

The Secret to Enhance Innovativeness in Digital Industry

Ardi
Business School
Universitas Pelita Harapan
Jl. Jend. Sudirman No.50, Jakarta, Indonesia
AA70021@student.uph.edu

Kezia Arya Nanda
Department of Communication
Binus University International
Jl. Jend. Sudirman, Jakarta, Indonesia
hirekeziatoday@gmail.com

Abstract— The effects of leadership styles on organizational performance are still arguable due to the inconsistencies. Many researchers analysed the direct and indirect relationships with antecedents' variables of organizational performance. However, organizations sometimes fail to achieve their organizational performance due to their limited understanding of the relationships between leadership styles, knowledge sharing, and innovation that will enhance organizational performance.

This study constructs the empowering knowledge sharing interaction capability to mediate between leadership styles and organizational innovativeness. This research deploys 32 digital firms' top management or owners in Indonesia as samples. Data are gathered through online questionnaire of Likert's Scales, and analysed with Smart PLS (partial least squares).

The finding of this study of empowering knowledge sharing interaction capability directly enhances organizational innovativeness which in turn significantly improves organizational performance. In line with previous study, leadership styles have a positive impact on empowering knowledge sharing interaction capability, organizational innovativeness and organizational performance.

Keywords: *transformational leadership, transactional leadership, empowering knowledge sharing interaction capability, organizational innovativeness, organizational performance*

I. INTRODUCTION

Industry 4.0 has changed the business world today by being characterized by several technology components: Cyber-Physics Systems, Internet of Things, Internet Services, Smart Factory & Smart Products, M2M (Machine-to-machine) communication, Big data and Cloud computing. Mastery of knowledge, science and technology are the key to win competition. Technology can be studied under technology elements such as

technical devices (technoware), human devices (humanware), information devices (infoware), and organizational devices (orgaware) in relation to knowledge management. Technical devices increase added value or productivity, human devices to promote science, skills and work ethics, information devices, the applied technology and organizational devices, the ability of human resources, management practices, and organizational connection that set to achieve positive results [1].

Knowledge management and innovation are processes for creating, exploiting, renewing, applying and understanding knowledge to enhance for a new way needed for competitive advantage [2]. Knowledge sharing increases new knowledge and organizational capabilities to create innovation. Knowledge sharing has been studied as the mediation between leadership styles and innovation and these three aspects, leadership styles, knowledge sharing, and innovation, will enhance organizational performance [3]; [4]; [5]; [6]; [7]. Leadership of the organization is the most important key factor for successful execution of knowledge management.

II. LITERATURE REVIEW

Leadership inspires employees to acquire, transfer and apply knowledge for innovative performance [8]. Study have found significant direct and indirect association between leadership and knowledge sharing [5], while other study found no relationship between transformational leadership and knowledge sharing besides transactional leadership [9]. Transformational leadership is also found to have insignificant impact on the organizational innovation and suggests future research on the relation of knowledge sharing as important antecedent of organizational innovation [10]. Latest studies show significant relationship between leadership styles and organizational performance [11]; [6], while other study show insignificant relationship between

transformational leadership and organizational performance, but mediated indirectly by job satisfaction [12]. The interactive effects of transformational leadership and munificence on firm performance (both 4-month growth and 1-year growth) are insignificant [13]. Both leadership styles have different results in their implementation as found in the research gap above.

A. *Leadership Styles*

Leadership describes the relationship of interaction between leaders and subordinates that influence subordinates to behave toward completing tasks, maximizing productivity, clear vision, improving organizational outcomes, and organizational innovativeness to search for new ideas, abilities, and high creativity [14]. Leaders also improve togetherness in the organization, join commitment, and unite organization members in achieving their organizational goals and objectives [15].

The leadership process can occur in one of two styles, transformational or transactional leadership [17]; [18]; [19]. They were investigated as antecedents for organization learning, knowledge sharing and, organizational innovation to improve organizational performance [14]; [15]; [16];[5];[20].

Transformational leadership consists of four styles, i.e. idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration [21]; [17]. Transformational leaders involve their followers, provide meaning and inspire emotion to expand and lift them [19]. Ideal influence or charisma of leaders provides vision, mission, and inspires subordinates. Inspirational motivation, meaning leaders acting as role models for their subordinates, brings intellectual stimulation, meaning leaders stimulating the efforts of their assistants to be innovative and creative. Finally, individualized consideration provides support, guidance, and training to followers [22].

In contrast, transactional leadership emphasizes contingent reward and management by exception, management focuses on exchange transactions between leaders and employees to achieve organizational goals, subordinates try to meet expectations to get rewards and avoid sanctions or penalties; while leaders expect high performance [23]; [22]; [19]; [24]. Exchange is based on agreement and clarity regarding goals, work standards, work assignments, and awards. Transactional leadership tends to maintain stability; while transformational

leadership is more active in developing followers.

Leadership styles in organizations provide different results from previous studies. There's insignificant effect of leadership styles on innovation [25] but it inspires organizational learning [16]. The relationship between the construction of transformational and transactional leadership positively correlates with knowledge management activities [26], knowledge sharing [9], employee's creativity when mediated with psychological empowerment [27] and organizational innovation [23]; [15]. Transformational leadership styles can develop capabilities and exploit organizational knowledge to increase knowledge and creativity.

B. *Knowledge Sharing*

Barney in resources-based value theory (RBV) determines competitive advantages as the ability to control the company resources that are valuable, rare, cannot be imitated and cannot be replaced including company management expertise, organizational processes and routines, and information and knowledge [28]; [29]. Knowledge is the most strategic resource thus superior organization is a learning organization that produces knowledge that improves the past and produces a breakthrough.

Knowledge is the result of interaction between individuals, groups, and organizational units that are influenced by internal and external motivational factors or empowerment that will encourage the creation of new knowledge and innovations which can enable increased performance and productivity.

There are two types of knowledge, explicit knowledge and tacit knowledge or intangible knowledge. Explicit knowledge is conveyed in words and numbers, scientific formulas, specifications, standard operating procedures, graphics, manuals, etc., and passed on from one person to another in a systematic way. Tacit knowledge is in the human mind, very personal and difficult to form, making it difficult to communicate or convey to others such as feelings, intuition, body language, physical experience, and practical instruction, but also rare or unique, cannot be imitated, and cannot be substituted [30]; [31].

Both tacit & explicit knowledge are epistemological dimensions of organizational learning, the process of creating knowledge and learning organizations that work through various stages of socialization (tacit to tacit), externalization (tacit to explicit), combination (explicit to explicit) and internalization (explicit to tacit). After internalization is achieved, the process begins again, starting from a higher level of knowledge, resulting in cognitive evolution with increasing accumulation of knowledge, this

process has a spiral shape [23]. Synergizing both tacit and explicit knowledge creates new knowledge.

Knowledge sharing consists of two dimensions: knowledge donation (KD) and knowledge collection (KC). Knowledge donation is to share personal intellectual capital through conversation and knowledge collection is earn their intellectual capital through consulting with partners.

Knowledge emerging from KD and KC improves an organizational routines, processes and practices for innovation [32]. Knowledge that is shared and exchanged within organizations will produce new information and experiences that grow linearly, but if the new knowledge gets feedback or support it will grow exponentially [33].

Knowledge sharing is believed to be the mediation between leadership styles and innovation. Knowledge sharing increases new knowledge and organizational capabilities to create innovation [3]; [4]; [5]; [6]; [7]. These three aspects, leadership styles, knowledge sharing, and innovation, will enhance organizational performance.

C. Empowerment

Empowerment includes a shared decision-making process, gains access to resources, increases member participation, increases organizational effectiveness for achieving goals [34]; [35]; [36].

Psychological empowerment makes employees become proactive, innovative, motivated, independent, and confident to perform certain tasks and make decisions to improve organizational performance[37].

i. Empowered Interaction Capability

Company’s interactions with customers determine the success of the company. There are six interaction capabilities, namely individuated interaction capabilities, relational interaction capabilities, ethical interaction capabilities, empowered interaction capabilities, developmental interaction capabilities, and concerted interaction capabilities [38], [39]. Each of these strategic interaction capabilities is meaningful and mutually integrated which is beneficial as a relevant theme from the Service- dominant logic a concept of service interaction between companies and customers. [40]; [41]; [42].

Empowered interaction capability becomes a special talent needed by leaders to deal with things that are more complex and require cognition (the process of gaining knowledge) and related to intellectuals [38]; [39].

Empowered interaction capability encourages individual actors to form profitable resources and experiences that facilitate, enhance, and actualize shared value creation in organizational level interaction capabilities [43]. This interaction can be developed in sharing knowledge as to encourage the emergence of innovations that organizations need to have competitive advantage that results in organizational performance [44]; [45]. This study refers to Karpen’s idea of how the concept of empowered interaction capability is adopted in the process of dynamic interaction between organizational members in order to improve team performance.

ii. Derivation of Empowering Knowledge Sharing Interaction Capability

Empowering knowledge sharing interaction capability (EKSIC) is a newly constructed concept taken from Service-Dominant orientation theory [38], [39].

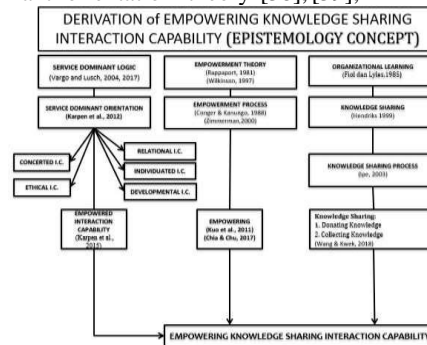
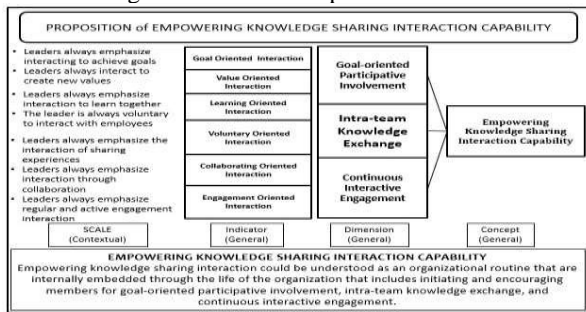


Figure 1: Derivation of Empowering Knowledge Sharing Interaction Capability

empowerment theory [46]; [47]; [48]; [49]; [35], knowledge sharing theory [50]; [51]; [52]; [32]; [36], and organization learning theory [53]. Empowered interaction capability and empowerment concept have same dimensions which can be combined as empowering interaction capability. This research synthesizes process of various concepts and theories to obtained EKSIC as a strategic mediator between types of leadership and organizational innovativeness related to company’s performance.

EKSIC could be understood as an organizational routine that is internally embedded through the life of the organization that includes initiating and encouraging members for goal-oriented involvements, intra-team knowledge exchanges, and continuous interactive engagements to improve organizational performance. The research proposition model shown in figure 2 have 3 dimensions as stated above and 6 indicators (Goal-oriented interaction and Value creating interaction under Goal-oriented participative involvement dimension; Learning-oriented interaction and Voluntary oriented interaction under Intra-team knowledge exchange; Collaboration oriented interaction and Engagement-oriented interaction under Continuous interactive engagement).

Figure 2: Research Proposition Model.



iii. Organizational Innovativeness

Organization creates competitive advantage through innovation of new products or services, market expansion, production processes improvement, and service quality. Utilization of external organization resources such as the availability of natural resources, technology, labour market; and utilization of internal organization resources such as employee skills and capability, knowledge sharing, organizational structure, and work systems create organizational innovativeness [54]. Managing resources and intellectual abilities inherent in the organization and every member of the organization (both explicit and tacit knowledge) is a valuable and strategic source for generating innovation. Knowledge management and innovation are important competencies for improving organizational performance [55]. To develop the intellectual capital, organizations must use social capital which can be achieved through interaction between members and the ability of the organizations to introduce innovation as a form of newness [45].

Innovation can improve efficiency, productivity, competitiveness, and ultimately performance. Innovation is an important component of sustainable competitive advantage [56]; [57], but organizations are mostly designed to promote order and routines that are not friendly to innovation, so leadership should provide direction and create an environment that supports creativity and innovativeness through various processes of organizational learning, new knowledge, and essential competencies for the firm [3]; [7].

Four types of innovations are product/service, market and organization OECD [58]; [59]. Product/service innovation creates new products or services such as technical specifications, the latest software for expansion into new markets and industries. Process innovation is an implementation of new method of production or delivery system. Market innovation is new marketing method in product design, product placement, promotion, and pricing of products in order to penetrate new digital markets or increase company sales. Organization innovation is an implementation of new method in the practice of business and external relations of the company which will improve company's performance by updating organizational systems, procedures, and routines to encourage team's cohesiveness, coordination, collaboration, knowledge sharing, and learning OECD [58]; [59].

Numerous studies have reported that leadership styles such as transformational and transactional leadership contribute towards innovation and organizational performance through certain mediators such as knowledge sharing, organizational innovation, organizational learning, and HRM practices [16]; [4]; [5]; [60]; [20]. Transformational leadership has a direct impact on innovation because top management strives to foster innovation, increase growth, and profitability. Other study have found insignificant relationships and suggested the need for future research that links leadership style and innovation to organizational performance [61].

The main objective of this study is to systematically track the impact of empowering knowledge sharing interaction capability between leadership styles towards organizational innovativeness that at the end will enhance organizational performance in digital organizations. This study adopts three-dimensional model of innovation related to the service sector, which are product innovation, process innovation, and market innovation.

iv. Organizational Performance

Researchers have found both direct and indirect connection from leadership styles to organizational performance [15]; [62]; [63]. The antecedents of organizational performance include research in several domains of social sciences [64].

Innovation is a key factor in the creation of technology and in maintaining the organization's competitive advantage, which in turn increases its overall performance[62].

Transformational leadership confronts reality by drawing on intellectual capital, know-how and learning. It influences learning positively, challenging the existing level to influence organizational innovation and improve performance [16]; [15]. This study adopts three-dimensional model of organizational performance, which are profitability, sales growth and customer satisfaction [65]; [66].

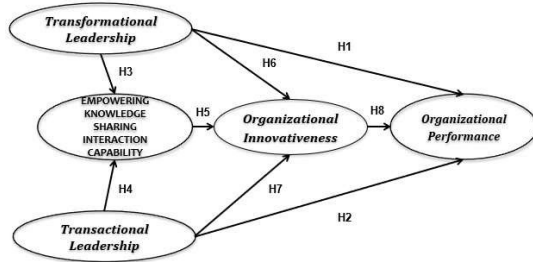


Figure 3: Empirical Research Model.

v. Empirical Research Model and Research Hypothesis

To answer the research question: should organization consider the empowering knowledge sharing interaction capability to increase organizational innovativeness that will enhance organizational performance? this study develops empirical research model and will test and analyse the data in digital industry. It is expected that conclusions can be drawn to answer research question and to analyse evidences according to the hypothesis that have been formulated in table 1.

Data for this research are drawn from a survey of knowledge practices in the context of digital firms in Indonesia. In addition, the survey instrument contained instructions for completion and research variables consists of the organizational performance, leadership

styles (transformational leadership and transactional leadership), empowering knowledge sharing interaction capability and organizational innovativeness.

The study adopted self-reported data management approach. Questionnaires distributed online to the top management from the digital industries as well as those owners who are familiar with the company's activities and practices. Purposive sampling used to collect data from directory of digital firms.

III. RESEARCH METHOD

Table 1: Research Hypothesis.

No	Hypothesis
Hypothesis 1	Transformational leadership has a positive effect on organizational performance
Hypothesis 2	Transactional leadership has a positive effect on organizational performance
Hypothesis 3	Transformational leadership has a positive effect on empowering knowledge sharing interaction capability
Hypothesis 4	Transactional leadership has a positive effect on empowering knowledge sharing interaction capability
Hypothesis 5	Empowering knowledge sharing interaction capability has a positive effect on organizational innovativeness
Hypothesis 6	Transformational leadership has a positive effect on organizational innovativeness
Hypothesis 7	Transactional leadership has a positive effect on organizational innovativeness
Hypothesis 8	Organizational innovativeness has a positive effect on organizational performance

Table 2: Test Reliability and Validity.

Variable	AVE	Composite Reliability	Cronbach's Alpha
Empowering Knowledge Sharing Interaction Capability	0.757	0.956	0.946
Organizational Innovativeness	0.552	0.83	0.736
Organizational Performance	0.736	0.918	0.88
Transactional Leadership	0.597	0.806	0.705
Transformational Leadership	0.666	0.908	0.871

processing data deploy Smart PLS to answer research questions. All top management voluntary take part in this survey without any reward. There are 32 valid responses from top management or owners of digital companies.

IV. RESULTS

In descriptive statistics using Smart PLS, statements that are considered valid should have an outer loading value greater than 0.5. The loadings range from 0.7 to 0.9 and all Cronbach's alpha values are greater than 0.70.

Transformational leadership was measured by the scales developed by Podsakoff et al., (1996). The transformational leadership scale consists of five items. Transactional leadership was measured using scales developed by Jensen et al., (2019) but omitting non-pecuniary rewards. The transactional leadership scale consists of three items. Empowering knowledge sharing interaction capability developed for this research comprises of seven items. Organizational innovativeness was assessed by the scales developed by Miller and Friesen's. The scale comprises of four items. All items used a five-point Likert scale anchored from 1, strongly disagree, to 5, strongly agree. Organizational performance was measured by using the scales from Cho et al., [66].

A five-point Likert-type scale was used to measure organizational performance, choices ranging from 1 poor to 5 excellent.

Result of Smart PLS is shown on Fig.4. Transformational and Transactional leadership related to organizational performance (H1 and H2) and have a positive relation with empowering knowledge sharing interaction capability (in short knowledge sharing interaction) (H3 & H4). Empowering knowledge sharing interaction capability relates significantly and positively with organizational innovativeness (H5). Transformational leadership and transactional leadership positively relates to organizational innovativeness (H6 & H7), and organizational innovativeness relates to organizational performance

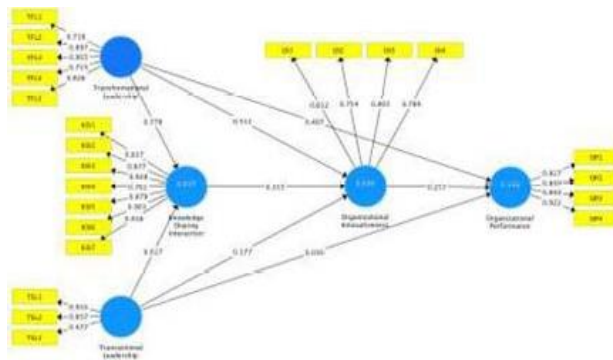


Figure 4: Result of Smart PLS.

in line with Hypothesis 8. Other results from this study show that transformational leadership has stronger influence on organizational innovativeness and organizational performance compared to transactional leadership, as seen in Figure 4.

V. DISCUSSION

The results showed that leadership types influence organizational performance, which is consistent with previous studies [11]; [6]. The empirical model demonstrated that transformational leadership had positive effects on empowering knowledge sharing interaction capability, different from research conducted by [9]. Therefore, this study proposed empowering knowledge sharing interaction capability as essential to enable employees' innovativeness.

This study supports the research which states that knowledge sharing positively affects the organizational innovativeness [16]; [4]; [5]. Other results showed that leadership types had significant impact on the organizational innovation, which is different from previous research [10]; [25]. There is indirect relationship between transformational leadership and organizational performance, mediated by organizational innovativeness. Organization that successfully implement knowledge will generate innovation in terms of new products and services to enhance the organization performance, which is in line with previous research [63].

VI. CONCLUSIONS

The study contributes scientifically and practically to the discussion around knowledge sharing, innovation, and leadership of practitioners in Industry 4.0.

The study creates an understanding of empowering knowledge sharing interaction capability (EKSIC) which comes from the term empowering knowledge sharing interaction capability, which is needed for a reasonable scientific discussion to impact innovativeness.

The study's practical contributions are twofold: First, the definition given for EKSIC helps clarify the basic understanding of the term knowledge sharing among practitioners. Second, the six design indicators can be used for implementing EKSIC scenarios in companies. They will help identify cases and guidance during implementation stages.

Limitations of the study result from its sample and research method applied. This study only focuses on organizational innovativeness as the mediator. Other research could look at other mediators such as competitive advantage, intellectual capital, and job performance. Furthermore, it is possible that EKSIC related topic might have been overlooked, consequently, to an imperfect definition of EKSIC.

For further research, both academics and practitioners are welcomed to test the accuracy and usefulness of the definition given and challenge their utility of EKSIC. Empowering Knowledge sharing interaction capability is an integral part of organization behavioural study that organizational learning, competitiveness and innovation are platforms to prepare and develop human capital.

REFERENCES

- [1] Daryani, S. M., Khodaverdi, Y., Rasouli, E., & Shareghi, B. (2012). The importance of knowledge management technologies in performance improvement of organizations. *Life Science Journal*, 9(4), 4695-4699.
- [2] Thornhill, S. (2006). Knowledge, innovation and firm performance in high- and low- technology regimes. *Journal of Business Venturing*, 21(5), 687-703. doi:10.1016/j.jbusvent.2005.06.001
- [3] Birasnav, M., Albufalasa, M., & Bader, Y. (2013). The role of transformational leadership and knowledge management processes on predicting product and process innovation: An empirical study developed in Kingdom of Bahrain. *Tekhné*, 11(2), 64-75. doi:10.1016/j.tekhné.2013.08.001
- [4] Khan, H. u. R., Ali, M., Olya, H. G. T., Zulqarnain, M., & Khan, Z. R. (2018). Transformational leadership, corporate social responsibility, organizational innovation, and organizational performance: Symmetrical and asymmetrical analytical approaches. *Corporate Social Responsibility and Environmental Management*, 25(6), 1270-1283. doi:10.1002/csr.1637
- [5] Noruzy, A., Dalfard, V. M., Azhdari, B., Nazari-Shirkouhi, S., & Rezazadeh, A. (2013). Relations between transformational leadership, organizational learning, knowledge management, organizational innovation, and organizational performance: an empirical investigation of manufacturing firms. *The International Journal of Advanced Manufacturing Technology*, 64(5- 8), 1073-1085. doi:10.1007/s00170-012-4038-y
- [6] Sethibe, T.G. (2018). Towards A Comprehensive Model On The Relationship Between Leadership Styles, Organisational Climate, Innovation And Organisational Performance. *International Journal of Innovation Management*, 1850021. doi:10.1142/S1363919618500214
- [7] Yaseen, S. G., Al-Janaydab, S., & Alc, A. N. (2018). Leadership Styles, Absorptive Capacity and Firm's Innovation. *International Journal of Knowledge Management*, 14(3), 82-100.
- [8] Lopez, V. W. B., & Esteves, J. (2013). Acquiring external knowledge to avoid wheel re-invention. *Journal of Knowledge Management*, 17(1), 87- 105. doi:10.1108/13673271311300787
- [9] Masa'deh, R. e., Obeidat, B. Y., & Tarhini, A. (2016). A Jordanian empirical study of the associations among transformational leadership, transactional leadership, knowledge sharing, job performance, and firm performance. *Journal of Management Development*, 35(5), 681-705. doi:10.1108/jmd-09-2015-0134
- [10] Calisir, F., Gumussoy, C. A., Basak, E., & Gurel, G. (2016). Effect of Organizational Learning, Transformational Leadership, and Market Orientation on Firm Performance. *International Journal of Innovation and Technology Management*, 13(03). doi:10.1142/s0219877016400010
- [11] Arshad, A. S., Rasli, A., Arshad, A. A., & Mohd Zain, Z. (2016). Transformational Leadership and Business Performance: An Insight From Technology-based SMEs in Malaysia.
- [12] Muterera, J., Hemsworth, D., Baregheh, A., & Garcia- Rivera, B. R. (2016). The Leader- Follower Dyad: The Link Between Leader and Follower Perceptions of Transformational Leadership and Its Impact on Job Satisfaction and Organizational Performance. *International Public Management Journal*, 21(1), 131-162. doi:10.1080/10967494.2015.1106993
- [13] Huang, X., Xu, E., Chiu, W., Lam, C., & Farh, J.-L. (2015). When Authoritarian Leaders Outperform Transformational Leaders: Firm Performance in a Harsh Economic Environment. *Academy of Management Discoveries*, 1(2), 180-200. doi:10.5465/amd.2014.0132
- [14] Arif, S., & Akram, A. (2018). Transformational Leadership and Organizational Performance. *SEISENSE Journal of Management*, 1(3), 59-75. doi:10.5281/zenodo.1306335
- [15] Garcia-Morales, V. J., Llorens-Montes, F. J., & Verdu- Jover, A. J. (2008). The Effects of Transformational Leadership on Organizational Performance through Knowledge and Innovation. *British Journal of Management*, 19, 299-319. doi:10.1111/j.1467- 8551.2007.00547.x
- [16] García-Morales, V. J., Jiménez-Barrionuevo, M. M., & Gutiérrez-Gutiérrez, L. (2012). Transformational leadership influence on organizational performance through organizational learning and innovation. *Journal of Business Research*, 65(7), 1040-1050.
- [17] Avolio, B. J., & Bass, B. M. (1999). Re-examining the components of transformational and leadership using the Multifactor Leadership Questionnaire. *Journal of Occupational and Organizational Psychology*, 72, 441-462.
- [18] Bass, B. M., & Avolio, B. J. (1994). *Improving Organizational Effectiveness Through Transformational Leadership*. Sage Publications, Inc. 2455 Teller Road Thousand Oaks, California.
- [19] Burns, J. M. (1978). *Leadership*. New York: Harper and Row.
- [20] Sethibe, T., & Steyn, R. (2015). The relationship between leadership styles, innovation and organisational performance: A systematic review. *South African Journal of Economic and Management Sciences*, 18(3), 325-337. doi:10.17159/2222-3436/2015/v18n3a3
- [21] Bass, B. M., & Avolio, B. J. (1993). Transformational Leadership And Organizational Culture. *Public Administration Quarterly*, Southern Public Administration Education Foundation, 112-121.
- [22] Bass, B. M., & Riggio, R. E. (2006). *Transformational Leadership*.

- [23]Bass, B. M., Avolio, B. J., Jung, D. I., & Berson, Y. (2003). Predicting unit performance by assessing transformational and transactional leadership. *Journal of Applied Psychology*, 88(2), 207-218. doi:10.1037/0021-9010.88.2.207
- [24]Chang, J., Bai, X., & Li, J. J. (2015). The influence of leadership on product and process innovations in China: The contingent role of knowledge acquisition capability. *Industrial Marketing Management*.doi:10.1016/j.indmarman.2015.04.014
- [25]Pieterse, A. N., van Knippenberg, D., Schippers, M., & Stam, D. (2009). Transformational and transactional leadership and innovative behavior: The moderating role of psychological empowerment. *Journal of Organizational Behavior*, 31(4), 609-623. doi:10.1002/job.650
- [26]Birasnav, M. (2014). Knowledge management and organizational performance in the service industry: The role of transformational leadership beyond the effects of transactional leadership. *Journal of Business Research*, 67(8), 1622-1629. doi:10.1016/j.jbusres.2013.09.006
- [27]Gumusluoglu, L., & Ilsev, A. (2009). Transformational leadership, creativity, and organizational innovation. *Journal of Business Research*, 62(4), 461-473. doi:10.1016/j.jbusres.2007.07.032 [28]Barney, J. (2001). The resource-based view of the firm: Ten years after 1991. *Journal of Management*, 27(6), 625-641. doi:10.1177/014920630102700601
- [29]Wright, P. M., Coff, R., & Moliterno, T. P. (2013). Strategic Human Capital. *Journal of Management*, 40(2), 353-370. doi:10.1177/0149206313518437
- [30]John, G., & Andrew, C. (2017). Knowledge management and professional experience: the uneasy dynamics between tacit knowledge and performativity in
- [31]Muthuveloo, R., Shanmugam, N., & Teoh, A.P. (2017). The impact of tacit knowledge management on organizational performance: Evidence from Malaysia. *Asia Pacific Management Review*, 22(4), 192-201. doi:10.1016/j.apmr.2017.07.010
- [32]Wang, Z., & Kwek, C. L. (2018). The Mediation Role of Knowledge Sharing Between Organizational Learning and Technological Innovation Practice. *Knowledge Management*, doi:10.4018/ijkm.2018070104
- [33]Liao, S.-h., Fei, W.-C., & Chen, C.-C. (2007). Knowledge sharing, absorptive capacity, and innovation capability: an empirical study of Taiwan's knowledge-intensive industries. *Journal of Information Science*, 33(3), 340-359. doi:10.1177/0165551506070739
- [34]Perkins, D. D., & Zimmerman, M. A. (1995). Empowerment Theory, Research, and Application. *American Journal of Community Psychology*, 23(5), 569-579.
- [35]Wilkinson, A. (1998). Empowerment: theory and practice. *Personnel Review*, 27(1), 40-56. [36]Zimmerman, M. A. (2000). Empowerment Theory. *Handbook of Community Psychology*, 43-44.
- [37]Spreitzer, G. M. (1995). Psychological Empowerment in The Workplace: Dimensions, Measurement, and Validation. *Academy of Management Journal*, 38(5), 1442-1465.
- [38]Karpen, I. O., Bove, L. L., & Lukas, B. A. (2012). Linking Service-Dominant Logic and Strategic Business Practice. *Journal of Service Research*, 15(1), 21-38. doi:10.1177/1094670511425697
- [39]Karpen, I. O., Bove, L. L., Lukas, B. A., & Zyphur, M. J. (2015). Service-Dominant Orientation: Measurement and Impact on Performance Outcomes. *Journal of Retailing*, 91(1), 89-108. doi:10.1016/j.jretai.2014.10.002
- [40]Vargo, S. L., & Lusch, R. F. (2004). Evolving to a New Dominant Logic for Marketing. *Journal of Marketing*, 68, 1-17.
- [41]Vargo, S. L., & Lusch, R. F. (2017). Service- dominant logic 2025.
- [43]Karpen, I. O., Gemser, G., & Calabretta, G. (2017). A multilevel consideration of service design conditions: Towards a portfolio of organisational capabilities, interactive practices and individual abilities. *Journal of Service Theory and Practice*, 27(2), 384-407. doi:10.1108/JSTP-05-2015-0121
- [44]María Ruiz- Jiménez, J., & del Mar Fuentes- Fuentes, M. (2013). Knowledge combination, innovation, organizational performance in technology firms. *Industrial Management & Data Systems*, 113(4), 523-540. doi:10.1108/02635571311322775
- [45]Wuryaningrat, N. F. (2013). Knowledge Sharing, Absorptive Capacity and Innovation Capabilities: An Empirical Study on Small and Medium Enterprises in North Sulawesi, Indonesia. *International Journal of Research in Marketing*, 34(1), 46-67. doi:10.1016/j.ijresmar.2016.11.001
- [42]Vargo, S. L., Maglio, P. P., & Akaka, M. A. (2008). On value and value co-creation: A service systems and service logic Gadjah Mada International Journal of Business, 15(1), 61-78
- [46]Chia, Y. M., & Chu, M. J. T. (2017). Presenteeism of hotel employees: interaction effects of empowerment and hardiness. *International Journal of Contemporary Hospitality Management*, 29(10), 2592-2609. doi:10.1108/ijchm-02-2016-0107
- [47]Conger, J. A., & Kanungo, R. N. (1988). The Empowerment Process: Integrating Theory and Practice. *The Academy of Management Review*, 13(3), 471-482.
- [48]Kuo, R. Z., Lai, M. F., & Lee, G. G. (2011). The impact of empowering leadership for KMS adoption. *Management Decision*, 49(7), 1120-1140. doi:10.1108/00251741111151172
- [49]Rappaport, J. (1981). In Praise of Paradox: A Social Policy of Empowerment Over Prevention. *American Journal of Community Psychology*, 9(1), 1-25.
- [50]Hendriks, P. (1999). Why Share Knowledge? The Influence of ICT on the Motivation for Knowledge Sharing. *Knowledge and process management*, 6(2), 91-100.
- [51]Ipe, M. (2003). Knowledge Sharing in Organizations: A Conceptual Framework. *Human Resource Development Review*, 2(4), 337-359. doi:10.1177/1534484303257985
- [52]Nonaka, I. (1994). A Dynamic Theory of Organizational Knowledge Creation. *Organization Science*, 5(1), 14-37.
- [53]Fiol, M. C., & Lyles, M. A. (1985). Organizational Learning. *The Academy of Management Review*, 10(4), 803-813.
- [54]Saleh, A. A., Sani, M. K. J. A., & Noordin, S. A. (2018). Conceptualizing Knowledge Management, Individual Absorptive Capacity and Innovation Capability: A Proposed Framework. *International Journal of Academic Research in Business and Social Sciences*, 8(9), 385-395. doi:10.6007/IJARBS/v8-i9/4600
- [55]Hult, G. T. M., Hurley, R. F., & Knight, G. A. (2004). Innovativeness: Its antecedents and impact on business performance. *Industrial Marketing Management*, 33(5), 429-438.
- [56]Gunday, G., Ulusoy, G., Kilic, K., & Alpkan, L. (2011). Effects of innovation types on firm performance. *International Journal of Production Economics*, 133(2), 662-676. doi:10.1016/j.ijpe.2011.05.014
- [57]Rosenbusch, N., Brinckmann, J., & Bausch, A. (2011). Is Innovation Always Beneficial? A Meta-Analysis of the Relationship Between Innovation and Performance in SMEs (Vol. 26).
- [58]OECD. (2005). Oslo Manual: Guidelines for Collecting and Interpreting Innovation Data. OECD and Eurostat.

- [59]Rajapathirana, R. P. J., & Hui, Y. (2018). Relationship between innovation capability, innovation type, and firm performance. *Journal of Innovation & Knowledge*, 3(1), 44-55.doi:10.1016/j.jik.2017.06.002
- [60]González, P. L., Jiménez-Jiménez, D., & Martínez-Lorente, A.R. (2018). Exploring the mediating effects between transformational leadership and organizational performance. *Employee Relations*, 40(2), 412-432.doi:10.1108/er-10-2016-0190
- [61]Henriksen, D., & Mishra, P. (2018). Creativity as Invention, Discovery, Innovation and Intuition: an Interview with Dr. Richard Buchanan. *TechTrends*, 62(3), 215-220.doi:10.1007/s11528-018-0279-4
- [62]Huang, K.-E., Wu, J.-H., Lu, S.-Y., & Lin, Y.-C. (2016). Innovation and technology creation effects on organizational performance. *Journal of Business Research*, 69(6), 2187- 2192.doi:10.1016/j.jbusres.2015.12.028
- [63]Jiménez-Jiménez, D., & Sanz-Valle, R. (2011). Innovation, organizational learning, and performance. *Journal of Business Research*, 64(4), 408-417.doi:10.1016/j.jbusres.2010.09.010 [64]Abukhait, R. M., Bani- Melhem, S., & Zeffane,R. (2019). Empowerment, Knowledge Sharing and Innovative Behaviours: Exploring Gender Differences. *International Journal of Innovation Management*, 23(01).doi:10.1142/s1363919619500063
- [65]Richard, P. J., Devinney, T. M., Yip, G. S., & Johnson, G. (2009). Measuring Organizational Performance: Towards Methodological Best Practice. *Journal of Management*, 35(3),718- 804.doi:10.1177/0149206308330560
- [66]Cho, J. Joong- Kun, Ozment, J., & Sink, H. (2008). Logistics capability, logistics outsourcing and firm performance in an e- commerce market. *International Journal of Physical Distribution & Logistics Management*,38(5), 336-359.