Did Transformational, Transactional Leadership Style and Organizational Learning Influence Innovation Capabilities of School Teachers during Covid-19 Pandemic?

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ABSTRACT

This study aims to analyze and calculate the influence of transformational, transactional leadership and organizational learning on the innovation capabilities of teachers in Islamic schools in Jakarta during the COVID-19 pandemic. This research uses quantitative methods and data collection was carried out by simple random sampling electronically using an online questionnaire to the population of teachers in Islamic schools in Jakarta at the COVID-19 pandemic. The results of the questionnaire were returned and valid as many as 140 respondents. Data processing using SEM method with SmartPLS 3.0 software. The results of this study indicate that transformational leadership has a positive and significant effect on the innovation capabilities of teachers. Transactional leadership has a positive and significant effect on teachers' innovation abilities. The learning organization has a positive and significant effect on the innovation ability of teachers. Novelty of this new research proposes a model for building innovation capabilities among teachers through transformational and transactional leadership and organizational learning. This research can be used as a reference for future research and can be applied in other places.

INTRODUCTION

Indonesia's education system in the era of the Covid-19 pandemic has obstacles, in this pandemic era, from social restrictions due to the Covid-19 outbreak it can hinder achieving and strengthening the character of the Indonesian nation towards a superior generation, Indonesia must pay more to pay attention to the spirit of learning and teaching in field of education . Education is one of the central sectors that is feeling the impact of this outbreak. Until now, there are 156 countries in the world that have changed their education policies, from face-toface learning systems to distance learning systems. Indonesia also certainly does the same thing with other countries, namely changing the learning patterns of students from primary, secondary, to higher education by using distance learning. The new academic year has entered the world of Indonesian education. However, distance learning is a policy that continues to be implemented in the midst of the COVID-19 pandemic during the Covid-19 emergency, the implementation of **Keywords:** Organizational learning, teacher innovation capability, leadership. school teachers.

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remote learning is in accordance with this policy which contains 4 things, namely (1) independent learning which aims to provide a learning experience that is meaningful without being burdened with curriculum achievement for progress and class graduation; (2) students must be equipped with life skills regarding the Covid-19 pandemic; (3) the teacher gives various assignments by considering the differences in the abilities of each individual, and the learning facilities; and (4) providing feedback (feedback) on student performance must be qualitative. One of them is the impact that causes changes in teaching and learning methods in the classroom to become PJJ or Distance Learning. Where the teaching and learning process in the classroom by teachers and students turns into an online learning process. There are short-term to long-term effects of implementing distance learning. Short-term impacts include the vulnerability of students' psychological health conditions, limited information technology infrastructure, limited mastery of information technology by teachers and students, inadequate facilities

and infrastructure (limited internet access), and insufficient budget provision. Meanwhile, the long-term impact is on the aspect of justice. There is a change in the physical distance policy from formal education to at home with an online system that makes teacher performance increase. Improving teacher performance must be taken during the Covid-19 pandemic, which can be realized by the existence of online-based applications, the values taken in this online-based system can increase student scores in being responsible, independent, working hard and honestly. The government implements policies such as Work from Home (WFH) to enforce students to finish everything at home, because in Indonesia this is one of the countries affected by Covid-19. The Ministry of Education issued a policy that replaces the Teaching and Learning Activities (KBM) process by using an online learning system. Thus, achieving teacher performance in an onlinebased system is not as easy as turning a hand. All efforts, both thought and energy, must be optimized in such a way. With this, students and teachers here can master various sophisticated technological systems, because teachers and students are required to have the ability in the field of technology in their learning system.

During the pandemic, many teachers, educators and lecturers innovated using media as an application in the learning process both face to face and interactive discussions, applications that are very commonly used are class wa groups which are always filled by teachers and students to assign assignments and also collect tasks, the role of whatssap groups are very popular in this pandemic era. Apart from using WhatsApp, there are also teachers who have used applications such as zoom meetings for virtual applications that can make us communicate face to face virtually from their respective homes, usually students will be happy when they can meet their friends through the application. which is commonly called a video. Online call which contains nearly 100 participants, there are also teachers who use two applications made by Google itself and can search Google for online media, namely Google Meet and Google Classroom, usually Google Meet is chosen for some teachers who want to communicate virtual via Google in addition to use zoom. and google clasroom can be used as a chat room for discussion. Education is an important role in shaping a better human being in the future and beneficial for human development and progress. This study aims to analyze and calculate the effects of transformational learning, transactional leadership, and organizational learning on the innovation capabilities of teachers in Jakarta during the COVID-19 pandemic.

LITERATURE REVIEW AND HYPOTHESIS

The style of transformative leadership in the study is the leadership of a leader who can change each teacher. Transformation leadership style indicators are as follows (Yukl, 2010): 1) The idealised influence, namely that evokes emotions and clear identity of leaders' followers. 2) The consideration of individuals requires offering supporters assistance, motivation and preparation. 3) An appealing vision is created by inspirational encouragement with icons that reflect on the efforts of subjects. 4) Intellectual stimulation is an action that raises the consciousness of problems and influences supporters to take a different viewpoint on problems. The influence of transformational leadership on how leaders enhance shared partnership and confidence, collective selfimprovement and team learning (Yukl 2009), are also

described. "Transformation leadership is a leadership style that appeals to the moral ideals of supporters in an attempt to raise awareness of ethical problems and to harness their energies and resources in order to change institutions (Yukl, 2009). Other and creates relationships which boost leaders and followers' motivation and morality (Burn, 2013).

Leadership Style

In various aspects of the leadership actions the transactional management process can be demonstrated (Yukl 2010): I Relevant awards (contingentreward), including clarification of employment to gain awards as well as of rewards and awards for their encouragement. 2) Exception Management-Proactive for detecting mistakes and applying error prevention laws. 3) Extraordinary management enthusiasm calls for the use of relevant fines and other measures to address gaps in the accepted standards of efficiency. Transitional leadership by clarifying roles and jobs criteria is defining by the Robbins and Judge as a leadership that guides or pushes supporters to achieve goals (Robbins and Judge, 2011). It cannot vary from Burns's (1978) principle of transactional management that motivates its adherents by calling on their adherents' personal interests (Yukl 2010). (Yukl, 2007). Yukl said that transactional leadership needs a framework for trade that can commit to mission objectives vigorously (Yukl, 2010). Transactional leadership is a leadership style that focuses on the interpersonal transactions that create an impact on exchange between managers and educators.

Teachers Innovation Capability

Innovation potential is recognised as one of the key internal tools that can contribute to higher performance at schools (Zouaghi et al, 2018; Santoro et al, 2017; Castela et al, 2018). A significant element of quality education is creativity (Klaeijsen, Vermeulen & Martens 2017). The new industry era 4,0 needs the opportunity to innovate teachers as an advantage to the competitive role of colleges, (Culot, Orzes & Sartor, 2019), competitive strategy, and the secret to confronting industry age 4,0 (Stachova et coll., 2019) are part of the standard of management in the 21st century (Gunasekaran, Sabramanian & Ngai, 2019), with many advantages for the industrial age of 4,0 (Gunasekaran, Sabre and others).

Organizational Learning

The ability to access information is a distinction between schools. In terms of the broad knowledge base of any person within an institution of school education, the performance of the school education institution's strategies is very significant. Good organisational learning would be more crisis-resilient (Starbuck, 2017). As core elements of institutions of learning (Wetzel and Tint, 2019; Urban & Gaffurini, 2018), dimensions such as desire, discipline, decisions and equity are described. Organizational learning is also an important measure of success in the evaluation of overall organisational performance (Qi & Chau, 2018) in order to develop the requisite knowledge and sustain school growth and continuity.

The Influence of Transformational and Transactional Leadership on Teacher Innovation Capability

Previous researchers have demonstrated a positive and important impact on teacher creativity capacity through transformation and transaction leadership (Ganguly et al, 2019; Aulawi, 2018; Li et al, 2019). In particular, several researchers agree that a positive and important impact on teacher creativity capacity is transformational leadership (Pérez-Luno, et al, 2018). They are all protected by the educational institutions. Capacity to innovate in teachers is a catalyst of sustainable education. This success depends on the culture of information embedded in the institution. Many scholars address the capacity of teachers to innovate, leading them (Samsir, 2018; Schukert et al , 2018; Villialuz&Hechanova, 2013) to exchange information and to share knowledge (Kim & Shim, 2018; Wang, Chen & Chang, 2019), collaborative culture (Yang, Nguyen & Le, 2018) and method (Immagination method) *H1: Transformational leadership has a significant effect on teacher innovation capability*

H2: Transactional leadership has a significant effect on teacher innovation capability

The Influence of Organizational Learning on Teacher Innovation Capability

This culture of learning helps all teachers to collaborate, share and connect their current knowledge and knowledge to school intelligence and knowledge in an effective manner (Lin & Lee, 2017; Lee et al , 2016; Chang & Lin., 2015). A fun-filled institutional atmosphere is essential to the growth of the capacity of teacher creativity for institutional members (Bani-Melhem, Zeffane&Albaity 2018). The development of knowledge conditioned by corporate learning is designed to promote creativity and institutional success in teaching capacities and institutions (Asbari, Purwanto & Santoso 2019; Vijande & Sanchez 2017; Lin & Lee, 2017). When based on a learning culture that adds value, school creativity would be sustainable. In

addition, the following theories must be checked based on the above literature:

H3: Organizational learning has a significant effect on teacher innovation capability

METHOD

The method employed is a quantitative method. Data have been obtained by distributing online electronic questionnaires to all Islamic schoolteachers in Jakarta, Indonesia. Bass & Avolio (2000) has adapted the instrument used to calculate transformational leadership with 5 components. Bass & Avolio (2000) has also adapted transactional leadership with 4 products. The organisational learning of the Jiménez-Jiménez-Sanz-Valle (2011) adaptable instrument is calculated using five components. Lee & Choi (2003) adapted teacher creativity capacity with five different products. The questionnaire is closed except in the form of semi-open questionnaire for questions / declarations about the identity of the respondent. Five answers are given to each closed question / statement item: strongly agree (SS) Score 5, Score 4, Distinguish (KS) Score 3, Score 2 (Disagreement) and Score 1. The processing method is by PLS and by means of the programme SmartPLS version 3.0. In this study the population was Islamic schoolteachers in Jakarta and questions were electronically transmitted using simple random samples. 130 respondents were presented with the results of the questionnaire.

Table 1. Profil of respondents

Crit	Total	
Age	< 30 years	45
	30 - 40 years	55
	> 40 years	40
Working period as teacher	< 5 years	35
	5-10 years	55
	> 10 years	50
Education	< S1 (bachelor's degree)	75
	≥ S1 (bachelor's degree)	65

For respondents who were under 30 years old were 45 teachers, respondents aged 30-40 years were 55 teachers and respondents aged over 40 years were 40 teachers. There were 35 respondents for Working period as teacher under 5 years, 55 respondents for working period as

teacher for 5 - 10 years, and 50 teachers for Working period as teacher over 10 years. For respondents with education levels below the bachelor's degree, there were 75 teachers, and respondents with education levels above the bachelor's degree were 65 teachers.

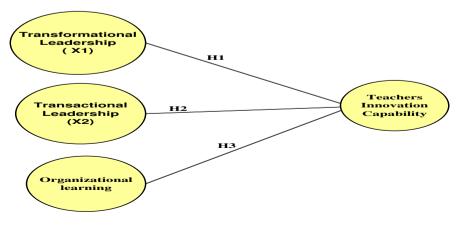


Fig. 1 Research Framework

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Based on previous research literature studies, the following hypothesis is obtained H1: Transformational leadership has a significant effect on teacher innovation capability H2: Transactional leadership has a significant effect on teacher innovation capability H3: Organizational learning has a significant effect on teacher innovation capability

RESULTS AND DISCUSSION

Testing of the Validity and Reliability of each Indicator Included in this testing process are convergent checks, disc validity and composite reliability. The results of the PLS study can be used to test the research hypothesis if the convergent validity, discriminant validity and reliability test criteria have been met with all the indicators in the PLS model.

1. Convergent Validity Testing indicators

Convergent validity test is done by looking at the loading factor value of each indicator against the Create. The reference showed that factor weights of 0.5 or more had adequate validation to justify latent structures (Chin, 1998; Hair et al, 2010; Ghozali, 2014). In this analysis, the minimum factor value accepted is 0.5, provided every construct has an AVE value of > 0.5 (Ghozali, 2014).

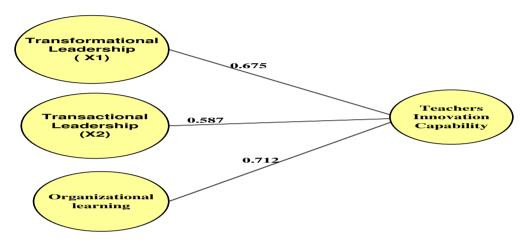


Fig 2. Estimation valid model

Based on the estimate results of the PLS model above, all indicators are paid above a value of 0.5 for a convergent validity of the model. The convergent validity of each building has also been evaluated based on the AVE value. Every structure in this study had an AVE value of above 0.5. The convergent validity of this research model has therefore fulfilled the requirements. Table 2 below shows the importance of loadings, cronbach alpha, composite reliability and AVE for each complete construction:

Table 2. Items, Loadings	, Cronbach's Alpha,	, Composite Reliability	y, and Average Variance	Extracted (AVE)
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Variables	Items	Loadings	Cronbach's Alpha	Composite Reliability	AVE
Transformational	X11	0.653	0.763	0.812	0.763
(X1)	X12	0.678			
	X13	0.765			
Transactional	X21	0.631	0.675	0.743	0.764
(X2)	X22	0.612			
	X33	0.723			
Organizational Learning	X31	0.764	0.875	0.874	0.785
(X3)	X32	0.992			
	X33	0.812			
Teachers' Innovation	Y1	0.771	0.789	0.875	0.932
Capability	Y2	0.653			
(Y)	Y3	0.761			

Construction Reliability Testing

The building reliability and the compositional reliability of each building can be measured from the Cronbach alpha value. The suggested alpha value is more than 0.7 for composite reliability and cronbach. Table 2 shows that any building has a composite reliability value and Cronbach's alpha is greater than 0,7 (> 0,7) due to the reliability test in the table 2. Finally, all buildings have achieved the durability necessary.

Discriminatory validity checks are conducted to ensure that each latent variable definition varies from other latent variables. A model of highly discriminating value exceeding the relationship between this building and other constructions (values beyond the ring) is the AVE sq.o. value of each exogenous building (the diagonal value). (Ghozali 2014). The results of discriminatory tests for validity with the AVE square value are obtained as follows, in particular by looking at the Fornell-Larcker criterion value:

Testing of the validity of discriminant variables

Variables	X1	X2	Х3	Y
X1	0.875			
X2	0.723	0.871		
X3	0.731	0.715	0.980	
Y	0.731	0.797	0.891	0.921

Table 3.	Discriminant	Validity

The results of the discriminating validity test in Table 3 above show that all constructs are above the correlation value of AVE with other latin constructs, so that it is possible to assume that the model has fulfilled the discriminating validity.

Tal	ole	4. <i>R</i>	Square	Value
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	R Square	R Square Adjusted
Teachers' Innovation Capability (Y)	0.888	0.761

Table 4 above shows R Square value of 0.888; that is to say, the variable for teacher creativity (Y) can be explanations by 88.8 percent for transition leadership (X1), transactional management (X2) and organisational learning variables, while other variables that are not addressed in this study explain the remaining 11.2 percent.

Hypothesis Testing

Testing of hypotheses in this PLS involves the evaluation of the importance of direct and indirect effects, and the calculation of the impact of endogenous variables. A direct effect test is required in order to assess the effects of transactional leadership, transactional leadership and organisational learning on teacher creativity. The direct research with the SmartPLS 3.0 programme was performed using the t-statistic test in the partial less squared analysis (PLS). As shown in table 5 below, the stand striking technique results in the R Square value and the value of the sense test:

Table 5	. Hypothesis	Testing Result
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Hypothesis	Relationship	Beta	SE	T Statistics	P-Values	Decision
H1	X1 -> Y	0.321	0.042	2.651	0.000	Supported
H2	X2 -> Y	0.367	0.034	2.653	0.001	Supported
H3	X3 -> Y	0.317	0.021	3.871	0.002	Supported

H1: Transformational leadership has a significant effect on teacher innovation capability

On the base of the hypothesis test results, the value beta of 0.321, SE 0.042, T Statistics 2.651 and P-Values 0.000 are found to have a positive and important impact on the capacity to innovate teachers. These findings are consistent with Asbari research (2019), that transformation leadership has a positive and important impact on the capacity to innovate teachers, that transformation leadership Santoso (2019) has a positive and significant impact on teacher innovation capacity, and that transformation leadership Wijayanti (2019) has a positive and significant effect on teacher innovation ability and transformation and Transformational leadership (2019) has a positive and substantial impact on teacher innovation and Hyun (2020) has a positive and significant impact on teacher innovation capabilities. transformation leadership Transformational leadership Transformative leadership in Pramono (2019) has a positive and significant impact on creativity capabilities in teaching, and Hyun (2020) has a positive and substantial effect on teacher creativity. Purwanto (2020) Transformative leadership has a clear and optimistic effect on teacher creativity.

H2: Transactional leadership has a significant effect on teacher innovation capability

Based on the hypothesis test results, a Beta value of 0.367, SE 0.034, T Statistics 2.653 and P-Values 0.001 were found to be positive and important in the effects of transitional leadership in educational innovation. These results are consistent with the findings of Asbari (2020) on the positive and significant impact of transactional leadership on the capability to teach creativity, the positive and significant impact of transactional leadership on the capability of teachers to innovate and the positive and significant effect on teacher capacity in transaction leadership, Wijayanti (2020). Transactional lead Pramono (2020) has a positive and significant impact on teacher innovation capabilities, while Hyun (2020) has a positive and significant impact on teacher innovation capabilities in change leadership. Transactional management Bernarto (2019) has a positive and important impact on teacher innovation ability. Transactional Purwanto (2020) has a positive and important impact on teacher innovation potential

H3: Organizational learning has a significant effect on teacher innovation capability

Based on the test results of the hypothesis, beta was seen as 0.317, SE 0.021, T statistics 3.871 and P-values 0.001 to demonstrate the optimistic and important influence of organisational learning in teacher creativity. These findings are consistent with research undertaken by Asbari (2020), according to which organizative learning has a positive and substantial effect on teachers' innovation, Purwanto (2020), organisational learning has a positive and significant impact on teachers' innovation capacities. Bernarto (2020) has a positive and significant impact on teacher innovation and Pramono (2019) has positive and significant impact on teacher innovation capabilities in the sense of organisation learning. Purwanto(2019) notes that the optimistic and important influence of organisational learning on teachers' capacity for innovation.

Based on the research results it is possible to conclude positive and important impacts of that the transformational leadership are on the teacher's innovation potential, so that the more positive transformative leadership belongs to school leaders, the more individual teacher innovation capacity would increase in schools. The findings are consistent with previous studies: Perez-Luno et al. (2018), Terhorst et al. (2018), Boadu et al. (2018), Che et al. (2019) and others. Transactional leadership has an impact on the willingness of teachers to innovate, which results in an increase of the individual teachers' innovation capability in education by the more optimistic transactional leaders. Organizational preparation has a positive and important effect on the ability to innovate teachers, which means that the more positive the organisational training belongs to school administrators, the greater the potential of individual teachers to innovate in schools.

CONCLUSION

Based on the results of the study, a positive and important effect of transformation leadership on the capacities of teachers to innovate means that the more positive transformation leaders are, the more the capacity of individual teachers to innovate in Islamic schools will increase. The stronger the teacher innovation capacity will expand. The positive and important implications for teacher innovation capacity are transactional leadership, which means that the more positive transactional leadership of teachers is, the greater the individual teacher innovation potential in Islamic schools. Organizational learning has a positive and important effect on Teacher innovation ability, which means that the more positive organisational learning belongs to the leaders of schools, the greater the individual teacher innovation ability of teachers in Islamic schools would be enhanced. Schools also have to build an organisational learning atmosphere that encourages the expertise and participation of individual teachers in schools. Leadership continues to be an important school resort for researchers. Leadership, disruptive and transaction leadership, will greatly boost teachers' creativity capabilities. Organizational learning accelerates knowledge into knowledge in classrooms. This study concludes that organisational learning serves as a mechanism for the the ability of school educators to innovate. There are various drawbacks to this report. In the first position, this research analyses the impact on the creativity capacities of teachers through transformational and transactional leadership. There may be, of course, several other variables that influence teacher creativity, the author suggests that this be found, investigated and evaluated. Second, studies carried out in other schools cannot be prevalent in other schools. Further study on this subject in other schools is also strongly recommended.

REFERENCES

- Asbari, M. (2019). Pengaruh Kepemimpinan Transformasional dan Iklim Institusi terhadap Kinerja Dosen. Journal of Communication Education. 13(2): 172-186. http://jurnal.ipem.ac.id/index.php/joceip/article/view/187.
- Asbari, M., Hyun, C.C., Wijayanti, L.M., Winanti, W., Fayzhall, M., Putra, F., and Pramono, R. (2020). Hard Skills dan Soft Skills: Apa Membangun Inovasi Guru Sekolah Islam? Evaluasi: Jurnal Manajemen Pendidikan Islam, 4(1), 143-172. doi:http://dx.doi.org/10.32478/evaluasi.v4i1.362.
- Asbari, M., Nurhayati, W. and Purwanto, A. (2019). Pengaruh Parenting style dan Personality Genetic Terhadap Pengembangan Karakter Anak di Paud Islamic School. JURNAL AUDI: Jurnal Ilmiah Kajian Ilmu Anak dan Media Informasi PAUD. 4(2): 148-163. Doi: http://dx.doi.org/10.33061/jai.v4i2.3344. Link:
- Asbari, M., Nurhayati, W., Purwanto, A., and Putra, F. (2020). Pengaruh Genetic Personality dan Authoritative Parenting Style terhadap Pendidikan Karakter di Aya Sophia Islamic School. Edumaspul: Jurnal Pendidikan. 4(1): 142-155. Doi: https://doi.org/10.33487/edumaspul.v4i1.341.
- Asbari, M., Pramono, R., Kotamena, F., Liem, J., sihite, O., Alamsyah, V., Imelda, D., Setiawan, S., and Purwanto, A. (2020). Studi Fenomenologi Work-Family Conflict dalam Kehidupan Guru Honorer Wanita. Edumaspul: Jurnal Pendidikan. 4(1): 180-201. Doi:

https://doi.org/10.33487/edumaspul.v4i1.347.

- Asbari, M., Pramono, R., Kotamena, F., Sihite, O., Liem, J., Imelda, D., Alamsyah, V., Imelda, D., Setiawan, S., & Purwanto, A. (2020). Bekerja Sambil Kuliah dalam Perspektif Self Management : Studi Etnografi pada guru Etnis Jawa di Kota Seribu Industri Tangerang. Edumaspul: Jurnal Pendidikan, 4(1), 253-263. https://doi.org/10.33487/edumaspul.v4i1.363.
- Asbari, M., Purwanto, A., Wijayanti, L.M., Hyun, C.C., Kusumaningsih, S.W., Yanthy, E., Putra, F., Winanti, Imelda, D., Pramono, R. and Bernarto, I. (2020). Pengaruh Hard Skills, Soft Skills dan Mediasi Budaya Sekolah Terhadap Kapabilitas Inovasi Guru di Jawa Barat: Studi Fenomenologi Esensi Pengalaman Peserta Didik. Jurnal Kependidikan: Jurnal Hasil Penelitian dan Kajian Kepustakaan di Bidang Pendidikan, Pengajaran dan Pembelajaran. 6(1): https://doi.org/10.33394/jk.v6i1.2320
- Asbari, M., Santoso, P., and Purwanto, A. (2019). Pengaruh Iklim Institusi dan Kepemimpinan Transformasional Terhadap Produktivitas Kerja Inovatif Pada Industri Manufaktur di Pati Jawa Tengah. Jurnal Produktivitas Universitas Muhammadiyah Pontianak. 7(1 2020): 62-69. Doi: 10.29406/jpr.v7i1.1797.

- Asbari, M., Santoso, P., and Purwanto, A. (2019). Pengaruh Kepemimpinan dan Budaya Institusi Terhadap Perilaku Kerja Inovatif Pada Industri 4.0. JIM UPB (Jurnal Ilmiah Manajemen Universitas Putera Batam). 8(1): 7-15. Doi: https://doi.org/10.33884/jimupb.v8i1.1562.
- Asbari, M., Santoso, P.B. and Purwanto, A. (2019). Influence of Leadership, Motivation, Competence, Commitment and Culture on ISO 9001:2015 Performance in Packaging Industry. Scholars Journal of Economics, Business and Management. 6(12): 577-582. DOI: http://doi.org/10.36347/sjebm.2019.v06i12.005.
- Asbari, M., Wijayanti, L.M, Hyun, C.C., Purwanto, A. and Santoso, P.B. (2020). Effect of Tacit and Explicit Knowledge Sharing on Teacher Innovation Capability. Dinamika Pendidikan. 14(2): 47-59. Doi: https://doi.org/10.15294/dp.v14i2.22732.
- Asbari, M., Wijayanti, L.M., Hyun, C.C., Imelda, D., Yanthy, E., and Purwanto, A. (2020). Hard Skills Atau Soft Skills: Manakah Yang Lebih Penting Bagi Inovasi Guru. Edumaspul: Jurnal Pendidikan.4(1): 1-20. Doi: https://doi.org/10.33487/edumaspul.v4i1.333.
- Asbari, M., Wijayanti, L.M., Hyun, C.C., Purwanto, A., Santoso, P.B., Bernarto, I., Pramono, R., and Fayzhall, M. (2020). The Role of Knowledge Transfer and Organizational Learning toBuild Innovation Capability: Evidence from Indonesian Automotive Industry. International Journal of Control and Automation. 13(1): 19-322. Link: http://sersc.org/journals/index.php/IJCA/article/vi ew/5732
- Asbari. M., Nurhayati. W. and Purwanto, A. (2020). The effect of parenting style and genetic personality on children character development. Jurnal Penelitian dan Evaluasi Pendidikan. 23(2). DOI: https://dx.doi.org/10.21831/pep.v23i2.28151.
- 15. Hyun, C.C., Wijayanti, L.M., Asbari, M., Purwanto, A., Santoso, P.B., Wardani, I.G.K., Bernarto, I., and Pramono, R. (2020). Implementation of Contextual Teaching and Learning (CTL) to Improve the Concept and Practice of Love for Faith-Learning Integration. International Journal of Control and Automation. 13(1): 365-383. Link: http://sersc.org/journals/index.php/IJCA/article/vi ew/5737
- Purwanto, A. Asbari, M., Prameswari, M., Ramdan, M. and Setiawan, S.T. (2020). Dampak Kepemimpinan, Budaya Institusi dan Perilaku Kerja Inovatif Terhadap Kinerja Pegawai Puskesmas. Jurnal Ilmu Kesehatan Masyarakat. 9(1): 19-27. https://doi.org/10.33221/jikm.v9i01.473.
- Purwanto, A., Asbari, M., and Santoso, P.B. (2019). Can ISO 38200:2018 Wood and Wood Based Product Chain of Custody Increase Business Competitiveness of Wood Industries in West Java? Jurnal 49-57. DOI: https://doi.org/10.35130/jrimk.

- Purwanto, A., Pramono, R., Bernarto, I., Asbari, M., Santoso, P., Saifuddin, M., Hyun, C.C., Wijayanti, L.M., Ong, F. and Kusumaningsih, W. (2020). Minat dan Hambatan Publikasi Artikel pada Jurnal Internasional Bereputasi: Studi Eksploratori pada Mahasiswa Doktoral di Sebuah Perguruan Tinggi Swasta di Jakarta. Edumaspul: Jurnal Pendidikan. 4(1): 219-228. Doi: https://doi.org/10.33487/edumaspul.v4i1.348.
- Purwanto, A., Putri, R.S., Ahmad, A.H., Asbari, M., Bernarto, I., Santoso, P.B., and Sihite, O.B. (2020). The Effect of Implementation Integrated Management System ISO 9001, ISO 14001, ISO 22000 and ISO 45001 on Indonesian Food Industries Performance. TEST Engineering & Management. 82.14054 – 14069. Link:

http://www.testmagzine.biz/index.php/testmagzine /article/view/3078

- Purwanto, A., Wijayanti, L.M., Hyun, C.C. and Asbari, M. (2020). The Effects of Transformational, Transactional, Authentic, Authoritarian Leadership style Toward Lecture Performance of Private University in Tangerang. Dinasti International Journal of Digital Business Management (DIJDBM). 1(1): 29-42. DOI:https://doi.org/10.31933/dijdbm.v1i1.88.
- Santoso, P.B., Purwanto, A. and Asbari, M. (2019). Influence of Implementation Chain of Custody Forest Management System FSC-STD-40-004 V3-0 to Business Performance of Paper Industries in Banten Indonesia. International Journal of Management and Humanities (IJMH). 4(4): 32-36. DOI: https://doi.org/10.35940/ijmh.C0442D0482.12441 9.
- Asher, D., & Popper, M. (2019). Transformational leadership as a multilayer phenomenon: the "onion" model. The Learning Organization. doi:10.1108/tlo-06-2018-0105
- Assyne N. (2019) Hard Competencies Satisfaction Levels for Software Engineers: A Unified Framework. In: Hyrynsalmi S., Suoranta M., Nguyen-Duc A., Tyrväinen P., Abrahamsson P. (eds) Software Business. ICSOB 2019. Lecture Notes in Business Information Processing, vol 370. Springer, Cham. https://doi.org/10.1007/978-3-030-33742-1_27
- 24. Attia, A. and Salama, I. (2018), "Knowledge management capability and supply chain management practices in the Saudi food industry", Business Process Management Journal, Vol. 24 No. 2, pp. 459-477. https://doi.org/10.1108/BPMJ-01-2017-0001
- Aulawi, H. (2018). Improving Teacher innovation capability Trough Creativity and Knowledge Sharing Behavior. IOP Conference Series: Materials Science and Engineering, 434, 012242. doi:10.1088/1757-899x/434/1/012242

- Azim, S., Gale, A., Lawlor-Wright, T., Kirkham, R., Khan, A., & Alam, M. (2010). The importance of transformational leadership in complex projects. International Journal of Managing Projects in Business, 3(3), 387–401. doi:10.1108/17538371011056048
- Baldé, M., Ferreira, A. and Maynard, T. (2018), "SECI driven creativity: the role of team trust and intrinsic motivation", Journal of Knowledge Management, Vol. 22 No. 8, pp. 1688-1711. https://doi.org/10.1108/JKM-06-2017-0241
- Bani-Melhem, S., Zeffane, R. and Albaity, M. (2018), "Determinants of teachers' innovative behavior", International Journal of Contemporary Hospitality Management, Vol. 30 No. 3, pp. 1601-1620. https://doi.org/10.1108/IJCHM-02-2017-0079
- Bashir, M. and Farooq, R. (2019), "The synergetic effect of knowledge management and business model innovation on firm competence: A systematic review", International Journal of Innovation Science, Vol. 11 No. 3, pp. 362-387. https://doi.org/10.1108/IJIS-10-2018-0103
- Boadu, F., Xie, Y., Du, Y.-F., & Dwomo-Fokuo, E. (2018). MNEs Subsidiary Training and Development and Firm Innovative Performance: The Moderating Effects of Tacit and Transactional leadership Received from Headquarters. Sustainability, 10(11), 4208. doi:10.3390/su10114208
- Borges, R., Bernardi, M. and Petrin, R. (2019), "Crosscountry findings on transformational leadership sharing: evidence from the Brazilian and Indonesian IT workers", Journal of Knowledge Management, Vol. 23 No. 4, pp. 742-762. https://doi.org/10.1108/JKM-04-2018-0234
- Borrego, G., Morán, A. L., Palacio, R. R., Vizcaíno, A., & García, F. O. (2019). Towards a reduction in architectural knowledge vaporization during agile global software development. Information and Software Technology. doi:10.1016/j.infsof.2019.04.008
- Boske, C. and Osanloo, A. (2015), "Conclusion Preparing all School Community Leaders to Live their Work", Living the Work: Promoting Social Justice and Equity Work in Schools around the World (Advances in Educational Administration, Vol. 23), Emerald Group Publishing Limited, pp. 405-426. https://doi.org/10.1108/S14793660201400000230 32
- 34. Cairó Battistutti, O. & Bork, D. Cogn Process (2017) 18: 461. https://doi.org/10.1007/s10339-017-0825-6
- Cantwell, J. and Zaman, S. (2018), "Connecting local and global technological knowledge sourcing", Competitiveness Review, Vol. 28 No. 3, pp. 277-294. https://doi.org/10.1108/CR-08-2017-0044

- 36. Castela, B., Ferreira, F., Ferreira, J. and Marques, C. (2018), "Assessing the teacher innovation capability of small- and medium-sized enterprises using a nonparametric and integrative approach", Management Decision, Vol. 56 No. 6, pp. 1365-1383. https://doi.org/10.1108/MD-02-2017-0156
- Chang, C. and Lin, T. (2015), "The role of organizational culture in the knowledge management process", Journal of Knowledge Management, Vol. 19 No. 3, pp. 433-455. https://doi.org/10.1108/JKM-08-2014-0353
- Chang, W.-J., Liao, S.-H., & Wu, T.-T. (2017). Relationships among organizational culture, knowledge sharing, and innovation capability: a
- 39. case of the automobile industry in Taiwan. Knowledge Management Research & Practice, 15(3), 471–490. doi:10.1057/s41275-016-0042-6
- 40. Chatterjee, A., Pereira, A. and Sarkar, B. (2018), "Learning transfer system inventory (LTSI) and knowledge creation in organizations", The Learning Organization, Vol. 25 No. 5, pp. 305-319. https://doi.org/10.1108/TL0-06-2016-0039
- Che, T., Wu, Z., Wang, Y. and Yang, R. (2019), "Impacts of knowledge sourcing on teacher innovation: the moderating effect of information transparency", Journal of Knowledge Management, Vol. 23 No. 2, pp. 221-239. https://doi.org/10.1108/JKM-11-2017-0554
- Che, T., Wu, Z., Wang, Y., & Yang, R. (2018). Impacts of knowledge sourcing on teacher innovation: the moderating effect of information transparency. Journal of Knowledge Management. doi:10.1108/jkm-11-2017-0554
- Chen, H., Baptista Nunes, M., Ragsdell, G., & An, X. (2018). Extrinsic and intrinsic motivation for experience grounded transformational leadership sharing in Chinese software organisations. Journal of Knowledge Management, 22(2), 478–498. doi:10.1108/jkm-03-2017-0101
- 44. Chin, WW. (1998). The Partial Least Squares Approach to Structural Equation Modeling. Modern Methods for Business Research, In: G. A. Marcoulides, Ed., Lawrence Erlbaum Associates Publisher, New Jersey, pp. 295-336.
- Cifariello, P., Ferragina, P., & Ponza, M. (2019). Wiser: A semantic approach for expert finding in academia based on entity linking. Information Systems, 82, 1– 16. doi:10.1016/j.is.2018.12.003
- Culot, G., Orzes, G., & Sartor, M. (2019). Integration and scale in the context of Industry 4.0: the evolving shapes of manufacturing value chains. IEEE Engineering Management Review, 1–1. doi:10.1109/emr.2019.2900652
- 47. Darwish, T. K., Zeng, J., Rezaei Zadeh, M., & Haak-Saheem, W. (2018). Organizational learning of Absorptive Capacity and Innovation: Does Leadership Matter? European Management Review. doi:10.1111/emre.12320

 Deranek, K., McLeod, A., & Schmidt, E. (2017). ERP Simulation Effects on Knowledge and Attitudes of Experienced Users. Journal of Computer Information Systems, 1–11.

doi:10.1080/08874417.2017.1373610

- Durana, Kral, Stehel, Lazaroiu, & Sroka. (2019). Quality Culture of Manufacturing Enterprises: A Possible Way to Adaptation to Industry 4.0. Social Sciences, 8(4), 124. doi:10.3390/socsci8040124
- 50. Fan, C.S., Wei, X., and Zhang, J. (2017). Transformational leadership, Transactional leadership, and The Black/White Wage Gap. Wiley Online Library. 55(2):1032-1052. Doi: https://doi.org/10.1111/ecin.12406
- Ferraris, A., Santoro, G. and Scuotto, V. (2018), "Dual relational embeddedness and knowledge transfer in European multinational corporations and subsidiaries", Journal of Knowledge Management, Vol. ahead-of-print No. ahead-of-print. https://doi.org/10.1108/JKM-09-2017-0407
- 52. Ferreira, J., Mueller, J. and Papa, A. (2018), "Strategic knowledge management: theory, practice and future challenges", Journal of Knowledge Management, Vol. ahead-of-print No. ahead-of-print. https://doi.org/10.1108/JKM-07-2018-0461
- 53. Gale, A. J., Duffey, M. A., Park-Gates, S., & Peek, P. F. (2017). Transformational leadership versus Transactional leadership: Practitioners' Perspectives on Interior Design Interns. Journal of Interior Design, 42(4), 45–63. doi:10.1111/joid.12105
- Ismaya, B., Setiawan, . T., Sulistyarini, . I., Winarti, . A., Nabila, . R., Purnamaningsih, . I. R., Haryati, ., Widodo, . A. P., Klau, . I. C. S. & Purwanto, . A. (2020) FAST Leadership Model for University Leaders Performance in Pharmacy Faculty: Yesterday, Today and Tomorrow. Systematic Reviews in Pharmacy, 11 (8), 362-373. doi:10.31838/srp.2020.8.54
- Yunarsih, N., Rahayu, . S., Fatoni, ., Asra, ., Sustiyono, . A., Anwar, . T., Sri, . N. & Purwanto, . A. (2020) Develop Leadership Style Model for Nurse in Indonesian Hospital. Systematic Reviews in Pharmacy, 11 (8), 352-361. doi:10.31838/srp.2020.8.53
- Slamet, M. U. A. G., Asdiana, ., Abdillah, . A., Abduloh, ., Fahlevi, . M., Ali, . R., Evanirosa, ., Mufid, . A., Purwanto, . A., Faricha, . F., Khairullah, . & Zumaro, . A. (2020) Islamic Leadership Model for Indonesian Millennial Teachers Performance in Pharmacy Schools. Systematic Reviews in Pharmacy, 11 (8), 374-382. doi:10.31838/srp.2020.8.55
- 57. Supriyadi, D., Syafitri, . L. N. H., Widodo, S. F. A., Wahidi, R., Arinta, . Y. N., Nabhan, . F., Mufid, . A., Purwanto, . A., Fahlevi, . M., Sunarsi, . D. & Cahyono, . Y. (2020) INNOVATION AND AUTHENTIC LEADERSHIP OF ISLAMIC UNIVERSITY LECTURES IN FACULTY PHARMACY FACULTY: WHAT IS THE ROLE OF PSYCHOLOGICAL CAPITAL?. Systematic Reviews in Pharmacy, 11 (8), 383-393. doi:10.31838/srp.2020.8.56

- Suryaman, M., Cahyono, . Y., Muliansyah, . D., Bustani, . O., Suryani, . P., Fahlevi, . M., Pramono, . R., Purwanto, . A., Purba, . J. T., Munthe, . A. P., Juliana, . & Harimurti, . S. M. (2020) COVID-19 PANDEMIC AND HOME ONLINE LEARNING SYSTEM: DOES IT AFFECT THE QUALITY OF PHARMACY SCHOOL LEARNING?. Systematic Reviews in Pharmacy, 11 (8), 524-530. doi:10.31838/srp.2020.8.74
- 59. Sutia, S., Riadi, . R., Fahlevi, . M., Istan, . M., Juhara, . S., Pramono, . R., Purwanto, . A., Purba, . J. T., Munthe, . A.
 P. & Juliana, . (2020) BENEFIT OF BENCHMARKING METHODS IN SEVERAL INDUSTRIES: A SYSTEMATIC LITERATURE REVIEW. Systematic Reviews in Pharmacy, 11 (8), 508-518. doi:10.31838/srp.2020.8.72
- Suheny, E., Arum, M., Wandi, D., Rahmat, A., kurnianingsih, A., Haerani, A., Dasmaran, V., Taryanto, Adha, S. & Purwanto, A. (2020) Develop Leadership Style Model for Indonesian SMEs Leaders During Covid-19 Pandemic. Systematic Reviews in Pharmacy, 11 (8), 576-586. doi:10.31838/srp.2020.8.82
- 61. Ganguly, A., Talukdar, A. and Chatterjee, D. (2019), "Evaluating the role of social capital, transformational leadership sharing, knowledge quality and reciprocity in determining teacher innovation capability of an organization", Journal of Knowledge Management, Vol. 23 No. 6, pp. 1105-1135. https://doi.org/10.1108/JKM-03-2018-0190
- 62. Ghozali, I. Structural Equation Modeling, Metode Alternatif dengan Partial Least Square (PLS), Edisi 4. Semarang: Badan Penerbit Universitas Diponegoro. 2014.
- 63. Gunasekaran, A., Subramanian, N., & Ngai, E. (2018). Quality Management in the 21st Century Enterprises: Research pathway towards Industry 4.0. International Journal of Production Economics. doi:10.1016/j.ijpe.2018.09.005
- 64. Guo, Y., Jasovska, P., Rammal, H. and Rose, E. (2018), "Global mobility of professionals and the transfer of transformational leadership in multinational service firms", Journal of Knowledge Management, Vol. ahead-of-print No. ahead-of-print. https://doi.org/10.1108/JKM-09-2017-0399
- 65. Haamann, T., & Basten, D. (2018). The role of information technology in bridging the knowingdoing gap: an exploratory case study on knowledge application. Journal of Knowledge Management. doi:10.1108/jkm-01-2018-0030
- Hair, J. F., Black. W. C., Babin. B. J.; and Anderson. R. E. (2010), Multivariate Data Analysis, 7th ed. New Jersey: Pearson Prentice Hall.
- 67. Hamada, T. (2019). Determinants of Decision-Makers' Attitudes toward Industry 4.0 Adaptation. Social Sciences, 8(5), 140. doi: 10.3390/socsci8050140

- Hartley, J. (2018), "Ten propositions about public leadership", International Journal of Public Leadership, Vol. 14 No. 4, pp. 202-217. https://doi.org/10.1108/IJPL-09-2018-0048
- Haseeb, M., Hussain, H. I., Ślusarczyk, B., & Jermsittiparsert, K. (2019). Industry 4.0: A Solution towards Technology Challenges of Sustainable Business Performance. Social Sciences, 8(5), 154. doi:10.3390/socsci8050154
- 70. Hodgins, M. and Dadich, A. (2017), "Positive emotion in knowledge creation", Journal of Health Organization and Management, Vol. 31 No. 2, pp. 162-174. https://doi.org/10.1108/JHOM-06-2016-0108
- Holford, W.D. (2018). The future of human creative knowledge work within the digital economy. Futures. doi:10.1016/j.futures.2018.10.002
- 72. Holste, J. S., & Fields, D. (2010). Trust and transformational leadership sharing and use. Journal of Knowledge Management, 14(1), 128–140. doi:10.1108/13673271011015615
- 73. Honeycutt, Jerry. (2000). Knowledge Management Strategies: Strategi Manajemen Pengetahuan. Jakarta : PT. Alex Media Komputindo.
- 74. Hyun,C.C, Wijayanti,L.M., Asbari,M.,Purwanto,A. Santoso,P.B., IGAK Wardani, Bernarto,I., Pramono,R., (2020). Implementation of Contextual Teaching and Learning (CTL) toImprove the Concept and Practice of Love for Faith-Learning Integration, International Journal of Control and Automation.13(1).365-383. http://sersc.org/journals/index.php/IJCA/article/vi ew/5737
- Hong, J. (1999). Structuring for organizational learning.The Learning Organization, Vol. 6 No. 4, pp. 173-186. https://doi.org/10.1108/09696479910280631
- 76. Huang, F., Gardner, S. and Moayer, S. (2016), "Towards a framework for strategic knowledge management practice: Integrating soft and hard systems for competitive advantage", VINE Journal of Information and Knowledge Management Systems, Vol. 46 No. 4, pp. 492-507. https://doi.org/10.1108/VJIKMS-08-2015-0049
- 77. Huesig, S. and Endres, H. (2019), "Exploring the digital innovation process: The role of functionality for the adoption of innovation management software by innovation managers", European Journal of Innovation Management, Vol. 22 No. 2, pp. 302-314. https://doi.org/10.1108/EJIM-02-2018-0051
- Hussain, S. T., Lei, S., Akram, T., Haider, M. J., Hussain, S. H., & Ali, M. (2018). Kurt Lewin's change model: A critical review of the role of leadership and teacher involvement in organizational change. Journal of Innovation & Knowledge, 3(3), 123–127. doi:10.1016/j.jik.2016.07.002

- Imran, M., Ilyas, M., Aslam, U. and Fatima, T. (2018), "Knowledge processes and firm performance: the mediating effect of teacher creativity", Journal of Organizational Change Management, Vol. 31 No. 3, pp. 512-531. https://doi.org/10.1108/JOCM-10-2016-0202
- 80. Innocentius Bernarto, Diana Bachtiar, Niko Sudibjo, Ian Nurpatria Suryawan, Agus Purwanto, Masduki Asbari.(2020). Effect of Transformational Leadership, Perceived Organizational Support, Job Satisfaction Toward Life Satisfaction: Evidences from Indonesian Teachers. International Journal of Advanced Science and Technology.29(3). 5495 -5503
- Jakhar, S. K., Mangla, S. K., Luthra, S., & Kusi-Sarpong, S. (2018). When stakeholder pressure drives the circular economy. Management Decision. doi:10.1108/md-09-2018-0990
- Jaleel, S. and Verghis, A.M. (2015). Knowledge Creation in Constructivist Learning. Universal Journal of Educational Research 3(1): 8-12. doi: 10.13189/ujer.2015.030102.
- 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
- Jou, M. Lin, Y. and Wu, D. (2016) Effect of a blended learning environment on student critical thinking and knowledge transformation, Interactive Learning Environments, 24:6, 1131-1147, DOI: 10.1080/10494820.2014.961485
- Kasim, A., Ekinci, Y., Altinay, L. and Hussain, K.(2018)Impact of market orientation, organizational learning and market conditions on small and medium-size hospitality enterprises,Journal of Hospitality Marketing & Management,27:7,855-875,DOI: 10.1080/19368623.2018.1438955
- Kawamura, K. (2016), "Kristine Marin Kawamura, PhD interviews Ikujiro Nonaka, PhD", Cross Cultural & Strategic Management, Vol. 23 No. 4, pp. 613-632. https://doi.org/10.1108/CCSM-06-2014-0056
- Kenayathulla, H., Ahmad, N. and Idris, A. (2019), "Gaps between competence and importance of employability skills: evidence from Malaysia", Higher Education Evaluation and Development, Vol. 13 No. 2, pp. 97-112. https://doi.org/10.1108/HEED-08-2019-0039
- Khoshsorour, A., Gilaninia, S. 2018. Kuwait Chapter of the Arabian. Journal of Business and Management Review; Kuwait City 7(3): 1-4. doi: 10.12816/0048627
- Kim, N. and Shim, C. (2018). Social capital, knowledge sharing and innovation of small- and medium-sized enterprises in a tourism cluster. International Journal of Contemporary Hospitality Management, Vol. 30 No.
 pp. 2417-2437. https://doi.org/10.1108/IJCHM-07-2016-0392

- 90. Klaeijsen, A., Vermeulen, M., & Martens, R. (2017). Teachers' Innovative Behaviour: The Importance of Basic Psychological Need Satisfaction, Intrinsic Motivation, and Occupational Self-Efficacy. Scandinavian Journal of Educational Research, 62(5), 769–782. doi:10.1080/00313831.2017.1306803
- 91. Laker, D. R., & Powell, J. L. (2011). The differences between hard and transformational leadership and their relative impact on training transfer. Human Resource Development Quarterly, 22(1), 111–122. doi:10.1002/hrdq.20063
- 92. Lecat, A., Beausaert, S. & Raemdonck, I. (2018). On the Relation Between Teachers' (In)formal Learning and Innovative Working Behavior: the Mediating Role of Employability. Vocations and Learning11, 529–554. doi:10.1007/s12186-018-9199-x
- 93. Lee, J.-C., Shiue, Y.-C., & Chen, C.-Y. (2016). Examining the impacts of organizational culture and top management support of knowledge sharing on the success of software process improvement. Computers in Human Behavior, 54, 462–474. doi:10.1016/j.chb.2015.08.030
- 94. Lee, Peter. (2019). Transformational leadership and University-Industry Technology Transfer. Research Handbook on Intellectual Property and Technology Transfer (2019, Forthcoming); UC Davis Legal Studies Research Paper Forthcoming. doi: http://dx.doi.org/10.2139/ssrn.3417933
- 95. Li, M., Liu, H. and Zhou, J. (2018), "G-SECI modelbased knowledge creation for CoPS innovation: the role of grey knowledge", Journal of Knowledge Management, Vol. 22 No. 4, pp. 887-911. https://doi.org/10.1108/JKM-10-2016-0458
- 96. Li, Song, Wang, & Li. (2019). Intellectual Capital, Knowledge Sharing, and Innovation Performance: Evidence from the Chinese Construction Industry. Sustainability, 11(9), 2713. doi:10.3390/su11092713
- 97. Liebowitz, J. and Chen, Y. 2001. Developing knowledge-sharing proficiencies. Knowledge Management Review 3(6): 12-15. https://www.researchgate.net/publication/285908 349_Developing_knowledgesharing_proficiencies_Bu ilding_a_sup portive_culture_for_knowledge-sharing
- 98. Lievre, P. and Tang, J. (2015), "SECI and interorganizational and intercultural knowledge transfer: a case-study of controversies around a project of cooperation between France and China in the health sector", Journal of Knowledge Management, Vol. 19 No. 5, pp. 1069-1086. https://doi.org/10.1108/JKM-02-2015-0054
- 99. Lin, C.-P. (2006). To Share or Not to Share: Modeling Transformational leadership Sharing, Its Mediators and Antecedents. Journal of Business Ethics, 70(4), 411-428. doi:10.1007/s10551-006-9119-0

- 100. Lin, H., Lee, Y. (2017). A Study of The Influence of Organizational learning on Teachers' Innovative Behavior and Work Engagement by A Cross-Level Examination. Eurasia Journal of Mathematics, Science and Technology Education, 13(7), 3463-3478. https://doi.org/10.12973/eurasia.2017.00738a
- 101. Lombardi, R. (2019). Knowledge transfer and organizational performance and business process: past, present and future researches. Business Process Management Journal, 25(1), 2–9. doi:10.1108/bpmj-02-2019-368
- 102. Lund, H. B., & Karlsen, A. (2019). The importance of vocational education institutions in manufacturing regions: adding content to a broad definition of regional innovation systems. Industry and Innovation, 1–20. doi:10.1080/13662716.2019.1616534
- 103.Ma, Q., Mayfield, M. and Mayfield, J. (2018), "Keep them on-board! How organizations can develop teacher embeddedness to increase teacher retention", Development and Learning in Organizations, Vol. 32 No. 4, pp. 5-9. https://doi.org/10.1108/DL0-11-2017-0094
- 104. Malik, A. (2019). Creating competitive advantage through source basic capital strategic humanity in the industrial age 4.0. International Research Journal of Advanced Engineering and Science 4(1): 209-215. www.irjaes.com/pdf/V4N1Y18-IRJAES/IRJAES-V4N1P195Y19.pdf
- 105. Manaf, H. A., Armstrong, S. J., Lawton, A., & Harvey, W. S. (2017). Managerial Transformational leadership, Individual Performance, and the Moderating Role of Teacher Personality. International Journal of Public Administration, 1–13. doi:10.1080/01900692.2017.1386676
- 106. Martínez-Costa, M., Jiménez-Jiménez, D., & Dine Rabeh, H. A. (2018). The effect of organisational learning on interorganisational collaborations in innovation: an empirical study in SMEs. Knowledge Management Research & Practice, 1–14. doi:10.1080/14778238.2018.1538601
- 107. Mohajan, Haradhan (2016): Sharing of Transformational leadership in Organizations: A Review. Published in: American Journal of Computer Science and Engineering, Vol. 3, No. 2 (1 July 2016): pp. 6-19. https://mpra.ub.unimuenchen.de/id/eprint/82958
- 108. Moustaghfir, K. and Schiuma, G. (2013), "Knowledge, learning, and innovation: research and perspectives", Journal of Knowledge Management, Vol. 17 No. 4, pp. 495-510.
- 109. Muhammad, A., Ariyani, E.D., Sadikin, S., Sujana, D. (2019). Factor Analysis of the Companies Demands to the Polytechnic Graduates in Indonesia. Advanced Science Letters, Volume 25, Number 1, January 2019, pp. 117-
 - 121(5)DOI:https://doi.org/10.1166/asl.2019.13199

- 110. Muñoz, C.A., Mosey, S. and Binks, M.(2015) The tacit mystery: reconciling different approaches to transformational leadership. Knowledge Management Research & Practice, 13:3, 289-298, DOI: 10.1057/kmrp.2013.50
- 111. Muqowim (2012). Pengembangan Transformational leadership Guru. Yogyakarta: Pedagogia
- 112. Muscio, A., & Ciffolilli, A. (2019). What drives the capacity to integrate Industry 4.0 technologies? Evidence from European R&D projects. Economics of Innovation and New Technology, 1–15. doi:10.1080/10438599.2019.1597413
- 113. Muthuveloo, R., Shanmugam, N., & Teoh, A. P. (2017). The impact of transformational leadership management on organizational performance: Evidence from Malaysia. Asia Pacific Management Review, 22(4), 192–201. doi:10.1016/j.apmrv.2017.07.010
- 114. Naqshbandi, M., Tabche, I. and Choudhary, N. (2019), Managing open innovation: The roles of empowering leadership and teacher involvement climate, Management Decision, Vol. 57 No. 3, pp. 703-723. https://doi.org/10.1108/MD-07-2017-0660
- 115. Nonaka I., Hirose Nishihara A. (2018) Introduction to the Concepts and Frameworks of Knowledge-Creating Theory. In: Hirose Nishihara A., Matsunaga M., Nonaka I., Yokomichi K. (eds) Knowledge Creation in Community Development. Palgrave Macmillan, Cham. https://doi.org/10.1007/978-3-319-57481-3_1
- 116. Nonaka I., Toyama R. (2015) The Knowledge-creating Theory Revisited: Knowledge Creation as a Synthesizing Process. In: Edwards J.S. (eds) The Essentials of KnowledgeManagement. OR Essentials Series. Palgrave Macmillan, London. https://doi.org/10.1057/9781137552105_4
- 117. Norwich, B., Koutsouris, G., Fujita, T., Ralph, T., Adlam, A. and Milton, F. (2016), "Exploring knowledge bridging and translation in lesson study using an inter-professional team", International Journal for Lesson and Learning Studies, Vol. 5 No. 3, pp. 180-195. https://doi.org/10.1108/IJLLS-02-2016-0006
- 118. Nouri, B.A., & Ghorbani, R. (2017). The Effect of Knowledge Management on Organizational Innovation with the Mediating Role of Organizational Learning (Case Study : Agricultural Bank in Iran). Journal of Applied Economics and Business Research JAEBR, 7(3): 194-211. https://www.semanticscholar.org/paper/TheEffectof-Knowledge-Management-on-Innovation-of-Nouri-Ghorbani/fb9eb1df37e4a47c9b3ac2bbf0bbc4f4907 b80a2
- 119. Nugroho, M. (2018), "The effects of collaborative cultures and knowledge sharing on organizational learning", Journal of Organizational Change Management, Vol. 31 No. 5, pp. 1138-1152. https://doi.org/10.1108/JOCM-10-2017-0385

- 120. Okuyama, R. (2017), "Importance of transformational leadership in incremental innovation: Implications from drug discovery cases", Journal of Strategy and Management, Vol. 10 No. 1, pp. 118-130. https://doi.org/10.1108/JSMA-02-2016-0016
- 121. Parida, V., Sjödin, D., & Reim, W. (2019). Reviewing Literature on Digitalization, Business Model Innovation, and Sustainable Industry: Past Achievements and Future Promises. Sustainability, 11(2), 391. doi:10.3390/su11020391
- 122. Pérez-Fuillerat, N., Solano-Ruiz, M. C., & Amezcua, M. (2018). Conocimiento tácito: características en la práctica enfermera. Gaceta Sanitaria. doi:10.1016/j.gaceta.2017.11.002
- 123. Pérez-Luño, A., Alegre, J., & Valle-Cabrera, R. (2018). The role of transformational leadership in connecting knowledge exchange and combination with innovation. Technology Analysis & Strategic Management, 1–13. doi:10.1080/09537325.2018.1492712
- 124. Pérez-Luño, A., Alegre, J., & Valle-Cabrera, R. (2018). The role of transformational leadership in connecting knowledge exchange and combination with innovation. Technology Analysis & Strategic Management, 1–13. doi:10.1080/09537325.2018.1492712
- 125. Polanyi, M. (1966). The Tacit dimension. New York: Doubleday & Co.
- 126. Prasarnphanich, P., Janz, B. and Patel, J. (2016), "Towards a better understanding of system analysts' transformational leadership: A mixed method approach", Information Technology & People, Vol. 29 No. 1, pp. 69-98. https://doi.org/10.1108/ITP-06-2014-0123
- 127.Qi, C. and Chau, P.Y.K.(2018)Will enterprise social networking systems promote knowledge management and organizational learning? An empirical study,Journal of Organizational Computing and Electronic Commerce,28:1,31-57,DOI: 10.1080/10919392.2018.1407081
- 128. Rainsbury, E., Hodges, D., Burchell, N. & Lay, M. C. (2002). Ranking workplace competencies: Student and graduate perceptions. Asia-Pacific Journal of Cooperative Education, 3(2), 8-18. https://hdl.handle.net/10289/3219
- 129. Razmerita L., Phillips-Wren G., Jain L.C. (2016) Advances in Knowledge Management: An Overview. In: Razmerita L., Phillips-Wren G., Jain L. (eds) Innovations in Knowledge Management. Intelligent Systems Reference Library, vol 95. Springer, Berlin, Heidelberg. https://doi.org/10.1007/978-3-662-47827-1_1
- 130. Rothberg, H. and Erickson, G. (2017), "Big data systems: knowledge transfer or intelligence insights?", Journal of Knowledge Management, Vol. 21 No. 1, pp. 92-112. https://doi.org/10.1108/JKM-07-2015-0300

- 131. Ruiz-Torres, A., Cardoza, G., Kuula, M., Oliver, Y. and Rosa-Polanco, H. (2018), "Logistic services in the Caribbean region: An analysis of collaboration, innovation capabilities and process improvement", Academia Revista Latinoamericana de Administración, Vol. 31 No. 3, pp. 534-552. https://doi.org/10.1108/ARLA-03-2017-0078
- 132. Rumanti, A. A., Samadhi, T. M. A. A., Wiratmadja, I. I., & Sunaryo, I. (2018). A systematic literature review on knowledge sharing for innovation: Empirical study approach. 5th International Conference on Industrial Engineering and Applications (ICIEA). doi:10.1109/iea.2018.8387153
- 133. Rumanti, A. A., Wiratmadja, I. I., Sunaryo, I., Ajidarma, P., & Ari Samadhi, T. M. A. (2019). Firm Teacher innovation capability through Knowledge Sharing at Indonesian Small and Medium Industries: Impact of Tacit and Transactional leadership Perspective. 2019 IEEE 6th International Conference on Industrial Engineering and Applications (ICIEA). doi:10.1109/iea.2019.8714947
- 134. Samsir, S. (2018), The effect of leadership orientation on innovation and its relationship with competitive advantages of small and medium enterprises in Indonesia, International Journal of Law and Management, Vol. 60 No. 2, pp. 530-542. https://doi.org/10.1108/IJLMA-01-2017-0005
- 135. Santoro, G., Vrontis, D., Thrassou, A., & Dezi, L. (2017). The Internet of Things: Building a knowledge management system for open innovation and knowledge management capacity. Technological Forecasting and Social Change. doi:10.1016/j.techfore.2017.02.034
- 136. Sasaki, Y. (2017), "A note on systems intelligence in knowledge management", The Learning Organization, Vol. 24 No. 4, pp. 236-244. https://doi.org/10.1108/TLO-09-2016-0062
- 137. Schuckert, M., Kim, T., Paek, S. and Lee, G. (2018), "Motivate to innovate: How authentic and transformational leaders influence teachers' psychological capital and service innovation behavior", International Journal of Contemporary Hospitality Management, Vol. 30 No. 2, pp. 776-796. https://doi.org/10.1108/IJCHM-05-2016-0282
- 138. Serna M., E., Bachiller S., O., & Serna A., A. (2017). Knowledge meaning and management in requirements engineering. International Journal of Information Management, 37(3), 155–161. doi:10.1016/j.ijinfomgt.2017.01.005
- 139. Sousa, M. J., & Rocha, Á. (2019). Strategic Knowledge Management in the Digital Age. Journal of Business Research, 94, 223–226. doi:10.1016/j.jbusres.2018.10.016

- 140. Spraggon, M. and Bodolica, V. (2017), "Collective transformational leadership generation through play: Integrating socially distributed cognition and transactive memory systems", Management Decision, Vol. 55 No. 1, pp. 119-135. https://doi.org/10.1108/MD-05-2015-0173
- 141.Stachová, K., Papula, J., Stacho, Z., & Kohnová, L. (2019). External Partnerships in Teacher Education and Development as the Key to Facing Industry 4.0 Challenges. Sustainability, 11(2), 345. doi:10.3390/su11020345
- 142. Shao, Z., Feng, Y., & Hu, Q. (2017). Impact of top management leadership styles on ERP assimilation and the role of organizational learning. Information & Management, 54(7), 902–919. doi:10.1016/j.im.2017.01.005
- 143. Megheirkouni, M. (2017). Leadership styles and organizational learning in UK for-profit and nonprofit sports organizations. International Journal of Organizational Analysis, Vol. 25 No. 4, pp. 596-612. https://doi.org/10.1108/IJOA-07-2016-1042
- 144. Prasad, B., & Junni, P. (2016). CEO transformational and transactional leadership and organizational innovation. Management Decision, 54(7), 1542–1568. doi:10.1108/md-11-2014-0651