ABC Group's Business Continuity Based on Uncertainty Analysis

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Abstract

This paper aims to ensure the business continuity of ABC Group by proposing a concept for changing the business model based on uncertainty analysis. The study suggests making changes in technology security and environmental product research and development to support the success of new business model designs. To ensure business continuity, the project proposes the following changes: diversifying greener product offerings, strengthening cybersecurity measures, developing disaster recovery plans, monitoring and managing reputation, adapting to changing business environments, and more. A project plan is proposed to implement these changes, including phases such as scoping, planning, execution, monitoring and control, and completion. By implementing these changes, ABC Group will be able to become more resilient to external uncertainties and ensure long-term business continuity.

Keywords: Business continuity, FMCG, Environmentally friendly, Technology security, Uncertainties.

I. Introduction

The Fast-Moving Consumer Goods (FMCG) industry is responsible for producing the daily necessities of people. Its products are sold at a rapid pace, in large quantities, and at affordable prices. Companies in the FMCG industry must possess high endurance due to the nature of the commodities they produce, which have a relatively high turnover as they are essential needs for the community. However, the characteristics of FMCG companies are not static and undergo dynamic changes due to various uncertainties (Qimyatussa’adah et al., 2020). Thus, the primary goal of any organization remains the analysis and visualization of the business model to develop effective strategies and optimize business processes. Providing value to customers and consumers is crucial for the success of a company's strategy.

The company needs to continuously innovate and modify its business models to stay ahead in today's highly competitive business environment. However, they also need to ensure business continuity in the face of various disruptions and uncertainties that could threaten their survival. In response to various types of business interruptions brought on by operational, organizational, and environmental factors, the concepts of business continuity (BC) or business continuity
management (BCM) were first introduced more than 20 years ago.

Business Continuity Management (BCM) is a concept that has gained traction in recent years and is now widely regarded as being essential to any organization that is dealing with a crisis or other business challenges (Sawalha, 2013). Many organizations are currently reevaluating their approach to managing crises and preparing themselves to deal with them using effective management techniques (Zhang & McMurray, 2013). As a result, BCM was observed from many angles by different analysts in order to improve business performance (Maier et al., 2014). The BCM technique ensures the continuity of crucial operations inside organizations by concentrating on the organization's personnel as well as the processes that are essential to business survival (Shaw & Harrald, 2006). As a result of the intense market competition, every organization should adopt a BCM (Alharthi & Khalifa, 2019).

The most important component of BCM, however, is securing the flow of resources used as production inputs (Mohamed, 2019). Any kind of business disruption can, in fact, have a tremendously negative impact on a company, not just in terms of monetary losses but also in terms of intangible effects on corporate reputation and confidence (Tammineedi, 2010). Therefore, developing a working plan to ensure that crucial business processes are restarted as quickly and effectively as is practical in the event of an unforeseen disruption is a crucial business requirement (Wong, 2009).

Before developing the BCM Infrastructure, the company should be introduced in order to understand what the business model of the company looks like with Business Model Canvass. The company will be named ABC Group, as it is not a publicly traded corporation. ABC Group is a consumer goods manufacturer that produces a variety of food and beverage, fabric care, home care, and personal care items.

ABC Group's business model encompasses the following key elements:

1. Customer Segments: ABC Group targets a diverse range of customers in Indonesia and other countries in Southeast Asia, including individuals and families seeking high-quality, affordable food and beverage products.
2. Value Proposition: ABC Group's value proposition revolves around providing its customers with high-quality products at affordable prices.
3. Channels: ABC Group distributes its products through a network of wholesalers, retailers, and supermarkets across Indonesia and other countries in the region, as well as through its e-commerce platform.
4. Customer Relationships: ABC Group maintains a strong marketing and sales team that works to enhance brand awareness and promote its products. The company also engages with customers through its social media channels and customer service centers.
5. Revenue Streams: ABC Group generates revenue by selling its products to wholesalers, retailers, and supermarkets, as well as through its e-commerce platform.
6. Key Resources: ABC Group's key resources include its manufacturing facilities, distribution network, and marketing and sales team.
7. Key Activities: ABC Group's primary activities include product development, manufacturing, distribution, marketing, and sales.
8. Key Partnerships: ABC Group collaborates with suppliers to source raw materials, as well as with wholesalers, retailers, logistics providers, and supermarkets to facilitate the distribution of its products.

9. Cost Structure: ABC Group's cost structure is primarily driven by expenses related to raw materials, manufacturing, distribution, marketing, and sales.

<table>
<thead>
<tr>
<th>Key Partners</th>
<th>Key Activities</th>
<th>Cost Structures</th>
<th>Revenue Streams</th>
<th>Customer Segments</th>
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<tr>
<td>5. Logistic Companies</td>
<td>5. Sales</td>
<td>5. Sales</td>
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<tr>
<th>Key Resources</th>
<th>Customer Relationships</th>
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<tr>
<td>1. State-of-the-art manufacturing facilities</td>
<td>1. Strong marketing and sales team that works to build brand awareness and promote its</td>
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<tr>
<td>2. Distribution network</td>
<td>2. Engages with customers through its social</td>
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<tr>
<td>3. Marketing and Sales team</td>
<td>media channels and customer service centers.</td>
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<table>
<thead>
<tr>
<th>Value Proposition</th>
<th>Channels</th>
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<tbody>
<tr>
<td>Delivering high-quality, affordable products to its customers</td>
<td>1. Wholesalers</td>
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<tr>
<td></td>
<td>2. Retailers</td>
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<td></td>
<td>3. Modern Market</td>
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<td></td>
<td>4. e-Commerce</td>
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**Figure 1.** ABC Group Business Model Canvas

**II. Literature Review**

The most important component of BCM, however, is securing the flow of resources used as production inputs (Mohamed, 2019). Any kind of business disruption can, in fact, have a tremendously negative impact on a company, not just in terms of monetary losses but also in terms of intangible effects on corporate reputation and confidence (Tammineedi, 2010). Therefore, developing a working plan to ensure that crucial business processes are restarted as quickly and effectively as is practical in the event of an unforeseen disruption is a crucial business requirement (Wong, 2009).

According to Herbane (2010), since the 1970s, BCM has changed in response to the technical and operational risks that jeopardize an organization’s ability to recover from hazards and disruptions. “A management process that identifies potential factors that threaten an organization and provides a framework for building the capability for an effective response,” according to Speight (2011), is what business continuity management is. According to Herbane et al. (2004), who looked at the organizational causes of BCM and built a conceptual framework to support their claim, BCM plays a part in maintaining a competitive advantage by actively assuring operational continuity. The phrase "enterprise business continuity" was first used by Nollau (2009), who stated that every organization should have a functional plan that includes all processes necessary to restore technology, a person in charge of that plan, and a disaster response team at the ready.

A strategy for outlining an organization's exposure risk to internal and external threats is called business continuity management (BCM). BCM's goal is to support the organization's business operations while giving it the capacity to fully respond to threats like "real disasters" or data breaches. A state of continuous and uninterrupted operation is referred to as business continuity (BC). The availability and integrity of information, as well as the resilience of people, property,
systems, platforms, and suppliers, are the main concerns. According to Peter (2018), an interruption is one that has a temporal dimension and occurs at the enterprise level but does not include operational irregularities that are handled by standard operating procedures.

Business disruptions can be good or negative depending on when, how, and how bad they are. Despite the rarity of interruption threats, they can have severe repercussions for essential services that regular management cannot address. Physical and non-physical occurrences like natural disasters, pandemics, significant losses in the provision of public services, financial crises, accidents, and incidents that endanger our brand are among the risks connected to the disruption (Peter, 2018). It is clear that BCM is a framework for determining the risk of exposure to both internal and external threats for an organization.

III. Analysis of Uncertainties

The Fast-Moving Consumer Goods (FMCG) industry comprises firms that produce goods with quick turnaround times and low manufacturing costs. It is a prominent and highly demanded sector in Indonesia (Celvin, 2020). FMCG items are designed to meet people’s daily needs and are known for their rapid sales and widespread accessibility across different demographics. Due to its fast-paced nature, the FMCG industry experiences high turnover rates and faces unique challenges in terms of market access and availability. However, there are various uncertainties that can impact the industry on a global or local scale, including pandemics, climate change, economic crises, natural disasters, new government policies, and more. These uncertainties can lead to layoffs, decreased production, a decline in consumer demand, reduced purchasing power, and other factors that ultimately influence a company’s performance.

One limitation of the traditional approach is that it encourages executives to view uncertainty as either certain and therefore predictable with accuracy or uncertain and completely unpredictable. To complete planning or capital budgeting processes that require point estimates, managers may need to mask the underlying uncertainty in their cash flows. This approach often leads managers to overestimate uncertainty in order to justify their strategies with seemingly solid evidence. Underestimating uncertainty can result in strategies that neither adequately address risks nor capitalize on potential opportunities presented by increased levels of uncertainty (Courtney, Kirkland, and Viguerie, 1997). Undertaking the creation of a Business Continuity is not an easy task but requires careful planning and assessment of mission-critical functions and available resources. Thus, the first step is determining What is the risk.

Given the current uncertainties and potential future uncertainties, there are several points of concern that ABC should be aware of, including:

1. Natural disasters: Indonesia is prone to natural disasters such as earthquakes, floods, and volcanic eruptions. These events can disrupt ABC’s supply chain, manufacturing processes, and distribution channels.
2. Cyber-attacks: As ABC Group relies on technology for its business operations, a cyber-attack could pose a threat to the company’s data and systems. This could result in operational disruptions, loss of customer confidence, and financial losses.
3. Reputation incidents: Negative press coverage or events related to product quality, safety, or ethical issues can damage ABC Group's brand and erode customer trust. This can lead to decreased sales and revenue. ABC Group has already experienced some uncertainty in this area.

4. New competitors with better business models: The market share and profitability of ABC Group could be negatively affected by the entry of new competitors with superior business plans, innovative products, and effective marketing strategies.

5. New competitors with emerging technology: ABC Group's market position may be threatened by competitors who leverage advanced technologies such as AI, IoT, and blockchain to enhance their operations and improve customer experiences.

6. Climate change: Climate change can result in supply chain disruptions, increased manufacturing costs, and regulatory pressure on ABC Group to reduce its environmental impact.

7. Sunset industry: Intense competition and evolving consumer preferences may render certain products or categories obsolete in the consumer goods sector. To remain relevant and successful, ABC Group must regularly adapt its business model and product offerings.

8. Changing business environment: Global economic, political, and regulatory developments can impact ABC Group's operations, supply chain, and profitability. The company must remain flexible and adaptable in its business model to navigate these changes effectively.

IV. Analysis of the Impact of Uncertainties

Every uncertainty, whether existing or potential, has the potential to affect a business. Depending on the nature of these impacts, a company can experience both short-term and long-term harm in various aspects. Thus, an important stage of developing a BC is performing a business continuity impact analysis. It identifies the effects of disruption of business functions and processes, dependencies (inter, intra and external) with other supporting processes. It also uses the information to make decisions about recovery priorities and strategies. Therefore, ABC Group must carefully consider the impacts of the uncertainties mentioned in the previous points:

1. Natural disasters can significantly impact ABC Group's operations and business continuity. As a consumer goods manufacturer, ABC Group relies on a complex network of suppliers, manufacturers, and distributors to produce and deliver its products to customers. Natural catastrophes such as earthquakes, floods, hurricanes, and typhoons can disrupt this network, leading to delays in product delivery, increased production costs, and ultimately, revenue loss.

2. Cyber-attacks can pose serious risks to ABC Group, including damage to reputation, financial losses, and operational challenges. Such attacks can result in production delays, disruptions in delivery, and critical business processes. Additionally, the costs associated with data recovery, system repairs, legal fees, and compensation for affected customers or partners can add up significantly.

3. Reputation incidents can jeopardize ABC Group's operations and overall business performance. As a consumer goods manufacturer, the company's reputation is crucial to its success. Any negative press or events that tarnish its brand
image can lead to a decline in customer loyalty and trust, impacting sales and long-term customer relationships.

4. The emergence of new competitors with superior business models can pose a threat to ABC Group's operations and ongoing business success. Customers may choose to switch from ABC Group's products to those offered by new competitors with innovative products or business practices. This shift in customer preferences can result in decreased sales, market share, and profitability, potentially affecting the company's long-term viability.

5. The emergence of new competitors with emerging technologies can pose a threat to ABC Group's operations and ongoing business. New competitors leveraging cutting-edge technology have the potential to disrupt the market and offer innovative goods or services that may be more efficient, affordable, or environmentally friendly. This can result in decreased sales and market share, negatively impacting the profitability and long-term viability of the business.

6. Climate change is an uncertainty that can jeopardize the ongoing operations and business of ABC Group. The impact of climate change, including extreme weather conditions, natural disasters, and altered weather patterns, can affect the cost and availability of raw materials, disrupt manufacturing and supply networks, and reduce consumer demand for specific goods. This may lead to higher expenses and lower revenues, ultimately affecting the profitability and sustainability of the business.

7. The possibility of becoming a sunset industry is an uncertainty that can pose risks to ABC Group's operations and ongoing business. A sunset industry refers to an industry that is losing market share or becoming obsolete due to changing consumer preferences, technological advancements, or other factors. Businesses in such sectors struggle to remain profitable and face the risk of going out of business.

8. Other changing business environments are uncertainties that may impact ABC Group's operations and ongoing business. Changes in regulations, the economy, consumer trends, and other external factors can have implications for the company's operations and profitability.

V. Designing the Changes

In order to ensure business continuity, ABC Group may need to make changes to its business model, which could involve expanding into new areas. This would require allocating additional resources to various departments such as distribution, marketing, technology, research and development, and training. Investment in research and development might be necessary to create new plant-based products or modify existing ones to meet the demands of the new market. Marketing efforts would be essential to enhance brand visibility and recognition, utilizing social media, influencers, and targeted advertising campaigns. To implement dynamic pricing strategies, technological investments in machine learning algorithms and data analytics tools would be required to analyze market trends and adjust pricing in real-time.

Modifications to distribution channels might also be necessary to ensure that products are available in appropriate settings and at the right times. Staff training may be needed to equip employees with the skills to effectively market and sell the new products and pricing strategies. It is crucial to carefully assess these resources to ensure the successful implementation of the new business model design.

Based on the earlier analysis of uncertainties, here are some potential design changes for ABC Group's business model
to ensure business continuity:

1. Develop a robust disaster recovery plan: ABC Group should create a comprehensive disaster recovery plan that includes backup systems and alternate production sites to minimize the impact of natural disasters. This will enable the business to continue operating in the event of a disaster.

2. Strengthen cybersecurity measures: ABC Group needs to increase its investment in cybersecurity to protect against cyberattacks. This involves implementing firewalls, intrusion detection systems, and encryption to safeguard data and systems. Regular training of staff in cybersecurity best practices can also help prevent cyberattacks.

3. Diversify product offerings: ABC Group should consider expanding its product offerings to mitigate the impact of new competitors with superior business models or emerging technology. This could involve developing new products that cater to evolving consumer needs or investing in research and development to improve existing products.

4. Monitor and manage reputation: Establishing a robust reputation management strategy that includes monitoring customer and stakeholder feedback and promptly addressing issues can help ABC Group minimize the impact of reputation incidents. Utilizing social media platforms to actively engage with stakeholders and gather feedback is important. Collaborating with external influencers or marketers can also help enhance the company’s reputation.

5. Stay updated on climate change risks: ABC Group should stay informed about climate change risks and adapt its practices accordingly to mitigate the effects of climate change. This may involve implementing sustainable production practices or developing new environmentally friendly products or packaging.

6. Adapt to the changing business environment: ABC Group should closely monitor changes in the business landscape and adjust its business strategy accordingly. This may include exploring new markets or diversifying its customer segments to stay competitive.

7. Focus on environmentally friendly products: To mitigate risks associated with climate change and reputation incidents, ABC Group should prioritize the development and production of environmentally friendly products.

<table>
<thead>
<tr>
<th>Elements</th>
<th>XYZ’s Original Business Model (Before Analysis of Uncertainties)</th>
<th>Uncertainty Analysis</th>
<th>Impact on XYZ’s Original Business Model</th>
<th>XYZ’s New Business Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technology</td>
<td>XYZ’s operation such as Production, Sales and Marketing, Distribution and many more is backed by technology-driven approach</td>
<td>Cyber-attacks, New Competitor</td>
<td>Compromised company’s data and systems, leading to operational disruptions, loss of customer trust, and financial losses</td>
<td>Allow multiple channels to develop secure system of its technology</td>
</tr>
<tr>
<td>Resources</td>
<td>XYZ Group rely on its own subsidiary to supply raw material to produce final products</td>
<td>Natural Disasters, Climate Change</td>
<td>Natural Disasters and Climate Change can disrupt the company’s supply chain, manufacturing operations and distribution channels</td>
<td>Enable sourcing raw materials from external parties to diversify supply chain to avoid disruption</td>
</tr>
<tr>
<td>Research and Development</td>
<td>XYZ Group’s research and development mostly about technology, distribution, marketing and also product</td>
<td>Climate Changes, Reputation Incidents, Changing Business Environment, New Competitors</td>
<td>XYZ’s lack of environmental-friendly approach will lead to Climate changes, brand/reputation damage, which later causes changing the business environment can impact to XYZ’s operations, and profitability. Regulatory will also pressure the company to reduce its environmental footprint</td>
<td>Diversity research and development to include environmental-friendly products and packaging</td>
</tr>
<tr>
<td>Costs</td>
<td>XYZ Group’s cost of being used to produce raw materials, manufacturing, distribution, sales and marketing</td>
<td>Cyber-attacks, New Competitors, Climate Changes, Reputation, Business Environment</td>
<td>XYZ’s lack of focus on Technology security, environmental-friendly products leads to high cost as the fixing expenses of the technologies is high if the system broken down due to cyber attacks, which will lead to the loss. The sanction fee from government is also high if the company is being sued due to less environmental-friendly products, this is not just about cost but also reputation will be impacted too.</td>
<td>Invest in Research and Development regarding Environmental-friendly products to prevent climate changes, reputation risks and Technology security to avoid cyber-attacks</td>
</tr>
</tbody>
</table>

Table 1. Analysis of Business Continuity in ABC Group’s Changing Business Model

VI. Execution Plan for Changes

The ABC Group should form a project team comprising departments such as R&D, marketing, technology, distribution,
and HR to implement the recommended changes in the business model. This project team will be responsible for executing the proposed changes. To ensure efficient coordination, each team member should be assigned specific duties and responsibilities, and frequent communication channels should be established. Based on the previous study, the ABC Group's primary focus areas are technology security and environmental products. However, implementing these modifications in the business model requires a well-planned project that includes the following steps:

1. Develop a project plan: The initial step involves creating a comprehensive project plan that outlines the project's objectives, scope, timeline, and budget. This plan should also identify the stakeholders, resources, and roles necessary for each change design.

2. Assign project team members: The next phase is to assign project team members who will be responsible for executing each change design. These team members should possess the knowledge and skills required to fulfill their assigned duties.

3. Conduct a risk assessment: To identify potential risks and establish mitigation strategies for each, the project team needs to conduct a risk assessment. This will help minimize the impact of any unexpected issues that may arise during the project implementation.

4. Develop a communication plan: The project team should create a communication strategy that outlines how information will be disseminated to stakeholders during the project. This plan should include regular updates on the project's status and any modifications that may affect stakeholders.

5. Execute the project: Once the project strategy, risk assessment, and communication plan have been established, the project team can begin implementing the modifications to ABC Group's business model. This will involve allocating resources, implementing new systems and processes, and providing necessary instructions to staff members regarding procedures or skills.

6. Monitor and evaluate progress: Throughout the project, the team should monitor and evaluate the progress of each change design to ensure successful implementation. Tracking key performance indicators and comparing them to the project goals will be necessary for this purpose.

7. Adjust the plan as needed: The team should be prepared to modify the plan if any problems or difficulties arise during the project. This will help mitigate risks and keep the project on schedule.

VII. Testing Plan for Changes

Testing a plan is the only method to determine whether it will work or not. The best method to determine whether something works is to put it to the test in a real situation. A controlled testing technique, however, is far more pleasant and offers the chance to spot problems and get better. In order to determine whether a plan is complete and will serve its intended purpose, management must carefully test it. To do this, plans must always be credible but demanding. The only way to advance is in this way. Make sure the goals are challenging and measurable. Doing the bare minimum and 'getting away with it' just results in a poor plan and a lack of confidence in a real crisis.

Two to four times a year, many organizations test their business continuity plans. The timeframe is determined by the sort
of organization you run, the rate of key personnel turnover, the number of business processes and IT changes since the last cycle of testing, and many other factors. Tabletop exercises, scripted walkthroughs, and simulations are frequently used as testing methods. In testing the plan, management needs to structure the testing plan in detail to identify weaknesses. Often, the team works through the test with specific detail in mind. The company needs to simulate the plan with the worst-case scenario ever in order to correct any weaknesses occurring.

After testing the changes, they can be implemented directly in the company. However, the execution needs to be monitored and evaluated in order to make sure that the changes are running as planned.

VIII. Conclusion

Business Continuity is the concept that can be the key to the survival of any company facing uncertainty. Thus, the company should rethink the importance of making awareness and being ready for any unexpected crisis in the company. However, developing Business Continuity is not an easy task as it needs several steps such as:

1. Determine the risk
2. Analyze the impacts of the risk
3. Design the changes to tackle the risks
4. Plan the execution of the changes
5. Testing and executing the changes
6. Evaluate and review the changes

The analysis concludes that ABC Group faces high risks from uncertainties such as changing climates, the business environment, cyber-attacks, new competitors, reputation, and natural disasters due to its lack of focus on environmental friendliness and technology security. However, it is not only ABC Group that faces these high risks; other major companies in the FMCG industry also face similar risks. We believe that most top companies in the FMCG industry have adopted technologies in their operations, management systems, marketing, and so on. Therefore, competition will be determined by how advanced their cutting-edge technology is and how efficient their operations are. Additionally, this analysis helps ABC Group recognize the risks that are currently occurring and may occur in the future.

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