

[Open Peer Review on Qeios](#)

# ABC Group's Business Continuity Based on Uncertainty Analysis

William Tantono<sup>1</sup>, Adhi Setyo Santoso<sup>1</sup>

<sup>1</sup> President University

**Funding:** No specific funding was received for this work.

**Potential competing interests:** No potential competing interests to declare.

## 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, Environmentally friendly, Technology security, External uncertainties.

## I. Introduction

Companies need to continuously innovate and modify their 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.

The Business Model Canvas framework has emerged as a popular tool for understanding and creating business models. It helps organizations identify potential risks and opportunities and develop plans to strengthen their continuity and resilience. The objective of the Business Model Canvas is to provide a visual representation that offers a shared understanding of various aspects such as customer segments, costs, operations, and more. This framework consists of nine main components, each of which will be discussed individually.

The analysis of survival conditions for companies and the consideration of key factors are influenced by the dynamics and evolution of the current business environment. 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. Research suggests that sustainable business models offer several advantages to enterprises, including increased productivity and long-term competitive advantage. Moreover, the continuous advancement of technology brings about fundamental changes in business models, necessitating the creation of new ones. Therefore, the conceptual developments in this study are highly relevant to the field as a whole (Munna, 2021).

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). Therefore, conducting uncertainty analysis is crucial for ensuring the business continuity of such companies.

To illustrate this, let's consider a specific business as an example. We will refer to the company as 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.

Key Partners	Key Activities	Cost Structures	Revenue Streams	Customer Segments
1. Wholesalers 2. Retailers 3. Modern Market 4. e-Commerce 5. Logistic Companies	1. Product Development 2. Manufacturing 3. Distribution 4. Marketing 5. Sales	1. Raw Materials 2. Manufacturing 3. Distribution 4. Marketing 5. Sales	1. Profit from Marketing 2. Profit from Sales 3. Branding	Indonesia and other countries in Southeast Asia, including individuals and families who are looking for high-quality, affordable food and beverage products.
	<b>Key Resources</b>			<b>Channels</b>
	1. State-of-the-art manufacturing facilities 2. Distribution network 3. Marketing and Sales team			1. Wholesalers 2. Retailers 3. Modern Market 4. e-Commerce
<b>Value Proposition</b>		<b>Customer Relationships</b>		
Delivering high-quality, affordable products to its customers		1. Strong marketing and sales team that works to build brand awareness and promote its 2. Engages with customers through its social media channels and customer service centers.		

**Figure 1.** ABC Group Business Model Canvas

## II. 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).

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.

### III. 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. 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.

## IV. 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.

Elements	XYZ's Original Business Model (Before Analysis of Uncertainties)	Uncertainty Analysis	Impact on XYZ's original Business Model	XYZ's New Business Model
Technology	XYZ Group's operation such as Production, Sales and Marketing, Distribution and many more is backed technology-driven approach	Cyber-attacks, New Competitor	Compromise the company's data and systems, leading to operational disruptions, loss of customer trust, and financial losses	Allow multiple channels to develop security system of its technology
Resources	XYZ Group rely on its own subsidiary to supply raw material to produce final products	Natural Disasters, Climate Change	Natural Disasters and Climate Change can disrupt the company's supply chain, manufacturing operations and distribution channels	Enable Sourcing raw materials from external parties to diversify supply chain to avoid disruption
Research and Developments	XYZ Group's research and Development mostly about technology, distribution, marketing and also product	Climate Changes, Reputation Incidents, Changing Business Environment, New Competitors	XYZ's lack of environmental friendly approach will lead to Climate changes, Brand/Reputation Damage, which later causes Changing Business Environment can impact to XYZ's operations, and profitability. Regulatory will also pressures the company to reduces it environmental footprint	Diversify research and development to include environmental friendly products and packaging
Costs	XYZ Group's cost is being use to produce raw materials, manufacturing, distribution, sales and marketing	Cyber-attacks, New Competitors, Climate Changes, Reputation, Business Environment	XYZ's lack focus on Technology security, environmental Friendly products leads to high cost as the fixing expenses of the technologies is high if the system broken 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.	Invest in Research and Development regarding Environmental Friendly products to prevent climate changes, reputation risks and Technology Security to avoid cyber attacks

**Table 1.** Analysis of Business Continuity in ABC Group's Business Model

## V. Project Execution Plan for Change

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.

## VI. Conclusion

The analysis concludes that ABC Group faces high risks from uncertainties such as change 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.

## Acknowledgement



This work is a part of Erasmus+ CBHE Building Universities in Leading Disaster Resilience (BUILD) project activities from Work Package 2.3. Enhancing Disaster Management Curricula during 2019 – 2023.

## References

- Business Investigation in Thailand: Why It's Essential for Your Business. Retrieved from <https://www.compliancia.com/business-investigation-in-thailand-why-its-essential-for-your-business/>
- Courtney, H., Kirkland, J., & Viguerie, P. (1997). Strategy Under Uncertainty. *Harvard Business Review*. Retrieved from <https://hbr.org/1997/11/strategy-under-uncertainty>
- Cybersecurity Risks to the Energy Industry and How to Combat. Retrieved from <https://www.smallbusinesscoach.org/cybersecurity-risks-to-the-energy-industry-and-how-to-combat/>
- MJ, S. D., & Nuswantara, D. A. (2022). The Resilience of Fast Moving Consumer Goods Companies During the COVID-19 Pandemic. *Proceedings of the 2nd Jakarta Economic Sustainability International Conference Agenda, 2*
- Munna, A. S. (2021). Business Model: Literature Review. *Pinisi Discretion Review*, 4(2), 191-196.
- Niemimaa, M., Jarvalainen, J., Heikkilä, M., & Heikkilä, J. (2019). Business Continuity of Business Models: Evaluating the Resilience of Business Models for Contingencies. *International Journal of Information Management*, 49, 208-216. doi: <https://doi.org/10.1016/j.ijinfomgt.2019.04.010>
- Qimiyatussa'adah, Nugroho, S. W., & Hartono, H. R. P. (2020). Pengetahuan dan Pemahaman Pelaku UMKM atas Standar Akuntansi Keuangan Entitas Mikro, Kecil dan Menengah (SAK EMKM) [Knowledge and Understanding of SME Actors on Financial Accounting Standards for Micro, Small, and Medium Enterprises (SAK EMKM)]. *Jurnal Monex*, 9(2), 146–151.
- Stefan, S., & Richard, B. (2014). Case Study: Analysis of Business Models and Their Innovations. *Advances in Management*, 7(6), 39.
- Sunrise Industry: Meaning, Overview, FAQ - *Investopedia*. Retrieved from <https://www.investopedia.com/terms/s/sunriseindustry.asp>