

# Analysis Of The Effect Of Dynamic Capability, Knowledge Management On Employee Performance

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## Abstract

This study aims to analyze the effect of Dynamic Capability on Knowledge Management, analyze the effect of Dynamic Capability on Employee Performance, and to analyze the effect of Knowledge Management on Employee Performance in SINOTRUK companies. The data analysis technique used is the Structural Equational Modeling (SEM) method, the method of collecting data using a questionnaire to employee SINOTRUK. Sampling technique using purposive sampling method with a sample size of 120 respondents. Based on the results of the study it can be concluded that Dynamic Capability has on positive effect on Knowledge Management, Dynamic Capability has a positive effect on Employee Performance, and Knowledge Management also has a positive effect on Employee Performance.

## Keywords

Dynamic Capability, Knowledge Management, Employee Performance

## INTRODUCTION

Dynamic capabilities enable companies to adapt to a rapidly changing and risky environment by responding swiftly and nimbly. This is because dynamic capabilities create the ability to innovate and adapt to changing environments (Teece & Leih, 2016). Considering the rapid development in the automotive sector, companies must have good dynamic capabilities, and this must be supported by the company's resources, human resources and other resources owned by the company. It is difficult for companies to be able to survive in situations of intense competition in the traditional way. Many physical assets, the amount of investment can no longer guarantee the success of the company. Where the company's ability to manage intangible assets is far more important than just managing the physical assets they have.

Founded in 1956, Jinan General Auto Works Plant, the predecessor of China National Heavy Duty Truck Group Co., Ltd. (SINOTRUK), is the cradle of China's heavy-duty truck industry. The works manufactured China's first heavy-duty truck – Huanghe JN150 8t truck in 1960, and introduced a heavy-duty truck project from Steyr in 1983 as China's first enterprise that introduced heavy truck manufacturing technologies from abroad in an all-round manner. SINOTRUK was established following the reform and

restructuring in 2001, and has become a domestic and overseas famous heavy-duty truck R & D and manufacturing conglomerate after a dozen years of development. We have initially built an international platform through the red-chip listing in Hong Kong in 2007; in 2009, we forged a strategic partnership with MAN which holding a 25%+1 stake in SINOTRUK (Hong Kong) Limited, and introduced D08, D20 and D26 engine technologies, medium & heavy-duty truck axle technologies and corresponding vehicle technologies, laying a solid foundation for our long-term development. To date, we have become China's largest heavy truck manufacturing base that has made a remarkable contribution to the development of China's heavy-duty truck industry and economic construction.

The Dynamic Capability approach seeks to analyze the sources of wealth creation and capture by companies. The dynamic approach to capability is very relevant in the world of Schumpeterian, where company competition is based on innovation, price competition or performance competition, increasing profits, and creative destruction of existing competencies. In principle, every organization must carry out Knowledge Management consciously or not. The problem will arise when Knowledge Management is managed unplanned, organized and fully integrated with general

business strategies (such as HR, IT, RM, TQM, SM, production, etc.) then ineffectiveness and inefficiency will arise in all lines. In this condition, it is faced with high global competition, while corporations that do not really care about Knowledge Management will tend to be limped and left behind in the competition. Knowledge management is not something better, but to know how to do things better. One of the objectives of knowledge management is to increase the Intangible Asset of the company. Knowledge Management is a series of activities used by organizations/companies to identify, create, explain and distribute knowledge for reuse, knowing and learning within the organization. This activity is usually associated with organizational objectives and is intended to achieve a certain result. Knowledge Management which involves 3 main factors namely people, process and technology.

Considering SINOTRUK is a large company that already has branches in Asia Pacific, Africa, and America, so the language used in its business is English and Mandarin, of course, the knowledge of everyone who works there must at least be able to master one of the two languages. Ownership of knowledge or skills of people who are in the company is very important in the effort to achieve business goals. Because employee performance is one of the most important factors in achieving company goals. Good employee performance can be seen from the quality, quantity and time constraints if the employee's performance is in accordance with the standards set, it will make it easier for the company to achieve the company's goals. Excellence work also depends on the creation of work culture that has superior learning characteristics, the culture of learning possessed by employees will make employees feel free to have initiatives in working and providing superior work results. The culture of learning can be monitored in terms of knowledge sharing activities that are supported by the knowledge and resources of knowledge as a learning material for employees. SINOTRUK is well aware of the importance of a consistent and continuous learning process, knowledge management as a management system acts as a learning tool for employees by providing sources of knowledge, knowledge transfer activities, and use of knowledge based on SINOTRUK's intellectuals.

Based on the description above, the purpose of this study is to determine the effect of Dynamic Capability on Knowledge Management, analyze the effect of Dynamic Capability on Employee Performance, and to analyze the effect of Knowledge Management on Employee Performance in SINOTRUK companies. Then the study entitled the Analysis of the Influence of Dynamic Capabilities, Knowledge Management on Employee Performance.

### ***Dynamic Capability***

Strategic management discussion, there are two major currents to understand the competitiveness of companies. First, the approach (Porter, 1979) which focuses on analyzing the company's external environment where the industrial structure is a determining factor in the company's competitiveness. Second, the approach and Wernerfelt (1984) and Barney (1991) which focus on the company's internal environment. The second approach is known as resource-based view (RBV). In his paper entitled "A resource-based view of the firm", Wernerfelt put forward the term RBV which is the basis for understanding the theory of resource-based companies. The RBV considers that an important factor to excel from competitors is resources and the company which consists of tangible and intangible resources that can be managed by the company for survival (Barney, 1991). Intangible assets are competence, technology, knowledge, skills, experience, and capabilities. As Barney (1991) points out, not all resources have the potential to be unique and are not easily imitated and profitable for the company. So, only the knowledge that Barney mentioned has the potential to become this unique resource.

Companies are always trying to expand, modify, reconfigure, or even really change what they normally do to create value in dynamic environmental changes (Katkalo et al., 2010). In this case, dynamic capabilities play an important role as a company's ability to adjust its structural organization to create value in a rapidly changing environment (Teece et al, 1994). The concept of dynamic capabilities according to Teece et al. (1994) are part of competencies that enable companies to create new products or processes and respond to changing market conditions. Then it was revised to the company's ability to integrate, build, and reconfigure its internal and external

competencies to cope with rapid environmental changes (Teece, Pisano, and Shuen, 2000). When a company has Valuable resources, Rare, Inimitable, and Nonsubstitutable, also known as VRIN, then the company can gain a competitive advantage by implementing a new value creation strategy that is not easily duplicated by competing companies. Finally, when these resources and related system activities have complemented one another, the potential for creating competitive advantage can be increased (Eisenhardt & Martin, 2000).

The development of dynamic capabilities is very dependent on learning, while organizational knowledge sticks to capabilities that accumulate over the long term. The level of learning at a particular point in time depends on how much knowledge has been accumulated (Cohen & Levinthal, 1990). Experimental, learning-by-doing, learning-by-using and other forms of experimental learning based on trial-and-error tend to be local. Knowledge from the local learning process is only in the company concerned (Levinthal & March, 2008). Consequently, because learning is unique in an organizational context, the capability development process is also unique. If the accumulation process includes characteristics such as time-compression diseconomies, ambiguity of causal relationships, or mutual interconnection between assets (assets interconnectedness), then it is likely that the resulting outcome will also be idiosyncratic. Because dynamic capabilities are inherent in the organizational context, the path of capability development may depend on the availability of resources and capabilities that are interconnected within the organizational system (Pan et al. 2007).

Dynamic capability indicators including those derived from the Teece and Barreto definitions above include several aspects. The company systematically seeks new concepts / modes of production / manufacturing through observation outside the company. The company systematically conducts discussion forums to identify new opportunities. The company actively works with new partners to develop employee competencies. Employee relations are an important source of information for developing company virtual capital. For each new business opportunity, company management has conducted a good employee transfer process. The company

already has a database system that maps employee competency levels fairly accurately.

### **Knowledge Management**

The term Knowledge Management was first introduced in 1986, at the European Management Conference (American Productivity and Quality Center, 1996). There is no one definition that is generally recognized so that the understanding of knowledge management is diverse, ambiguous, and abstract (Maier and Hädrich, 2006). However, the concept of knowledge management then developed quickly and attracted the attention of many parties. Some general patterns about the meaning of knowledge management (Tjakraatmadja and Kristinawati, 2017). Knowledge management is an individual, team, and ultimately disciplined discipline. Knowledge management is a management tool to produce knowledge-based innovation correctly and quickly, through a process of integration between people (knowledge workers), a process that includes policies, regulations, work procedure systems, and work procedures and technology that are synergistically able to facilitate Knowledge Management process. Knowledge management is a management tool to facilitate the process of sharing knowledge (as the essence of the knowledge management process). Knowledge management is a management tool to enrich or replicate the use of the best knowledge/experience that an organization has, to expand its use in every related business unit, and certainly to achieve organizational goals in a more efficient and effective way. Essential knowledge management about how an organization manages knowledge workers, identifies the knowledge they have, documents and disseminates knowledge to other work units. Knowledge management facilitates creative, imaginative and/or inventive processes through the process of transforming tacit knowledge into explicit knowledge or rejuvenating knowledge to carry out new knowledge-based innovations.

Knowledge management has a simple cycle. The first stage, capturing, can include one or more of the following: data entry, scanning, interviewing, and brainstorming. The organizing stage can include one or several of the following: cataloging, indexing, filtering, linking, and coding. The refining

stage can include one or several of the following: contextualization, collaboration, compression, and making projections. The transfer phase can include one or several of the following: distribution and warnings.

The cognitive pyramid of knowledge management consists of four elements. Data is the most basic, discrete, and unprocessed element, so it has no meaning. Example: numbers, words, codes, tables, and databases. Information is an interconnected element and is the result of processing of data, so it has a meaning. Example: sentences, paragraphs, equations, concepts, ideas, questions, and simple stories. Knowledge is an organized collection of information about a field that is already understood. Examples: theory, axioms, conceptual frameworks, complicated stories and facts. Wisdom is the result of applying knowledge that can be the basis for decision making. Example: books, paradigms, systems, philosophies, poetry, belief systems, traditions, principles, and truths.

In general, knowledge can be classified into 2 categories, namely tacit (know-how) and explicit (know-what). Tacit knowledge is knowledge that is still in the form of thoughts in the human head. This knowledge is rather difficult to communicate, understand and translate into other forms that are more structured because it is based on personal experience or intuition and is context dependent. Explicit knowledge is knowledge that has been represented in certain media. This knowledge is easy to communicate, understand, and translate into other forms that are more structured, so that it can be managed by the Knowledge Management System (KMS).

The need in organizations to always adapt to a dynamic environment requires the knowledge creation in the organization. The process of knowledge creation as described by Li and Gao (2003) requires continuous innovation in organizations to achieve competitive advantage. Nonaka popularized the concept of knowledge creation in the late 90s (Nonaka and Takeuchi, 1995). Knowledge creation is the process of improving existing knowledge through the process of discovering new knowledge, or through a process of reflection on experiences that have been experienced. Usually this process occurs if the employee has an open attitude when he detects work errors and tries to make improvements. Nonaka and Takeuchi (1995) explained that

there are four basic patterns of knowledge creation, or conversion between individual knowledge and organizational knowledge, which might occur within an organization, which is well known for the SECI concept, short for Socialization, Externalization, Combination and Internalization.

### **Employee Performance**

According to Robbins (2015), employee performance is a function of the interaction between ability and motivation, if it is not adequate, performance will be negatively affected. Besides motivation, intelligence and skills must also be considered. Performance is influenced by variables associated with the work includes a role-conflict stress and work/non-work (Riyanto, 2002; Jayaweera, 2015). A person's performance is a combination of capabilities, businesses and opportunities that can be judged from their work (Handayani, 2015). Performance of individuals affected by the effort, ability and the environmental situation (Riyanto, 2016). Four factors that affect performance.

#### **Effectiveness and Efficiency**

If a certain goal can finally be achieved, we may say that the activity is effective but if the consequences that are not sought the activity assesses the importance of the results achieved so as to result in satisfaction even though it is called inefficient. Conversely, if the results sought are not important or trivial then the activity is efficient (Prawirosentono, 1999: 27).

#### **Authority**

According to authority is the nature of a communication or order in a formal organization owned by a member of the organization to other members to carry out a work activity in accordance with its contribution (Prawirosentono, 1999: 27). The order says what can and isn't in the organization.

#### **Discipline**

Discipline is obeying the applicable laws and regulations (Prawirosentono, 1999: 27). Thus, employee discipline is the activity of the employee concerned in respecting work agreements with the organization where he works.

#### **Initiative**

Initiative that is related to the power of thought and creativity in forming ideas to plan something related to organizational goals.

According to Mangkunegara (2002) the characteristics of people who have high performance are : have high personal

responsibility; dare to take and bear the risks faced; have realistic goals; have a comprehensive work plan and strive to realize its objectives; utilizing concrete feedback in all work activities he does; looking for opportunities to realize plans that have been programmed. There are six indicators to measure individual employee performance according to Robbins (2006).

**Quality.** Work quality is measured by employee perceptions of the quality of work produced and the perfection of the task of the skills and abilities of employees.

**Quantity.** Represents the amount generated expressed in terms such as the number of units, the number of activity cycles completed.

**Timeliness.** Is the level of activity completed at the beginning of the stated time, viewed from the point of coordination with the outputs and maximizing the time available for other activities.

**Effectiveness.** Represents the level of use of organizational resources (energy, money, technology, raw materials) maximized with the intention of increasing the yield of each unit in the use of resources.

**Independence.** Is the level of an employee who will be able to carry out their work functions **Work commitment.** Is a level where employees have a commitment to work with the agency and employee responsibilities to the office.

## METHODS

This type of research is a case study research using a survey method with the location of the research conducted at the SINOTRUK Asia branch company. The subjects of this study were SINOTRUK employees. The sampling method in this study is purposive sampling, which is sampling based on certain criteria. The population in this study were SINOTRUK employees. Samples based on Hair, et al. (in Ferdinand, 2005) who advocate that by using the Structural Equational Model (SEM) the minimum sample size is 100 and the maximum is 200, and then using a comparison with five observations for each estimated parameter. The number of samples to be used in this study is 120 samples.

The hypothesis in this study are:

H1: Dynamic Capability has a positive effect on Knowledge Management.

H2: Dynamic Capability has a positive effect on Employee Performance.

H3: Knowledge Management a positive effect on Employee Performance.

Hypothesis testing criteria:

The hypothesis is accepted if C.R (Critical Ratio) = t-table.

The hypothesis is rejected if the C.R (Critical Ratio) < t-table.

## RESULT AND DISCUSSION

Total of respondents in this study were 120 respondents who were employees of SINOTRUK. From the results of the questionnaire collection it is known the characteristics of respondents based on gender, age and education, as can be seen in the following table.

**Table 1. Characteristic of Respondents Based on the Gender of SINOTRUK Employees**

Gender	Total	Percentage (%)
Female	37	30,83
Male	83	69,17
<b>Total</b>	<b>120</b>	<b>100,00</b>

Source: Primary Data

From Table 1 above it can be seen that of the 120 respondents, the majority were Male respondents namely 67 respondents and 37 respondents Female. The majority of respondents who are male can also prove that because the company is engaged in automotive and heavy equipment.

**Table 2. Characteristic of Respondents Based on the Age of SINOTRUK Employees**

Age (Year)	Total	Percentage (%)
≤ 20	4	3,33
20 – 30	33	27,50
30 – 40	51	42,50
> 40	32	26,67
<b>Total</b>	<b>120</b>	<b>100,00</b>

Source: Primary Data

From Table 2 above it can be seen that of the 120 respondents, the majority were at the age of 30-40 years, namely as many as 51 respondents. This shows that respondents at the age of 30-40 who, on average, had sufficient prior work experience. Considering that SINOTRUK is a large company and there are automotive and heavy equipment sales, here is the need for people who are experienced in their fields.

**Table 3. Characteristic of Respondents Based on SINOTRUK Employees Education**

Education	Total	Percentage (%)
High School/Diploma	4	14,05
Bachelor	92	44,33
Graduate	24	41,62
<b>Total</b>	<b>120</b>	<b>100,00</b>

Source: Primary Data

From Table 3 above it can be seen that from 120 respondents, there were 92 respondents with the last education being Bachelor. This is because SINOTRUK attaches great importance to the quality criteria of the education of its employees, in addition to that SINOTRUK is a multinational company so it requires quite good foreign language skills especially English and Mandarin as everyday language at SINOTRUK. From that level of education they not only have abilities in their fields but also have quite good foreign language skills.

Based on the results of data analysis using the Structural Equational Modeling (SEM) data analysis method, the Evaluation of Data Normality is performed using the criterion value of the normality skewness ratio of  $\pm 2.58$  at the 0.01 level. Data can be concluded having a normal distribution if the value of critical ratio skewness is below the absolute value of 2.58 (Suliyanto, 2011).

Based on the data from table 4 it can be seen that the critical value of the skewness ratio of all indicators shows the normal distribution because each critical value is less than the absolute value of 2.58 at a significant level of 0.01. Therefore, it can be concluded that the observed variable data are proven in a normal distribution. Evaluation of Outliers Outliers Outliers Based on the data obtained Z-score (on each indicator smaller than  $\pm 3$ , so that research data states that are free from univariate outliers. While the analysis results on the Multivariate Outliers Evaluation obtained the highest value of Mahalanobis distance of 47,372. The farthest Mahalanobis distance divided by the indicator  $47,372:19 = 2,493$  is smaller than 2.50. This shows that there are no multivariate outliers (Hair et al., 2010).

After conducting confirmatory analysis and Structural Equation Modeling, the model testing is then performed by looking at the value of the goodness-of-fit index.

**Table 5. Goodness of Fit Test**

Goodness Of Fit Index	Cut Of Value	Result	Category
<b>X<sup>2</sup> -Chi Square<sup>2</sup> Probability</b>	$\geq 0,05$	155,464	<b>Good Fit</b>
<b>CMIN/DF</b>	$\leq 2,00$	1,043	<b>Good Fit</b>
<b>GFI</b>	$\geq 0,90$	0,882	<b>Marginal Fit</b>
<b>AGFI</b>	$\geq 0,90$	0,849	<b>Marginal Fit</b>
<b>RMSEA</b>	$\leq 0,08$	0,019	<b>Good Fit</b>
<b>TLI</b>	$\geq 0,95$	0,992	<b>Good Fit</b>
<b>CFI</b>	$\geq 0,95$	0,993	<b>Good Fit</b>

Source: Primary Data

**X2 Chi-Square Statistic**

The greater the sample size, the statistics (X2) obtained tend to be even greater with the smaller P-count value. So for large sample sizes, Statistics (X2) tend to reject the model. The model is accepted if the cut off value is  $p \leq 0.05$  or  $p \geq 0.10$  (Hair et al., 2010). Then it can be concluded that the model in this study **Good Fit**.

**CMIN/DF**

The CMIN/DF value result in this study was 1,043. The Model in this study is **Good Fit** because the value of  $CMIN/DF=1,043 \leq 2,0$ .

**GFI Goodness of Fit Index**

The GFI value result in this study was 0,882. The model in this study is **Marginal Fit** because the value of  $GFI=0,882 \leq 0,90$ .

**AGFI – Adjusted Goodness of Fit Index**

The AGFI value result in this study was 0,849. The model in this study is **Marginal Fit** because the value of  $AGFI = 0,849 \leq 0,90$ .

**RMSEA – The Root Mean Square Error of Approximation**

The RMSEA value result in this study was 0,019. The model in this study is **Good Fit** because the value of  $RMSEA = 0,019 \leq 0,080$ .

**TLI – Tucker Lewis Index**

The TLI value result in this study was 0,992. The model in this study is **Good Fit** because the value of  $TLI = 0,992 \geq 0,95$ .

**CFI – Comparative Fit Index**

The CFI value result in this study was 0,993. The model in this study is **Good Fit** because the value of  $CFI = 0,993 \geq 0,95$ .

Based on the results of SEM analysis statistics in the suitability test of the goodness of fit test model in table 5, obtained 6 criteria included in the good fit category, and 2 criteria included in the marginal fit category. So overall this research model can be categorized as a very good model. On the results of testing the hypothesis as can be

seen in table 6, the test results can be explained as follows:

**H<sub>1</sub>: Dynamic Capability has a positive effect on Knowledge Management (DC→KM).**

Based on table 6 it is known that the critical ratio or C.R (5,613) > t table (1,288) and p (0,000) < 0.05. So, the hypothesis that Dynamic Capability has a positive effect on Knowledge Management is **accepted**.

This study is in accordance with previous research conducted by Teguh Sriwidadi (2014) which states that Dynamic Capability has a positive influence on Knowledge Management. Dynamic Capability in the SINOTRUCK company itself is pretty good. The existing resources are all adjusted or updated according to the needs so that they can be a source of competitive advantage for the company. Of course, a good company Dynamic Capability in SINOTRUCK company is not immune from the Knowledge Management owned by the company, because to compete and be able to maintain its competitive advantage the company requires knowledge must also have good knowledge in it. Zollo and Winter (2002) propose a cycle of knowledge evolution that includes accumulation of experience, articulation of knowledge and codification of knowledge as a dynamic capability process. So, that dynamic capabilities will be generated by collective activities to learn and share knowledge to achieve company goals or increase performance. Based on this, it can be concluded that Dynamic Capability must be based on an effective Knowledge Management process.

**H<sub>2</sub>: Dynamic Capability has a positive effect on Employee Performance (DC→EP).**

Based on table 6 it is known that the critical ratio or C.R (4,051) > t table (1,288) and p (0,000) < 0.05. So, the hypothesis that Dynamic Capability has a positive effect on Employee Performance is **accepted**.

Dynamic capabilities enable companies to adapt to a rapidly changing and risky environment by responding swiftly and nimbly. This is because dynamic capabilities create the ability to innovate and adapt to changing environments (Teece & Leih, 2016). As Barney (1991) points out, not all resources have the potential to be unique and are not easily imitated and profitable for the company. So only the knowledge that Barney mentioned has the potential to become this unique resource. Dynamic

Capability is also one of the determinants in Employee Performance because after all employees are movers in the company that can bring the company to achieve its goals. Dynamic Capability in SINOTRUCK companies is also related to Employee Performance because employees are one of the important assets of the company to support the company in achieving its competitive advantage.

**H<sub>3</sub> : Knowledge Management a positive effect on Employee Performance (KM→EP).**

Based on table 6 it is known that the critical ratio or C.R (3,669) > t table (1,288) and p (0,000) < 0.05. So, the hypothesis that Knowledge Management has a positive effect on Employee Performance is **accepted**.

This research supports the research carried out by Ahmad Sahas Nur Falah management knowledge variably with management, which will have a significant positive effect on the performance of employees, this means that the higher the level of employee knowledge, it will also increase the number of employees. And Shofa (2013) in which management knowledge has a significant influence on employee performance. Sangkala (2007) in Mardhotillah (2011) states that Knowledge Management is information that is required to perform business, capture, capture, transfer, transfer, and take account of the knowledge needed for the purposes of making, capture, capture, transfer, and recovery of information that is good for the purposes of making, capturing, processing, and making use of the data. Because now the ability to manage knowledge has become the most important factor in encouraging a competitive business. Knowledge Management in the SINOTRUCK company is already classified as good because it can run programs to support the performance of its employees. So that it shows that Knowledge Management has a significant effect on the performance of employees can be accept.

**CONCLUSION**

Brand Equity contributes significantly to sales and long-term profits for a product. Formation of Brand Equity through a product program becomes important. Panin Bonanza Program is one of the programs created by PT Bank Panin in building the company's Equity Brand. Based on the results of the study it can be concluded that the Brand Equity Dimension has a positive influence on

Brand Equity, the Brand equity dimension has a positive influence on Relationship Marketing, and Relationship Marketing has a positive influence on Brand Equity. Thus it can be concluded that all variables have a positive influence on the formation of Brand Equity at PT Bank Panin KCU Senayan.

As an empirical study, the results of this research can be used by SINOTRUK companies to be able to further improve the performance of their employees, dynamic capabilities and knowledge management of their companies because given the developments in the business world so rapidly that requires entrepreneurs to be able to maintain the best possible company in order to achieve competitive advantage in the company.

Future research can be done by adding other variables that can affect the Dynamic Capability, Knowledge Management and Employee Performance variables as well as adding variables that can mediate between the independent and dependent variables in this study. In addition, future research can be carried out by applying it to other companies as well as government or educational institutions.

## REFERENCES

- Barney, J. B. 1991. Firm Resources and Sustained Competitive Advantage. *Journal of Management*. 17, 99-120.
- Porter, M. E. 1979. How Competitive Forces Shape Strategy. *Harvard Business Review*.
- Cohen, W. M., and Levinthal, D. A. 1989. Innovation and Learning: The Two Faces of R&D. *The Economic Journal*. 99, 569-596
- Eisenhardt, K. M., & Martin, J. E. 2000. Dynamic Capabilities: What are they? *Strategic Management Journal*. <https://doi.org/10.1002/smj.233>.
- Hair, J.F., Black, W.C., Babin, B.J., Anderson, R.E. and Tatham, R.L. (2010). *Multivariate Data Analysis*. Upper Saddle River. Pearson. New Jersey.
- Halim, Stevani. 2018. *Knowledge Management*. Diakses tanggal 10 Juni 2020 melalui <https://medium.com/@stevanihalim/manajemen-pengetahuan-d69851468a23>.
- Katkalo, V. S., Pitelis, C. N., & Teecey, D. J. 2010. Introduction: On the nature and scope of dynamic capabilities. *Industrial and Corporate Change*. <https://doi.org/10.1093/icc/dtq026>
- Mangkunegara, Anwar Prabu. 2002. *Manajemen Sumber Daya Manusia*. Remaja Rosdakarya. Bandung.
- Nonaka, I., & Takeuchi, H. 1995. Knowledge Creating Company. *Knowledge-Creating Company*. [https://doi.org/10.1016/S0969-4765\(04\)00066-9](https://doi.org/10.1016/S0969-4765(04)00066-9)
- Riyanto, Setyo., et.,all. (2017). The Impact of Working Motivation and Working Environment on Employees Performance in Indonesia Stock Exchange. *International Review of Management and Marketing Journal: Econjournal*, 7(3), 342-348.
- Suliyanto. (2011). *Ekonometrika Terapan: Teori & Aplikasi dengan SPSS*. CV Andi Offset. Yogyakarta.
- Teece, D. J., Rumelt, R., Dosi, G., & Winter, S. 1994. Teece, D. J., Pisano, G., Shuen. A. 1997 Dynamic capabilities and strategic management, *SMJ* 18(7) 509-533.pdf. *Journal of Economic Behavior & Organization*. [https://doi.org/10.1016/0167-2681\(94\)90094-9](https://doi.org/10.1016/0167-2681(94)90094-9)
- Tjakraatmadja, J., & Kristinawati, D. 2017. *Strategi Implementasi Knowledge Management* (1st ed.). Bandung: Penerbit ITB
- Wernerfelt. 1984. A Resource-based view of the firm. *Wernerfelt, B. (1984). A ResourceBased View of the Firm. Strategic Management Journal*. <https://doi.org/10.1002/smj.4250050207>
- Zollo, M., & Winter, S. G. (2002). Deliberate learning and the evolution of dynamic capabilities. *Organizational Science*. <https://doi.org/10.1287/orsc.13.3.339.2780>.



**List of Tables**

**Table 4.**  
The results of the Evaluation of data Normality

Variable	min	max	skew	c.r.	kurtosis	c.r.
X13	1,000	5,000	-,163	-,731	-1,008	-2,253
X19	1,000	5,000	-,450	-2,013	-,208	-,464
X18	1,000	5,000	-,066	-,296	-,341	-,763
X17	1,000	5,000	-,419	-1,875	-,507	-1,134
X16	2,000	5,000	-,137	-,614	-,300	-,672
X15	1,000	5,000	-,595	-2,661	,481	1,075
X14	2,000	5,000	-,125	-,559	-,901	-2,015
X7	1,000	5,000	-,386	-1,728	-,606	-1,355
X8	2,000	5,000	-,177	-,790	-,917	-2,051
X9	1,000	5,000	-,376	-1,680	-,427	-,955
X10	2,000	5,000	-,454	-2,029	1,090	2,437
X11	1,000	5,000	-,386	-1,724	,160	,357
X12	1,000	5,000	-,351	-1,572	-,491	-1,098
X1	1,000	5,000	-,452	-2,020	-,078	-,173
X2	1,000	5,000	-,274	-1,224	-,827	-1,848
X3	1,000	5,000	-,379	-1,697	-,243	-,544
X4	1,000	5,000	-,610	-2,726	,002	,005
X5	1,000	5,000	-,403	-1,802	-,452	-1,011
X6	1,000	5,000	-,614	-2,744	-,251	-,561
<b>Multivariate</b>					<b>19,581</b>	<b>3,797</b>

**Table 5.**  
Hypotheses Test

Hypothesis	C.R Value	t table Value		
DC → KM	5,613	1,288	0,000	<b>Accepted</b>
DC → EP	4,051	1,288	0,000	<b>Accepted</b>
KM → EP	3,669	1,288	0,000	<b>Accepted</b>

**List of Figures**

**Figure 1. Model Test**

