

Risk Analysis on the Management Practices of an Electronics and Automation Company

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Abstract

The study focused on different risks encountered within an automation company such as business, reputational, and market risks. The study also included mitigation strategies applied by the organization to counter these identified risks. The risks encountered by the company were assessed by the researchers using in-depth interviews, and documented observations to get an overview of the overall risk management practices of the company. To collate the data needed in conducting the study, the researchers performed qualitative research methods, particularly in-depth interviews to three employees coming from different departments. Documented observations within the company premises were also included. The data were analyzed through thematic analysis. Literature suggests that this technique is the most appropriate method for identifying patterns and themes. Through thematic analysis, the data collected was sorted out into different themes to identify the type of risks that belongs to the same cluster. Similar approach was used to identify the risk mitigation techniques applied by the company. Results suggest that in business risks, employee retention, internal relationship within the organization, the pandemic, and numerous rivals in the industry were the most prevailing risk. Among the identified reputational risks were: bad feedback from exiting employees; fake resume skills; and not meeting the project deadlines. Further, the identified competition or market risks were: employee pirating; having a too common business model; and the high capability of the competitors.

Keywords

Business Risk, Competitive Risk, Reputational Risk, Risk Management, Qualitative Analysis

1. Introduction

According to Sraders (2019), risk in general is the possibility that a desired outcome may occur or an undesirable outcome may occur instead. Moreover, in a business setting, risk is defined to be a scenario where the expected outcome is lesser (Chen 2023). To lessen the likelihood of a risk occurring, risk management must be implemented. According to Culp (2020) that the business world is increasingly becoming more volatile in changes and this presents a lot of risks and complexity in the business setting. The said event needs to be addressed and risk leaders and managers must act proactively to be able to act properly when a problem arises. Kenton (2022) mentioned that a business risk is an event that prevents a company from realizing the desired financial outcome. The occurrence of the said type of risk can lead to lower profits for an organization. On the other hand, Kenton (2022) said that reputational risk is a type of risk that can damage the good name of an entity. One of the greatest concerns with reputational risk is that it can happen at any time and can be costly. Conversely, Udealor (2019) said that competitive risk is any actions that a competitor can perform to hinder the growth of another entity. The aim of this study is to identify business risks, reputational risks, and competitive risks. The study also aims to identify tools used by the organization to give meaning to the effects of these risks. Similarly, the study focused on the effect of International Organization for Standardization (ISO) certification to business outcomes. The researchers utilized qualitative research, particularly in-depth interview. Thematic analysis was performed to identify the common themes.

2. Literature Review

Aven (2016) defined risk management as the process to which one person will consider a set of alternatives and will evaluate the effects of each alternative, and then will decide the best course of action. Some of examples of risks are business risks, reputational risks, and competition risks. According to Segal (2023), reputational risk arises from the damage to a business from negative perception or failure to meet the expectations of its customers, stakeholders, and other relative parties. Moreover, business risk is anything that jeopardizes the ability of a firm to meet its financial objectives (Kenton 2022). Lastly, competitive risk is the possibility that a competitor's actions will have a detrimental effect on your business (Udealor 2019). To be able to identify and categorize each risk properly, a risk registry is company utilizes. According to Everitt (2022), a risk registry is an instrument in risk management and project management. It is used to identify possible risks in a project or organization, occasionally to comply with regulatory requirements, but primarily to keep track of potential problems that might thwart planned goals.

According to Kenton (2019), the ISO is an international nongovernmental organization (NGO) comprising national standards bodies. The ISO developed many standards for different fields and one notable standard that created ISO 9001. The criteria provide quality management system (QMS) framework, and promotes risk-based thinking. In consonance with Avital (2019), ISO-certified businesses acknowledge global norms as evidence of dedication to offering high-quality, dependable, and secure goods and services. If a company has an ISO certification, it means that it underwent stringent audits.

3. Methods

A qualitative research technique was used in the study. According to Crossman (2020) that qualitative research is focused on micro-level studies which help researchers understand the social life of a specific targeted population. The researchers conducted in-depth interviews. Principe (2020) argued that in-depth interviews help shed light to important information from a specific population. Moreover, researchers are given a chance to investigate and comprehend the beliefs, actions, events, and phenomena of a study topic. The narratives were transcribed, and thematic analysis was used to identify the common themes. Thematic analysis is considered to be the most appropriate method to use to identify patterns and themes (Kiger and Varpio 2020). This technique was used to interpret the research data. The technique provided the methodical component for data analysis. In addition, it enables the researcher to link an examination of the frequency of a theme that permeates the entire content. This added precision, and complexity, and improve the overall quality of the research analysis. A study performed by Perry and Roberson (2021), whose study focused on inclusive leadership, used thematic analysis from twenty-seven leaders which highlighted: handling diversity, how to respond to different needs and style of working, and how to actively listen properly on the needs of members. The participants in the study involved three representatives from various departments of the automation and electronics company. The participants were interviewed about the risks identified by the researchers inside the company. The participants are all male, ages 25 to 27 years old, and have been with the organization for more than a year.

3.1 Data Analysis

The researchers systematically organize and analyze large, complex data sets using thematic analysis (Dawadi 2020). It involved looking for themes that can encompass the narratives present in the datasets. It entailed carefully reviewing and rereading the transcripts of the data to find the themes. Thematic analysis was used because it is an appropriate and powerful method to comprehend a collection of experiences, events, thoughts, or behavior. Thematic analysis was useful because its goal is to recognize themes, patterned responses, or meanings that were formed from the data and supported the research questions.



Figure 1. The Organizational Diagram

Figure 1 shows the main themes of the thematic analysis. Based on the results, among the risks identified were: business; reputational; and competitive risks. The company implemented two types of mitigations to lessen the impact of the risk. These are internal mitigation and external mitigation. Lastly, the effect of ISO on business results was also established by the results of the thematic analyses.

The company mainly uses two tools in identifying risks. The first identified tool is a risk registry as cited by (P. Rimbao, Personal Communication, February 28, 2023) who mentioned *we use a risk register there (when identifying risks)*, and according to Uzulans (2019) that risk register is used in risk management by companies and it is the repository of all risk identified in all levels. Moreover, another tool used by the organization to identify risks is feedback as cited by (R. Barrera, Personal Communication, February 28, 2023) who mentioned *we are more open to the client in telling us what has been the problem since the feedback is our perspective for observation and also the management of the project*. Lim and Wen (2022) stated customer focus is the first principle of quality management of a company and to improve customer satisfaction, monitoring and analyzing customer feedback must be utilized by companies.

For the business risks, four sub-themes were identified from the interviews. The first sub-theme is employee retention which is caused by higher offers from other companies, low salary, or repetitive work as cited by (J. Disenia, Personal Communication, February 28, 2023) and this was supported by Herryty (2023) stating that employee retention is caused by things such as low morale, boredom, and more. Further, the interviewee also mentioned that *Employees do not last long, why? The probable cause is that there is a higher job offer or it can be a low salary or the process of their work is repetitive actions*. In these words, it can be identified that the problem of employee retention is present within the organization. The second identified sub-theme is internal relationships inside the corporation as cited by (P. Rimbao, Personal Communication, February 28, 2023) where the interviewee cited *Even if you don't interact with the client it doesn't mean that you don't have a customer, actually, there is what you called an internal customer which that is the pointed end of all process* Moreover this is supported by Sinclair (2020) and said that in some companies, internal communication is successful but sometimes not and this can be very costly and affect morale negatively. Another sub-theme identified (R. Barrera, Personal Communication, February 28, 2023) was the pandemic which affected the sales of the organization. Further, the interviewee mentioned that *Based on recent years' statistics, the pandemic affects the sales of the company*. Additionally, according to Mensah (2020) that the pandemic negatively affected the production and business flow of companies. Moreover, Greenfield (2020) cited that Wind River conducted a survey about how the pandemic negatively affected the enterprises of China and the USA. In their results, 98% in China and 90% in the USA said that their capability to meet demands was affected. The last business risk identified by (R. Barrera, Personal Communication, February 28, 2023) was numerous rivals in the industry and mentioned, *There are many competitors of our company that manufacture electronic devices and services that also affect our sales*. Also, according to Havard (2018) that rivalries between businesses are prevalent and a good example of it is Samsung and Apple.

The researchers identified three sub-themes under reputational risk with the first one being comments from departing workers as cited by (J. Disenia, Personal Communication, February 28, 2023) mentioning *the reputational risk that we think damages our reputation are the employees who exit because of their negative feedback*. Furthermore, according to Fitzgerald (2021) that this type of reputational risk occurs in other companies as well and can be frustrating for the business owner since it damages the reputation of the company. The next reputational risk mentioned by (R. Barrera, Personal Communication, February 28, 2023) is failure to fulfill project deadlines, in which it was mentioned that *sometimes we do not reach the proper deadline because there are unexpected problems or the device do not work* and Roberts (2021) emphasized that meeting deadlines is the cornerstone of the reputation of a business and that failing to meet deadlines can put your company in a bad image. Lastly is falsifying resume skills which is cited by (J. Disenia, Personal Communication, February 28, 2023) and mentioned that *the people you hire, even if it is in their resume that doesn't mean they are good. You have no sufficient evidence that those are their skills* and according to Abbas (2020) that this type of reputational risk happens often, in fact, according to Fowler (2022) that in 2020, Checkster, a reference-checking firm surveyed 400 hiring managers and 400 applicants were surveyed and the results stated that 78% of applicants lies in their resume.

Competitive risk has three identified sub-themes. The first sub-theme was identified by (J. Disenia, Personal Communication, February 28, 2023) which is employee pirating where another business attracts employees to leave the current company by offering higher job compensation. The interviewee mentioned that *the higher the job or I mean the better the offer, for example here in our company let's assume you have ₱20,000 in another company they*

offered ₱25,000 of course they would prefer that. Moreover, Aquino et al. (2019) mentioned that employee piracy occurs in the business when employees who feel like they are not adequately compensated at work tend to leave the company for better offers offered by rival companies. The second sub-theme that was identified in the interview is that the type of business is not unique as cited by (P. Rimbao, *Personal Communication, February 28, 2023*). In the interview, the participant mentioned that *“to us, there are many automation companies”* and Garcia et.al. (2017) said that being a common or typical sort of business where innovations are always emerging in the present business environment, altering customer wants and expectations, results in more competition disadvantage and competitive risk. The last sub-theme identified in the interview under competitive risk is the rival capability cited by (R. Barrera, *Personal Communication, February 28, 2023*) who mentioned that there are factors or sectors in the competitor's business that allows them to have more competitive advantage compared to them. The interviewee also added *it's not just the price that we battle against other competitors, the battle is also the lead time.* Acheng (2021) said that this happens to businesses in the market; over time rival companies would use their own unique resources, and capabilities, and develop new strategies that would help the company gain competitive advantage.

Internal mitigation was divided into two sub-themes: process smoothing and promotion and salary raise. Promotion and salary raise was found to be the first internal mitigation as cited by (J. Disenia, *Personal Communication, February 28, 2023*) who mentioned that *increase the salary, now check if it's possible to increase the salary based on what they are asking to make them stay.* Ldama and Nasiru (2020) stated that salary increase has substantial effects on employee efficiency, employee collaborative behavior, and employee creativity at Adamawa State University, Mubi; employees are quite capable of coming up with creative concepts if given a high income. Performance appraisals can, in general, be a crucial tool for motivating staff, enhancing their job performance, and giving them an advantage over competitors as stated by Al-Jedaia and Mehrez (2020). The second internal mitigation was cited by (P. Rimbao, *Personal Communication, February 28, 2023*) which is making the process smooth. The interviewee said that *“Our identified risk is per process; The process depends on the asset. The process is how you will make the process smooth and standard.* Indeed (2022) mentioned that the internal process is the steps inside an organization that is used to reach goals and identify areas that can be improved. Processes may be improved by conducting an audit which may include analyzing current processes and internal relationships within the company.

For external mitigations, three sub-themes were identified, the first one being proper quotation as cited by (P. Rimbao, *Personal Communication, February 28, 2023*) who mentioned *every quotation we give, we make sure that it will be executed well and minimize the problem.* Brown (2021) stated that proper quotations can give a competitive edge as one may be able to utilize the resources efficiently and can understand better the project timeline. The next external mitigation identified is mentioned by (P. Rimbao, *Personal Communication, February 28, 2023*) which was proving to the client that the system presented is efficient and cost-effective. The interviewee mentioned *we are proving that the system that we are providing to our clients is working and at the same time it uses minimal cost.* Caramela (2023) mentioned that product quality can give a significant competitive advantage. Products that are of quality can help build relationships with your customers, fuel recommendations, and have more income. The last external mitigation identified is ongoing client search as cited by (R. Barrera, *Personal Communication, February 28, 2023*) who mentioned *well, we are continuing to find clients that need to have a project done despite the pandemic.”* and according to Dore et.al (2020) companies adjusted their strategies during the pandemic to find new customers and provide new customer experience that is suitable during the pandemic.

ISO accreditation influences a company's performance. The first is the established business framework, which is highlighted by (P. Rimbao, *Personal Communication, February 28, 2023*) who mentioned *if you have an ISO, you have an established process, you have a basis for conducting business.* Llewellyn (2023) emphasized business frameworks as vital because they give an organized approach to problem-solving and decision-making. They assist firms in analyzing complicated circumstances, identifying essential challenges, and developing strategies for dealing with them. Second, a thorough employee background check cited by (J. Disenia, *Personal Communication, February 28, 2023*) *in HR, ISO requires validation of resumes or background checking.* Millow (2022) stated that if a potential employee, or applicant for the position, lacks such capabilities, the business may be held accountable for difficulties or events. Due to ISO certification, the organization will be able to keep and hire excellent staff. Finally, the credible source of quality work stated by (R. Barrera, *Personal Communication, February 28, 2023*) who mentioned *it is an advantage of having (ISO) in a company since we have proven that based on the previous projects, we have proof that we'll reach the standard.* Quain (2019) mentioned that if you fail to match your client's expectations, they will swiftly hunt for alternatives. Quality is essential for delighting your clients and preserving their loyalty so that they will

continue to purchase from you in the future. Excellent products make a significant contribution to long-term revenue and profitability.

5. Results and Discussion

Based on the results of the thematic analysis, the company experiences risks such as business risk, reputational risk, and competitive risks. Business risks in the organization that was identified are employee retention, internal relationship within the organization, the pandemic, and numerous rivals. These risks experienced by the organization are the problems that can damage the ability of the company to function properly or to generate income. Moreover, there were also identified reputational risks in the organization which are feedback from exiting employees, gaps in resume skills, and not meeting project deadlines. These risks identified in the company are the risks that can damage the reputation of the company. Reputation is important because it is the one that can give a company credibility even if an entity is not familiar with the company. The last type of risk identified is competitive risks which are employee pirating, the type of business that is not the unique, capability of competitors.

For the risks to be identified, tools are necessary to search the company effectively and efficiently for risks. The tools used by the organization are risk registry and feedback. Both are effective tools when it comes to identifying risks and has been proven to be useful throughout the years according to Uzulans (2019) and, Lim and Wen (2022). Risks are the problem that may be encountered by the organization in the future. To prevent the risks from happening or having a huge impact, countermeasures or mitigations are applied. Based on the thematic analysis, the organization has two types of interventions which are internal and external mitigations. Internal mitigations is comprised of promotion and salary increase, and making the processes smooth. On the other hand, the external mitigations that the company implements are proper quotation, proving that the system is efficient and cost-effective, and continual search of customers.

The ISO 9001 is an international standard that is being followed by many companies. The said standard promotes a quality management system and risk-based thinking. Based on the thematic analysis, the effects of ISO 9001 on the organization is positive to the basic framework of doing business, rigorous employee background check, and credible source of quality work. The ISO certification gives a competitive advantage to companies. These advantages can include many things such as companies does not need any more to create new systems within the organization since ISO standards have already an established system that the company can improve and follow.

5.1 Business Risks

Based on the thematic analysis, the business risks identified were: employee retention; internal relationships within the organization; the pandemic; and a high number of competitions. Employee retention is a situation wherein employees are leaving an organization because they do not feel they are growing. The study suggests that low salaries and repetitive work were some of the reasons that caused employee resignation. Upon checking the risk registry of the company, these reasons were present as well. Moreover, internal relationships within the organization can be problematic sometimes. Based on the study conducted by Morrison and Nolan (2007) where an online survey questionnaire was distributed to 412 people, results show that negative internal relationships are problematic in many organizations from different countries and industries. Also, one of the main problems faced by the organization is the pandemic, and according to the results from the study of Greenfield (2020), this is not just happening in the Philippines but rather worldwide. Further, the study suggests that about 98% of the organization in China, and 90% in the USA were affected in terms of the ability to comply with the demand due to the COVID-19 pandemic. Additionally, it is stated in the company's risk registry that the occurrence of a global recession is one of the risks identified by the organization. Moreover, the pandemic, according to Cirillo (2020) caused a recession much deeper than the economic recession after World War II. The last business risk identified is numerous rivals which refers to the abundant number of businesses in the same industry. According to Havard (2018), the problem of numerous rivals is common and can be seen explicitly in the example provided which is the rivalry between smartphone giants Samsung and Apple.

Table 1. Business Risks

	Not at all a problem	Minor Problem	Moderate Problem	Serious Problem
Employee Retention				
Numerous Rivals				

Internal Relationship	[Shaded]														
Pandemic	[Shaded]														
Wrong decision-making	[Shaded]														
Client Pirating	[Shaded]														
Theft inside the company	[Shaded]														

Table 1 shows the intensity of each risk identified under business risk. The category of intensity was taken from the Likert scale setting of Vagias (2006) level of problem. Employee retention was deemed to be a moderate problem in the company. Numerous rivals on the other hand were deemed to be an average serious problem. On the other hand, the internal relationship is deemed to be an average moderate problem. The pandemic was deemed to be a slightly serious problem due to the short financial loss that occurred during the event. Due to the impacts of ISO, wrong decision-making is an average minor problem. Lastly, client pirating and theft inside the company were deemed to be a slightly minor problem.

5.2 Reputational risks

The thematic analysis showed that there are three reputational risks in the organization. The first one is the feedback from existing employees. Based on the interviews, feedback from employees can be detrimental to the reputation of the company as it gives ideas to future applicants on what to expect in the organization. Moreover, based on the answer of the participants, sometimes negative feedback from exiting employees can happen even though there is no such thing, and situations like this can negatively impact an organization. Conversely, the next risk identified is gaps in resume skills in which applicants lie on their resume to obtain a competitive advantage. This method can damage the reputation of a company especially when external entities identified that an employee with a gap in resume skills was hired. Results of the study by Fowler (2022) found that lying in a resume is common in America and not just found in the Philippines, in fact, the study stated that 78% of applicants lie in their resumes. Additionally, it can also be found in the risk register of the company, underperforming teams was one of the risks identified and one of the probable causes of it is poorly qualified candidate hired for the job. The last reputation risk identified is not meeting project deadlines. Based on the interviews, sometimes there will be scenarios wherein deliverables were not accomplished on time due to the failure of the device. According to Payapps (2022) that the problem does not only occur in automation companies. The problem also occurs in construction companies as well. The main problem that was identified is that some work is too complex that they cause delays. Moreover, it was stated in the risk registry that one of the risks identified by the organization is a plan not done at all, and this may be caused by a lack of awareness and feedback.

Table 2. Reputational Risks

	Not at all a problem	Minor Problem	Moderate Problem	Serious Problem						
Feedback of exiting employees	[Shaded]									
Gaps in resume skills	[Shaded]									
Not meeting deadlines	[Shaded]									
Feedback from other clients	[Shaded]									
Poor quality of products	[Shaded]									

Table 2 shows the intensity of each reputational risk identified. Feedback from exiting employees is deemed to be very damaging to the reputation of the company. On the other hand, gaps in resume skills and not meeting deadlines is an average moderate problem of the company. Negative feedback from other clients is categorized as a minor problem. Lastly, poor quality of deliverables is a slight minor problem that occurs only sometimes.

5.3 Competitive risks

It was identified in the thematic analysis that some of the market or competitive risks experienced by the organization were: employee piracy; the type of business that is not unique; and the capability of competitors. Employee pirating pertains to existing employees being attracted by other companies by offering them better salaries and benefits. Aquino et.al (2019) stated that this happens to other organizations as well and this is caused by higher paying salaries, benefits, or sometimes better growth. In the risk registry of the company, it was stated that one of the identified risks is the resignation of key personnel, which is caused by: uncompetitive salary; employee burnout; and lack of career growth. Moreover, the organization’s type of business is not unique, meaning that there are also other automation companies. Garcia and Llovaes (2017) stated that due to a business not having a competitive advantage, competition is much more likely to be extreme compared to monopolistic competition wherein the type of business is unique since only a few companies compete against each other. Lastly is the capability of competitors which pertains to the ability of the competitors to have an advantage against the organization’s performance. According to Acheng (2021), competitors will use unique resources and utilize the strengths of their organization to dominate the market.

Table 3. Competitive Risks

	Not at all a problem	Minor Problem	Moderate Problem	Serious Problem
Employee Pirating				
Type of business is not unique				
Capability of competitors				

Table 3 shows the competitive risks that were identified and the intensity of each risk. Employee pirating and the capability of competitors were moderate problems of the company. On the other hand, type of business is not unique is deemed to be an average moderate problem.

5.4 Tools Used for identifying risks and Effects of ISO

The thematic analysis showed the tools used by the organization to identify the present risks. Mainly, there were: risk registry; and feedback. A risk register pertains to a document where risk and mitigation are listed. It is used by an organization to tabulate the risk present for easier treatment and measurement (Uzulans, 2019). On the other hand, feedback is also effective when identifying risks as cited by the participants. Through feedback, employees can know what they lack during a project and then can be improved later. Lim and Wen (2022) stated that to give a better-quality experience, feedback is necessary.

Table 4. Tools Identified

	Never use	Almost never	Sometimes	Almost every time	Frequently use
Risk Registry					
Feedback					

Table 4 shows the identified tools and the amount of use in identifying risks. Risk registry is used almost every time by employees who is concerned in using the tool. Other employees do not know of risk registry but are aware of using feedback as a tool in identifying potential risks.

5.5 Effects of ISO on business results

Based on the results of the thematic analysis, the first effect is that there is an established basic framework for doing business. According to Llewellyn (2023), it is important that an organization to have a basic framework because it allows an organized method of decision-making and problem-solving. Moreover, in the business environment, frameworks are established to assist businesses in structuring, organizing, and approaching complicated business issues. The second effect is a rigorous employee background check is being done by human resources to ensure that the applicant is capable and that the said skills are true. According to Millow (2022) that if an organization hires an applicant that lacks capabilities, the cost of damage can be high, so companies are encouraged to have rigorous

employee background checks. The last effect is a credible source of quality work wherein because of the certification, the perception of customers towards the organization is good. According to Quain (2019), organizations should put a premium on quality since it is the determining factor of whether a customer will come back to purchase services from the organization.

5.6 Internal Structure Mitigations

The thematic analysis presented the internal structure mitigations that are being implemented to counter the risks experienced by the organization. Promotion and salary increase refers to the process in which the salary is increased or promotion is implemented to motivate and boost the morale of employees. Moreover, a study conducted by Rathore (2020) supported the idea by stating that both mitigations are effective performance boosters. Based on the results of the study of Rathore (2020), private teachers in Udaipur India were motivated when salaries were increased. Making the process smooth refers to making the internal processes of a company efficient to reduce delays and layovers. Moreover, according to Dumas et al. (2018) that managing the process effectively can lead to better operational improvement practices, advanced manufacturing techniques, human resource practices, supplier activity, supplier integration, customer integration, product process technology integration, marketing, and manufacturing consolidation in which the said improvement can add value to the organization and positively affect it. According to Georgiev (2020), to achieve an efficient business system, the company needs to routinely complete certain and defined activities which are doable with business processes.

Table 5. Internal Structure Mitigations

	Never use	Almost never	Sometimes	Almost every time	Frequently use
Salary increase					
Making the process smooth					
Improving the standards					

Table 5 shows the internal structure mitigations used by the company. The salary increase is usually implemented when personnel feel they are inadequately compensated. Also, smoothing out the processes and improving internal relations is performed almost every time to make the operations efficient and effective. On the other hand, improving of current standards is performed sometimes only when needed.

5.7 External Structure Mitigations

The results of the thematic analysis showed the external structure mitigations that were being implemented to effectively counter the risks faced by the organization. The said external structure mitigations were: Proper quotation; proving that system is effective and cost-efficient; continuous search of clients; and relationship building with clients. Proper quotation and execution refer to the process of properly identifying the prices of materials and expenses that are needed for a project. Moreover, this also includes proper realization wherein the organization must be able to deliver what is intended based on the agreed-upon terms. Brown (2021) stated that a proper quotation can help a company in managing its resources effectively. Proper quotations can help the management foresee the cost of goods, labor, and services. Moreover, proper execution of jobs should accompany proper quotations. The second external mitigation is proving that the system is efficient and cost-effective. The mitigation mentioned beforehand refers to the process of demonstrating that the agreed-upon specification of machines from the organization is efficient and cost-effective. According to Georgiev (2020) that to achieve an efficient business system, an organization needs to routinely complete certain and defined activities which are doable with business processes. The final external mitigation from the thematic analysis is the ongoing client search which pertains to the continual search for customers even in critical situations like the pandemic. Moreover, according to Dore (2021) that it is important for organizations to be creative to find more customers during the pandemic and there are many ways to do it. Some examples of it would be bringing joy to customers trapped at home and shifting customers to online channels.

Table 6. External Structure Mitigations

	Never use	Almost never	Sometimes	Almost every time	Frequently use
Proper quotation and execution					
Proving that system is effective and cost-efficient					
Continuous search of clients					
Relationship building with clients					

Table 6 shows the frequency of use of each external mitigation. Proper quotation and execution are used almost every time and not used only when projects are delayed due to unforeseeable events. Proving that system is effective and cost-efficient is observed frequently to showcase the degree of performance of the company. The continuous search for clients was mostly observed during the pandemic when almost all industries halted operations. Lastly, relationship building with clients is observed almost every time but was only mentioned once by one of the interviewees.

The researchers had five objectives, the first of which was to identify whether the organization has business risks, how these risks are assessed, and what remedies are in place. According to Kenton (2022), the organization's vulnerability to factors that will reduce profitability or cause it to collapse is referred to as business risk. A business risk is anything that jeopardizes a company's capacity to meet its financial objectives. Second, is the organization experiencing reputational risks? What are these reputational hazards, and how can businesses prevent them? Kenton (2022) also mentioned that any time a company's reputation is ruined, either by an event that was the result of a previous business risk or by a different occurrence, it runs the risk of losing customers and its brand loyalty suffering. The third goal is to identify whether the firm has any competitive risks. What are the specific competitive threats, and what actions are in place? The fourth goal is to understand the instruments used to assess commercial, reputational, and competitive threats. How the company employs employees. The final goal is to understand the influence of ISO certification and risk management techniques on the organization's business outcomes.

6. Conclusion

In conclusion, the evaluation provided an outline of the importance of having a risk registry within an organization when it comes to creating a sustainable business. Thematic analysis was used to describe six primary components of business risk, reputational risk, competitive risk, instruments used, and the significance of ISO certification and risk policies impacting business results inside an organization. There are risks in any business, but the key to any firm is recognizing the necessity of preventing, limiting, or eliminating risks wherever feasible to avoid losses. A risk registry is an essential component of any good risk management plan and assists in the prevention of project delays. It keeps track of potential dangers inside a project. It also provides information on the risk's significance and likelihood of occurrence. Obtaining ISO quality management accreditation provides significant benefits in terms of increased efficiency, productivity, and customer satisfaction in the firm. Establishing detailed business procedures and outlining duties for quality control are essential components of ISO 9001 certification, as is transmitting those criteria to personnel. Also, risk analysis must be performed by the business to assess how any possible hazards will influence the firm. By assigning a monetary value to prospective hazards, businesses may assess the impact on costs, output, and other factors that may be influenced by risks.

7. Directions for Future Research

The research study focused on the risk management of the company, how the organization identify risk through different tools and ISO certification as well as providing mitigation measures on both internal and external processes within the organization. In addition, the study utilizes qualitative research methods only specifically by doing in-depth interviews with the participants and observation within the organization's premises. For further research, future researchers may use other qualitative research methods as well as add a quantitative method to gather more precise

data and provide validation and credibility to the study. A recommended qualitative method that can be used is the nominal group technique discussion. The nominal group technique (NGT) is an organized methodology for collaborative discussion that promotes contributions from all participants and organizes immediate consensus on the relative importance of topics, problems, or solutions (American Society for Quality, n. d.). The nominal group technique is good for a more collaborative discussion in tracking down a problem that needs an efficient solution in a specific group. The researchers recommend utilizing the nominal group technique since some of the identified risks are subject to a specific department that needs to have a group discussion to assess those risks. It is stated by Olsen (2019) that Ven and Delbecq (1972) cited that “the nominal group process is a structured meeting which seeks to provide an orderly procedure for obtaining qualitative information from target groups who are most closely associated with a problem area”. This can be helpful to provide procedural steps in mitigating identified risks.

There were other risks present in a company that the study was not able to identify, future researchers may tackle those risks and provide a new risk assessment of the organization. Future researchers may come up with a more detailed and comprehensive diagram that shows the process of risk assessment in the company. To further collect more detailed and precise data, it is recommended that future researchers may conduct multiple sessions of group discussions, observations, and site visits to the company.

The developed theories can be validated through quantitative methods such as conducting surveys and validation from experts in those fields. According to Hoover (2021), quantitative data is numerically analyzed to present a statistical picture of a trend or connection. The causal relationships may be made clearer by such statistical data. They could be used to support or refute the research's primary hypothesis. Whether the outcome is favorable or unfavorable, it can cause awareness and movement. Therefore, future researchers are recommended to add quantitative methodology on gathering data on the future development of the study.

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Biographies

Jewell P. Bosto is a highly motivated and skilled student leader with a proven track record of success in a variety of areas. I have strong customer service skills, technical skills, leadership skills, critical thinking skills, and product development skills. I am also adept at using AutoCAD, Minitab, Lingo, Pro Model, and MATLAB. I am proficient in

MS Office and Google Office. I am a team player who is always willing to go the extra mile to get the job done. I am also a highly motivated and driven individual who is always looking for ways to improve my skills and knowledge.

Johanh Gabriell C. Julian is a committed and dedicated student in various fields who adapt collaborative and teamwork attitudes to have efficient and effective work processes which enhance the productivity of any team I'm working on. Provides excellent support in building good public relations with teams, advisers, organization members, and acquaintances. Can work under pressure and is able to handle challenging situations using critical thinking and problem-solving with professionalism. Additionally, as a driven student leader and team member, I have improved my leadership, organization, interpersonal and analytical skills. I am known for my ability to be a supportive and dedicated team player who inspires and motivates teams and has a good collaboration work ethic to provide excellent work for the betterment of processes and improvement of systems present.

Rey Marc B. Lagundimao an Industrial Engineering Student studying at the Technological Institute of the Philippines Quezon City. Received some awards such as Best Technical Feasibility and Best Feasibility Study in their institution. Received also scholarship grants such as VPAA's lister and President's lister for the school year 2020 – 2021. Moreover, a passionate researcher who loves learning about the nature of things.

Ralph Miguel M. Panganiban is a student taking up a Bachelor of Science in Industrial Engineering at the Technological Institute of the Philippines. He received the best feasibility during his project feasibility course.

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Jaypy T. Tenerife has more than 15 years of combined teaching, consulting, and actual practice of various strategic and techno-structural level interventions in the academe, private, and non-government organizations in the Philippines. He is an Assistant Professor in the Industrial Engineering Program of the Technological Institute of the Philippines. His research areas are in organization development, gender studies, quality, management, and engineering education and training.