Humapities and Social Sciences

ISSN 2615-3076 Online) ISSN 2615-1715 (Print)

# The Effect of Talent Management and Innovation Digital Capability on Employee Performance

# Ahmad Zaelani Adnan<sup>1</sup>, Eeng Ahman<sup>2</sup>, Disman<sup>3</sup>, Tjutju Yuniarsih<sup>4</sup>, Ramayani Yusuf<sup>5</sup>

<sup>1,2,3,4,5</sup>Universitas Pendidikan Indonesia ahmadzaelaniadnan@upi.edu, eengahman@upi.edu, disman@upi.edu, yuniarsih@upi.edu, yusuframayani1907459@upi.edu

#### Abstract

The readiness of HR in welcoming industry 4.0 is a very important thing to pay attention to. Pertamina itself is now trying hard to support vendors who have technology, inventories or industries to synergize with educational institutions to assist the government in preparing human resources that are able to compete in welcoming industry 4.0. The purpose of this study is to examine the effect of talent management and digital innovation capabilities on employee performance. The sample of this research is 150 employees of PT Pertamina RU-VI Balongan. This research design uses quantitative research with data analysis using a structural equation model (Structural Equation Modeling). Based on the results of the analysis, the structural equations model equations are Y = 0.44X1 + 0.60X2, these coefficients indicate that there is an influence of talent management and digital innovation capabilities on employee performance with a determinant coefficient (R2whichmeans 55% of management variables. talent and digital innovation capabilities can explain the performance of employees at PT Pertamina RU-VI Balongan. While the remaining 35% is influenced by other variables outside of this research variable.

### Keywords

talent management; digital innovation capability; employee performance

Rudapest Institut



#### **I. Introduction**

The company wants employees who work seriously with their abilities to get good work results. Without good performance from all employees, success in achieving goals will also be difficult to achieve. Understanding performance (performance) is a description of the level of achievement of the implementation of a program of activities or policies in realizing the goals, objectives, vision, and mission of the organization as outlined through the strategic planning of an organization. Therefore, without the goals and targets set in the measurement, then the performance of a person or organizational performance may not be known if there is no benchmark for success. (Moeheriono, 2014: 95).

The process of implementing good talent management will certainly have a positive impact on the development and growth of employee performance in the field.approach applied theory employee performance development is needed to produce good organizational performance as well. According to Sedarmayanti (2017), performance is not a characteristic of a person, such as talent or ability, but is the embodiment of talent or ability itself. This opinion shows that performance is an embodiment of ability in the form of real work. In implementation in the field, optimizing employee performance is needed in order to maintain the existence of the company in the long term and sustainably.

The practice of talent management itself includes three aspects of organizational activities consisting of working culture, working conditions, and talent development (Benitez-amado, Llorens-montes, and Fernandez-perez; 2015). The success of the organization in building the three aspects of talent management has an impact on increasing the work ability of employees (Van Zyl et al., 2017). Thus, the implementation of talent management will have an impact on increasing competence an employee.

A company's ability to innovate is the most important factor in competitive advantage in highly volatile market conditions. The digital capabilities of innovation lead organizations to develop innovations continuously to respond to the changing market environment and are embedded with all the strategies, systems and structures that support innovation in an organization (Gloet & Samson, 2016). Digital innovation capability is the ability to develop products or services in accordance with market demand by implementing processes appropriately and quickly in response to technological changes and unexpected opportunities by competitors.

Innovative organizations must be able to improve digital innovation capabilities both in terms of individuals and the organization itself. One of the impacts of digital innovation capabilities is a change in the type of innovation (Rajapathirana & Hui, 2017). Baldwin (2015) in his research states that larger companies are more innovative than smaller companies, because they have more ease of access to financing, can spread fixed costs of innovation in aspects of organizational activity consisting of working culture, working conditions, and talent development . Benitez-amado, Llorens-montes, and Fernandezperez; 2015).

Indonesia has entered the gates of the Industrial Revolution 4.0 or the fourth generation of industry. The industrial revolution 4.0 started with the internet revolution which has actually been going on since the 90s. However, the presence of the internet is not widely known if the effect will be like this. The government has compiled an industry 4.0 roadmap with the help of a number of parties. With this roadmap, the government hopes to increase the competitiveness of national industries in the global arena. The readiness of HR in welcoming industry 4.0 is a very important thing to pay attention to. Pertamina itself is now trying hard to support vendors who have technology, have inventories or industries to synergize with educational institutions to assist the government in preparing human resources who are able to compete in welcoming industry 4.0.

Human Resources (HR) is the most important component in a company or organization to run the business it does. Organization must have a goal to be achieved by the organizational members (Niati et al., 2021). Development is a change towards improvement. Changes towards improvement require the mobilization of all human resources and reason to realize what is aspired (Shah et al, 2020). The development of human resources is a process of changing the human resources who belong to an organization, from one situation to another, which is better to prepare a future responsibility in achieving organizational goals (Werdhiastutie et al, 2020).

PT Pertamina RU-VI Balongan is one of Pertamina's work units in Indramayu region which is in charge of maintaining the supply of Pertamina's products for the surrounding area. The work area of PT Pertamina RU-VI Balongan is quite wide and has relatively large number of human resources. In maintaining the performance of employees, the management of Petamina must pay attention to various factors, especially the talent management factor. When selecting employees, the company's management must pay close attention to talent management as well as when managing these employees. Companies must pay great attention to the competencies of their employees. Good employee competence will give birth to good digital innovation capabilities among employees. If the company can manage talent management and digital innovation capabilities, it is hoped that it can encourage the realization of good employee performance as well. In the implementation of the Industrial Revolution 4.0, the company's management must be able to collect the latest technology, this is so that work efficiency can be implemented properly.

Based on the importance of the company's sustainability in entering the era of the industrial revolution 4.0, the purpose of this research is to examine the influence of talent management and digital innovation capabilities on employee performance at PT Pertamina RU-VI Balongan.

#### **II. Review of Literature**

#### **2.1 Talent Management**

Talent management is an important aspect in the organization related to the governance of organizational members with the aim of forming and obtaining the best talents to be able to fill key positions within the organization. Views on talent management come from various experts. Talent management is more than just recruiting, succession planning, training and putting people in the right jobs at the right time. Talent management is an important strategy. (Ashton & Morton, 2015). Talent management is an overall process from recruitment, placement, to development and planning for employee succession (Lewis and Heckman 2016)

According to Sweem (2013:22) defines talent management as a term for managing talent based on performance and as something that can be distinguished arising from both humanistic and demographic perceptions. Meanwhile, according to Sareen and Mishra (2016) talent management can be defined as the process of recruiting, training, managing, developing, assessing, and maintaining the organization's most valuable resource, namely people. According to Kehinde (2012) talent management is the application of an integrated strategy or system designed to increase productivity in the workplace by developing better processes to attract, develop, retain and utilize people with the skills and proficiency needed to meet current and future business needs.

According to Yong (2017) there are four indicators (competency mapping, employee engagement, performance management, and career development). While the dimensions of talent management according to Yamall (2015) are 1) selection, 2) placement, 3) development.

#### **2.2 Digital Capabilities Innovation**

Innovation is the application of new ideas into products, processes and other aspects of company activities. Innovation focuses on the process of turning ideas into values (Roger, 2014). GNU (2015) states that most definitions of innovation focus on two things, namely:

- a. Product innovation (new products): considered to have a clear and positive impact on income growth
- b. Process innovation is seen from the side of increasing efficiency (costcutting). Increased ability to innovate can help individuals in overcoming the problems that exist in the work, so that the quality and quantity of work can be better.

According to Jong (in Alawi, 2015) the digital capabilities of individual innovation can be viewed from 3 aspects, namely:

- 1. Based on personalitycharacteristics, this personality character is measured by the individual's willingness/willingness to change.
- 2. Based on the behavioral perspective, in this case, it focuses on creativity and the development of ideas or the ability to try something new.
- 3. Based on the output perspective, namely based on the ability to produce something (product/process)

According to Kotler et al. (2018) Digital innovation capability is measured by the parameters 1. Product quality, 2. Product variants, 3. Product style and design. Zimmerer et al (2016) suggested that the digital capability of innovation is measured by the following parameters: 1. Design changes, 2. Technical innovation, 3. Product development.

#### **2.3 Employee Performance**

Performance Performance is a person's success in carrying out tasks, work results that can be achieved by a person or group of people in an organization in accordance with their respective authorities and responsibilities or about how a person is expected to function and behave in accordance with the tasks assigned to him and the quantity, quality and time used in carrying out tasks (Sutrisno, 2016). The term performance is intended as a translation of the term "performance". According to Sedarmayanti (2017), performance is not a characteristic of a person, such as talent or ability, but is the embodiment of talent or ability itself. This opinion shows that performance is the embodiment of ability in the form of real work. Performance in relation to the position is defined as the results achieved related to the function of the position within a certain period of time. Then Robbins (2016) defines performance as a result achieved by employees in their work according to certain criteria that apply to a job.

According to Mondy (2018), the starting point of the performance appraisal process is the identification of performance goals. A scoring system may not be able to effectively meet every desired goal, so management must choose specific goals that are believed to be the most important and can realistically be achieved. The next step in this continuous cycle continues with establishing performance criteria and communicating these performance expectations to those concerned. Then the work is carried out and the supervisor assesses the performance. At the end of the appraisal period, the appraiser and the employee together assess the performance in the job and evaluate it based on the performance standards that have been set.

#### **III. Research Method**

Research design is a way of processing and analyzing data so that it can be carried out easily and in accordance with the research focus. Based on the focus of this research, namely the influence of talent management, and digital innovation capabilities on employee performance at PT Pertamina RU-VI Balongan, this research design is included in the survey category. This research uses quantitative research. Munurut Sugiyono (2016:4), quantitative research is "research that analyzes data quantitatively by testing established hypotheses and then interpreting the results of the analysis to obtain conclusions".

According to Sugiyono (2016: 53) descriptive research methods are "methods used to find answers to the formulation of problems relating to questions about the truth of variables, both only on one or more variables". This research basically wants to test the theory by testing the hypothesis. Hypothesis testing is carried out using statistical calculations used to test the effect of Talent Management, and Digital Innovation Capability on employee performance at PT Pertamina RU-VI Balongan.

In this study, data analysis used a structural equation model (Structural Equation Modeling). Structural Equation Modeling is a second-generation multivariate analysis technique that combines factor analysis and path analysis, enabling researchers to simultaneously test and estimate the relationship between multiple exogenous and endogenous variables with multiple indicators (Chin, 1998; Gefen et al. 2000; Kirby and Bollen, 2009; Pirouz, 2006 in Latan, 2012:5).

Based on the theoretical study, the dimensions used in measuring each variable are as follows:

Table 1. Research indicators				
Variables	Measurement Model			
Talent	Selection (MT1)			
Management (MT)	Placement (MT2)			
	Development (MT3)			
Digital	Product innovation capability (CDI1)			
Innovation	Process innovation capability (CDI2)			
Capability (CDI)				
Employee	Technical Ability (Kin1)			
Performance (KIN)	Conceptual Ability (Kin2)			
	Interpersonal Relationship Skills (Kin3)			

Table 1. Research Indicators

## **IV. Results and Discussion**

#### 4.1 Validity and Reliability Testing

In the measurement model, the model fit test can be seen the validity and reliability of the measurement model. A variable is said to have good validity on the construct or latent variable if the loading factors t value is greater than the critical value (or 1.96 or practically 2) and the standardized loading factor 0.50. And it is said to be reliable if CR 0.70 and VE 0.50. Because good data is the result of a valid and reliable instrument. Following are the details of each variable.

Latent	Indicator	SLF≥	T value	Desc	CR≥	$VE \ge$	Desc
Variable	Code	0,50	> 1,96		0,70	0,50	
Talent	MT1	0.67	5.17	Valid	0.81	0.59	Reliable
Management	MT2	0.95	7.56	Valid			
	MT3	0.64	4.69	Valid			
Digital	CDI1	0.53	3.18	Valid	0.71	0.54	Reliable
Innovation	CDI2	0.50	5.17	Valid			
Capability							
Employee	Kin1	0.92	-	Valid	0.86	0.68	Reliable
Performance	Kin2	0.77	6.63	Valid			
	Kin3	0.76	5.92	Valid			

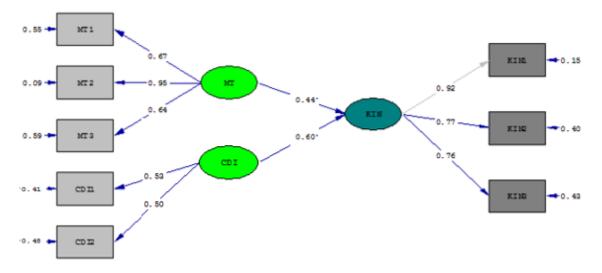
**Table 2.** Validity and Reliability Analysis Results

#### **4.2 Measurement Model Fit Test**

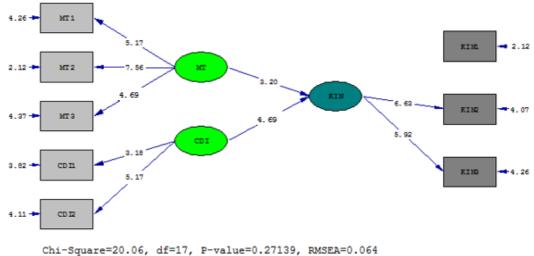
After the measurement model is valid and reliable, the next step is to test the fit of the model.

GOF	Acceptable match rate	Model Index	Desc
Chi-Square	The smaller the better	20,06	Good fit
	$(p-value \ge 0.05)$	(p value 0.27)	
GFI	$GFA \ge 0.90$ good fit	0.90	Good Fit
	$0,80 \le \text{GFI} \ge 0.90$ marginal fit		
RMSR	$RMSR \le 0.05$ good fit	0.036	Good fit
RMSEA	$RMSEA \leq 0.08$	0.064	Good fit
CFI	$CFI \ge 0.90 \text{ good fit}$	0.91	Good fit

Table 3.	Model	Fit Test	Results



Chi-Square=20.06, df=17, P-value=0.27139, RMSEA=0.064 Figure 1. Standardized Solution



i-Square=20.06, df=17, P-value=0.27139, RMSEA=0.064 Figure 2. T Value Solution

In the T-Value estimation results, there are variables that do not have a trajectory, namely the relationship between Kin and Kin1. This is because the variable has been set as a reference variance, which means that the manifest variable is significantly related to the latent variable.

Exogenous latent variable	Standardized coefficient	T value	Desc	$\mathbb{R}^2$	
X1	0.44	3.20	Significant	0.55	
X2	0.60	4.69	Significant	0.33	

Table 4. Results of structural equation analysis

So that the structural equations model is Y = 0.44X1 + 0.60X2, the coefficient shows the effect of each independent variable on the dependent variable. In addition, it can be seen the coefficient of determination (R2) which serves to show how much contribution is given simultaneously to the dependent variable. This means that the determinant coefficient of 0.55 means that 55% of talent management variables and digital innovation capabilities can explain the performance of employees at PT Pertamina RU-VI Balongan. While the remaining 35% is influenced by other variables outside of this research variable.

Sweem (2014:22) defines talent management as a term for managing talent based on performance and as something that can be distinguished that arises from both humanistic and demographic perceptions. Performance is a real behavior displayed by everyone as work performance produced by employees according to their role in the company (Rivai 2014: 309). Meanwhile, Wirawan (2019) says that performance is the output produced by the functions or indicators of a job or a profession within a certain time.

This is in line with Viani and Syamsudin's research (2020) Talent Management has a positive and significant impact on employee performance at the Manpower and Transmigration Office of Banten Province.

Lie Heng's research (2019) entitled The Study of Digital Capabilities of Innovation, Product Differentiation Excellence, and Marketing Performance of Micro, Small, and Medium Creative Enterprises in Pontianak City concludes that digital innovation capabilities have an insignificant effect on company performance. As stated by A. O'Cass and Sok, (2013) that innovation does involve a number of processes within the company that are interrelated with one another in order to produce superior advantages. By relying solely on the role of innovation alone, companies will experience obstacles in achieving optimal marketing performance.

Martin et al. (2017) revealed that the important role of innovation needs to be utilized to optimize marketing capabilities so that companies are able to achieve their competitive advantage. In this case, marketing capabilities in the context of products require the role of innovation, for example through the process of developing and improving the quality of the products produced so that their value and bargaining power can be further increased. Thus the company can build its differentiation advantage through the uniqueness of the product and make it more valuable to its customers compared to its competitors so as to improve its marketing performance.

The better the internal factor management efforts owned by SMEs, the digital innovation capabilities will increase. The better the management of SME external factors, the greater the digital innovation capability will be. and increasing digital innovation capabilities will affect the performance of SMEs (Rahmani, 2011).

The impact of collaboration networks and digital innovation capabilities on performance shows that digital innovation capabilities are proven to have a positive and significant impact on performance, which means that the higher the digital innovation capability, the higher the innovation digital capability. the performance of Batik SMEs is also high. With their ability to innovate, Batik MSME owners are able to create something new and diverse. Innovation development (packaging, market, product, and process) is carried out to attract consumers so that it can help to encourage increased company performance. This is reflected in ROA, profits, sales, and market share which increase every year and also the creation of consumer satisfaction with these innovations (Ranatiwi and Mulyana, 2018).

By increasing the ability to innovate, it will help individuals in overcoming the problems that exist at work, so that the quality and quantity of work can be better than before. With good innovation skills, it will also help individuals take the initiative to be able to generate ideas in a more effective and efficient work process. The better the application of knowledge sharing will improve the innovation process and product quality through the use of new technology, the employee's performance will also increase, which will directly affect the improvement of the company's performance itself (Azadehdel, Mohammad, et al, 2015).

The ability to innovate which is manifested in the form of always trying new ideas, trying new operating methods, and product innovation will be able to improve performance (Asegaff & Wasitowati, 2015). According to Munandar (2018: 287), performance appraisal is the process of assessing the personality traits, work behavior, and work results of a person's workforce or employees (workers and managers), which are considered to support their performance, which are used as consideration for making decisions about actions in the field of employment.

Kafetzopoulos and Psomas (2012) research on the impact of innovation capability on the performance of manufacturing companies. The results of this study obtained the results that According to the study findings, "digital innovation capabilities" directly contribute to product quality and operational performance.

#### **V.** Conclusion

The readiness of HR in welcoming industry 4.0 is a very important thing to pay attention to. Pertamina itself is now trying hard to support vendors who have technology, inventories or industries to synergize with educational institutions to assist the government in preparing human resources that are able to compete in welcoming industry 4.0. Based on the analysis results, the structural equations model equations are Y = 0.44X1 + 0.60X2, these coefficients indicate that there is an influence of talent management and digital innovation capabilities on employee performance with a determinant coefficient of 0.55 which means 55% of talent management variables and digital capabilities innovation can explain the performance of employees at PT Pertamina RU-VI Balongan. While the remaining 35% is influenced by other variables outside of this research variables.

#### References

- Alawi, A.A. 2015. The Role Of Engagement On Stakeholder's Satisfaction With The Destination Marketing Organisation's Performance. Thesis. School of Advertising, *Marketing, and Public Relations Faculty of Business Queensland University of Technology*, www.sampr.org
- Ashshiddiqi, M. Hasbi. 2012. Kompetensi Sosial Guru Dalam Pembelajaran dan Pengembangannya. *Jurnal TA'DIB*, 17 (1), 60-67, https://doi.org/10.19109/td.v17i01.25
- Ashton, C. dan Morton, L. 2015. Managing talent for competitive advantage: Taking a systemic approach to talent management, *Strategic HR Review*, Vol. 4 Iss: 5, 28 31, https://doi.org/10.1108/14754390580000819
- Baldwin, John R. 2015. Innovation, Training and Success, Working Paper Series, *Micro Economic Analysis*, Division Canada No. 137.
- Benitez-amado, J., Llorens-montes, F., & Fernandez-perez, V. 2015. IT Impact On Talent Management and Operational Environmental Sustainability. *Information Technology* and Management, 16(3), 207-220. https://doi.org/10.1007/s10799-015-0226-4
- Chin, W. W. (1998). The Partial Least Squares Aproach to Structural Equation Modeling. Modern Methods for Business Research, 295, 336
- Gefen D. 2000. *E-commerce: the role of familiarity and trust*. Omega 28, 725–737, https://doi.org/10.1016/S0305-0483(00)00021-9
- Gloet, M., & Samson, D. 2016. Knowledge Management and Systematic Innovation Capability. *International Journal of Knowledge Management*, 12(2), 54–72. https://doi.org/10.4018/IJKM.2016040104
- GNU, 2015. Innovation Definition Comparative Assessment, Brussels, retrieved from http://www.gnu.org, on 12th August 2017.
- Kafetzopoulos dan Psomas. 2012. The Impact Of Innovation Capability On The Performance Of Manufacturing Companies. *Journal of Manufacturing Technology Management* Vol. 26 No. 1, 2015 pp. 104-130, https://doi.org/10.1108/JMTM-12-2012-0117
- Kehinde, J. S. 2012. Talent Management: Effect On Organizational Performance. Journal Of Management Research. 4(2). 178–186. https://doi.org/10.9790/487X-1810041118
- Kirby, J.B & Bollen, K. A. 2009. Using Instrumental Variable (IV) Tests to Evaluate Model Specification in Laten Variable Structural Equation Models. *Sociological Methodology*, 39 (1), 327-355. https://doi.org/10.1111/j.1467-9531.2009.01217.x
- Kotler, Philip., and Kevin Lane Keller. 2018. *Marketing Managemet*. Edisi 15 Global Edition. Pearson.
- Latan, Hengky, SE. & Ghozali, Prof. Dr. Imam, M.Com., Ak. 2012. Partial Least Squares – Konsep, Teknik dan Aplikasi SmartPLS 2.0 M3. Semarang: Badan Penerbit Universitas Diponegoro.
- Lewis, R. E., dan Heckman, R. J. 2016. Talent Management : A Critical Review. *Human Resource Management Review*.
- Moeheriono. 2014. "Pengukuran Kinerja Berbasis Kompetensi". Jakarta: Raja. Grafindo Persada
- Mondy, R Wayne. 2018. Manajemen Sumber Daya Manusia. Jakarta: Erlangga
- Munandar, A. S. 2018. *Psikologi Industri dan Organisasi*. Jakarta: Universitas Indonesia (UI-Press).
- Niati, D. R., Siregar, Z. M. E., & Prayoga, Y. (2021). The Effect of Training on Work Performance and Career Development: The Role of Motivation as Intervening

Variable. Budapest International Research and Critics Institute (BIRCI-Journal): Humanities and Social Sciences, 4(2), 2385–2393. https://doi.org/10.33258/birci.v4i2.1940

Rahmawati, Andi. 2017. Effect of competence on organizational citizenship behavior and performance management: The impact on organizational effectiveness. *The International Journal of Engineering and Science (IJES)*, Vol. 6, Issue 11, pp 74-85, ISSN (e): 2319 – 1813,

https://papers.ssrn.com/sol3/papers.cfm?abstract\_id=3187630

- Rajapathirana, R. P. J., & Hui, Y. 2017. Relationship between innovation capability, innovation type, and firm performance. *Journal of Innovation & Knowledge*, 3(1), 44–55. https://doi.org/10.1016/j.jik.2017.06.002
- Rogers, Everett M. 2014. *Diffutions of innovations. 3rd Edition*. New York: The Free Pass A Division of Macmillan Publishing Co, Inc.
- Sareen, P., & Mishra, S. 2016. A Study Of Talent Management And Its Impact On Performance Of Organizations. IOSR *Journal Of Business And Management* (IOSR-JBM). 18(12). 66–73, http://iosrjournals.org/iosr-jbm/papers/Vol18-issue12/Version-3/J1812036673.pdf
- Sedarmayanti. 2017. Manajemen Sumber Daya Manusia. Bandung: Refika Aditama
- Shah, M. M., et al. (2020). The Development Impact of PT. Medco E & P Malaka on Economic Aspects in East Aceh Regency. Budapest International Research and Critics Institute-Journal (BIRCI-Journal) Volume 3, No 1, Page: 276-286.
- Stephen, Robbins .2016. Perilaku Organisasi, Jakarta: Penerbit Salemba Empat.
- Sugiyono. 2016. Metode Penelitian Kuantitatif, Kualitatif dan R&D. Bandung: PT Alfabet
- Susan L Sweem. 2013. Leveraging Employee Engagement Through a Talent Management Strategy: Optimizing Human Capital Through Human Resources and Organization Development Strategy in a Field Study. USA
- Van Zyl, E.,S., Mathafena, R. B., & Ras, J. 2017. The Development Of A Talent<br/>Management Framework For The Private Sector. SA Journal of Human Resource<br/>Management,Management,15(0),a820,

https://sajhrm.co.za/index.php/sajhrm/article/download/820/1183

- Veithzal ,Rivai. 2015. Bank and Financial Institute Management. Jakarta: PT. Raja Grafindo Persada
- Werdhiastutie, A. et al. (2020). Achievement Motivation as Antecedents of Quality Improvement of Organizational Human Resources. *Budapest International Research* and Critics Institute-Journal (BIRCI-Journal) Volume 3, No 2, Page: 747-752.
- Wirawan, 2015. Evaluasi Kinerja Sumber Daya Manusia (Teori, Aplikasi, dan Penelitian). Jakarta: Salemba Empat
- Yong. 2017. Management Control in Nonprofit Organizations. McGraw-Hill: 7th ED.
- Zimmerer, Thomas W Dkk. 2016. *Kewirausahaan Dan Manajemen Usaha Kecil Edisi 5 Buku 1*. Jakarta: Salemba Empat.