INNOVATION PERFORMANCE: ABSORPTIVE CAPACITY TO INCREASE PERFORMANCE IN SMALL AND MEDIUM-SIZED ENTERPRISES (SMES) (CASE STUDY: SMES IN MANADO)

INOVASI KINERJA: KAPASITAS SERAP UNTUK MENINGKATKAN KINERJA DALAM USAHA KECIL MENENGAH (UKM) (STUDI KASUS: UKM DI MANADO)

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Abstract: Performance innovation is becoming more and more important in order to create competitive advantage in this management environment especially in small and medium-sized enterprises (SMEs) that the speed of changes is getting faster and the lifecycle of product is being reduced. To improve the performance in SMEs, companies need to have absorption ability to utilize external knowledge and skills effectively. Such absorption ability is formed through interaction with internal and external resources of an organization and the characteristics of environment and so has important association with the results of performance innovation. The objectives of this research is to know the impact of exploratory learning, exploitative learning and transformative learning in absorptive capacity to Innovation Performance in Small and Medium-Sized Enterprises (SMEs). This research applied causal type with quantitative research method. Population of this study are 100 respondents from Small and Medium-Sized Enterprises in Manado. The Result indicate that exploratory learning, exploitative learning and transformative learning influence the innovation performance. Meanwhile, exploratory learning and transformative learning are insignificantly influence the innovation performance. As the recommendation, SMEs start to recognize the important of absorption ability in the future. In general, if acquiring new and a high level of knowledge, it should be reconstructed appropriately for our SMEs in Manado.

Keywords: *innovation performance, absorptive capacity, smes*

Abstrak: *Inovasi kinerja menjadi semakin penting untuk menciptakan keunggulan kompetitif dalam lingkungan manajemen ini terutama dalam usaha kecil dan menengah (UKM) bahwa kecepatan perubahan semakin cepat dan siklus hidup produk sedang dikurangi. Untuk meningkatkan kinerja di UKM, perusahaan harus memiliki kemampuan penyerapan untuk menggunakan pengetahuan dan keterampilan eksternal secara efektif. Kemampuan penyerapan tersebut dibentuk melalui interaksi dengan sumber daya internal dan eksternal dari suatu organisasi dan karakteristik lingkungan dan begitu juga asosiasi penting dengan hasil inovasi kinerja. Tujuan penelitian ini adalah untuk mengetahui dampak pembelajaran eksploratif, pembelajaran eksploitatif dan pembelajaran transformatif dalam kapasitas serap terhadap Kinerja Inovasi dalam Usaha Kecil dan Menengah (UKM). Penelitian ini menerapkan jenis kausal dengan metode penelitian kuantitatif. Populasi dalam penelitian ini adalah 100 responden dari Usaha Kecil dan Menengah di Manado. Hasil menunjukkan bahwa pembelajaran eksplorasi, pembelajaran eksploitatif dan pembelajaran transformatif mempengaruhi kinerja inovasi. Sementara itu, pembelajaran eksplorasi dan pembelajaran transformatif tidak signifikan mempengaruhi kinerja inovasi. Sebagai rekomendasi, UKM mulai mengenali pentingnya kemampuan penyerapan di masa depan. Secara umum, jika memperoleh pengetahuan baru dan tingkat tinggi, harus direkonstruksi secara tepat untuk UKM di Manado.*

Kata kunci: *kinerja inovasi, kapasitas serap, ukm*

INTRODUCTION

Research Background

Performance is taken an important role in industries especially those who working in small to medium size enterprises (SMEs). SMEs are important to maintain strong economic growth. However, how to sustain their performance in the long term is a big challenge in small to medium size enterprises it is important for firms to advance innovation and enhance performance to meet dynamic markets.

Indonesia is the country with the largest SME / SMEs since 2014. According to BPS 2014 data, the number of SMEs in Indonesia has 57.89 million units or 99.99 percent of the total number of national business actors. Based on data from the Ministry of Cooperatives and SMEs, the number of entrepreneurs in Indonesia also jumped sharply from 0.24 percent to 1.56 percent of the total population. Even so the number is still far from the target of Indonesian entrepreneurs should ideally be at least 2 percent of the total population..

SMEs have a strategic role in fighting poverty in Indonesia. Especially in Manado total number of SMEs is about 18,608 units based on data from *Dinas Koperasi UMKM Daerah Provinsi Sulawesi Utara*. Example of SMEs in Manado: culinary, fashion retailing, education and training, functional SMEs (photographer, software designer) and ,automotive. Unfortunately SMEs in Manado are considered not able to compete in the free market of the economic community. This is because the products that produced by SMEs in Manado do not match with market needs. Does not provide quality goods, does not provide after-sales services, and is unable to package, sell, the good products to customer. Therefore the performance of SMEs employees needs to constantly innovate or improve to meet dynamic markets while having little control over the external environment. The importance of innovation performance is emphasized as a new growth engine to improve competitiveness. An innovation is defined as an idea, practice, or material creation perceived to be new by the relevant unit of adoption. The essential factors that affect innovation performance is organizational absorptive capacity or the ability of employees to create knowledge.

Absorptive capacity has been considered as the key antecedents of innovation performance. Several studies investigating the nature of absorptive capacity and its effect on organization has shown that absorptive capacity has gained a considerable attention of the researchers. Absorptive capacity is the firm's ability to utilize externally held knowledge through three processes of exploratory learning, transformative learning, and exploitative learning (Lane, Pathak and Koka 2006).

Exploratory learning is the process of learning to accumulating, observing, and identifying the information. Likewise exploitative learning is a process learning done with the aim of improving, developing, acquire and utilize existing competencies, knowledge, technologies and paradigms. And transformative learning is defined as learning that influences long-term change in self-learning in relation to other types of learning, especially learning experiences that shape learning and produce meaningful impacts, or change paradigms that affect subsequent experiences. Thus, enhancing absorptive capacity of the organization is one of the processes that lead to improve the innovative capabilities then maintain the competitive advantage.

The result of research from Herath and Mahmood (2014) in context of SMEs said that strategic orientation with higher absorptive capacity would improve the performance of SMEs. Further attention of researchers of the theory of dynamic capabilities that emphasize the implication of absorptive capacity in exploiting strategic orientation for the success of SMEs was demanded by these findings. The result of various previous studies confirmed that absorption ability would have an impact on innovation outcome.

Research Objective

1. To know the impact of exploratory learning in absorptive capacity to Innovation Performance in Small and Medium-Sized Enterprises (SMEs)
2. To know the impact of exploitative learning in absorptive capacity to Innovation Performance in Small and Medium-Sized Enterprises (SMEs)
3. To know the impact of transformative learning in absorptive capacity to Innovation Performance in Small and Medium-Sized Enterprises (SMEs)

THEORETICAL REVIEW

Absorptive Capacity

Absorptive capacity is an organization's ability to identify, assimilate, transform, and use external knowledge, research and practice. In other words, absorptive capacity is the measure of the rate at which an

organization can learn and use scientific, technological or other knowledge that exists outside of the organization itself. It is a measure of an organizations ability to learn. Matusik and Heeley (2005) said absorptive capacity enables firms to use of knowledge obtained from outside efficiently and to change these knowledge to outputs having economic value.

Exploratory Learning

Exploratory learning can be defined as an approach to teaching and learning that encourages learners to examine and investigate new material with the purpose of discovering relationships between existing background knowledge and unfamiliar content and concepts. McGrath (2001) defined Exploratory learning is requires firms to continuously scan the environment to identify and collect industry information, observe technological trends and identify sources of new knowledge.

Exploitative Learning

Exploitative learning is a learning method to acquire and utilize the existing knowledge from past experiences, routines, and norms of organizations. Lane, Koka and Pathak (2006), said exploitative learning of absorptive capacity captures this translation process through the transmutation of knowledge assimilated earlier and its subsequent application.

Transformative Learning

Transformative learning is a theory of adult learning that utilizes disorienting dilemmas to challenge students' thinking. Students are then encouraged to use critical thinking and questioning to consider if their underlying assumptions and beliefs about the world are accurate. Eun and Seong (2015), defined Transformative learning accelerates assimilation of knowledge in an organization through the activities to analyze, evaluate, and interpret knowledge.

Previous Research

Eun and Seong (2015). This article studied about the effectiveness of absorptive capacity formation mechanism on innovation performance by industry in South Korea. The study itself talk about both Absorptive Capacity and Innovation Performance which is the same with the current research and make it relatable each other and can make the researcher know wider about the variable that he/she use. Also both studies will give the understanding of how effective absorptive capacity in innovation performance itself. This study have correlation in current research to strengthen and the background and aim to be reference about absorptive capacity since this study includes all that factors.

Herath and Mahmood (2014). The main purpose of this study is Strategic Orientations and SME Performance: Moderating Effect of Absorptive Capacity of the Firm. In this study, they examine the effect of market, entrepreneurial and learning orientations on SME performance and the moderating effect of absorptive capacity of the firm. The result of this research is they proved that the findings and that being market, entrepreneurial and learning oriented were more important in achieving firm performance. Absorptive capacity was included as a moderating variable to the relationship. This was very successful and supported the premise behind the theory of dynamic capabilities that indicates the importance of such capabilities for the SMEs as emphasized in recent studies. They also talk about absorptive capacity and SMEs in this study similar with the current study.

Tzokas, Kim and Akbar (2015). This article studied about the role of customer relationship and technological capabilities in high-tech SMEs. This research talk about how the interplay between a firm's absorptive capacity, and its technological and customer relationship capability contributes to its overall performance. This study have correlation with the journal because beside the absorptive capacity itself it is also related with other variable which is exploitative learning, exploratory learning, and transformative learning. This study have correlation in current research because the sample of this research is similar current research which is small to-medium enterprises (SMEs).

Limaj and Bernroider (2017). This research is titled "The roles of absorptive capacity and cultural balance for exploratory and exploitative innovation in SMEs". The relation with this research lies on the variables of the research itself which are Absorptive capacity, exploratory, exploitative innovation. Surely it is

about innovation performance and absorptive capacity but what makes it important and connected to one each other is about the existence of the real and visible data that can be researcher's strong grip to continue the study and to strengthen the research itself.

Leivaa, Juan and Ricardo (2016). This studies is about Effects of hiring former employees of multinationals in the absorptive capacity of local firms. This research analyzes the effect of the presence of former employees of multinational corporations as employees of local companies, on the absorptive capacity of said companies. The study was done in Costa Rica, a country known for its successful strategy in the subject matter. Based on the result above, and given that one of the policies of the Costa Rican government authorities has been attracting foreign investment, it could be asserted that said policy has a positive externality in terms of knowledge spillovers toward local companies, by increasing their knowledge and technology absorptive capacity.
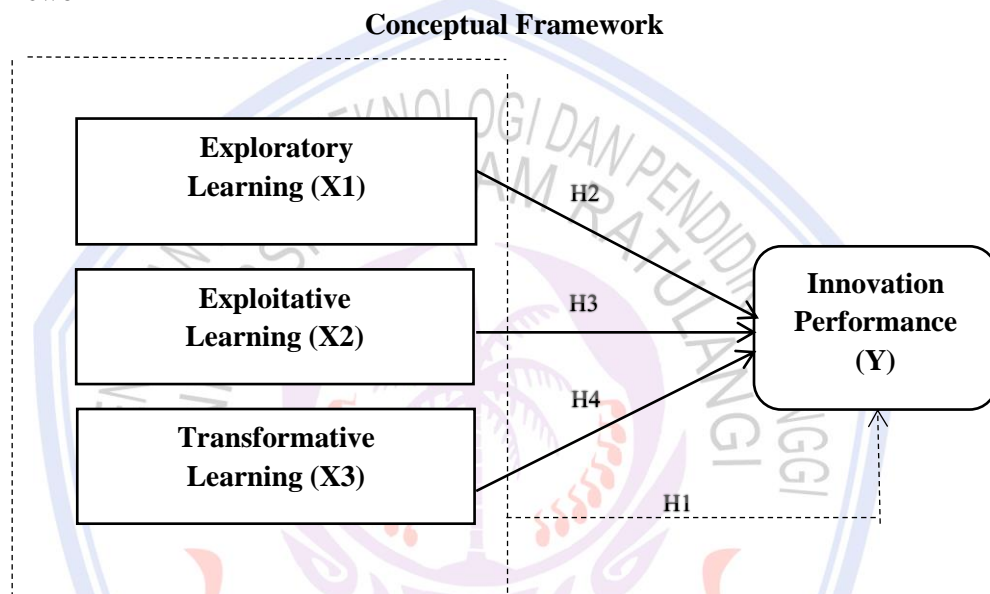
Conceptual Framework

Figure 1. Conceptual Framework
Source: Data Analysis Method (2018)

RESEARCH METHOD

Type of Research
This research will use quantitative method. Quantitative is a research method based on positivism philosophy, used to examine the population or a particular sample sampling technique are generally done randomly, data collection using research instruments, quantitative / statistical with the aim to test the hypothesis that has been set.

Place and Time of Research
The study was conducted in SMEs in Manado July – August

Population and Sample
The population is a generalization region consisting of objects / subjects that have certain qualities and characteristics set by the researchers to be studied and then drawn conclusions (Marini, 2013). Population in this research is people who work in SMEs in Manado. The sample is part of the number of populations the researcher selected for a fixed source of data but still represents the population number (Sukardi, 2017). The sample in this research is the employees of SMEs as many as 100 respondents. The sampling technique is Incidental sampling, which the technique of determining samples by chance, that anyone who accidentally / incidentally meets with the researcher can be used as a sample, when viewed by the person who happened to meet it is suitable as a data source.

Data Collection
In this research, the source of data is primary data. Primary data has been obtained by spreading questioners to the respondents.

Operational Definition and Research Variables
This research defines the variables into:
1. Absorptive capacity (X) as the identification so that the employees can increase their performance in SMEs.
2. Innovation Performance (Y) Positive or negative feedback that SMEs receives related to the three process of learning such as exploratory learning, exploitative learning and transformative learning.

Data Analysis Method

Reliability and Validity
Validity refers to the degree in which our test or other measuring device is truly measuring what is we intended it to measure. Correlation Pearson Product Moment is statistical tool used to test the associative hypothesis (test relationship) two variables when the data scale interval or ratio. According to Sekaran (2012) defines Reliability test is a set of measurements or a set of measuring tools that have consistency when measurements made with the measuring instrument are repeated. To test the level of reliability of the instrument is done through Internal Consistency Test by using the Reliability Coefficient (Cronbach Alpha).

Multiple Linear Regression
Multiple Linear Regression is a statistical method used to form a model of the relationship between the dependent variable (the dependent; responses, Y) with one or more independent variables (independent, predictor, x) (Sekaran, 2006) . If the number of variable are only one, it is known as simple linear regression, whereas if there is more than one independent variable, called linear regression. Regression analysis has at least three functions, namely for the purpose of data or description of the phenomenon being studied cases, for control purposes, as well as prediction purposes.

According to Ghozali (2013), this analysis is to predict the value of the dependent variable if the value of the independent variable has increased or decreased and to determine the direction of the relationship, between the independent variable and the dependent variable whether each independent variable is positively or negatively related.

Multiple linear regression equation as follows:

$$Y = a + b_1X_1 + b_2X_2 + b_3X_3 + b_4X_4$$

Information:
Y   = Brand Function (Dependent Variable)
X1   = Guarantee (Independent Variable)
X2   = Personal Identification (Independent Variable)
X3   = Social Identification (Independent Variable)
X4   = Status (Independent Variable)
a   = Constant (value Y 'if X_1, X_2, X_3, X_4 = 0) when all the independent variable all equal to 0.
b   = regression coefficient (value increase or decrease)

RESULT AND DISCUSSION

Result
Validity and Reliability
The validity test of Exploratory Learning (X_1), Exploitative Learning (X_2), Transformative Learning (X_3), and Innovation Performance (Y) are greater than r_{table}0,197 which mean all the indicators are valid. The reliability test using Alpha Cronbach. The Cronbach"s Alpha parameter, with ideal scores more than 0.6. The variable is reliable because the value of Cronbach"s Alpha is bigger than 0.6.

Result of Multiple Linear Regression Analysis

Multiple linear regression model is used to determine the influence of several independent variables on a dependent variable. SPSS 25.0 software is used to analyze the data and the result of multiple regressions is shown in Table 1.

Table 1. Multiple Linear Regression Output
Coefficient

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	7.003	1.211		5.784	.000
	Exploratory Learning	.037	.099	.042	.374	.709
	Exploitative Learning	.220	.097	.243	2.272	.025
	Transformative Learning	.121	.081	.155	1.495	.138

a. Dependent Varable: Innovation Performance
Source: Data Processed (2018)

The result in Table 4.4 can be written in equation below:

Y = 7.003 + 0.037X1 + 0.220X2 + 0.121X3

The interpretation of the multiple linear regression equation above is as follows:
- In the equation, the constant = 7.003 shows that in a condition where all independent variables are zero, innovation performance (Y) as dependent variable is 7.003.
- Coefficient value of 0.037 means that if there is one unit increase in exploratory learning (X1) then the innovation performance (Y) will increase 0.037 assuming that other variables are constant.
-Coefficient value of 0.220 means that if there is one unit increase in exploitative learning (X2) then the innovation performance (Y) will increase 0.220 assuming that other variables are constant.
-Coefficient value of 0.121 means that if there is one unit increase in transformative learning (X2) then the innovation performance (Y) will increase 0.121 assuming that other variables are constant.

t-test
Table 2. Partial Test (t-test)

Variable	$T_{calculate}$	T_{table}	Description
Exploratory Learning (X_1)	0.374	1.98498	Rejected
Exploitative Learning (X_2)	2.272	1.98498	Accepted
Transformative Learning (X_2)	1.495	1.98498	Rejected

Source: Data Processed (2018)

The t-test can be performed by using the criteria of hypothesis testing:
- If $t_{count} < t_{table}$ ($a = 0.05$), then Ho accepted and H1 rejected.
- If $t_{count} > t_{table}$ ($a = 0.05$), then Ho rejected and H1 accepted.
Based on Table 3, the interpretation as follows:

1. The partial influence of exploratory learning (X1) on innovation performance (Y), the $t_{calculated} = 0.374$ and $t_a(0.05) = 1.98498$. Since $t_{calculated} < t_a$ then Ho is accepted and H1 is rejected. It means that exploratory learning (X1) has negative and no significant partial influence on innovation performance (Y).
2. The partial influence of exploitative learning (X2) on innovation performance (Y), the $t_{calculated} = 2.272$ and $t_a(0.05) = 1.98498$. Since $t_{calculated} > t_a$ then Ho is rejected and H1 is accepted. It means that exploitative learning (X2) has positive and significant partial influence on innovation performance (Y).
3. The partial influence of transformative learning (X3) on innovation performance (Y), the $t_{calculated} = 1.495$ and $t_a(0.05) = 1.98498$. Since tcalculated $< t_a$ then Ho is accepted and H1 is rejected. It means that transformative learning (X3) has negative and no significant partial influence on innovation performance (Y).

Heteroscedasticity
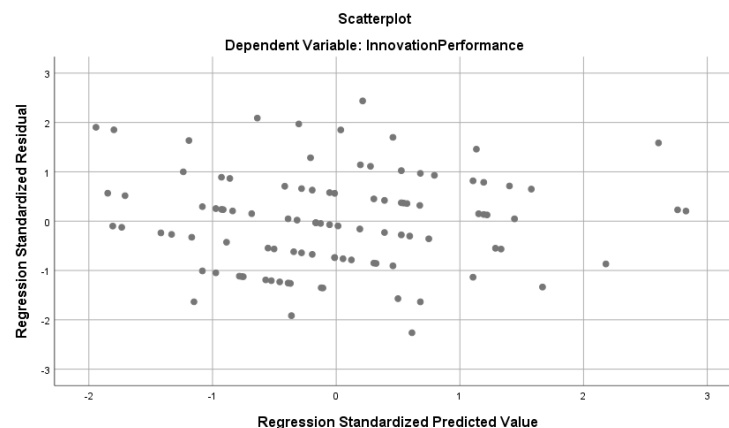This value is computed by SPSS software. This test is done by determine the tolerance and VIF value.

Figure 2.Heteroscedasticity Result
Source: Processed Data (2018)

In the scatter plot above shows that the data points do not form a particular pattern and the data spread above and below the number 0 on the Y wick. This mean, there was no interference with the assumption of Heteroscedasticity in this regression.

Discussion
Based on the data collected from 100 congregations in Manado, the researcher found that one factor of absorptive capacity have a relatively high effect towards innovation performance such as exploitative learning. In the contrary, some absorptive capacity have a low degree of effect on innovation performance such as exploratory learning and transformative learning.

Implication of Research Result
The influence of Exploratory Learning, Exploitative Learning and Transformative Learning on Innovation Performance in SMEs
Based on the result of statistical tests, researcher found out that Exploratory Learning, Exploitative Learning and Transformative Learning influence simultaneously on Innovation Performance of SMEs in Manado. The result of this study is suitable or fit for the selected F-test. Based on the R-square correlation test or R2, the independent variables influence the dependent variable. It can be concluded that advertising, personal selling, publicity, direct marketing and sales promotion will determine the church growth.

The influence of Exploratory Learning on Innovation Performance
From the result of t-test conducted by researcher, the exploratory learning has no significant influence on innovation performance of SMEs in Manado. The influence of independents variables partially can be seen from the significant value of t. T-test results show that variables exploratory learning (X1) has negative and insignificance coefficient. The influence of variable exploratory learning (X1) on innovation performance has the lowest beta coefficient of 0.374 and the highest significance value of t 0.709 > 0.05. It means exploratory

learning (X1) has a weak or no influence on innovation performance. This research indicates that the exploratory learning brings less or no impact to innovation performance of SMEs in Manado.

The influence of Exploitative Learning on Innovation Performance
From the result of t-test conducted by researcher, the exploitative has an
influence on innovation performance of SMEs in Manado. The influence of independents variables partially can be seen from the significant value of t. T-test results show that variables exploitative learning (X2) has positive and significant coefficient. Variable exploitative learning (X2) become the strongest and dominant variable that impact the church growth in this research by showing as the highest beta coefficient of 2.272 and the lowest significance of t $0.025 < 0.05$. It means advertising (X1) has the strongest influence.

The researcher examined that exploitative learning appeared to have a positive impact on innovation performance. The existing core capabilities that a company held can be expanded and applied or newly acquired knowledge can be combined with the existing capabilities.

The influence of Transformative Learning on Innovation Performance
Based on t-test statistic, can be explained the effect of transformative learning on innovation performance of SMEs in Manado has an insignificant and negative coefficient. The influence of independents variables partially can be seen from the significance value of t. T-test results show that variables transformative learning (X3) has a negative and insignificance coefficient. The influence of variable transformative learning (X3) on innovation performance shown as having a lower beta coefficient of 1.495 and the higher significance value of t $0.138 > 0.05$. It means transformative learning (X3) has a weak or no influence on innovation performance of SMEs in Manado. This research indicates that the transformative learning brings less or no impact to the innovation performance in Manado. This also supported by the previous research by Eun Mi Park and Seong Taek Park (2015) that stated about transformative learning has no relationship with the church growth.

Limitation of Research and Future Research Recommendation
This sections describe the limitation of the research as well as recommendations for further research into the topic discussed. First, this research are limited to exploring the data from respondents obtained in Manado City area. Secondly, there are only various type of absorptive capacity that conducted in this research. The implementation of this research result on other type of absorptive capacity should be made with cautions. Future researches are encouraged since there are still limitations on this research regarding absorptive capacity effect on innovation performance.

CONCLUSION AND RECOMMENDATIONS

Conclusion
After examining the collected data, just one variable affect the innovation performance of SMEs in Manado. And there are some conclusions based on this research conducted to analyze the effect of absorptive capacity on innovation performance of SMEs in Manado. This study concludes that there is a significant relationship between absorptive capacity (exploratory learning, exploitative learning and transformative learning) on innovation performance. Findings of the study reveal indicates that:
1. Absorptive capacity have a significant effect on innovation performance of SMEs in Manado simultaneously.
2. Exploratory learning has an insignificant effect on innovation performance of SMEs in Manado partially.
3. Exploitative learning has a significant effect on innovation performance of SMEs in Manado partially.
4. Transformative learning has an insignificant effect on innovation performance of SMEs in Manado partially.

Recommendations
From the results of this study, variable Innovation Performance with variables Exploratory Learning (X₁), Exploitative Learning (X₂) and Transformative Learning (X₃) have an influence on Innovation Performance. Based on the results of the study, here are some recommendations which can be applied:

1. SMEs in Manado who want to experience of an improvement of employees performance should start recognize absorption ability in the future. In this research only one of three absorptive capacity factors that affect the innovation performance which is exploitative learning.
2. If making good use of exploratory learning and transformative learning it may have a positive impact on innovation performance. In general, if acquiring new and a high level of knowledge, it should be reconstructed appropriately for our SMEs.
3. This study recommends that SMEs in Manado can and should take control of their own performance; knowledge is rich and multidimensional. In that case, competitors cannot catch our company easily. In particular, the SMEs who did not recognize absorption ability importantly are expected to recognize the absorption ability formation mechanism and take considerable interests in management strategies through absorption ability in the future and this will play an important role in securing sustainable competitive advantage and coping with this rapidly changing corporate environment.

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