

# MSMEs Mitigation Risk: Purchase Decision of Natural Disaster Insurance at MSMEs

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The aim of this study was to examine the relationship model in service quality, insurance premium and promotion with the purchase decision using respondents of 101 MSMEs of insurance policy holders who were willing to buy natural disaster insurance policies without the assistance of subsidies from the government. The data obtained from the respondents was analysed using multiple linear regression analysis. Surprisingly, this study found that although the premium insurance price variable had the greatest effect, it turned out to only have a difference of 18 percent compared to the effect of the service quality variable. This proves that independent MSMEs are not merely calculating the affordability of premium prices, but they are aware of the benefit of insurance. This is one of the differences from other MSMEs that rely on government subsidies.

**Key words:** *Natural Disaster, Insurance, MSMEs, Purchase Decision.*

## Introduction

Over the past 15 years, Indonesia is one of the countries that has experienced a variety of terrible natural disasters, even causing human deaths and severe business and economic losses. Of those affected are Micro, Small and Medium Enterprises (MSMEs) (Jogjapolitan, 2019; Liputan6, 2016). MSMEs, as the main support of national economic resilience, is the most vulnerable business unit to the threat of natural disasters. Natural disasters in several places in Indonesia have caused MSMEs to suffer losses due to damaged business premises and production equipment (Liputan6, 2016). This was made worse because most MSME actors did not have the knowledge and ability to mitigate risks so that as a result many MSMEs go bankrupt and cannot rise again (Liputan6, 2016; Zhang & Qian, 2018). In 2016, there were three major natural disasters due to earthquakes in Garut Regency on September 16, 2016, Pidie Aceh Jaya Regency on December 7, 2016, and Bima City on December 21, 2016 with the value of losses to the MSMEs of US\$2.88 million (Liputan6, 2016). As for Sleman, Bantul

and Kulonprogo Regency the estimate losses reached US\$1.05 million in 2019. These regencies are in an area of Yogyakarta which in 2006 experienced a very severe earthquake (Jogjapolitan, 2019). Therefore, various efforts need to be made including research so that MSMEs have the ability to mitigate the risk of natural disasters so as to avoid bankruptcy and be able to survive (Ye et al., 2017; Asseldonk et al., 2018; Bera & Danek, 2017).

One risk mitigation currently being carried out is by using a risk transfer scheme to insurance companies (Asseldonk et al., 2018). Businesses transfer risks to insurance companies by purchasing natural disaster insurance policies (Ye et al., 2017). As a result, when an MSME loss occurs, the insured will receive a reimbursement of insurance money from the insurance company for his business recovery capital (Ye et al., 2017; Zhang & Qian, 2018). There have been many studies conducted in the context of risk mitigation by businesses using insurance schemes including the research of Zhang & Qian (2018) who conducted a research on household groups in China. The study used 536 respondents with the results that the household groups need to buy earthquake disaster insurance products involving government funding assistance. Then, Ye et al. (2017) conducted a research on the purchase of disaster insurance that resulted in crop failure in farmers associated with a Chinese government policy. Asseldonk et al. (2018) examined the purchase of disaster insurance policies with a focus on crop insurance that involved the Dutch government. All three studies emphasised the importance of purchasing natural disaster insurance policies involving government assistance. In addition, Ullah & Khan (2017) examined the purchase of natural disaster insurance policies by associating the financial capabilities of microfinance. Lyu & Barre (2017) examined the insurance purchase decision of crop insurance by associating the ability to pay insurance premiums by the farmers in China. These studies also related to the ability to pay premiums by MSMEs.

All the studies conducted show that MSMEs buy and get disaster insurance protection because there is an element of financial assistance from the government (Keskin et al., 2017; Lyu & Barre, 2017; Ye et al., 2017; Ullah & Khan, 2017). The studies examining the role of MSME independently in making decisions on purchasing natural disaster insurance are rarely found. In a research by Keskin et al. (2017), although the object is the risk of earthquake, the object is not the focus of MSMEs. For this reason, this research examined a different viewpoint from previous studies where the MSMEs made the decisions to purchase natural disaster insurance independently. This study used the variables of service quality, insurance premium prices and promotion as the predictors of the decision to purchase natural disaster insurance policies independently by MSMEs. The respondents of this study were the MSMEs who bought an earthquake disaster insurance policy independently in Central Java Province, Indonesia.

The aim of this study was as a recommendation to the management of insurance companies in making and formulating marketing strategies in improving the decision to purchase a natural disaster insurance policy (earthquake) with a special customer segment of MSME.

## Literature Review

Buying decision is a stage in decision making process carried out by consumers (Zhu et al., 2018; Gildea, 2001). Consumers make the decision to buy because it is driven by needs (Rezaei et al., 2018). Various motives become the basis for buying decision by consumers when buying a service (Kumar et al., 2018; Gildea, 2001). There are two main factors which are often taken into consideration by consumers in making a purchase, namely the attitude of other people in providing references and the supporting situation elements such as price, income factor and the benefits of the service (Zhu et al., 2018). When these two things are fulfilled, consumers will gladly decide to buy a product (Rezaei et al., 2018). In the field of services, consumer behaviour in deciding to buy services can be analysed by means of problem recognition, information seeking and buying decision (Rezaei et al., 2018; Kumar et al., 2018; Gildea, 2001). In the service sector, it also always emphasises the importance of feedback (Utomo et al., 2020). According to Ye et al. (2017) and Bera & Danek (2017), the introduction of the problem in the case of purchasing natural disaster insurance is closely related to the safety needs which are the priority of every human being. Buying insurance services for risk mitigation needs to be performed by businesses (Amron, 2017). In addition, the confidence in buying, needs, spontaneity and recommendations are very important dimensions in terms of consumers to decide on a purchase (Zhu et al., 2018). Natural disasters will be out of control, especially in terms of financial recovery, if not handled properly using certain mechanisms (Bera & Danek. 2017). According to Zhang and Qian (2018), MSMEs play a role in protecting the business against natural hazards although the government's role is also very important.

The government plays an important role in natural disaster recovery, but MSME players are also required to mitigate risks for business continuity through the purchase of natural disaster insurance products (Asseldonk et al., 2018; Zhang & Qian, 2018). The decision to buy disaster insurance products actually involves a large role from MSMEs. One strategy is to look for information on various schemes that might be carried out to obtain security from disasters (Lyu & Barre, 2017; Bera & Danek, 2017). MSMEs have many alternatives that can be done ranging from asking for government subsidies to transferring risk to insurance companies independently. According to Ullah & Khan (2017) and Lyu & Barre (2017) various insurance products that provide guarantees to MSMEs for losses due to disasters have been widely bought by MSMEs. Some of the purchases are subsidised by the government and the MSMEs. For example, the type of agricultural insurance that guarantees MSMEs for agricultural land losses due to natural disasters. In addition, there is also animal husbandry insurance, such as cattle and sheep that places MSMEs to decide to buy natural disaster insurance products. The

need for natural disaster insurance makes businesses, including MSMEs, decide whether to buy the product or not because, realised or not, it will be a solution to the financial problems that occur. Many studies placed the purchasing power factor as the main factor in conducting their studies (Kumar et al., 2018; Asseldonk et al., 2018; Zhang & Qian, 2018). Many MSME researchers place price factor as the main element although there are other important elements, such as service quality and promotion (Kumar et al., 2018; Zhu et al., 2018; Lyu & Barre, 2017; Fan et al., 2011).

### ***The Service Quality in Buying Decision for Disaster Insurance Services***

Quality is a dynamic condition related to products or services, people, processes and environment that matches or exceeds expectations (Parasuraman et al., 2005; Kumar et al., 2018; Buyukozkan & Cifci, 2012). Service quality is a measure to find out whether the service level is suitable for customers or not. Service quality is manifested in the ability to meet customer expectations (Han et al., 2018; Parasuraman et al., 2005).

Various studies on service quality have been carried out by associating various aspects, including buying decision, in the service sector (Han et al., 2018; Kumar et al., 2018). The research of Kumar et al. (2018) examined buying decision in the field of digital market services. The results in the field of digital market services show that the decisions are influenced by service quality. Rahman et al. (2018) examined the effect of service quality on buying decision involving 200 respondents using healthcare services. The result is that service quality can be a predictor of buying decision in the field of healthcare services. The research by Han et al. (2018) examined the service quality of Koreans using online media. The result is that service quality can influence the buying decision of online media users in Korea. For this reason, it is concluded that service quality and natural disaster insurance purchase decisions have a positive relationship.

**H<sub>1</sub>:** Service quality has a positive effect on purchase decisions of natural disaster insurance services in MSMEs.

### ***The Prices in Buying Decision for Disaster Insurance Services***

Price is in general measured by the amount of money that can be exchanged for goods or services. Price is one of the variables that can be controlled by a company (Devlin & Gerrard, 2004; Kim, 2018; Devlin & Gerrard, 2004). Producers can determine the reasonable and acceptable prices to consumers (Chen et al., 2017; Fan et al., 2011). The price of services offered will reflect the profit expected by the company (Chabacib et al, 2019). Companies prioritise fair prices because prices will reflect the ability of consumers to buy services (Devlin & Gerrard, 2004). The buyer will consider buying an item after knowing the price feasibility

(Chen et al., 2017). Prices help buyers to measure the level of benefits they will receive (Fan et al., 2011). Consumer perceptions often justify that high prices will be in accordance with the quality of goods and vice versa (Devlin & Gerrard, 2004). The price of natural disaster insurance is called the price of insurance premium, which is the amount of money paid to get insurance benefits (Amron, 2018). The price of insurance premiums paid must be in accordance with the insurance benefits obtained.

According to the research of Chen et al. (2017), prices play a role in measuring consumer purchases. The study was conducted by associating prices with discount items given to consumers with the group buying category. Next, Kim (2018) examined prices in terms of buyer segment and at the same time confirms that prices affect buying decision. The research conducted by Vyas et al. (2017) examined the characteristics of competing prices, and the results found that prices have an influence on buying decision in the banking industry. For this reason, this study claims that the price of insurance premiums has a relationship with the decision to purchase natural disaster insurance at MSMEs.

**H2:** Competitive insurance premiums have a positive effect on buying decision for natural disaster insurance.

### ***Promotion's Role in Buying Decision on Disaster Insurance Services***

Promotion is a form of incentive that can move consumers to be interested in buying products (Akram et al., 2017; Blattberg et al., 1990). Promotion is an attempt to persuade consumers to buy good products now and in the future (Blattberg et al., 1990). Promotion is a marketing activity through the act of persuading and spreading positive information so that consumers are willing to buy and be loyal to a company. Promotions introduce products, persuasion to buy, and shape consumer behaviour to be loyal (Zhu et al., 2018; Codini et al., 2018; Blattberg et al., 1990).

Many studies have been conducted by associating promotion variable with consumer decisions. Some studies in line with MSME objects are the studies using a special segment in examining the effect of promotion on buying decision. For example, Zhu et al. (2018) examined the online purchase decisions of retail special segments involving 224 respondents. The retail purchases are in line with MSME objects as the buyers of natural disaster insurance of special segments. Rezaei et al. (2018) also examined the buying decision in special segments (retail purchases) by including brand indicators as one of the elements of building promotions that influence buying decision. Akram et al. (2017) conducted a study in China with the results confirming that promotion has an effect on consumer buying decision. Codini et al. (2018) examined the effect of promotion on the buying decision of car sharing services by

incorporating the elements of green service in which promotion played a role in deciding consumer purchases. For this reason, the research hypothesis is:

**H3:** Promotion has a positive effect on buying decision for natural disaster insurance.

### ***Research Method***

The respondents in this study were the MSMEs who had held a natural disaster insurance policy (earthquake) for at least one year; a minimum of 3 years in running a business; bought the policy independently without government subsidies, and; were located in Central Java, Indonesia. The instrument in the form of questions was measured using a Likert scale from 1 to 5. The respondents were asked to provide opinions on each item ranging from strongly disagree of scale 1 to strongly agree of scale 5 by circling or crossing the answers to be chosen by the respondents on the questionnaire sheets. This study used multiple linear regression analysis with SPSS program process.

### **Research Results**

#### ***Description of Respondents***

A total of 113 questionnaires were distributed to the respondents (MSMEs), but 101 questionnaires were returned and eligible for the process. 25 percent of them had run the businesses no longer than 5 years, and 55 percent had run their businesses from 6 to 10 years. The remaining 20 percent had run their businesses for more than 10 years. The respondents who had been the holders of basic earthquake disaster insurance policies for 2 to 3 years reached 67 percent, and the remaining 33 percent had been policy holders for more than 3 years. In terms of annual sales turnover, the data obtained show that 51 percent of the turnover was lower than US\$150 thousand, while the remaining 49 percent had turnover that was higher than US\$150 thousand.

#### **Data Analysis Results**

##### ***Validity and Reliability Tests***

The validity test shows that the KMO was higher than 0.50. Besides, all loading factors of each indicator per variable have fulfilled the criteria, which is  $> 0.40$  (Denis, 2018). Meanwhile, the reliability measurement using Cronbach Alpha indicates that all variables can be accepted ( $\alpha > 0.70$ ) according to the following Table 1.

**Table 1:** Reliability Test

Variables	Cronbach Alpha			Description
	Results	><	Criteria	
Service quality	0.792	>	0.70	Reliable
Insurance premium	0.778	>	0.70	Reliable
Promotion	0.850	>	0.70	Reliable
Buying Decision	0.759	>	0,70	Reliable

**Source:** Processed Data, 2019

Then, the results of the multiple regression analysis are presented in Table 2 below:

**Table 2:** Analysis of Multiple Linear Regression Coefficients<sup>a</sup>

Model	Unstandardised Coefficients		Standardised Coefficients	T	Sig.	
	B	Std. Error	Beta			
1	(Constant),	.882	.627		1.409	.163
	Service quality	.301	.088	.319	3.464	.001
	Insurance Premium	.368	.089	.378	4.167	.000
	Promotion	.245	.087	.258	2.857	.004
Dependent Variable: Buying Decision						

**Source:** Process data 2019

The classic assumption test conducted found that the normality test is normally distributed with reference to the Kolmogorof-Sminov value of  $0.987 > 0.05$ . The heteroscedasticity test used a Scatterplot chart in which the results indicated that heteroscedasticity does not occur because the points spread below the number 0 on the Y axis do not forming a clear pattern. On other hand, the multicollinearity test found that the VIF value is lower than 10 and the tolerance value is more than 0.1 indicating that there is no multicollinearity (Denis, 2018). Besides, the coefficient of determination test found the Adjusted R Square value of 0.805 indicating that the independent variable is able to explain the dependent variable in this study by 80.5 percent.

## Discussion

The main finding of this study is that insurance premiums play a very significant role in influencing the buying decision of natural disaster insurance. This is indicated by the significance level of 0.000 with an influence of 0.378. The study also found that compared to the service quality and promotion variables, the element of insurance premium has the greatest and most significant effect on the MSME's decision to buy natural disaster insurance products. This result also validates that the variable cost of affordable insurance premiums is a major



factor for MSMEs in deciding to buy natural disaster insurance services. The MSMEs are generally synonymous with efficient operational costs and revenues that tend to be less stable, so the expenditure element is a major concern for the MSMEs (Asseldonk et al., 2018; Zhang & Qian, 2018; Ye et al., 2017; Chen et al., 2017). This research is also in line with Lyu & Barre (2017) which suggests that insurance premiums are very sensitive to MSMEs so that the role of government is needed to help overcome them. The results of this study also reinforce the research of Asseldonk et al. (2018) that MSMEs need to be subsidised given the limitations in insurance premium payments. In addition, this study also validates the findings of Kim (2018) that MSMEs are a special market segment.

However, this study differs from previous studies because the respondents argued that competitive insurance premiums must be in accordance with the nature of disaster risk in the region. This means that competitive premiums must be followed by a clear explanation of the nature of natural disaster risk guaranteed by the policy. Payment of insurance premiums must be comparable to the items of natural disaster guaranteed by the policy. The other finding is that the MSMEs are willing to pay insurance premiums on a condition that the premiums must reflect the condition of the emergency level and the frequency of natural disasters that occur. Based on these findings, it is recommended to insurance companies to consider the potential of the MSME market, not only from their ability to pay for disaster insurance policies but also to consider the gravity of the location of natural disasters that may occur (Chen et al., 2017). Another strategy can also be carried out by giving several guarantees to MSMEs allegedly located in disaster prone areas to strictly comply with government procedures so that premium reductions can be given.

This study also found that service quality variables had a positive and significant effect on the buying decisions for natural disaster insurance. This finding is supported by a sig value of  $0.001 < 0.05$  with an effect value of 0.319. This indicates that the MSMEs have a perception that the better the quality of services provided, the higher the desire to buy natural disaster insurance services. Although this research is in line with the research by Kumar et al., (2018), Rahman et al. (2018), and Han et al. (2018), this study has differences with previous studies because the MSMEs did not only see premium prices as the only main variable that influences buying decisions. The results of the data processing show that the effect of the price variable is 18 percent higher than the effect of service quality, but the difference is not very significant. The difference indicates that MSMEs expect that any costs paid must be followed by good service, especially in the process of mitigating natural disaster risk. These results do not rule out the possibility of MSMEs that will not buy natural disaster insurance services when the insurance premium offered is not competitive. For this reason, this research recommends insurance companies to create quality service strategies while considering affordability. For example, insurance companies do not only focus on quick claims settlement, they are also



equipped with sympathetic information on natural disaster cycles that often occur in certain areas with standard risk mitigation education required by MSMEs.

Another finding of this study is that promotion can be a good predictor of MSMEs in deciding to buy a natural disaster insurance policy. This study found that promotion can influence buying decisions by 0.258 with a significance level of 0.004. Therefore, the results of this study reinforce the initial argument that a well-managed promotion will be able to increase MSMEs to decide on buying natural disaster insurance products. Although the results of this study are in line with previous studies (Akram et al., 2017; Codini et al., 2018), this study has differences in the types of promotions used by insurance companies to establish communication with MSMEs. Most MSMEs felt that the type of promotion used by insurance companies must have easily accessible criteria and that the MSMEs do not feel burdened with additional costs. The respondents stated that the promotions used by insurance companies should not be a burden for MSMEs to access this information (Zhu et al., 2018; Rezaei et al., 2018). For this reason, this research recommends insurance companies to choose the type of promotional media that is suitable with the ability to access MSMEs without having to reduce the effectiveness of the promotional contents, for example, by conducting outreach and promotion contracts involving formal groups / associations of MSMEs that exist in every MSME industry centre, MSMEs of batik clothing manufacturers, MSMEs of ceramic craftsmen, as well as a means of providing the latest information on natural disaster risk mitigation.

## **Conclusion**

This study examined in depth the model of the relationship of service quality, insurance premiums and promotion on the buying decisions of natural disaster insurance made by MSME independently without financial assistance from the government. This is different from previous studies which always associated the payment of disaster insurance risk mitigation premiums by MSMEs with government (non-independent) subsidies. The main finding of this research is that the cost of the insurance premium has the greatest effect compared to the other variables in influencing the decision to buy a natural disaster insurance policy made by MSMEs. This finding is in line with the results of previous studies which validate that MSMEs are very price sensitive. However, it is surprising that this study also found that; although the premium price variable had the greatest effect, it turned out to only have a difference of 18 percent compared to the effect of service quality variable. This proves that independent MSMEs are not merely calculating the affordability of premium prices, but it turns out that independent MSMEs also take into account the quality of insurance company services, especially when paying for disaster insurance claims. The MSMEs wanted to pay insurance premiums independently because they were actually aware of the benefits of the insurance services they buy. This is different from the MSMEs that rely on assistance from the government in paying insurance premiums and buying policies because they are required by



government programs. For this reason, this research recommends insurance companies to formulate a marketing strategy that is able to serve the MSME segment by providing affordable premium prices without reducing the quality of services provided.

### ***Limitations and Suggestions for Further Research***

This study found that the roles of insurance premiums, service quality and promotion are only able to explain the buying decisions of MSMEs at 80.5 percent and the remaining 19.5 percent is explained by other variables that did not exist in this study. For this reason, it is suggested that future studies be carried out by including other variables that can be a predictor of MSME's insurance buying decisions, especially those that focus on independent funding without government subsidies.

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**KONTRAK PENELITIAN TAHUN ANGGARAN 2019  
PENELITIAN TERAPAN UNGGULAN PERGURUAN TINGGI  
PELAKSANAAN PENELITIAN MULTI TAHUN**

**Nomor: 060/A38.04/UDN-09/V/2019**

Pada hari ini **Rabu** tanggal **Dua Puluh Dua** bulan **Mei** tahun **Dua Ribu Sembilan Belas**, kami yang bertandatangan dibawah ini :

- 1. **Dr. Eng., Yuliman Purwanto., M.Eng** : Direktur Lembaga Penelitian dan Pengabdian Masyarakat Universitas Dian Nuswantoro Semarang, dalam hal ini bertindak untuk dan atas nama Universitas Dian Nuswantoro, yang berkedudukan di Jl. Nakula I No. 5-11, Semarang 50131 Indonesia untuk selanjutnya disebut **PIHAK PERTAMA**;
- 2. **Dr. Amron, M.M** : Dosen Fakultas Ekonomi dan Bisnis Universitas Dian Nuswantoro, dalam hal ini untuk pengusul dan Ketua Pelaksana Penelitian Tahun Anggaran 2019, untuk selanjutnya disebut **PIHAK KEDUA**.

**PIHAK PERTAMA** dan **PIHAK KEDUA** secara bersama-sama bersepakat mengikatkan diri dalam suatu Kontrak Penelitian, tahun anggaran 2019 dengan ketentuan dan syarat-syarat yang diatur dalam pasal-pasal berikut:

**BAB I  
Dasar Kontrak  
Pasal 1**

Kontrak Penelitian ini berdasarakan kepada :  
Surat Edaran Direktur Riset dan Pengabdian Masyarakat Nomor T/140/E3/RA.00/2019 tanggal 25 Februari 2019 perihal Penerima Pendanaan Penelitian dan Pengabdian kepada Masyarakat di Perguruan Tinggi Tahun 2019.



## **Pasal 2**

### **Ruang Lingkup Kontrak**

**PIHAK PERTAMA** memberi pekerjaan kepada **PIHAK KEDUA** dan **PIHAK KEDUA** menerima pekerjaan tersebut dari **PIHAK PERTAMA**, untuk melaksanakan dan menyelesaikan PENELITIAN TERAPAN UNGGULAN PERGURUAN TINGGI Tahun Anggaran 2019 dengan judul **Metode Dan Aplikasi Mitigasi Risiko Untuk UMKM Terdampak Risiko Bencana Alam Menggunakan Pendekatan Loss Transfer Berbasis Trust**

Dengan Anggota : 1. Usman,S.Si, M.T., M.Si

2. Dr. Sih Darmi Astuti, M.Si

## **Pasal 3**

### **Dana Penelitian**

- (1) Besarnya dana untuk melaksanakan penelitian dengan judul sebagaimana dimaksud pada Pasal 2 adalah sebesar **Rp. 190.915.000 ( Seratus Sembilan Puluh Juta Sembilan Ratus Lima Belas Ribu Rupiah)** sudah termasuk pajak.
- (2) Dana Penelitian sebagaimana dimaksud pada ayat (1) dibebankan pada Daftar Isian Pelaksanaan Anggaran (DIPA) Direktorat Jenderal Penguatan Riset dan Pengembangan, Kementerian Riset, Teknologi dan Pendidikan Tinggi Nomor SP DIPA-042.06.1.401516/2019 tanggal 5 Desember 2018.

## **Pasal 4**

### **Tata Cara Pembayaran Dana Penelitian**

- (1) **PIHAK PERTAMA** akan membayarkan Dana Penelitian kepada **PIHAK KEDUA** dengan ketentuan sebagai berikut:  
Pembayaran sebesar 100% sekaligus atau sebesar **Rp. 190.915.000 Seratus Sembilan Puluh Juta Sembilan Ratus Lima Belas Ribu Rupiah** ;yang akan dibayarkan oleh **PIHAK PERTAMA** kepada **PIHAK KEDUA** setelah **PIHAK KEDUA** membuat dan melengkapi rancangan pelaksanaan penelitian yang memuat judul penelitian, pendekatan dan metode penelitian yang digunakan, data yang akan diperoleh, anggaran yang akan digunakan, dan tujuan penelitian berupa luaran yang akan dicapai, Laporan Kemajuan Pelaksanaan Penelitian dan Catatan Harian.
- (2) **PIHAK PERTAMA** tidak bertanggung jawab atas keterlambatan dan/atau tidak terbayarnya sejumlah dana sebagaimana dimaksud pada ayat (1) yang disebabkan karena kesalahan **PIHAK**

**KEDUA** dalam menyampaikan data peneliti, nama bank, nomor rekening, dan persyaratan lainnya yang tidak sesuai dengan ketentuan.

#### **Pasal 5**

- (1) Pendanaan Kontrak Penelitian sebagaimana dimaksud Pasal 3 ayat (1) dibayarkan kepada **PIHAK KEDUA** sebagai berikut.

Nama : **Dr. Amron, M.M**  
Nomor Rekening : **2099125066**  
Nama Bank : **Bank Jateng**

- (2) **PIHAK PERTAMA** tidak bertanggungjawab atas keterlambatan dan/atau tidak terbayarnya sejumlah dana sebagaimana dimaksud pada Pasal 4, yang disebabkan oleh kesalahan **PIHAK KEDUA** dalam menyampaikan informasi sebagaimana dimaksud pada ayat (1).

#### **Pasal 6**

##### **Jangka Waktu**

Jangka waktu pelaksanaan penelitian sebagaimana dimaksud dalam Pasal 2 sampai selesai 100%, adalah terhitung sejak **25 Februari 2019** dan berakhir pada **16 November 2019**

#### **Pasal 7**

##### **Target Luaran**

- (1) **PIHAK KEDUA** berkewajiban untuk mencapai target luaran wajib penelitian  
(2) **PIHAK KEDUA** jika memiliki target luaran tambahan, maka disesuaikan dengan target luaran di SIMLITABMAS.  
(3) **PIHAK KEDUA** berkewajiban untuk melaporkan perkembangan pencapaian target luaran sebagaimana dimaksud pada ayat (1) kepada **PIHAK PERTAMA**.

#### **Pasal 8**

##### **Hak dan Kewajiban Para Pihak**

- (1) Hak dan Kewajiban **PIHAK PERTAMA**:

a. **PIHAK PERTAMA** berhak untuk mendapatkan dari **PIHAK KEDUA** luaran penelitian sebagaimana dimaksud dalam Pasal 7;

- b. **PIHAK PERTAMA** berkewajiban untuk memberikan dana penelitian kepada **PIHAK KEDUA** dengan jumlah sebagaimana dimaksud dalam Pasal 3 ayat (1) dan dengan tata cara pembayaran sebagaimana dimaksud dalam Pasal 4.

(2) Hak dan Kewajiban **PIHAK KEDUA**:

- a. **PIHAK KEDUA** berhak menerima dana penelitian dari **PIHAK PERTAMA** dengan jumlah sebagaimana dimaksud dalam Pasal 3 ayat (1);
- b. **PIHAK KEDUA** berkewajiban menyerahkan kepada **PIHAK PERTAMA** luaran **PENELITIAN TERAPAN UNGGULAN PERGURUAN TINGGI** dengan judul **Metode Dan Aplikasi Mitigasi Risiko Untuk UMKM Terdampak Risiko Bencana Alam Menggunakan Pendekatan Loss Transfer Berbasis Trust** dan catatan harian pelaksanaan penelitian;
- c. **PIHAK KEDUA** berkewajiban untuk bertanggungjawab dalam penggunaan dana penelitian yang diterimanya sesuai dengan proposal kegiatan yang telah disetujui;
- d. **PIHAK KEDUA** berkewajiban untuk menyampaikan kepada **PIHAK PERTAMA** laporan penggunaan dana sesuai dengan Standar Biaya Keluaran (SBK) dari KEMENKEU.

## **Pasal 9**

### **Laporan Pelaksanaan Penelitian**

- (1) **PIHAK KEDUA** berkewajiban untuk menyampaikan kepada **PIHAK PERTAMA** berupa laporan kemajuan dan laporan akhir mengenai luaran penelitian dan rekapitulasi penggunaan anggaran sesuai dengan jumlah dana yang diberikan oleh **PIHAK PERTAMA** yang tersusun secara sistematis sesuai pedoman yang ditentukan oleh **PIHAK PERTAMA**.
- (2) **PIHAK KEDUA** berkewajiban mengunggah seluruh pekerjaan yang telah dilaksanakan ke SIMLITABMAS paling lambat **09 November 2019**.
- (3) **PIHAK KEDUA** berkewajiban menyerahkan seluruh Laporan Pekerjaan *Hardcopy* Laporan Kemajuan dan Surat Pernyataan Tanggungjawab Belanja (SPTB) kepada **PIHAK PERTAMA**, paling lambat **07 September 2019**
  - a. Catatan harian dan laporan komprehensif pelaksanaan Penelitian, pada tanggal **07 September 2019**
  - b. Laporan akhir, capaian hasil, Poster, artikel ilmiah dan profile, pada tanggal **09 November 2019** (bagi penelitian tahun terakhir).
  - c. Surat pernyataan Tanggungjawab Belanja (SPTB) atas dana Penelitian yang telah ditetapkan



- (4) Apabila sampai dengan batas waktu yang telah ditetapkan untuk melaksanakan Kontrak Penelitian telah berakhir, **PIHAK KEDUA** belum menyelesaikan tugasnya dan atau terlambat mengirim laporan akhir, maka **PIHAK KEDUA** dikenakan sanksi administratif berupa penghentian pembayaran dan tidak dapat mengajukan proposal penelitian dalam kurun waktu dua tahun berturut-turut.
- (5) Peneliti/Pelaksana Penelitian yang tidak hadir dalam kegiatan Pemonitoran dan Evaluasi tanpa pemberitahuan sebelumnya kepada Direktur Riset dan Pengabdian Masyarakat, maka Pelaksanaan Penelitian dikenakan sanksi administrasi berupa penundaan pengajuan usulan proposal untuk tahun berikutnya.

#### **Pasal 10**

##### **Hasil Penelitian**

- (1) Laporan hasil Penelitian sebagaimana tersebut pada Pasal 9 ayat (1) ditulis dalam format font Times New Romans ukuran 12 spasi 1,5 kertas A4 pada bagian bawah sampul (*cover*) ditulis :

Dibiayai oleh:

Direktorat Riset dan Pengabdian Masyarakat  
Direktorat Jenderal Penguatan Riset dan Pengembangan  
Kementerian Riset, Teknologi, dan Pendidikan Tinggi  
sesuai dengan Kontrak Pelaksanaan Program Penelitian Multi Tahun  
Nomor: **026/L6/AK/SP2H.1/PENELITIAN/2019**, tanggal 08 April 2019

- (2) *Softcopy* laporan hasil program penelitian sebagaimana tersebut pada Pasal 9 ayat (1) harus diunggah ke laman (*website*) SIMLITABMAS sedangkan *hardcopy* disimpan oleh **PIHAK KEDUA** dan mengirimkan salinan rangkap 2 (dua) ke LPPM.

#### **Pasal 11**

##### **Monitoring dan Evaluasi**

**PIHAK PERTAMA** dalam rangka pengawasan akan melakukan Monitoring dan Evaluasi internal terhadap kemajuan pelaksanaan Penelitian Tahun Anggaran 2019 ini sebelum pelaksanaan Monitoring dan Evaluasi eksternal oleh Direktorat Riset dan Pengabdian Masyarakat, Direktorat Jenderal Penguatan Riset dan Pengembangan, Kementerian Riset, Teknologi, dan Pendidikan Tinggi.

## **Pasal 12**

### **Penilaian Luaran**

1. Penilaian luaran penelitian dilakukan oleh Komite Penilai/*Reviewer* Luaran sesuai dengan ketentuan yang berlaku.
2. Apabila dalam penilaian luaran terdapat luaran tambahan yang tidak tercapai maka dana tambahan yang sudah diterima oleh peneliti harus disetorkan kembali ke kas negara.

## **Pasal 13**

### **Perubahan Susunan Tim Pelaksana dan Substansi Pelaksanaan**

Perubahan terhadap susunan tim pelaksana dan substansi pelaksanaan Penelitian ini dapat dibenarkan apabila telah mendapat persetujuan tertulis dari Direktur Riset dan Pengabdian Masyarakat, Direktorat Jenderal Penguatan Riset dan Pengembangan, Kementerian Riset, Teknologi, dan Pendidikan Tinggi.

## **Pasal 14**

### **Penggantian Ketua Pelaksana**

- (1) Apabila **PIHAK KEDUA** selaku ketua pelaksana tidak dapat melaksanakan Penelitian ini, maka **PIHAK KEDUA** wajib mengusulkan pengganti ketua pelaksana yang merupakan salah satu anggota tim kepada **PIHAK PERTAMA**.
- (2) Apabila **PIHAK KEDUA** tidak dapat melaksanakan tugas dan tidak ada pengganti ketua sebagaimana dimaksud pada ayat (1), maka **PIHAK KEDUA** harus mengembalikan dana penelitian kepada **PIHAK PERTAMA** yang selanjutnya disetor ke Kas Negara.
- (3) Bukti setor sebagaimana dimaksud pada ayat (2) disimpan oleh **PIHAK PERTAMA**.

## **Pasal 15**

### **Sanksi**

- (1) Apabila sampai dengan batas waktu yang telah ditetapkan untuk melaksanakan Penelitian ini telah berakhir, namun **PIHAK KEDUA** belum menyelesaikan tugasnya, terlambat mengirim laporan Kemajuan, dan/atau terlambat mengirim laporan akhir, maka **PIHAK KEDUA** dikenakan sanksi administratif berupa penghentian pembayaran dan tidak dapat mengajukan proposal penelitian dalam kurun waktu dua tahun berturut-turut.
- (2) Apabila **PIHAK KEDUA** tidak dapat mencapai target luaran sebagaimana dimaksud dalam Pasal 7, maka kekurangan capaian target luaran tersebut akan dicatat sebagai hutang **PIHAK**

**KEDUA** kepada **PIHAK PERTAMA** yang apabila tidak dapat dilunasi oleh **PIHAK KEDUA**, akan berdampak pada kesempatan **PIHAK KEDUA** untuk mendapatkan pendanaan penelitian atau hibah lainnya yang dikelola oleh **PIHAK PERTAMA**.

#### **Pasal 16**

##### **Pembatalan Perjanjian**

- (1) Apabila dikemudian hari terhadap judul Penelitian sebagaimana dimaksud dalam Pasal 1 ditemukan adanya duplikasi dengan Penelitian lain dan/atau ditemukan adanya ketidakjujuran, itikad tidak baik, dan/atau perbuatan yang tidak sesuai dengan kaidah ilmiah yang dilakukan oleh **PIHAK KEDUA**, maka perjanjian Penelitian ini dinyatakan batal dan **PIHAK KEDUA** wajib mengembalikan dana penelitian yang telah diterima kepada **PIHAK PERTAMA** yang selanjutnya akan disetor ke Kas Negara.
- (2) Bukti setor sebagaimana dimaksud pada ayat (1) disimpan oleh **PIHAK PERTAMA**.

#### **Pasal 17**

##### **Kewajiban Pajak**

- (1) Hal-hal dan / atau segala sesuatu yang berkenaan dengan kewajiban pajak berupa PPN dan / atau PPh menjadi tanggungjawab **PIHAK KEDUA** dan harus dibayarkan oleh **PIHAK KEDUA** ke kantor pelayanan pajak berupa :
  1. Pembelian barang dan / atau jasa yang dikenakan Pajak Pertambahan Nilai (PPN) sebesar 10% (sepuluh persen) dan Pajak Penghasilan (PPh) 22 sebesar 1,5 % (satu koma lima persen);
  2. Pajak – Pajak lainnya sesuai dengan ketentuan yang berlaku.
- (2) **PIHAK KEDUA** wajib menyimpan seluruh bukti-bukti pembayaran pajak yang telah disetorkan.

#### **Pasal 18**

##### **Kekayaan Intelektual**

- (1) Hak Kekayaan Intelektual yang dihasilkan dari pelaksanaan penelitian diatur dan dikelola sesuai dengan peraturan dan perundang-undangan.
- (2) Setiap publikasi, makalah, dan/atau ekspos dalam bentuk apapun yang berkaitan dengan hasil penelitian ini wajib mencantumkan **DIREKTORAT RISET DAN PENGABDIAN MASYARAKAT** sebagai pemberi dana.
- (3) Hasil penelitian berupa peralatan adalah milik negara dan dapat dihibahkan kepada institusi/lembaga melalui Berita Acara Serah Terima (BAST).



## **Pasal 19**

### **Keadaan Kahar**

- (1) **PARA PIHAK** dibebaskan dari tanggung jawab atas keterlambatan atau kegagalan dalam memenuhi kewajiban yang dimaksud dalam Kontrak Penelitian disebabkan atau diakibatkan oleh peristiwa atau kejadian diluar kekuasaan **PARA PIHAK** yang dapat digolongkan sebagai keadaan memaksa (*force majeure*).
- (2) Peristiwa atau kejadian yang dapat digolongkan keadaan memaksa (*force majeure*) dalam **Kontrak Penelitian** ini adalah bencana alam, wabah penyakit, kebakaran, perang, blokade, peledakan, sabotase, revolusi, pemberontakan, huru-hara, serta adanya tindakan pemerintah dalam bidang ekonomi dan moneter yang secara nyata berpengaruh terhadap pelaksanaan Kontrak Penelitian ini.
- (3) Apabila terjadi keadaan memaksa (*force majeure*) maka pihak yang mengalami wajib memberitahukan kepada pihak lainnya secara tertulis, selambat-lambatnya dalam waktu 7 (tujuh) hari kerja sejak terjadinya keadaan memaksa (*force majeure*), disertai dengan bukti-bukti yang sah dari pihak yang berwajib, dan **PARA PIHAK** dengan itikad baik akan segera membicarakan penyelesaiannya.

## **Pasal 20**

### **Peralatan dan/alat Hasil Penelitian**

Hasil Pelaksanaan Penelitian ini yang berupa peralatan dan/atau alat yang dibeli dari pelaksanaan Penelitian ini adalah milik Negara yang dapat dihibahkan kepada Universitas Dian Nuswantoro Semarang sesuai dengan ketentuan peraturan perundang-undangan.

## **Pasal 21**

### **Penyelesaian Perselisihan**

- (1) Apabila terjadi perselisihan antara **PIHAK PERTAMA** dan **PIHAK KEDUA** dalam pelaksanaan Kontrak Penelitian ini akan dilakukan penyelesaian secara musyawarah dan mufakat.
- (2) Dalam hal tidak tercapai penyelesaian secara musyawarah dan mufakat sebagaimana dimaksud pada ayat (1) maka penyelesaian dilakukan melalui proses hukum yang berlaku dengan memilih domisili hukum di Pengadilan Negeri Jakarta Pusat.

## Pasal 22

### Amandemen Kontrak



Apabila terdapat hal lain yang belum diatur atau terjadi perubahan dalam **Kontrak Penelitian** ini, maka akan dilakukan amandemen Kontrak Penelitian


## Pasal 23

### Lain-lain

**PIHAK KEDUA** menjamin bahwa penelitian dengan judul tersebut di atas belum pernah dibiayai dan/atau diikutsertakan pada Pendanaan Penelitian lainnya, baik yang diselenggarakan oleh instansi, lembaga, perusahaan atau yayasan, baik di dalam maupun di luar negeri.

Perjanjian ini dibuat dan ditandatangani oleh **PARA PIHAK** pada hari dan tanggal tersebut di atas, dibuat dalam rangkap 2 (dua) dan bermeterai cukup sesuai dengan ketentuan yang berlaku, yang masing-masing mempunyai kekuatan hukum yang sama.

 **PIHAK PERTAMA**  
  
Dr. Eng. Yuliman Purwanto., M.Eng  
NIDN : 0628075602

**PIHAK KEDUA**  
  
Dr. Amron, M.M  
NIDN : 0906017101