

RISK MITIGATION STRATEGIES FOR THE FOOTWEAR INDUSTRY DURING THE COVID-19 PANDEMIC

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Abstract: CV. XYZ is one of the companies affected by Covid-19, which is marked by a decreased turnover of 70% and as many as 50% of workers are laid off. Risk considerations in business are a concern in the face of an increasingly competitive, unpredictable, and complex business environment. This study aims to identify, analyze and recommend priority operational risk strategies faced by CV. XYZ. The methods used are the Structured What-If Technique (SWIFT) and House of Risk (HOR). The results of this study found that the operational risk events of CV. XYZ are categorized into 3 categories of risk events with a total of 12 risk events. There are 8 of 15 risk-causing agents that contribute 75% to the total ARP, and there are 5 of 17 risk prevention actions that prioritized with the highest Effectiveness To Difficulty (ETD) value.

Keywords: house of risk, footwear industry, risk management, business processes, business strategy

Abstrak: CV. XYZ merupakan salah satu perusahaan yang terkena dampak Covid-19 yang ditandai dengan omzet yang menurun sebesar 70% dan sebanyak 50% pekerja dirumahkan. Pertimbangan risiko dalam bisnis menjadi perhatian dalam menghadapi lingkungan bisnis yang semakin kompetitif, tidak dapat diprediksi, dan kompleks. Penelitian ini bertujuan untuk mengidentifikasi risiko, menganalisis dan merekomendasikan prioritas strategi risiko operasional yang dihadapi oleh CV. XYZ. Metode yang digunakan yaitu Structured What-If Technique (SWIFT) dan House of Risk (HOR). Adapun hasil dari penelitian ini yaitu kejadian risiko operasional CV. XYZ dikategorikan menjadi 3 kategori kejadian risiko dengan total 12 kejadian risiko. Terdapat 8 dari 15 agen penyebab risiko yang memberikan kontribusi 75% terhadap total ARP, serta terdapat 5 dari 17 aksi pencegahan risiko yang diprioritaskan dengan nilai Effectiveness To Difficulty (ETD) tertinggi.

Kata kunci: house of risk, industry alas kaki, manajemen risiko, proses bisnis, strategi bisnis

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INTRODUCTION

The national footwear industry in 2019 was recorded at 394 companies with a production capacity of 1.03 billion pairs per year (Ministry of Industry, 2021). Of the ten shoe factories that are included in the main players in the shoe industry in Indonesia, 60% of them are international shoe factories that compete with 40% of other local factories. One company that supports the competition in the shoe industry in Indonesia is CV. XYZ. This company was founded in 2002. CV. XYZ has a target of business-to-business (B2B) customers. CV. XYZ produces for the Asian market coverage with a single production reaching a capacity of hundreds to thousands of pairs of shoes with a minimum total turnover of 85 million rupiahs for one client. The client chooses CV. XYZ because it is considered that quality control is maintained with production costs that are still affordable compared to others.

Manufacturing business certainly has a close relationship with management. This is intended to control the quality of production and process efficiency in the company. The price of material goods that go up or down will result in the production costs that will be more inefficient, coupled with the quality of machines that are not maintained and even result in many defects in mass production, this must be considered to minimize losses and maintain competitiveness. The many factors that influence the management of management in this business field, both internal and external, of course, there are various possible risks that will be faced by business management which have an impact on the response of clients or consumers.

According to Lam (2014), operational risk can be defined as the risk of losses arising from the inadequacy or failure of internal processes, human resources, and systems or from external events. The scope includes process risk, human resources (HR) risk, incidental risk, and business risk. According to Aung (2008), the classification of operational risk is generally divided into 4 (four) categories R, technology, processes, and external factors. It is important for a company to manage the risks that may occur in its business. Risk management is a structured and systematic process for identifying, measuring, mapping, developing alternative risk management, monitoring, and controlling risk treatment (Djohanputro, 2008). Ariyanti (2018) In general, there are five objectives of operational management: 1) Increasing efficiency, namely by

maximizing the output of goods and services with minimal input of resources; 2) Increasing productivity, namely by producing the right goods and services to meet consumer needs; 3) Reducing costs, namely by minimizing the cost of producing goods and services to be made; 4) Improving quality, by ensuring that the goods and services produced are in accordance with the specified quality standards; and 5) Reducing production process time, namely by controlling time and making the most of the time spent in other activities.

According to Djohanputro (2008), operational risk is the potential deviation from the expected results due to the malfunctioning of a system, HR, internal processes, and other external factors. Therefore, The company uses an understanding of risk, measurement, monitoring, and control. Operational risk classification is generally divided into four categories according to Aung (2008), namely HR, technology, processes, and external factors. ISO 31000:2009 Risk Management – Principles and Guidelines is a standard created to provide generic principles and guidelines in the application of risk management. This standard provides principles, frameworks, and processes for risk management. ISO 31000 is an international standard issued by the International Organization for Standardization (ISO) to manage risk. ISO 31000 is divided into three parts, namely risk management principles, risk management framework. and management processes risk. The risk management framework ISO 31000:2009 Risk Management Principles and Guidelines begins with the provision of mandates and commitments. Giving mandates and commitments is very important because it determines the accountability, authority, and capability of risk management actors.

The risk management principle is the foundation of the risk management framework and process, while the risk management framework is the building structure for the risk management process. The risk management process is the core application of risk management. Hence it must be carried out comprehensively, consistently, and continuously improved as needed. Implementation of risk management based on ISO 31000: 2009 in detail and comprehensively on the three components is expected to increase the effectiveness of organizational risk management. Actions taken to reduce the risks that arise are called risk mitigation/handling. Actions that can be taken in dealing with risks according to Yasa et al. (2013) are: 1) Risk Retention, this action is taken because the impact of an adverse event is still

acceptable; 2) Risk Reduction, reducing risk is done by studying in depth the risk, and carrying out prevention efforts at the source of the risk or combining efforts so that the accepted risk does not occur simultaneously; 3) Transferring the risk (Risk Transfer), is carried out by insuring the risk either partially or completely to another party; and 4) Avoiding Risk (Risk Avoidance), is done by avoiding activities with a high level of loss. Proper risk management is risk management that applies future possibilities and is proactive rather than reactive. Thus, risk management does not only reduce the tendency for risk to occur but also the impacts that arise (Ningrum and Sari, 2020).

CV. XYZ is currently facing problems. The operational segment is the focus of the problem as the part most affected by the problems that occur. Therefore, it is necessary to analyse the causes of risk and strategies as actions to respond to these risks. Based on the background and problem formulation described, the objectives of this research are to identify operational risks faced by CV. XYZ, analyse the priority causes of CV. XYZ operational risk, determine strategic priorities as an effort to prevent operational risks faced by CV. XYZ.

METHODS

This research was conducted at CV. XYZ located in Cangkang Kulon, Dayeuhkolot, Bandung, West Java. Data collection is conducted in-depth interview with top management of the company in April - June 2021. This research uses a descriptive qualitative approach, which is taken by in-depth interviews. The data used in this study are primary data and secondary data. Primary data was obtained through structured interviews (in depth interviews) with employees in top and middle management positions. Interviews were conducted with the top management of the CEO and operational manager of CV. XYZ. Interviews were conducted in stages. The first stage is an interview with the CEO of the company. The purpose of this interview is to identify operational risks in the production process at CV. XYZ with an assessment based on risk impact. The second stage is interview with the company's operational manager to map the causes of operational risks that occur by providing an assessment of the probability value for each risk. The third stage is an interview with an accountant with the aim of mapping out relevant mitigations to the causes of emerging risks

and handling the risks. While secondary data obtained the company's annual report.

Data processing and analysis was carried out using quantitative methods. Quantitative methods are described in the House of Risk (HOR). Quantitative methods use data in the form of numbers as a tool to analyse information about what you want to know (Kasiram, 2008). Data collection is done through measurements using objective and standard tools. Risk identification is carried out using the Structured What-If Technique (SWIFT) by preparing guide words, explaining the goals to be achieved, explaining the criteria needed, and identifying risks using reference words in the process being carried out. Each participant is expected to provide opinion using the words "What if..." or "How could..." to identify potential risks associated with the reference word used (Card 2012). HOR is a renewable method of analysing risk. The application uses the FMEA (Failure Mode and Error Analysis) principle to measure risk. House Of Risk was developed by Pujawan and Geraldin (2009), which is divided into two stages, namely HOR 1 and HOR 2. HOR phase 1 is the initial stage in the house of risk method, HOR phase 1 is a risk identification stage where in this phase to determine the source of priority risk for preventive action. The steps that need to be taken in HOR phase 1 are to identify risks and carry out risk assessments such as assessing severity, assessing occurrence frequency, assessing correlation, and calculating aggregate risk potential (ARP) values as described above. seen in formula 1.

$$ARP = 0_j \sum_i S_i R_{ij}$$

HOR phase 2 is the stage to determine actions that can be taken against the source of risk, considering resources effectively. The industry can determine an action that is easy to implement but can effectively reduce the likelihood of a source of risk occurring. HOR Stage 1 identification of the company's business processes/supply chain, measuring the severity or impact of a risk event, identifying the causes of risk, developing a relationship matrix, calculating the aggregate risk potential of agents with a mathematical formula, and ranking the risk values from the largest to the smallest value. HOR stage 2 selects the cause of risk starting from the highest ARP to the lowest using Pareto analysis, identifies relevant mitigation actions (PAK) for the causes of emerging risks, measures the correlation value between risk causes and risk

management (E_{jk}), calculates total effectiveness (TE_j) using a mathematical formula, measuring the level of difficulty in implementing mitigation actions (D_k), calculating the total effectiveness of implementing mitigation actions effectiveness to difficulty of ratio (ETD_j) with a mathematical formula and determining a priority scale starting from the highest ETD to the lowest. The way to determine this can be seen in formula 2.

$$TE_k = \sum_j ARP_j E_j V_k$$

$$ETD_j = TE_k / D_k$$

CV. XYZ needs to carry out several activities to anticipate the risks that will occur with the current state of the resources. The focused risk is operational risk. The first step is to identify business processes, especially the operations of CV. XYZ through in-depth interviews with the Director, Operations Manager and Finance. The next step is to describe the operational risks of each business process using the SWIFT method. From there, the risk events and the risk-causing agents will be obtained. Furthermore, the priority of the risk-causing agent is determined with HOR1 and HOR2 and then the priority of the strategy to deal with the risk-causing agent is determined by calculating the ETD. The framework for this research is shown in Figure 1.

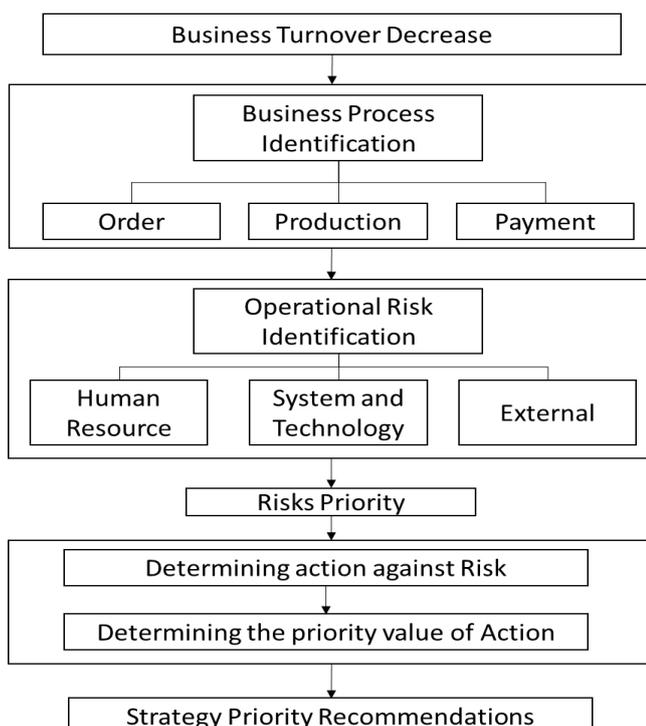


Figure 1. Research framework

RESULTS

Business Process

The business process on the CV. XYZ is divided into processes, namely the ordering process, the manufacturing process, and the payment process. These category was created to make it easier for authors to identify risks. Figure 2 shows the CV. XYZ business process.

The stages of the CV. XYZ shoe production process start from making product samples. This is shown to show examples of shoes produced by CV. XYZ to offer to clients. After that, if the sample is in accordance with the client's wishes, then a dealing order is carried out. The result of dealing is an agreement on production and payment timelines. The next step is to purchase raw materials according to requests from clients. Most raw materials from CV. XYZ are obtained in Garut because Garut is one of the best places to produce shoe raw materials. The next stage is the manufacturing process. The process begins with the preparation of the production timeline. This is done so that the production is completed following the terms of the time agreed with the client.

The next step is to make and cut the pattern, then sew the upper part of the shoe and make the base, then combine the shoe parts and the final stage in this part of the process is finishing and packing. In the manufacturing process, it is necessary to pay attention to the maintenance of property or production equipment as well as compliance with SOPs or company quality standards. The last stage is the payment process. In this process the client is required to pay the remaining balance before the ordered goods are shipped. After the payment is completed, the goods are sent to the client's location using a cargo expedition.

Risk Identification

Definition of operational risks refer to risks caused by non-financial factors, namely human, technology, and nature (Kountur, 2008). Based on this definition and identification through in-depth interviews, the operational risk of CV. XYZ is divided into three parts, namely: human resources risk, system and technology risk, and external risk. Of the three risk categories, there are 12 risk events, 5 of which are HR risks, 3 system and technology risks, and 4 external risks in CV. XYZ

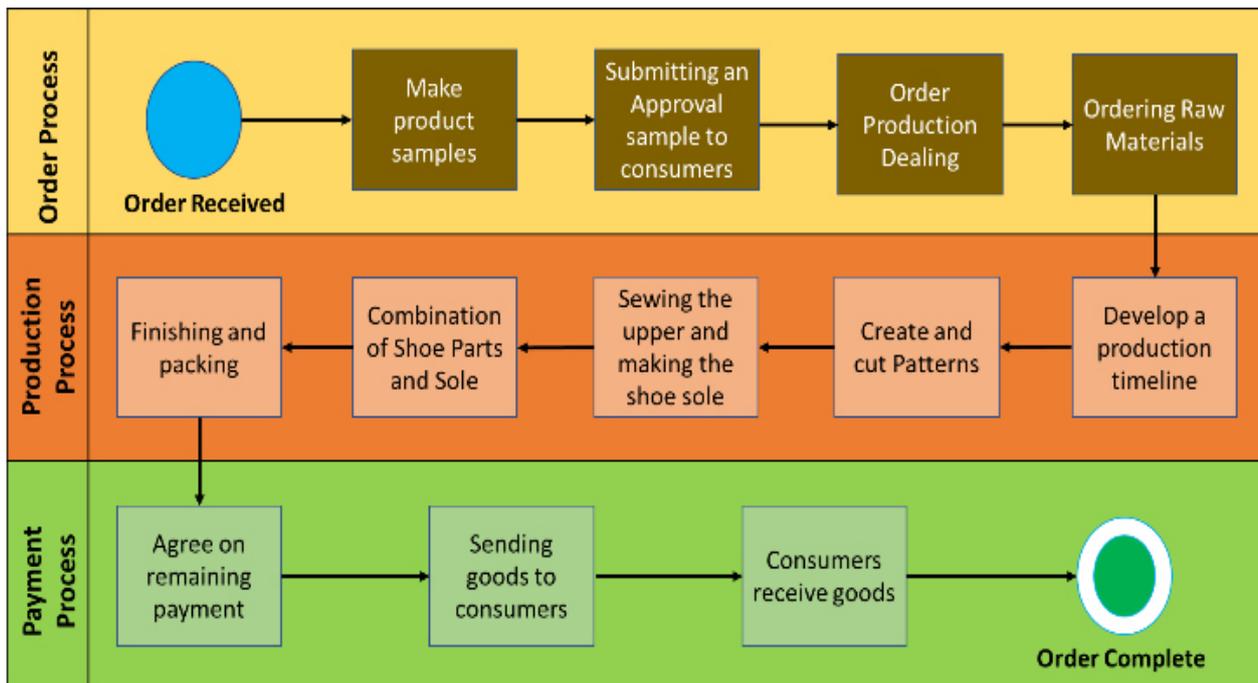


Figure 2. CV. XYZ business process

1. Human resource risk

The number of employees owned by the company is 40 people but currently 50% of them are laid off or dismissed to maintain the company's operations, so there are only 20 people left. Of the twenty people, 10 of them occupy executive or leadership positions in the company, while the other 10 become permanent workers. As a result of cutting employees, there are roles or positions that are held concurrently by one or two people. Based on the results of interviews, this activity is quite detrimental because there are workers who are completed overtime and not optimally. This dual position activity can directly reduce the effectiveness of employee performance. Yuanto (2017) stated that dual work activities can reduce employee morale and have an impact on targets that are not achieved and continuous punishment from the company.

This risk event is dominantly caused by miscommunication. Errors in information captured by employees from clients can lead to fatal production failures. Based on empirical data, it is possible for employees to carry out the production process not in accordance with the order criteria. Transaction errors are common errors in the operational process (Abadi 2020). Empirical data shows that currently CV. XYZ does not have a special Standard Operating Procedure

(SOP) to carry out the production process. The company's production process can produce without a written SOP, but this risk event has made a resume. XYZ suffered losses in production. This risk also resulted in incorrect product specifications, forcing the product to be remanufactured to compensate the customer.

The fraud is one of the big concerns for the company, because if it occurs then the capital turnover will be hampered, and production activities may be terminated. Sudarmanto (2020) states that the economic costs of fraudulent practices in financial statements continue to be a problem for organizations and the public. In this case, CV. XYZ is quite selective in selecting workers and the executive team to avoid irresponsible persons committing fraud or misuse of production capital

Production on CV. XYZ uses a low-volume system known as jobbing-shop production, which is the production of very diverse types of products in which only a small amount is produced of each type. Production orders are also completed based on predetermined deadlines. CV. XYZ has a problem with limited production equipment so that its production is relatively limited. Companies often face penalties due to delays in product delivery, the penalty is determined based on an agreement between the client and the company, whether it is a money return or other agreement.

CV. XYZ is one of the companies whose employee rotation frequency is quite low. The workers are dominated by old workers who have joined since the company's inception. There is rarely any training or renewal of facilities, even though the clients they have are quite 'big'. There are often problems with adjusting the model that the client wants with limited human resources and facilities.

2. System and Technology Risk

Number of machines and workers in CV. XYZ compared to 1:5 where there are only 4 special machines for sewing and tidying shoes. Currently, the production process is still dominated by manual or traditional workmanship without using machines, for example in the stages of making patterns, uniting shoe parts, and packing. Machines are one of the main risks in the company's operations (Dankis and Mulyono 2015). If the use of the machine is misused, it will certainly hamper the production process past the deadline so that the client's level of trust decreases and there is the possibility of losing a client.

Sirait and Susanti (2016) stated that the mismatch of raw materials provides a big loss for the company and is classified as a high-level risk. Incompatibility of raw materials can be caused by scarcity of raw materials or miscommunication between the company and the client. As a result, it can reduce the quality of the product and the results if it does not match expectations. Raw materials are an important factor for quality control in shoe products, especially for CV. XYZ which has a wide range of international brand clients.

3. External Risk

CV. XYZ due to property damage or the impact of natural and non-natural disasters can trigger the company to stop operating. West Java is one area that has a fairly high risk of natural disasters. The Centre for Volcanology and Geological Hazard Mitigation (PVBMG) of the Geological Agency noted that at least in 2019 there were 200 to 300 landslides (Andriyawan 2020). The non-natural disaster that is being experienced is the Covid 19 pandemic which causes a 50% decrease in turnover due to restrictions on physical activity resulting in a decrease in company activities.

The frequency of regulatory changes is rare both internally and externally. Based on the results of the interview, the impact if there is a change in regulation is the need for an adjustment process by conducting training to termination of employment. The large-scale social restriction policy or the imposition of restrictions on community activities in various regions in Indonesia set by the government had a major impact, resulting in 50% of workers being laid off.

Empirical data shows that there are two activities that often occur, namely the existence of arrears in payments from the client, and changes or cancellations unilaterally by the client. These two things have an impact in the form of delays in the provision of wages and the fulfilment of production raw materials. This is certainly something to worry about because it can cause big losses for the company.

Technological advances make it easier for new start-ups to enter the industry, including the shoe industry. As with the explanation of increasingly fierce competition, one of the main factors triggering technology also needs to be balanced with the capabilities of its employees, as for CV. XYZ needs to pay attention to this to increase the value of competitiveness.

Risk Analysis

Risk analysis through data processing using HOR aims to determine the level of severity or impact scale of the risk event and the occurrence or scale of occurrence of the cause of risk. There are 12 events coded E1 to E12 where E1-E5 is the HR risk category, E6 and E7 are system and technology risks, and E8-E12 is external risk. These twelve risks are assessed using a scale of 1 to 5 with an assessment that the larger the scale, the greater the impact caused by these risks. The risks that are categorized as catastrophic are those with a very high level of disruption and endangering business processes, employees, and clients, including fraud (E3), incompatibility of raw materials (E7), and property and building damage (E8). Meanwhile, the major categories are influencing the occurrence of product damage and client complaints, including changes in agreements with clients (E10). Moderate categories that cause product defects include transaction and procedure errors (E2), regulatory changes (E9), and technological advances (E12). Furthermore, minor categories with decreased business performance include failure to make model

variations (E5), use of technology by unauthorized persons (E6), and increasing number of competitors (E11). Insignificant category scale that only slightly affects business processes is duplicate work (E1) and late delivery (E4).

All identified risk events caused by 12 risk events occurring due to 15 risk-causing agents. This is because one risk event can be caused by more than one risk-causing agent, and one risk-causing agent can cause more than one risk event. The order of risk agent code does not affect the order of risk priority. The scale of the impact and occurrence of each risk and the causative agent has been known, so the next step is to use a Pareto diagram to map the causes of the risk. The Pareto chart shows the ARP value and the cumulative percentage of risk causes. The correlation value between risk events and the causative agent was used on a scale of 0.1, 3, and 9 (0: no correlation, 1: weak correlation, 3: moderate correlation and 9: strong correlation). The ARP value is used as a reference in determining which risk agent should be prioritized by the company. The greater the ARP value, the higher the priority level. The results of the ARP assessment of operational risk agents CV. XYZ. The analysis that has been carried out resulted in 8 causes of risk events that contributed 75% of the total ARP including A1 (limited number of HR), A2 (miscommunication with clients), A3 (lack of financial supervision), A6 (limited HR expertise), A9 (errors purchase of raw materials), A12 (arrears in payments by clients), A13 (cancellations of orders by clients), A14 (many new companies appear).

The purpose of determining risk priorities is to direct the focus of attention to risk-causing agents who have a high probability of affecting the operations of CV. XYZ. The results of the selected risk causes are used as input at the stage of drawing the Pareto diagram (Figure 3). The Pareto diagram as shown in Figure 3 above shows the correlation between risk causative agents and risk events measured using a scale between 0.1, 3, 9. Based on the calculation results, there are three causes of risk events that become the main priority, namely A2, A6, and A12. Miscommunication with clients (A2) with an ARP value of 216 has a strong correlation and moderate impact on transaction and procedure errors (E2). The correlation is strong because communication is considered as an important

basis in receiving information and planning, if there is an error it can be fatal to the form of a failed product. The causative agent of A2 risk is also considered to be strong and has a minor impact on the failure of model variation (E5). Making variations of the model is based on the ability of employees to receive order information from clients or study variations of models requested by clients so that communication is considered important. However, the impact is minor because it is only a complaint from a client which, if not handled, will result in a loss of client loyalty. In addition, A2 has a weak correlation and catastrophic impact, namely with E8, property and building damage, this is because raw materials are closely related to property but not based on communication relationships with clients.

The other highest ARP score is the risk agent A6 (limited HR expertise) of 300, limited HR expertise has a strong correlation with an insignificant impact on E1, multiple jobs, this is because the occurrence of multiple positions is closely related to HR capacity in terms of quantity not expertise, so it does not have an impact on the risk of double work. In addition, A6 is closely correlated with risk events E5 (failure to create a variation model) and E6 (use of technology by unauthorized persons) both of which have minor impact. Making a variety of models and using technology is closely related to HR expertise. If human resources with minimal expertise are possible, failure and property damage may occur. However, both are considered to have a minor impact because they only cause client complaints and the delay of the order processing deadline so that it can be limited by compensation according to the mutual agreement of both parties. In addition, A6 has a weak correlation with E2 and E9, both of which have a moderate impact. HR expertise is not closely related to the ability to transact and understand procedures, but the occurrence of errors is caused by carelessness or negligence (human error). In terms of regulatory changes, the most important thing is not expertise but the ability to adapt to changes that must be considered by the company. Both have a moderate impact, so it is quite important to pay attention to. A6 is also moderately correlated with E12 with a moderate impact, this is based on technological advances that need to be aligned with the development of the expertise of the company's human resources so as not to cause 'technology stuttering'.

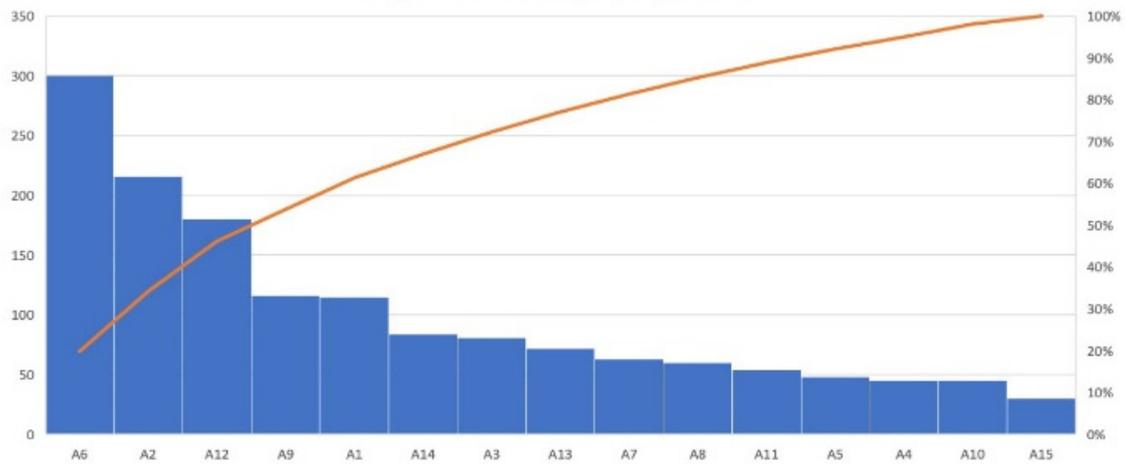


Figure 3. Pareto chart ARP risk causative agent

The highest ARP score is owned by A12 (delay in payments by clients) of 180. A12 has a strong correlation with E4 (insignificant impact) and E10 (major impact). The use of payments can have an impact on production activities that are hampered both in terms of planning and results. Procurement of raw materials, delivery, and payment of wages can be hampered. However, this is considered not too bad for the company's operational processes. Meanwhile, a change in the agreement with the client may be possible because the client does not have funds until the specified time limit resulting in losses for the company in the form of time, money circulation, and the order production operational schedule is disrupted. A12 (payment arrears by the client) has a moderate correlation with E3 (catastrophic impact), the reason is that it is feared that the use of payments occurs not because the client is late in payment, but because there are individuals who use company money for personal purposes.

There are five other risk-causing agents with the highest scores, including A1 (limited number of human resources), A3 (lack of financial supervision), A9 (error purchasing raw materials), A13 (cancellation of orders by clients), A14 (many new companies emerging). Risk causative agent A1 has a strong correlation with E1 and E4 with both insignificant impacts. A1 is also weakly correlated with E8 (catastrophic impact). Although the correlation is weak, the shortage of human resources may lead to a shortage of manpower to maintain property and buildings and can lead to misuse of property due to the remaining workforce being less skilled in using the production machinery or the property in question. A3 has a strong correlation with E2 (moderate impact). A9

has a strong correlation with E7 (catastrophic impact). Errors in purchasing raw materials can have a fatal impact on the suitability of the criteria for orders from clients so that it will cause losses for the company. In addition, A9 also has a moderate correlation with E4 (insignificant impact) and E5 (minor impact). A13 has a strong correlation with E10 (major impact). A14 has a strong correlation with E12 (minor impact) and a weak correlation with E9 (moderate impact).

Strategy Recommendation

This risk prevention action strategy has different levels of difficulty for its implementation according to company conditions. There are 17 efforts to prevent risk-causing agents (Table 1). Those who have a high level of difficulty include PA1, PA7, PA8, PA11, PA17. This level of difficulty is based on consideration of the company's current condition during the pandemic. Empowerment of outsourced or part-time workers can prevent duplication of work and speed up the production process but requires additional costs to provide wages while the company's condition is deteriorating and 50% of employees are laid off. Another solution is to hire outsourced on a three-month or part-time contract system that is paid by the hour to ease the company's expenses. Training and workshops also need to bring in experts and require time for learning, so it is difficult to implement considering that employees are dominated by old employees who are sometimes resistant to changes in the work system. Likewise, job rotation, on the other hand, can improve HR expertise in operations, but is difficult to implement due to employee resistance.

Table 4. Actions to prevent risk agents and their level of difficulty

Code	Actions to prevent risk-causing agents	level of difficulty
PA1	Empowering outsourced or part-time workforce	5
PA2	Doing double crosscheck order criteria	3
PA3	Learn to make variations of the latest models with training	4
PA4	Establish sanctions for employees who violate work SOPs	3
PA5	Provide special privileges for existing clients	4
PA6	Establish scheduling techniques through line balancing	3
PA7	Conduct training and workshops	5
PA8	Do a job rotation	5
PA9	Set a penalty if there is a delay in work	3
PA10	Establishing a financial and production supervisory division	4
PA11	Make an emergency fund	5
PA12	Choose cooperation with shipping vendors	3
PA13	Set rewards for the best performing workers	4
PA14	Provide alternative choices of raw materials for orders	3
PA15	Make a written order agreement with the client	3
PA16	Do benchmarking with similar companies	4
PA17	Updating production equipment technology	5

Another preventive action is to save an emergency fund. This is shown to save cash flow and minimize delays in paying employee wages. Another purpose is to cover the cost of purchasing raw materials for subsequent orders in case of arrears in payments by the client. The difficulty is with the current minimal cash flow conditions due to a decrease in the number of orders and turnover. Another risk-causing agent prevention action is being able to update production equipment technology, on the one hand it is beneficial in attracting new clients with new technology and supporting production activities, on the other hand it requires costs and training for workers to be able to use technology quickly.

Based on the 17 preventives actions of risk-causing agents, an effectiveness to difficulty (ETD) assessment was carried out to determine strategic priorities

(Table 1). There are five risk prevention actions that have the greatest ETD value. These five actions are recommended priorities to companies that have been based on company conditions and resources. This aims to streamline the application of risk prevention actions at CV. XYZ. Priority risk prevention actions include PA15 (performing a written order agreement with the client), PA2 (doing double cross check of order criteria), PA7 (conducting training and workshops) PA8 (performing job rotation), and PA9 (setting a penalty if it occurs late payment).

The previously obtained ETD value is then interpreted on a Pareto diagram which illustrates that the steeper the curve, the more effective risk prevention actions will be. In the Figure 4, PA15 became the first level of risk prevention action. In a study written by Nugraha (2018), a written contract or agreement is considered important to reach a valid agreement with other intended parties and as a priority strategy in handling operational risk in PTPN companies. PA15 (performing written agreement of client's order agreement) has a strong correlation with A2 (miscommunication with client), A12 (delay in payment by client), and A13 (cancellation of order by client). Miscommunication with clients, order cancellations and payment arrears can be anticipated by making a written agreement with the client regarding the order agreement. This is considered effective for recording all criteria or the contents of the agreement, starting from deadlines, prices, and special requests as well as penalty agreements in the event of an unexpected event. The second order risk prevention action is PA2 (doing double cross check of order criteria). Based on research conducted by Pujianingrum (2015), double cross check is important to carry out quality control as a form of company operational management strategy. PA2 (doing double cross check of order criteria) has a strong correlation with A2 (miscommunication with clients) and A9 (error purchasing raw materials). Miscommunication and errors in purchasing raw materials can be anticipated by double crosschecking orders. This is done by the company's operational management team so that orders can meet client expectations. In the third place, namely conducting training and workshops (PA7). To prevent product failure due to employee limitations or negligence, one of the efforts to handle it is to conduct training and workshops. As suggested in a study conducted by Rachmawati on a plastic processing company in 2013. This precaution has a strong correlation with A6 (limited HR expertise). Training and workshops can

improve HR skills. However, in this case it is necessary to pay attention to the company's ability to procure a budget to hold training or workshops.

In Figure 4, there is a moderate correlation with A7 (misuse of production machines), A11 (changes in regulation by the local government, and A14 (many new companies emerge). The fourth and fifth sequences with the same ETD value are PA8 (doing job rotations) and PA9 (setting penalties if there are late payments). PA8 (doing job rotation) has a strong correlation with A6 (limited human resources expertise). Job rotation is another preventive measure in dealing with limited HR expertise. In addition to holding training or workshops, job rotation is considered capable of being a solution. It is intended that each worker has expertise in all fields so that each worker is expected to be able to back up each other if one of them is unable to do his job. The implementation is by arranging job rotation scheduling every 3 or 6 months. PA9 (setting a penalty if there is a delay in work) has a strong correlation with A12 (delay in payment by the client). Penalties need to be determined to prevent company losses due to arrears in payments by clients. This penalty can be determined by agreement between the two parties.

Managerial Implication

The COVID-19 pandemic has disrupted operational activities, even causing production activities to stop. It is very important to carry out risk mitigation strategies in operations during the pandemic because it limits the

space for workers in the production department and employees in other units. Changes in business processes to limit workers during the pandemic must be adapted. Therefore, it is necessary to have clear stages as part of this adaptation process. Strengthening to balance between increasingly sophisticated technological developments and the development of human resource expertise. Not only that, considering the availability of human resources, but the ability of employees must also be improved so that the use of each production tool in business processes can be effective to reduce the level of risk faced by the company which results in financial losses in the future.

CONCLUSIONS AND RECOMMENDATIONS

Conclusions

Based on the research the following conclusions are obtained CV. XYZ operational risk events are categorized into three risk event categories with a total of 8 risk events, including: a) HR risk: duplicate work (E1), transaction and procedure errors (E2), fraud (E3), delivery delays (E4), and failure to make variations of the order model (E5); b) Technology system risk: damage to production machines (E6) and mismatch of raw materials (E7); c) External risks: damage to property and buildings (E8), changes in regulations (E9), changes in agreements with clients (E10), increasing competition (E11), as well as advances in production equipment technology (E12).

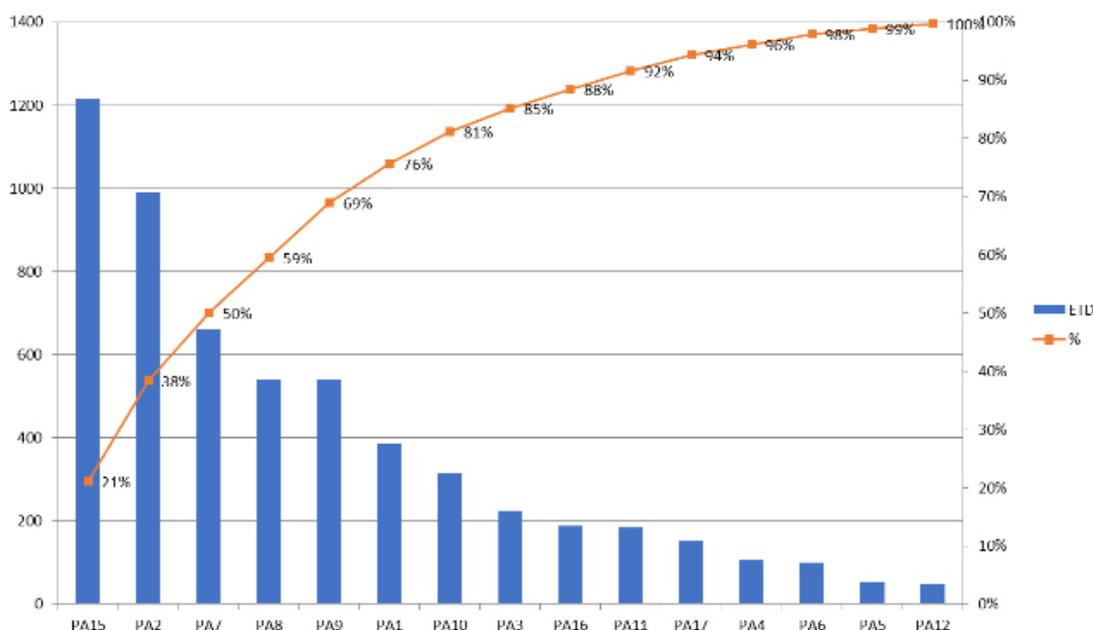


Figure 4. Risk prevention action ETD value

There are 15 agents causing the operational risk, and 8 risk agents that contribute 75% to the total ARP, including: limited number of human resources (A1), miscommunication with clients (A2), lack of financial supervisors (A3), limited HR skills (A6). Errors in purchasing raw materials (A9), arrears in payments by clients (A12), cancellation of orders by clients (A13) and many new companies appearing (A14).

There are 5 priority strategies, namely the main action of 17 risk prevention actions determined by the company. The risk prevention actions determined by the company are determined based on the highest ETD value, namely: double cross-checking the order criteria (PA2), conducting training and workshops (PA7), doing job rotation (PA8), setting a penalty in case of late payment (PA9), and make a written order agreement with the client (PA15).

Recommendations

CV. XYZ is expected to implement the company's strategic priority recommendations such as double crosschecking the order criteria, conducting training and workshops, and doing job rotations. In addition, there is a need for periodic risk management analysis to maintain the company's position in line with changes that occur both externally and internally. the scope of this research does not cover the issue of financial risk, further research is expected to be able to analyse the financial risks that need to be considered by CV. XYZ to develop a company's financial strategy amid the current pandemic conditions.

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