive market has shifted its attention to smaller cars and is looking for low-cost production bases with skilled labor. Thailand's automotive industry is ranked number one in ASEAN and 12nd in the world for car manufacturers [2]. More than half of the products are exported to developed countries such as Japan and several countries in Europe. Therefore, production quality must meet world-class standards. Thailand's auto parts industry consists of two main types: OEM parts (Original Equipment Manufacturer), and REM parts (Replacement Equipment Manufacturer). Accordingly, production volume depends on the demand for automotive spare parts in Thailand and abroad [3]. Senge [4] proposed the so-called "Fifth Discipline on Building Learning Organizations". The Fifth Discipline is the principal foundation of a learning organization that will foster innovative partnerships with customers, suppliers, distributors and competitors, as well as external partnerships. This will result in increased capacity, products that respond to the needs of consumers from the creation of innovative technology, and efficiency through organizational learning [5]. Planning for customers and trade partners contributes to innovation-driven operations. The bolstering of technology strengths, knowledge, innovation, and marketing are related to service innovation and service delivery, leading to better strategic planning in the company and the allocation of resources for sustainable growth [6, 7]. With the above-mentioned reasoning, the researchers aim to study the development of collaboration models and innovation that affects the performance of organizations in the automotive parts industry in Thailand. Collaboration with both internal and external organizations affects innovation creation, production processes, product quality, and services. Organizations in Thailand's automotive parts industry will benefit with regards to setting the most appropriate direction, vision, mission, policy and strategic planning for the organization.

Purpose of the study

This study intends to develop a model for learning organization and innovation that affects organizational performance in the Thai automotive parts industry.

II. THEORETICAL BACKGROUND

2.1. Learning Organization

Learning organization is the center of organizational management. It is an important element of the overall organization [8]. Learning is an important element in determining the vision and goals of the organization [9, 10]. Existence as a learning organization will have an impact on organizational growth and development [11]. Operation as a learning organization will have effects on efficiency in the organization operation [12]. Linkages to team working create a process of learning and understanding in relation to preparation for change. Peter Senge [13] stated that, for organizations that continually build their future, it's not just "survival". Learning to survive is important. Indeed, it is necessary. For the learning organization, learning to survive must be linked with learning to

increase creative ability. At the heart of the learning organization is a shift of mind. The training of personnel is a very important element in the transfer of learning and knowledge [14]. Personal mastery is part of an organization's strategic planning in order to provide balances in work [15]. Mental models bring about the ability to respond quickly [16]. It is the ability in interpersonal work relationships that is in line with the need of the organization to work together by using skills in linkages between the staff and other people in work activities [17]. Shared learning as a team and a shared vision will stimulate knowledge within the organization in connection to work efficiency [15]. Based on research, Baoliang Hu [5] indicated that organizational learning is fully engaged as a mediator between efficiency as a centre for business model and innovative technology efficiency. In line with Joaqui'n Alegre and Ricardo Chiva [8], the capacity of learning organizations has an impact on operation results in innovation creativity. For organizations with top management support on technology and organization learning, the impact on the capacity of technology and learning organization and innovation affect the operation of organizational performance [19, 20].

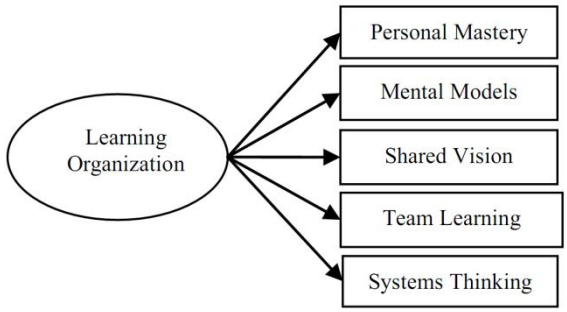

Fig.1. Model of Learning Organization

From a literature review of studies conducted by various scholars and researchers, it can be concluded that there are empirical variables or observable variables, as shown in Fig.1. Collaborative variables can be summed up as four observable variables, including Personal Mastery, Mental Models, Shared Vision, Team Learning and Systems Thinking [4, 15, 21, 22].

2.2. Innovation

Innovation is one of the major strengths for increasing an organization's competitive advantage and service quality [23]. Nonaka [24] suggests that innovation occurs when employees transfer knowledge to the organization, as well as when they jointly share new knowledge in the short term. A learning organization will contribute to the development of the enterprise. Change and application of new knowledge enhances organizational innovation. More innovation in the organizations will lead to improved responses to customer needs and the development of new capabilities that deliver better performance and profitability [25]. Innovation is the acceptance or adoption of new concepts and uses in the organization. Inventing a new concept or developing something new must be utilized commercially or marketed through promotion, development and improvement as well as the re-creation of product processes, techniques and management systems [26] and the operation of the organization's business from using internal resources and internal resources [19]. According to a study by Kyung-Nam Kang and Hayoung Park [27], external government support by stimulating research and development through direct and indirect capital projects has had an impact on organizational innovation. In addition, innovation is significantly influenced by Top Management Support, Customer Focus, Corporate Learning Capabilities, Organizational Learning Capability, Creative Capability, Corporate Collaboration Organizational Collaboration and Supplier Relations [28]. A variety of partners can benefit from innovation, i.e. customers, suppliers, distributors and even competitors. Innovation depends on different types of cooperating partners [29, 30] and may not be the same [31]. The use of external sources also increases the potential of three vehicles and allows products to meet the needs of customers [32]. A literature review of innovation variables from various studies indicates four dimensions of empirical variables or observable variables, as shown in Fig.2. These dimensions include 1) Product innovation, 2) Process innovation, 3) Service innovation, and 4) Organization Innovation [7, 33, 34, 35, 36].

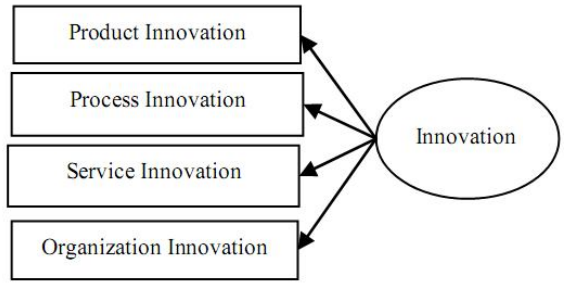

Fig.2. Model of Innovation

2.3. Organizational Performance

The performance of an organization depends on the quality of its employees' collaboration [37]. Repeat customers and word of mouth advertising are important for customer satisfaction and for businesses [38]. Therefore, organizational performance is the progress made in relation to operational achievement and success in relation to the goals set by the organization. Measurement of organizational performance is based on management tools, the implementation of corporate strategy, and the measurement or evaluation of key indicators. Internal processes, learning and development are required in order for the organization to ascertain the success of its financial operations [39]. Organizations nowadays

are focusing more on the measurement of organizational performance by identifying quality measurement indexes and measuring the success of operations. The purpose is to act as a tool to help executives recognize performance and make sound decisions [40]. Four measurement perspectives include Financial Perspective, Customer Perspective, Internal-Business Process Perspective, and Learning and Growth Perspectives. Collaboration can change the way the organization works to improve buyer's sustainable performance. Similarly, it is also believed that collaboration with suppliers and buyers will enhance knowledge and skills, which in turn will improve social performance in society [41], as well as build partnerships between buyers and suppliers to improve performance. Rune Dahl Fitjar et al. [42] found that maintaining sustainability between supply chain partnerships in dealing with external pressures affected the operations of the company. Improvement in the sustainable process helps to save costs and increase sales profits [43]. From a literature review of studies and research on organizational performance conducted by various scholars and researchers, the empirical variables or observable variables are shown in Fig.3. The four variables can be summarized as follows: Customer Retention, Employee Satisfaction, Cost Savings and Growth [44, 45, 46, 47, 48, 49].

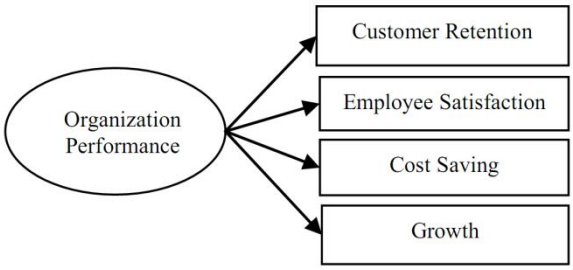

Fig.3. Model of Organization Performance

After reviewing the relevant literature, the research model can be developed with the following hypotheses, as shown in Fig.4.

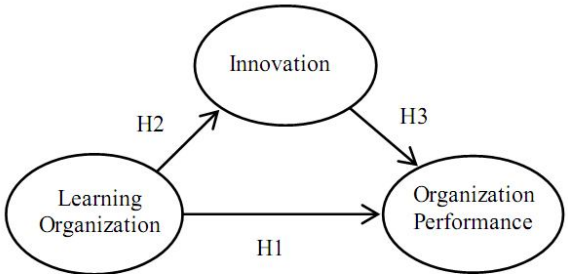

Fig.4. Conceptual framework

Hypothesis 1: Learning organisation has a direct positive influence on the performance of the organisation.
Hypothesis 2: Learning Organisation has a direct positive influence on innovation.
Hypothesis 3: Innovation has a direct positive influence on the performance of the organisation.

III. METHODOLOGY

3.1. Questionnaire Design

The researchers constructed the questionnaire as a measurement tool based on the conceptual framework and the operational definition. The measuring instrument or questionnaire will use a 7-point Likert Scale [50], as shown in Table 1. The questionnaire was tested by 5 experts on IOC value for evaluating content validity. Only IOC values of 0.5 or higher were selected. Subsequently, the revised questionnaire was used with 30 samples to test Cronbach's α-coefficient to calculate the mean of the correlation coefficients. Only empirical variables with a confidence level greater than 0.70 were considered to be highly confident.

Latent Variables	Manifest Variables	Development
Organization Performance	1) Customer Retention 2) Employee Satisfaction 3) Cost Reduction 4) Growth	34, 51, 52
Learning Organization	1) Personal Mastery 2) Mental Models 3) Shared Vision 4) Team Learning 5) Systems Thinking	48, 53, 54
Innovation	1) Product Innovation 2) Process Innovation 3) Service Innovation 4) Organization Innovation	20, 34, 55

Table 1: Questionnaire construct and development of research questions from literature review

3.2. Data Collection

The researcher used a Structural Equation Model (SEM) or Causal Analysis of Variables to analyze the data and the relationships among variables. For correlational analysis with high statistical analysis and relationships between variables, a population of 20 per sample size of 1 variable was used. Schumacker & Lomax [56] stated that the analysis of the structural equation model (SEM) requires larger sample sizes than in other analysis techniques in order to ensure proper estimations and accurately represent the population. Hair et al. [57] stated that the size of the sample should be large enough to analyze the data by applying the structure equation form and normal curve distribution. In this study, the researcher collected data from 220 factories that manufacture automotive parts in Thailand. Through a stratified sampling technique, Tier 1 of the manufacturers was identified from all 6 sub-regions in Thailand. Subsequently, a simple random sample was taken from the population of managers with 5

years or more work experience in the manufacturer of automotive parts.

RESULT AND DISCUSSION

The organization of learning and innovation has a direct positive influence on the performance of an organization. In line with a study conducted by K.N. Krishnaswamy et al. [58], technological innovation influences the growth of SMEs in the automotive parts industry. Entrepreneurs' awareness of marketing opportunities and actions taken for changing innovative technology to meet customer needs are an important point of innovation. Innovation leads to continuous growth, including linking the learning organization and the performance of the organization on the basis of learning on the individual, team, and organizational levels. Innovation can enhance and promote organizational performance [59] through in-house knowledge transfer [60], which helps to improve organizational performance. The learning organization strives to share and transfer knowledge so that it can maintain its competitive edge and stimulate the development of financial and non-financial performance.

CONCLUSIONS

It is essential that Thailand's automotive industry develops and focuses on competition as a learning organization. The industry should promote learning processes and a learning structure, as well as a team communication process that facilitates more transfer of knowledge. Learning organizations should create new innovation and build on existing knowledge, including developing its 'organizations to be more competitive and grow sustainably when compared to competitors in the same industry. The ability to develop into a learning organization will result in the organization's innovative ability to create process innovation, product innovation and service innovation. Organizational innovation enables the capacity to create a sustainable competitive advantage.

This research finds that being a learning organization is an important factor in the creation and enhancement of product innovation, process innovation, service innovation and organizational innovation, which affect organizational performance and enhance the capacity of low-cost supporting industries, as well as maintaining the customer base and employee satisfaction. Strong linkages in the industry, customer retention, employee satisfaction and linkages to strong collaboration in the national automotive parts industry with regards to knowledge transfer and innovation affect employees' development in specific sectors and enable entrepreneurs to adapt to future competition.

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REFERENCES

[1] NSTDA, National Science and Development Agency, NSTDA's Strategic Plan 2011-2016. Strategic Planning Alliance II: SPAII. http://tinyurl.com/ozx67g3 [accessed on September 3, 2016]

[2] OICA, "2016 Production Statistics", [Online] Available: http://www.oica.net/category/production-statistics/, 2016.

[3] TAI, "Thailand Automotive Institute Master Plan for Automotive Industry 2012 – 2016", Ministry of Industry, http://tinyurl.com/o6cs4xs [accessed on September 3, 2016]

[4] Senge, P., "The Fifth Discipline: The art & practice of the learning organization", London: Century Business, 1990.

[5] Baoliang Hu, "Linking business models with technological innovation performance through organizational learning", European Management Journal, vol.32(2014), pp.587–595, 2014.

[6] Rajeev Verma and K.R. Jayasimha, "Service delivery innovation architecture: An empirical study of antecedents and outcomes." IIMB Management Review, vol.26, pp.105-121, 2014.

[7] Wawmayura Chamsuk, Wanno Fongsuwan, Josu Takala, "The Effect of Research and Development Capability on Competitive Advantage: A SEM Approach an Automotive Parts Industry in Thailand" Management and Production Engineering Review, Volume 8 Number 1, pp. 101-112, 2017.

[8] Armstrong, O.E., & Rasheed, A., "Structural Dimensions and Functions of Structure Influencing Agribusiness Enterprises: Mechanistic Vs Organic Systems Approach", Journal of Business and Management, vol.6, no.6, pp.1-63, 2013.

[9] Van Grinsven, M., & Visser, M., "Empowerment, Knowledge Conversion and Dimensions of Organizational Learning", The Learning Organization, vol.18, no.5, pp.378-391, 2011.

[10] Messarra, L.C. & El-Kassar, A.N., "Identifying Organizational Climate Affecting Learning Organization" Business Studies Journal, vol.5, no.1, pp.19-27, 2013.

[11] Norashikin Husseina, Safiah Omara, Fauziah Noordina, Noormala Amir Ishak, "Learning Organization Culture, Organizational Performance and Organizational Innovativeness in a Public Institution of Higher Education in Malaysia: A Preliminary Study." Procedia Economics and Finance, vol.37 (2016), pp.512 – 519, 2016.

[12] Pelin Kantena, Selahattin Kantenb, Mert Gurlekc, "The Effects of Organizational Structures and Learning Organization on Job Embeddedness and Individual Adaptive Performance" Procedia Economics and Finance, vol.23 (2015), pp.1358 – 1366, 2015.

[13] Senge, P., "The Fifth Discipline Fieldbook: Strategies and Tools for Building a Learning Organization" London: Century Business, 1994.

[14] Kim, J. H., Callahan, J. L., "Finding the intersection of the learning organization and learning transfer: the significance of leadership" European Journal of Training and Development, vol.37, no.2, pp.183-200, 2013.

[15] Bui, H. T., Baruch, Y., 2011, "Learning organizations in higher education: An empirical evaluation within an international context" Management Learning, 1350507611431212, 2011.

[16] Wheeler, R., "Adaptive Performance, Cognitive Ability and The Moderating Effect of Task Characteristics" Doctoral Thesis, University of Oklahoma Graduate College, Norman, Oklahoma, 2012.
[17] Murphy, W.M., Burton, J.P., Henagan, S.C. & Briscoe, J.P., "Employee Reactions to Job Insecurity in a Declining Economy: A Longitudinal Study of the Mediating Role of Job Embeddedness" Group & Organization Management, vol.38, no.4, pp.512–537, 2013.
[18] Joaqu´ın Alegre and Ricardo Chiva, "Assessing the impact of organizational learning capability on product innovation performance: An empirical test" Technovation, vol.28 (2008), pp.315–326, 2008.
[19] Mar´ıa Teresa Bol´ıvar-Ramos, V´ıctor J. Garc´ıa-Morales, Encarnacio´n Garc´ıa-Sa´nchez, "Technological distinctive competencies and organizational learning: Effects on organizational innovation to improve firm performance" J. Eng. Technol. Manage, vol.29 (2012), pp.331–357, 2012.
[20] Daniel Jiménez-Jiménez, Raquel Sanz-Valle, "Innovation, organizational learning, and performance" Journal of Business Research, vol.64 (2011), pp.408–417, 2011.
[21] Zeynep Kabadayı Kuşcu, Müjdelen Yener, F. Gülruh Gürbüz, "Learning Organization and its Cultural Manifestations: Evidence from a Global White Goods Manufacturer", Procedia - Social and Behavioral Sciences, vol.210 (2015), pp.154 – 163, 2015.
[22] Farhad Alipour, Roohangiz Karimi, "Mediation Role of Innovation and Knowledge Transfer in the Relationship between Learning organization and Organizational Performance" International Journal of Business and Social Science, vol.2, no.9, 144-148, 2011.
[23] Parasuraman, A., "Service productivity, quality and innovation: Implications for service-design practice and research" International Journal of Quality and Service Sciences, vol.2, pp.277–286, 2010.
[24] Nonaka I., "A dynamic theory of organizational knowledge creation" Organ Sci., vol.5, no.1, pp.14–37, 1994.
[25] Sadikoglu, E., & Zehir, C., "Investigating the effects of innovation and employee performance on the relationship between total quality management practices and firm performance: An empirical study of Turkish firms", International Journal of Production Economics, vol.127, pp.13–26, 2010.
[26] Ilker Murat Ar., "The impact of green product innovation on firm performance and competitive capability: the moderating role of managerial environmental concern" ,Procedia - Social and Behavioral Sciences, vol.62(2012), pp.854 – 864, 2012.
[27] Kyung-Nam Kang , Hayoung Park, "Influence of government R&D support and inter-firm collaborations on innovation in Korean biotechnology SMEs" Technovation, vol.32(2012), pp.68–78, 2012.
[28] Ilker Murat Ar and Birdogan Baki, "Antecedents and performance impacts of product versus process innovation: Empirical evidence from SMEs located in Turkish science and technology park" European Journal of Innovation Management, vol.14, no.2, pp.172–206, 2011.
[29] Schøtt, T., Sedaghat, M., "Innovation embedded in entrepreneurs networks and national educational systems: a global study" Small Bus. Econ, vol.43, no.2, pp.463–476, 2014.
[30] Zeng, S.X., Xie, X.M., Tam, C.M., "Relationship between cooperation networks and innovation performance of SMEs" Technovation, vol.30, pp.181–194, 2010.
[31] Lokshin, B., Hagedoorn, J., Letterie, W., "The bumpy road of technology partnerships: understanding causes and consequences of partnership mal-functioning" Res. Policy, vol.40, pp.297–308, 2011.
[32] Lipparini, A., Sobrero, M., "The glue and the pieces: entrepreneurship and innovation in small-firm networks" J. Bus. Venturing, vol.9, pp.125–140, 1994.
[33] Foret, Jerad A., Steen, John and Verreyrute. Martie-Louise, "How environmental regulations affect innovation in the Australian oil and gas industry: going beyond the Porter Hypothesis" Journal of Cleaner Production, vol.84 (2014), pp.204-213, 2014.
[34] Víctor Jesús García-Morales, María Magdalena Jiménez-Barrionuevo, Leopoldo Gutiérrez-Gutiérrez, "Transformational leadership influence on organizational performance through organizational learning and innovation" Journal of Business Research, vol.65(2012), pp.1040–1050, 2012.
[35] Alain Y.L. Chong, Felix T.S. Chan, K.B. Ooi, J.J. Sim, "Can Malaysian firms improve organizational/innovation performance via SCM?" Industrial Management & Data Systems, vol.111, no.3, pp.410 – 431, 2011.
[36] Alexandra Simon and Luc Honore Petnji Yaya, "Improving innovation and customer satisfaction through systems integration" Industrial Management & Data Systems, Vol. 112, issu 7, pp.1026 – 1043, 2012.
[37] Lahiri, S., Kedia, B.L., Mukherjee, D., "The impact of management capability on the resource–performance linkage: examining Indian outsourcing providers" Journal of World Business, vol.47, no.1, pp.145–155, 2012.
[38] Nambisan, S., "Designing virtual customer environments for new product development: towards a theory" Academy of Management Review, vol.27, no.3, pp.392–413, 2001.
[39] Revti Raman, DorenChadee, Banjo Roxas, Snejina Michailova, "Effects of Partnership Quality, Talent Management, and Global Mindset on Performance of Offshore IT Service Providersin India" Journal of International Management, vol.19 (2013), pp.333–346, 2013.
[40] Robert S. Kaplan and David P. Norton, "Using the Balanced Scorecard as a Strategic Management System," Harvard Business Review (January-February 1996), pp.76, 1996.
[41] Gualandris, J., Golini, R., Kalchschmidt, M., "Do supply management and global sourcing matter for firm sustainability performance? Int. Study" Supply Chain Manag. Int. J., vol.19, no.3, pp.258-274, 2014.
[42] Rune Dahl Fitjar , Andrés Rodríguez-Pose, "Firm collaboration and modes of innovation in Norway" Research Policy, vol.42(2013), pp.128– 138, 2013.
[43] Thoo Ai Chin, Huam Hon Tat, Zuraidah Sulaiman, "Green Supply Chain Management, Environmental Collaboration and Sustainability Performance" Procedia. CIRP, vol.26 (2015), pp.695 – 699, 2015.
[44] Zakuan, N.M., Yusof, S.M., Laosirihongthong, T. and Shaharoun, A.M., "Proposed relationship of TQM and organizational performance using structured equation modeling" Total Quality Management, vol.21, no.2, pp.185-203, 2010.
[45] Chinho Lin, Wing S. Chow, Christian N. Madu, Chu-Hua Kuei, Pei Pei Yu, "A structural equation model of supply chain quality management and organizational performance" Int. J. Production Economics, vol.96(2005), pp.355–365, 2005.
[46] T. Ramayah, NusrahSamat, May-Chiun Lo, "Market orientation, service quality and organizational performance in service organizations in Malaysia" Asia-Pacific Journal of Business Administration, vol. 3, no.1, pp.8-27, 2011.
[47] Fang-Yi Lo and Pao-Hung Fu, "The interaction of chief executive officer and top management team on organization performance" Journal of Business Research, 69 (2016), pp.2182–2186, 2016.
[48] K. Grekova, R.J. Calantone, H.J. Bremmers, J.H. Trienekens, S.W.F. Omta, "How environmental collaboration with suppliers and customers influences firm performance: evidence from Dutch food and beverage processors" Journal of Cleaner Production, vol.112 (2016), pp.1861-1871, 2016.
[49] Robyn King and Peter Clarkson, "Management control system design, ownership, and performance in professional service organizations" Accounting, Organizations and Society, vol.45 (2015), pp.24–39, 2015.
[50] Likert, R., Likert Technique for Attitude Measurement. In: Social Psychology: Experimentation, Theory, Research,

Sahakian, W.S. (Ed.). Intext Educational Publishers, Scranton, USA, ISBN-13: 9780700223879: 101-119, 1972.
[51] Chien-Huang Lin, Ching-Huai Peng and Danny T. Kao, "The innovativeness effect of market orientation and learning orientation on business performance" International Journal of Manpower, vol.29, no.8, pp.752-772, 2008.
[52] Halit Keskin, "Market orientation, learning orientation, and innovation capabilities in SMEs An extended model" European Journal of Innovation Management, Vol. 9 No. 4, pp.396-417, 2006.
[53] Christina Öberg, "What creates a collaboration-level identity?" Journal of Business Research, vol.69 (2016), pp.3220–3230, 2016.
[54] Guangping Wang,Wenyu Dou, Weichun Zhu, Nan Zhou, "The effects of firm capabilities on external collaboration and performance: The moderating role of market turbulence" Journal of Business Research, vol.68 (2015), pp.1928–1936, 2015.
[55] Aron O'Cass and Liem Viet Ngo, "Creating superior customer value for B2B firms through supplier firm capabilities" Industrial Marketing Management, vol.41(2012), pp.125–135, 2012.
[56] Schumacker, R.E. and R.G. Lomax, A Beginners Guide to Structural Equation Modeling, New York : Routledge, ISBN-13: 9781841698915, 2010.
[57] Hair Jr., J.F., Black, W.C., Babin, B.J. and Anderson, R.E., Multivariate Data Analysis: A Global Perspective. 7th Edition, Pearson Education, Upper Saddle River, 2010.
[58] K.N. Krishnaswamy, M. Mathirajan, M.H. Bala Subrahmanya, "Technological innovations and its influence on the growth of auto component SMEs of Bangalore: A case study approach" Technology in Society, vol.38 (2014), pp.18–31, 2014.
[59] Calantone, R.J., Cavusgil, T., Zhao, Y., "Learning orientation, firm innovation capability, and firm performance" Industrial Marketing Management, vol.31, pp.515–524, 2002.
[60] Jiang, X., & Li, Y., "The relationship between organizational learning and firms' financial performance in strategic alliances: A contingency approach" Journal of World Business, vol.43, no.3, pp.365-379, 2008.

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