

Analysis of Risk Management on MSMEs (Case Study of The Bamboo Handicraft Industry)

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ABSTRACT. This article aims to identify the risks in the bamboo handicraft industry in Sendari, assessment of the risks that may arise and analyze the strategies. Risk identification in this study was carried out by conducting a SWOT analysis to determine the current business conditions and to analyze the sources of risk that this industry is likely to face. The analysis found that the most significant risks faced by the bamboo handicraft industry in Sendari are Market Risk and Operational Risk. The risk assessment matrix shows that market risk and operational risk are in the red zone, and the financial risk becomes the next focus because the financial risk is in the orange zone. The bamboo handicraft industry in Sendari needs to increase the marketing of its products and collaborate with the government to improve human resource management, financing, and product innovation.

Keywords: management; MSMEs; risk

ABSTRAK. Artikel ini bertujuan untuk mengidentifikasi proses manajemen risiko pada industri kerajinan bambu di Sendari, melakukan penilaian terhadap risiko yang mungkin muncul dan melakukan analisa terhadap strategi yang akan dilakukan. Identifikasi risiko pada penelitian ini dilakukan dengan melakukan analisa SWOT untuk mengetahui kondisi usaha saat ini serta menganalisa sumber-sumber risiko yang kemungkinan akan dihadapi oleh industri ini. Dari hasil analisa didapatkan bahwa risiko yang paling besar dihadapi oleh industri kerajinan bambu Sendari adalah Risiko Pasar dan Risiko Operasional. Matriks risiko menunjukkan bahwa risiko pasar dan risiko operasional berada di zona merah, dan risiko keuangan menjadi fokus berikutnya karena risiko keuangan berada di zona orange. Industri kerajinan bambu Sendari perlu meningkatkan pemasaran akan produk-produknya dan melakukan kerjasama dengan pemerintah dalam rangka perbaikan pengelolaan SDM, pembiayaan, dan inovasi produk

Kata kunci: manajemen; risiko; UMKM

INTRODUCTION

Micro, Small and Medium Enterprises (MSMEs) have a significant role in the country's economy. Apart from contributing to income for the state, MSMEs are also able to be a solution to high unemployment by creating jobs. Based on the development of data on Micro, Small, Medium Enterprises (MSMEs) and Large Enterprises in 2016 - 2017 from Ministry of Cooperatives and SMEs (2018), MSMEs have a share of around 99.99% or 62.9 million units of the total business actors in Indonesia. Meanwhile, large businesses only have a share of 0.01% or around 5400 units. On the labour indicator, Micro Enterprises are able to absorb around 107.2 million workers (89.2%), Small Businesses 5.7 million (4.74%), and Medium Enterprises 3.73 million (3.11%); while large enterprises only absorb about 3.58 million people (2.98%).

According to UU no. 20 of 2008 There are specific criteria for each Micro, Small and Medium Enterprises. Micro enterprises have the criteria for net assets of not more than Rp.50,000,000.00 (fifty million rupiahs) excluding land and buildings for business premises or have annual sales proceeds of not more than Rp. 300,000,000.00 (three hundred million rupiahs). Meanwhile, the criteria for small businesses are having a net worth of more than Rp.50,000,000.00 (fifty million rupiahs) up to a maximum of Rp. 500,000,000.00 (five hundred million rupiahs) excluding land and buildings for business premises; or have annual sales proceeds of more than Rp. 300,000,000.00 (three hundred million rupiahs) up to a maximum of Rp. 2,500,000,000.00 (two billion and five hundred million rupiah). Medium Business Criteria, having a net worth of more than Rp.500,000,000.00 (five hundred million rupiahs) up to a maximum of Rp.10,000,000,000. 00 (ten billion rupiahs) excluding land and buildings for business; or have annual sales proceeds of more than Rp. 2,500,000,000.00 (two billion five hundred million rupiahs) up to a maximum of Rp. 50,000,000,000.00 (fifty billion rupiah). A summary of the MSME criteria based on assets and turnover can be seen in Table 1.

Table 1. Criteria for MSMEs based on assets and turnover

Criteria	Assets (excluding land and building of business premises)	Turnover
Microbusiness	Maximum of IDR 50 million	Maximum Rp. 300 million
Small business	> Rp. 50 million to Rp. 500 million	> Rp. 300 million, d, 2.5 billion
Medium Enterprises	> Rp. Rp. 500 million to Rp. 10 billion	> Rp. 2.5 billion to Rp. 50 billion

Source: Undang-Undang No 20 Tahun 2008

MSMEs in Indonesia have experienced very rapid development from year to year. Even MSMEs is a business activity that is relatively able to survive in times of monetary crisis compared to the large businesses in Indonesia. It happened because MSMEs are not too dependent on large capital or loans from outside in foreign currencies. Based on data from BPS (2018), MSMEs have also contributed 59.84% to GDP in 2016 and increased to 60% in 2017. This sizeable contribution is in line with the growing number of MSMEs. The Ministry of Cooperatives and SMEs noted an increase of 2.06% or 1.2 million business units from 61.7 million business units in 2016 to 62.9 business units in 2017.

Seeing the strategic role of the MSME sector for the economy, the government will take part in supporting the development of this sector. Among the forms of support provided by the government is through a financing scheme for MSMEs, which requires banks to channel loans to MSMEs at least 20% of the total financing disbursed (Weekly Economic Report of the

Coordinating Ministry for Economic Affairs, 2019). Besides, the government has also implemented a particular financing scheme for MSMEs, namely *Kredit Usaha Rakyat* (KUR) financing scheme.

Nevertheless, MSME owners also still face many problems in developing their business. Problems commonly faced by MSMEs include small capital, low human resource factors, limited facilities and infrastructure and access to finance. Of course, MSMEs as business organizations cannot be separated from risk factors. However, sometimes not all MSMEs are aware of the risks they face, especially to carry out the management of their business risks. Risk management is an activity that is still commonplace carried out by MSMEs and is considered only necessary for large companies. Whereas MSMEs also need risk management related to the risks they face and the sustainability of their business. Every business needs a robust risk management strategy. MSMEs require a more reliable strategic management system due to limited capacity and capital. MSME owners should understand the risks of the business they run. A good understanding of risk enables the owner to make the right decisions according to risk preferences and carry out risk management correctly.

Not only in Indonesia, but MSMEs also support the economy for countries in ASEAN. 89-99% of companies in ASEAN member countries are small and medium enterprises that can create 52-97% of jobs and contribute 23-58% of GDP, and 10-30% of total exports (ERIA, 2014). However, as in Indonesia, risk management is still a common thing for MSMEs. Fraser stated that attention to risk is getting higher, and many company leaders in developing countries are paying more attention to risk. However, an understanding of risk management is still inadequate (Fraser et al., 2010). Then based on research by the Organization for Economic Cooperation and Development (OECD) in Ekwere (2016) stated that many new companies could not survive more than five years and only a few can develop into high growth companies.

According to Duong (2009), specific risks to MSMEs include business entity risk, human capital risk, financial risk, market share risk and competition. Business entity risk occurs because MSMEs are usually businesses formed by individuals or partnerships so that operational risks are higher due to the lack of number and competence of human resources. The human capital risk to MSMEs is caused by high employee turnover and lack of human resources, resulting in waste and high training costs for employees. MSME financial risks relate to costs, cash flow, and leverage capacity. Market share and competition risks occur because after all, MSMEs have a small scale so that they will be unable to compete with large companies in gaining existing and profitable market share. Meanwhile, according to (Wati & Darda, 2012), the sources of risk come from the surrounding environment which consists of the physical environment, social environment, political environment, legal environment, operational environment and economic environment.

These various risks need to be managed through risk management. According to Hanafi (2016), risk management is a comprehensive risk management system faced by an organization to increase corporate value. COSO defines Enterprise Risk Management as a process that is influenced by management, the board of directors, and other personnel of an organization. It is applied in a strategic setting, covers the whole organization, designed to identify potential events that occur— influencing an organization, managing risk within the tolerances of an organization, to provide sufficient assurance regarding the achievement of organizational goals (Hanafi, 2016).

Sadgrove on Umar (2001) divides risk management into three rounds. The first round is when companies have not made efforts to minimize risks so that unwanted and adverse events often

occur. In the second half, the company realized that risk reduction could be made. The third phase is at present where companies conduct risk assessments by examining risks.

The stages in risk management are risk identification, risk evaluation and measurement, and risk management. Some methods to identify the risk such as risk sequence analysis, expanding observations of risk sources, financial reporting methods, flow chart analysis of company activities and operations, contract analysis, loss statistics records and company loss reports, and surveys or interviews with managers (Hanafi, 2016). The next stage is the risk evaluation which aims to understand the characteristics of the risk better, making it easier to control risks. Then to measure the risk, an approach can be used to estimate the likelihood of the risk occurring and the level of risk consequences. According to Wati & Darda (2012), several ways of managing risk are avoiding existing risks, holding risks, diversifying risks, transferring risks, controlling risks, and financing the losses.

According to Panigrahi (2018), proper risk management can provide benefits for the company. The benefits obtained from risk management include low insurance premiums, reducing the possibility of the company being the target of legal action, reducing cash or stock losses, and reducing business decline. Meanwhile, according to Fahmi (2016) the application of risk management provides several benefits, a) the company has a reliable measure as a basis for making every decision, b) can provide direction for a company in seeing the effects that may arise both in the short and long term, c) Encourages managers in making decisions to always avoid risks and avoid the effects of losses, especially financial losses, d) Allow the company to obtain a minimum risk of loss, e) The company has sustainably developed a direction and mechanism.

Research related to risk management in MSMEs in Indonesia has been conducted, including research by Sari et al. (2017) which analyzes risk management in the Small Rattan Industry in Malang City. The analysis tool used is a SWOT analysis. The results showed that supply risk and marketing risk are in the red zone (high), so that supply risk and marketing risk are the main focus of the rattan handicraft industry because these risks have a significant impact on the rattan industry. Meanwhile, operational risk is the next focus because the operational risk is in the yellow zone (minor), which means that it does not have an impact on the rattan industry.

Alifiana (2018) analyzed the potential risks of 27 MSMEs in Kudus, consisting of 25 small segment MSMEs and two medium segment MSMEs. Of the 27 MSMEs whose existence was verified and had complete data, there were eight small segment and one medium segment, which could be analyzed for potential risks based on aspects of capital, production and marketing. Based on these data, there is a large gap, from 27 MSMEs to 9 MSMEs. It can be indicated that risk management of MSMEs is still poorly managed. Potential MSME risks are classified based on the aspects of capital, production and marketing. The results showed that based on the capital aspect, there were 8 MSMEs with low-risk potential and only 1 MSMEs with high-risk potential. Based on the production aspect, 5 MSMEs are potentially low risk, and 4 MSMEs with moderate risk potential. Based on the marketing aspect, 8 MSMEs have the potential for low risk and only 1 MSME, which has the potential for moderate risk.

Wajdi et al. (2012) studied 315 MSME business actors in Surakarta City in 2011 which consisted of 3 types of industry, with details of 102 textile and batik industry companies, 107 food industry companies, and 106 furniture companies. The results of the study show that 70% of MSME entrepreneurs do not understand risks regarding the perception of disasters that may befall their

businesses. MSME business actors view disaster risk as something that has never been calculated or has never been imagined because they consider a disaster as something unlikely to happen if they do it carefully. MSME business actors only anticipate by implementing work safety standards, like separating business premises from residences, placing equipment/production tools that can easily cause fire at the very back of the residence, or make a 2-story house to anticipate flooding.

Qintharah (2019) examined the Saripakuan MSMEs in Bekasi. There are 14 risks in Saripakuan MSMEs consisting of 7 operational risks, two market risks, three strategic risks, one reputation risk and one compliance risk. This risk management design consists of 5 stages of the process: determining the context, risk identification, risk analysis, risk evaluation, and risk control.

Hanggraeni et al. (2019) examines the impact of internal, external, and risk management on the performance of MSMEs. The research was conducted in five less developed provinces in Indonesia, consisting of 14 cities in East Java, West Sumatra, North Sumatra, West Nusa Tenggara and East Nusa Tenggara. The results showed that risk management had a positive impact on the performance of MSMEs. Companies will get benefit from implementing risk management. The study also stated that the risks that had the most significant impact on MSMEs were financial risks and marketing risks.

Verbano & Venturini (2013) stated that the debate among managers resulted in interest in risk management implementation in MSMEs, but many studies in the literature did not accompany this. It indicates that risk management at MSMEs is still a subject "spot". However, it is widely diffused and essential from an economic and social perspective; the fact is that MSMEs are massively weak and prone to failure due to unexpected risks.

This study focuses on the risk management process in micro and small businesses. The case study has taken in the bamboo handicraft industry in Sendari Mlati Sleman Yogyakarta. The bamboo industry still uses conventional methods in its production process. The products produced from this bamboo industry include a variety of furniture such as chairs and tables, cupboards, shelves, room dividers and souvenirs. This industry has been established for a long time since the 1980s but has not experienced significant development because based on its assets and turnover, almost all businesses in the bamboo handicraft industry are still included in the category of micro business. Business owners are still unfamiliar with risk and risk management, so there is no effort to control existing risks. The purpose of this research is to identify risks along with sources of risk, assess risks that may arise and analyze strategies that will be carried out by the bamboo craft industry in dealing with or managing these risks. Risk identification in this study is carried out by conducting a SWOT analysis to determine the current business conditions and to analyze the sources of risk that this industry is likely to face. From the results of risk identification, the next step is to conduct a risk assessment; this assessment is carried out to determine which risks have the most influence on the sustainability of the bamboo craft industry in Sendari. The risk assessment in this study was carried out using a risk matrix based on the likelihood of occurring, the severity of impact and the handling of these risks to detection. From the results of this risk assessment, it can be seen which priority risks must be handled, and strategies can be made to reduce or minimize losses that will be borne by the business.

METHOD

This research uses descriptive qualitative and case study methods. The research stage consisted of the preparation stage, the data collection and processing stage, and the analysis and conclusion stages. The data used are primary data and secondary data. Primary data in this study were obtained from observations and interviews with the owners of the bamboo handicraft industry, while secondary data was in the form of the literature review of previous studies. This research was conducted at the Bamboo Craft Industry Center located in Sendari Village, Mlati District, Sleman Regency, Yogyakarta. Researchers conducted interviews with 14 business actors in the bamboo handicraft industry and also made observations to develop the research results obtained to answer the problems.

This study uses a SWOT analysis that used by Sari et al. (2017) in identifying the risks faced by bamboo industry owners. Muhamad (2008) stated that SWOT is one of the most popular and regular analysis tools used in strategy in both developed and developing countries. This SWOT analysis is considered the most suitable for analyzing risks and determining risk management strategies for MSMEs. Risk assessment is carried out using a risk assessment matrix by assessing the likelihood and consequence of each risk. On the scoring matrix, the likelihoods are divided into (1) almost never, (2) unlikely, (3) possible, (4) likely, (5) almost certain. Whereas the consequence is divided into (1) minor, (2) moderate, (3) severe, (4) major, (5) catastrophic. This risk determination matrix is a description of the areas of impact and the frequency of risk so that the level of risk can be determined. The level of the risk area consists of green areas which are low levels, yellow areas are medium levels, orange areas are high levels, and red areas are extreme levels.

RESULTS AND DISCUSSION

The Bamboo Craft Industry in Sendari is a labour-intensive industry so that it uses more human services in its production process. In this bamboo industry, there are several types of products that are produced either with bamboo as a whole or mixed with other materials. Products produced by this industrial centre include furniture handicrafts like tables, chairs, room dividers, shelves, parcel baskets, hangers, bamboo ornaments, and other bamboo handicraft products.

The Bamboo Craft Industry Center is a business group consisting of 14 bamboo craft entrepreneurs, chaired by Mr Paidi. Based on assets and turnover owned, all businesses in the bamboo handicraft industry are still micro businesses. The 14 bamboo handicraft industries are Muda Kreatif, Nura'ini, Pak Ambar, Kevin, Usaha Mandiri Karya, Lugut Pring, Suryo Kencono, Mebel Cebongan, TKT DW, Rajiman, Lancar, Tekun Jaya Muda, Shinta, Dheling Asri.

Risk identification at the bamboo handicraft centre is carried out using a SWOT analysis. This analysis is based on interviews and direct observations at the bamboo handicraft centre in Sendari Mlati. Besides, risks are also obtained from a literature review of the obstacles faced by the MSME industry. From the results of interviews, direct observation and literature review, analysis of Strength, Weakness, Opportunity and Threat (SWOT) can be made.

The results of the SWOT analysis carried out are as follows:

Strengths

The strengths possessed by the bamboo handicraft industry in Sendari include: 1) Bamboo handicraft products are handmade products that consumers love. Bamboo products have their

uniqueness so that they are in demand by both domestic and foreign consumers, such as Germany, France, Spain as well as several other countries; 2) The Bamboo Craft Industry is local wisdom in Sleman Regency so that it can become a tourist attraction. Traditional equipment used in the process of making bamboo products such as sickles is local wisdom that is still being empowered in the bamboo craft industry. This traditional tool is recognized as environmentally and health-friendly equipment. Even in terms of cost, this equipment is more efficient and more productive in producing products because bamboo has a unique shape that requires persistence in its processing. More modern equipment cannot compete with the quality of the products produced by this traditional tool; 3) Bamboo as a raw material for the bamboo handicraft industry in Sendari can be obtained from the Kulon Progo and Purworejo areas, which are bamboo supply areas with excellent quality at low prices; 4) Products made from bamboo are products with affordable prices compared to similar products with other raw materials; 4) There is no residual waste in bamboo handicraft production. The remaining product processing in the form of bamboo pieces can be resold to tile producers as fuel for the fireplace.

Weaknesses

Apart from its strengths, the Bamboo handicraft industry also has weaknesses: 1) Lack of Innovation (products produced in the bamboo handicraft industry tend to be monotonous from year to year. Meanwhile, today's consumers want a more varied and modern product); 2) Limited funding (the funds owned by the business owner are not significant, so when there is a demand for products in large quantities, the owner must look for a loan. Unless they even not being able to accept orders because of lack of funds); 3) The process of preserving raw materials is complicated (bamboo is a natural raw material which is brittle and does not last long. To make the product durable, it requires a long and expensive curing process. It can disrupt the running of business operations); 4) Often experiences a change in labour (employees in the handicraft industry need skills in processing bamboo. Newly recruited employees will usually be trained by the owner so that they can work skillfully and deftly. Nevertheless, what often happens when these employees are proficient, they will leave and set up their own business).

Opportunities

The Bamboo Craft Industry has several opportunities: 1) The emergence of substitute materials such as synthetic materials (currently available synthetic materials that can be used as a substitute for bamboo in producing handicraft products. Although not the same as bamboo, this material has a more durable level of durability. Also, several synthetic materials are given a variety of colours to give a more modern impression); 2) The government continues to promote to improve the performance of MSMEs in Indonesia with various programs to support SME activities. Currently, the government continues to issue programs that can be used by MSME players to improve performance; 3) The bamboo handicraft industry has experienced an increase in demand for making *gedek* which is used for temporary shelter when an earthquake occurs in an area.

Threats

While the threats faced by the bamboo handicraft industry in Sendari are: 1) Similar items from other materials that are stronger and more durable (Competition exists not only among bamboo craftsmen but also from other entrepreneurs who produce the same goods but use raw materials other than bamboo, which are more robust and more durable); 2) Unstable social and economic conditions (based on interviews conducted by the owner of the bamboo handicraft industry, said

that there was a decline in export sales after the Bali bombing. Before 2010, the bamboo handicraft industry had a high demand for products. Likewise, when the Covid-19 pandemic occurred, it also greatly affected product sales. Market conditions have become sluggish due to events that have befallen this country).

Based on the results of the SWOT analysis, the risks that exist in Bamboo Craft Industry Sendari can be identified as follows: 1) Environmental Risk (environmental risks can be said to be almost non-existent because environmental pollution occurs. The remaining bamboo processing can still generate income by selling it to tile producers. The tools used tend to be traditional tools that do not interfere with health); 2) Disaster Risk (Sleman Yogyakarta is an area that is prone to disasters such as volcanic eruptions and earthquakes. However, the disaster that occurred did not affect the sales of bamboo handicraft products. When an earthquake occurs, the demand for bamboo products "gedek" has increased because it is used for the construction of temporary shelters for refugees); 3) Market Risk (unstable social and economic conditions have a significant impact on the bamboo handicraft industry. Market risks faced by bamboo handicraft business actors are: decreased demand due to changes in market conditions, and competition for similar products with higher quality raw materials); 4) Operational Risk (the operational risks faced by the owners of the bamboo handicraft industry are high employee turnover rate, and the high cost of processing/preserving raw materials and the process takes a long time); 5) financial risk (the owners of the bamboo handicraft industry face financial risks in the form of a lack of capital to run their businesses).

Based on the impact and frequency of occurrence, the results of a risk assessment with a risk matrix can be seen in Figure 1.

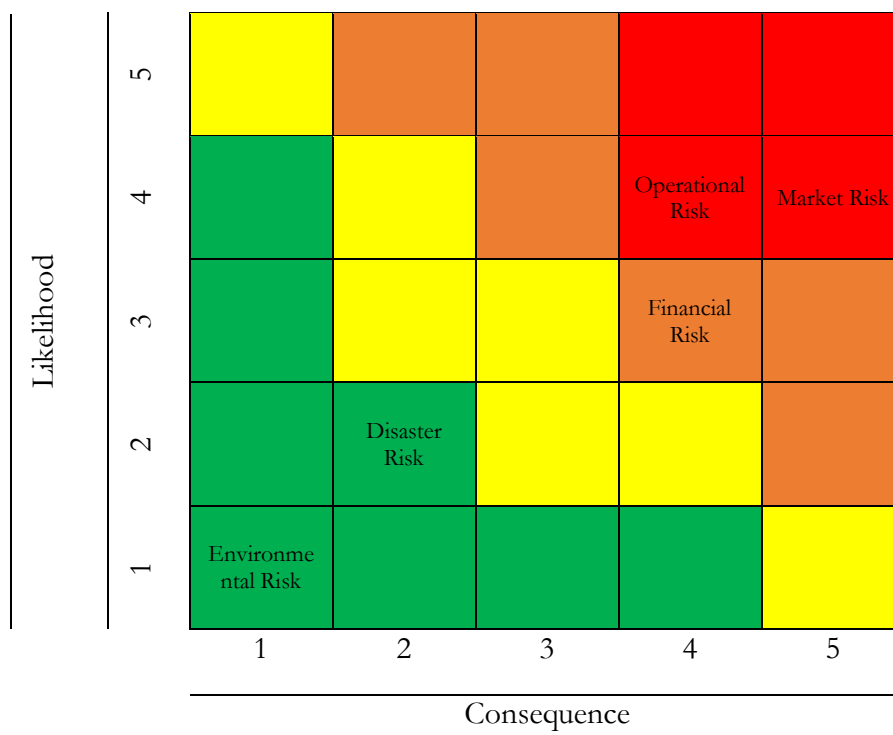


Figure 1. Risk Matrix

In figure 1, the risk assessment matrix shows that market risk and operational risk are in the red zone (extreme). So that market risk and operational risk are the main focus of the bamboo

handicraft industry because these risks occur almost frequently and have a significant impact on the bamboo industry. Meanwhile, financial risk becomes the next focus because the financial risk is in the orange zone (high). Although the occurrence is not frequent enough, it has a significant impact on the bamboo handicraft industry. Disaster risk and environmental risk are in the green zone (low) because they are rare and do not affect the bamboo handicraft industry.

The strategy carried out by the craft industry based on the SWOT analysis, and the risk matrix is by mitigating or reducing existing or future risks. Improvements that can be made to overcome risks can be made in the following ways: 1) In order to keep product sales high when economic conditions are not well, the craft industry holds advertisements/promotions through social media so that marketing can be done further and develop. So far, marketing is still conventional, so it is ineffective; marketing using technology and media that is easily accessible to the public is expected to be able to maintain sales when economic conditions decline; 2) Cooperate with the government, especially in terms of ease of product export and marketing development; 3) Conduct sustainable cooperation with distributors and consumers; 4) Perform proper human resource management so that the turnover that occurs is not too high; 5) Do innovations in processing/preserving raw materials so that it does not require a long process and high costs; 6) Take advantage of government support in terms of financing so that capital problems can be resolved, especially when there are large orders.

CONCLUSION

The main risks faced by the bamboo handicraft industry in Sendari are market risk, operational risk and financial risk. In the risk assessment process, it is found that market risk and operational risk are in the red zone, while the financial risk is in the orange zone. The bamboo handicraft industry in Sendari needs to increase its marketing through marketing media that is easily accessible to the public so that many are familiar with its products. Collaboration with the government is necessary in order to improve human resource management, financing and product innovation.

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