ETHICAL LEADERSHIP ON ORGANIZATIONAL INNOVATION AND THE ROLE OF KNOWLEDGE SHARING

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Abstract. This study examines the role of knowledge sharing (KS) as the mediating variable for ethical leadership (EL) and organizational innovation (OI). Based on the theory, data were collected from 104 participants and 75 participants gave valid responses from one private university in Jakarta, Indonesia. The results show that KS partially mediates the relationship between EI and OI.

Keywords: *leadership style, ethical leadership, organizational innovation, knowledge sharing*

Introduction

The term industry 4.0 has changed the way people see things and react towards the industry development. Industry 4.0 is not merely about machine and internet only but also characterized by the integration and development of biological substances. Different technology model should be applied at every level of society. Technology exists not to replace the human role it makes human work easier so that humans will work efficiently and be able to take strategic roles and make strategic decisions.

Human resources are very vital assets in companies and cannot be replaced with other inanimate objects (i.e. robotic), even though the human roles in various industries seem threatened. Human resources are still the most significant source of organizational competitive advantage.

Organization cannot create knowledge without individuals, unless those individuals share their knowledge to other individuals and or group, and it is unlikely to have the same interpretation. In an organization, individuals share their knowledge, it is considered as the natural function. The word sharing means there is one person that delivers the information or knowledge he/she has to another person. Transformational leadership is well known in the literature and it is an important factor to enhance knowledge management and innovation system. (Al-Husseini, El Beltagi, & Moizer, 2019) found that there is a significant impact between transformational leadership, knowledge management and innovation in higher education.

There are two kinds of knowledge that we have, they are: *explicit knowledge* that can be expressed and shared by words, numbers and *tacit knowledge* that highly personal, hence it is difficult to share, so that it is hard to get someone who has the same kind of tacit knowledge (Nonaka & Takeuchi, 1995). Making knowledge available and accessible to everyone in organization is known as knowledge sharing (Ipe, 2003).

Leaders are expected to direct their subordinates to get their job done. (Brown, Treviño, & Harrison, 2005) defines ethical leadership as the demonstration and the promotion through two-way communication, reinforcement, and decision-making. In facilitating the knowledge sharing and team performance, ethical leadership plays an important role It is aligned with (Liu, Lin, Joe, & Chen, 2019) that found ambidexterity and ethical leadership have a positive relationship to knowledge sharing. Not only affects the individuals, ethical leadership also relates to group learning behaviour and group in-role performance (Walumbwa, Hartnell, & Misati, 2017; Walumbwa, Morrison, & Christensen, 2012). Leaders are expected to be trusted by their subordinates, (Le & Lei, 2018) trust in leadership is mediating the relationship between ethical

leadership and knowledge sharing behaviour, they define the knowledge sharing into knowledge collecting and knowledge donating.

Innovate or die. Fourth industry will be adding quality to the regular object we interact in daily life. Industrial big data is likely to be generated as more industries start to adapt to sensory systems and mobile devices. The application presented is showing how real industrial data can be generated leading to Industrial big data with knowledge sharing. Amazing innovations not only create phenomenal opportunities of economic growth, but also serious societal challenges (Benioff, 2017). Organizational innovation is considered as a powerful tool for maintaining competitive advantage and providing high value for customer (Hoseini, Aminbeidokhti, & Nikabadi, 2016). Transformational leadership has a positive impact on the knowledge management processes and the organizational innovation (Hoseini et al., 2016)

The literature about ethical leadership, knowledge sharing and organizational innovation is still limited, in order to have more information and knowledge, we hypothesize that:

H1: Ethical leadership affects organizational innovation in private university
H2: Ethical leadership affects knowledge sharing in private university
H3: Knowledge sharing mediates the relationship between ethical leadership and organizational innovation in private university
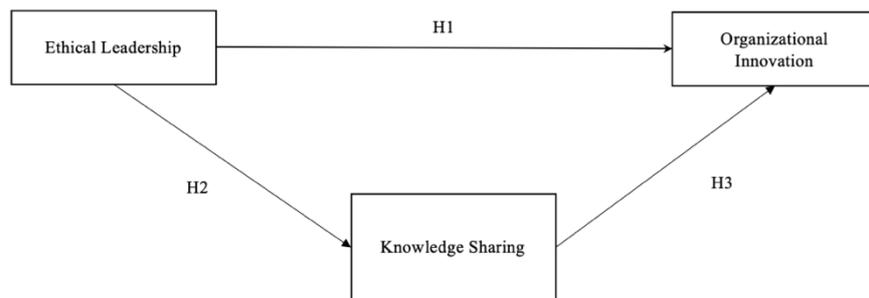
Figure 1 Theoretical Framework

The purpose of this article is to contribute to a better understanding of the relationship between ethical leadership in accelerating organizational innovation.

Methods

Data were collected through survey in one private university in Jakarta, Indonesia. We limited the survey by asking full-time employeesthat have been working for more than 1 year. We distributed the questionnaire online, via email, social media, LinkedIn, and groups. When conducting an online survey, researcher often encountered a problem with sampling. Most of the respondents ignored the survey, put it into their spam folder or directly deleted it, made it really hard to have a high response rate. Population in this study was 104 full-time employees, 95 responses were received and only 75 responses were valid according to Roscoe (1975) on (Sekaran & Bougie, 2016) the sample size should be 10 times or more, as larger as the number of variables. This study has three variables. Thus, the sample number is accepted, and based on the responses taken, the response rate is 72%, which is still pretty good (Sekaran & Bougie, 2016). We analyse the data using Structural Equation Modelling with Lisrel 8.0.

Measurement

All construct is measured using six-point Likert scales, ranging from "1" (strongly disagree) to "6" (strongly agree), means there is no zero point in this measurement, like (Edwards, 1957)

said "i*f we wish to correlate scores on an attitude scale with scores on other scales or with other measures of interest, this can also be done without any reference to the zero point on the favourable-unfavourable continuum*".

Ethical leadership

We used (Bavik, Tang, Shao, & Lam, 2018) to measure EL. There are ten item measurements. We removed one which we considered not suitable with what we would like to measure. Sample items are: "My supervisor listens to what employees have to say." and "My supervisor disciplines employees who violate ethical standards."

Organizational innovation

To measure the organizational innovation, we used 6 items adapted from the research of (Chen, Zheng, Yang, & Bai, 2016). Samples items are: "The rate of introduction of new products or services into the organization has grown rapidly" and "The rate of introduction of new methods of production or delivery of services into the organization has grown rapidly".

Knowledge sharing

10 items were adapted from the research of (Z. Yang, Nguyen, & Le, 2018). Sample items are: "Usually, I do my best and offer suggestions while discussing work-related matters with my colleagues" and "If something is hard to explain, I gladly give my colleagues a demonstration"

Results and Discussion

The loading factors in all measurement are considered good, the loading factor for each indicator is >0.5. In addition, the construct reliability (CR) in each variable is also considered good, with the value as follows: ethical leadership 0.753; organizational innovation 0.856; and knowledge sharing 0.805 According to (Jr et al., 2019) construct reliability should be 0.7 or higher to indicate appropriate convergence or internal consistency.

Among 75 valid responses received, 47,4% of them are male; and 52,6% of them are female. With the range of age 21 – 30 years old (67,4%); 31-40% years old 10,5%; 41 – 50 years old 17,9%; the rest is greater and equal than 51 years old. Table 1 indicates the result of the study:

Table 1 Structural Model Result

Effect	Proposal Effect	t-value	Result
Ethical leadership → Organizational innovation	H1 +	2.96	Supported
Ethical leadership → Knowledge Sharing	H2 +	3.84	Supported
Knowledge Sharing → Organizational Innovation	H3 +	4.77	Supported

The result shows that t-value for the relationship between ethical leadership and organizational innovation is 2.96 (greater than 1.96), hence, the *hypothesis 1* is supported. Meaning that there is a significant relation between ethical leadership and organizational innovation. Which in line with (Pučėtaitė, 2014), ethical leadership has a positive impact on organizational innovation, and organizational trust act as partial mediation.

Hypothesis 2 is also supported, because the t-value is 3.84 greater that 1.96. There is a positive and significant relation between ethical leadership and knowledge sharing. This finding is in line with (Bavik et al., 2018; Liu et al., 2019). Meanwhile (J. Te Yang, 2007) found that leadership plays an important role in encouraging employees to share their knowledge to their partners.

On the other hand, knowledge sharing acts as partial mediator between ethical leadership and knowledge sharing, because the t value 4.77 for that relationship is greater than the t-value for the relationship between ethical leadership and organizational innovation which is only 2.96. On (Z. Yang et al., 2018) knowledge sharing also acts as the mediator between collaborative culture and innovation capability on 77 Chinese firms. Meanwhile, ethical leadership has also a positive and significant impact on knowledge sharing (TANG, BAVIK, CHEN, & TJOSVOLD, 2015)

In order to make sure the role of knowledge sharing as mediating variable, we calculate it using the Sobel test, the result is as follows:

Figure 2 Sobel test Result

Input:		Test statistic:	p-value:
t_a 3.84	Sobel test:	2.99118074	0.00277901
t_b 4.77	Aroian test:	2.95207712	0.00315644
	Goodman test:	3.03188061	0.00243035
	Reset all	Calculate	

According to Sobel test, Z value is 2.99 and p value is 0,0027 < 0.05, thus, it can be stated that knowledge sharing is a true mediating variable (Sobel, 1982)

Conclusion

Technology changes the way people do things, the level of complexity and uncertainty are increasing. One way to be resilient is to innovate (Castellacci, 2015; Williams & Anyanwu, 2017). Implementing what we innovate is also challenging, not all people want to change. There should be someone to push and encourage them to change, that's what we called a leader, even though not all leaders encourage their subordinates to be the part of transformational.

This study concludes that there is a positive relation between ethical leadership and organizational innovation, meaning that leaders are the one who can have a vision for future and embrace their subordinates to innovate and work together to make their vision happen. Most companies are hard to innovate because they think it is hard, inconvenient and adding too much work for them. Most innovations will be rejected at first, meanwhile without innovation companies will sink overtime.

Knowledge sharing partially mediates the relationship between ethical leadership and organizational innovation, because the relationship between knowledge sharing and organizational innovation is significant, and applied with the same ethical leadership. Ethical leaders will lead their subordinates or employees to share their knowledge to others. Knowledge sharing is important, so that everyone in the company has the same information and ability.

Even though innovation is hard to do, the more we innovate, the more improvement a company will have. Improvement could lead to better performance, but that innovation still needs to be evaluated monthly, quarterly or yearly.

Future study could be done in different industry with bigger samples. Future study can also focus on motivation for employees to make an innovation for their organization and the impact of the innovation made to the firm performance.

References

Al-Husseini, S., El Beltagi, I., & Moizer, J. (2019). Transformational leadership and innovation: the mediating role of knowledge sharing amongst higher education faculty. *International*

Journal of Leadership in Education, *00*(00), 1–24. https://doi.org/10.1080/13603124.2019.1588381

Bavik, Y. L., Tang, P. M., Shao, R., & Lam, L. W. (2018). Ethical leadership and employee knowledge sharing: Exploring dual-mediation paths. *Leadership Quarterly*, *29*(2), 322–332. https://doi.org/10.1016/j.leaqua.2017.05.006

Benioff, M. (2017). Businesses Are the Greatest Platforms for Change. Retrieved July 3, 2020, from https://www.huffpost.com/entry/businesses-are-the-greate_b_8993240

Brown, M. E., Treviño, L. K., & Harrison, D. A. (2005). Ethical leadership: A social learning perspective for construct development and testing. *Organizational Behavior and Human Decision Processes*, *97*(2), 117–134. https://doi.org/10.1016/j.obhdp.2005.03.002

Castellacci, F. (2015). Institutional Voids or Organizational Resilience? Business Groups, Innovation, and Market Development in Latin America. *World Development*, *70*, 43–58. https://doi.org/10.1016/j.worlddev.2014.12.014

Chen, L., Zheng, W., Yang, B., & Bai, S. (2016). Transformational leadership, social capital and organizational innovation. *Leadership and Organization Development Journal*, *37*(7), 843–859. https://doi.org/10.1108/LODJ-07-2015-0157

Edwards, A. L. (1957). *Techniques of Attitude Scale Construction*. https://doi.org/10.2307/3708688

Hoseini, A. M., Aminbeidokhti, A., & Nikabadi, M. S. (2016). The role of transformational leadership and knowledge management processes on the rate of organisational innovation. *International Journal of Knowledge Management Studies*, *7*(3/4), 270. https://doi.org/10.1504/ijkms.2016.10003233

Ipe, M. (2003). Knowledge Sharing in Organizations: A Conceptual Framework. *Human Resource Development Review*, *2*(4), 337–359. https://doi.org/10.1177/1534484303257985

Jr, J. F. H., Black, W. C., Babin, B. J., Anderson, R. E., Black, W. C., & Anderson, R. E. (2019). *Multivariate Data Analysis* (8th Editio). https://doi.org/10.1002/9781119409137.ch4

Le, P. B., & Lei, H. (2018). Fostering knowledge sharing behaviours through ethical leadership practice: The mediating roles of disclosure-based trust and reliance-based trust in leadership. *Knowledge Management Research and Practice*, *16*(2), 183–195. https://doi.org/10.1080/14778238.2018.1445426

Liu, M. L., Lin, C. P., Joe, S. W., & Chen, K. J. (2019). Modeling knowledge sharing and team performance: The interactions of ethical leadership and ambidexterity with politics and job complexity. *Management Decision*, *57*(7), 1472–1495. https://doi.org/10.1108/MD-01-2017-0052

Nonaka, I. ;, & Takeuchi, H. (1995). *The knowledge-creating company: How Japanese companies create the dynamics of innovation*. New York: Oxford University Press.

Pučėtaitė, R. (2014). Stimulating Organizational Innovativeness through Ethical Leadership Practices: The Mediating Role of Organizational Trust. *Procedia - Social and Behavioral*

Sciences, *156*(April), 231–235. https://doi.org/10.1016/j.sbspro.2014.11.180

Sekaran, U., & Bougie, R. (2016). *Research Methods for Business* (7th Editio). https://doi.org/10.1017/CBO9781107415324.004

Sobel, M. E. (1982). Asymptotic Confidence Intervals for Indirect Effects in Structural Equation Models. *Sociological Methodology*, *13*(1982), 290. https://doi.org/10.2307/270723

TANG, P. M., BAVIK, Y. L., CHEN, Y. N., & TJOSVOLD, D. (2015). *Linking ethical leadership to knowledge sharing and knowledge hiding : the mediating role of psychological engagement*. *84*, 71.

Walumbwa, F. O., Hartnell, C. A., & Misati, E. (2017). Does ethical leadership enhance group learning behavior? Examining the mediating influence of group ethical conduct, justice climate, and peer justice. *Journal of Business Research*, *72*, 14–23. https://doi.org/10.1016/j.jbusres.2016.11.013

Walumbwa, F. O., Morrison, E. W., & Christensen, A. L. (2012). Ethical leadership and group in-role performance: The mediating roles of group conscientiousness and group voice. *Leadership Quarterly*, *23*(5), 953–964. https://doi.org/10.1016/j.leaqua.2012.06.004

Williams, A., & Anyanwu, S. (2017). Innovation and organizational resilience: a study of selected food and beverage firms in Port Harcourt. *Innovation*, *3*(6), 1–15.

Yang, J. Te. (2007). Knowledge sharing: Investigating appropriate leadership roles and collaborative culture. *Tourism Management*, *28*(2), 530–543. https://doi.org/10.1016/j.tourman.2006.08.006

Yang, Z., Nguyen, V. T., & Le, P. B. (2018). Knowledge sharing serves as a mediator between collaborative culture and innovation capability: an empirical research. *Journal of Business and Industrial Marketing*, *33*(7), 958–969. https://doi.org/10.1108/JBIM-10-2017-0245