

## THE EXISTENCE AND SURVIVAL STAGE IN SMEs SUSTAINABILITY TRANSFORMATION

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### ABSTRACT

*The purpose of this study is to explore SMEs' proactive approach towards sustainability transformation, especially in the existence and the survival stage, what are the challenges and opportunities that come with each stage of a company's existence can help SMEs plan for their sustainability transformation in a way that is appropriate for their current stage of development. The interpretivism paradigm is used in this study. This research involves collecting qualitative data through the interview method. Cross-sectional data were collected from 10 Indonesian SMEs which implemented sustainable business practices through convenience sampling and snowball sampling. Based on the interview, it was generally analyzed the data through initial coding, axial coding, selective coding, and lastly, using the results proposition to make new conclusions and recommendations for the study. The case studies discussed in this research provide insights into the sustainability transformation of SMEs at different stages of development, from existence to survival. The cases illustrate various challenges, opportunities, and approaches that SMEs can use to integrate sustainable practices into their operations. There are several limitations including a limited scope, level of depth, generalizability, reliance on self-report by SMEs, and time-bond. But despite the limitations of these studies, this research provides insights that can help to inform future research on sustainable entrepreneurship, social innovation, and corporate social responsibility.*

**Keywords:** Sustainable Business Practices; Sustainability Transformation; SMEs; Growth Stage Model

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## INTRODUCTION

Businesses are increasingly facing pressure from various stakeholders to be more responsible in their operations (Waddock et al., 2002). This is due to a growing awareness of the impact that businesses have on the environment, society, and the economy (Gibbs, 2009). There are some reasons why businesses are facing pressure to be more responsible. First, environmental concerns (Hoffman, 2018), the impact of businesses on the environment, such as climate change, pollution, and biodiversity loss, has become a major concern for many stakeholders, including customers, employees, investors, and governments. Second, social issues, companies are increasingly expected to address social issues such as human rights, labor practices, and diversity and inclusion (Wang et al., 2016). Consumers are becoming more conscious of these issues and are demanding that companies take responsibility for their actions. Third, regulatory requirements, governments around the world are enacting regulations to hold companies accountable for their impact on the environment and society (Berry & Rondinelli, 1998). These regulations are becoming more stringent, and companies that fail to comply face legal and reputational risks. Fourth, competitive advantage, companies that adopt responsible practices are increasingly seen as more attractive by customers, investors, and employees (Huang et al., 2015). This can give them a competitive advantage and help them to attract and retain talent, customers, and investors. And Lastly, reputation management, in today's interconnected world, a company's reputation can be easily damaged by negative publicity. Companies are under pressure to manage their reputations by being transparent about their operations and taking steps to address any negative impact they may have (Moon, 2007).

Environmental sustainability has become a key concern across businesses in recent years. Environmental sustainability is essential for the long-term viability of businesses (Wilkinson et al., 2001). Companies that fail to address environmental issues are at risk of being affected by climate change, resource depletion, and other environmental problems. Businesses that prioritize sustainability are more likely to be resilient and have a competitive advantage in the long run. Consumers are becoming more conscious of the impact that businesses have on the environment (Brochado et al., 2017). Companies that prioritize sustainability are more likely to build a positive brand image and reputation, which can help to attract customers and retain loyal ones. Governments around the world are increasingly introducing regulations to address environmental issues such as greenhouse gas emissions, waste reduction, and resource conservation (Omer, 2008). Companies that do not comply with these regulations may face legal consequences and damage to their reputation. Adopting sustainable practices can help businesses save money in the long run. For example, implementing energy efficiency measures can reduce energy costs, while waste reduction strategies can help to reduce waste disposal fees. Companies that fail to do so may face reputational damage and a loss of support from stakeholders. By prioritizing sustainability, businesses can ensure their long-term viability, build a positive brand image, comply with regulations, save costs, and respond to stakeholder pressure.

Many small and medium-sized enterprises (SMEs) have been slower to adopt sustainable business practices compared to larger companies (Masurel, 2007). This is partly since SMEs often have limited resources and capacity to invest in sustainability measures. Small and medium-sized enterprises (SMEs) make up a significant portion of the global economy and play a crucial role in driving economic growth and job creation in many countries. According to the World Bank, SMEs contribute up to 60% of employment and up to 40% of GDP in emerging economies (Yadav et al., 2018). Despite

their important role in driving economic growth and job creation, also have a significant impact on the environment. Research has shown that SMEs are responsible for a significant proportion of global pollution and greenhouse gas emissions. A study by Caldera et al., (2019) found that SMEs were responsible for about 70% of global pollution, which can be attributed to factors such as resource consumption, energy use, and waste generation. This highlights the urgent need for SMEs to adopt sustainable business practices to reduce their environmental impact and contribute to global efforts to address climate change and other environmental challenges. Adopting sustainable business practices can benefit SMEs in several ways, such as improving their operational efficiency, reducing their costs, enhancing their brand reputation, and improving their access to markets (Carolina et al., 2020). Adopting sustainable practices can also benefit SMEs in several ways, and many organizations and initiatives are working to support SMEs in this transition.

The Growth Stage Model (GSM) can be a useful tool to understand the different stages of business growth and transformation. The GSM helps to identify the key characteristics, challenges, and opportunities that are associated with each stage of business growth and can be used to inform strategic planning, resource allocation, and decision-making (McMahon, 2014). The GSM in SMEs is typically divided into several stages, including the existence stage, the survival stage, the success stage, the take-off stage, and the resource maturity stage (Lewis & Churchill, 1983). Each stage is associated with different challenges and opportunities, such as establishing a customer base, expanding operations, optimizing processes, and preparing for an exit. By understanding the GSM, businesses develop strategies that are tailored to their current stage of development. The Growth Stage Model (GSM) can be linked to sustainability transformation for SMEs. By understanding the GSM, SMEs can also plan for their sustainability transformation. In the early stages of growth, SMEs may want to focus on building environmental awareness and knowledge, while in the survival stage, they may want to invest in sustainability practices that can improve their competitiveness in the market. In the success stage, SMEs may want to focus on optimizing their operations to reduce their environmental impact, while in the decline phase, they may want to consider how to end their business sustainably.

The purpose of this study is to explore SMEs' proactive approach towards sustainability transformation especially in the existence and the survival stage, what are the challenges and opportunities that come with each stage of a company's existence and can help SMEs plan for their sustainability transformation in a way that is appropriate for their current stage of development. The initial proposition of the study is: there are specific characteristics, strategies, and challenges of SMEs adopting sustainable business practices based on their stage of growth. It is also a specific reason for sustainable engagement, according to the level of growth.

## LITERATURE REVIEW AND THEORETICAL FRAMEWORK

Lewis and Churchill (1983) proposed the Five Stages of Small Business Growth. This model has been widely used as a framework for understanding the growth and development of small businesses, and it provides a useful tool for entrepreneurs to assess where their business is at and what they need to focus on to move to the next stage. Lewis and Churchill' (1983) model of small business growth can help SMEs in their sustainability transformation journey. The model outlines five stages of small business growth: existence, survival, success, takeoff, and resource maturity. In the existence stage, the focus is on getting the business up and running, and survival is the primary

concern. In terms of sustainability transformation, this stage may involve initial efforts to reduce waste and conserve resources to keep costs low and maintain financial viability (Ghisellini et al., 2016). In the survival stage, the business has established a foothold in the market and is focused on generating consistent revenue. In terms of sustainability transformation, this stage may involve efforts to develop more formalized sustainability practices and strategies, as the business seeks to differentiate itself and establish a reputation for environmental and social responsibility (Lin & Chen, 2017). In the success stage, the business has achieved a high level of stability and success. In terms of sustainability transformation, this stage may involve efforts to leverage sustainability as a competitive advantage, as the business seeks to attract and retain customers who prioritize sustainability and social responsibility (Berkhout et al., 2010). In the takeoff stage, the business experiences rapid growth and expansion. In terms of sustainability transformation, this stage may involve scaling up existing sustainability practices and investing in new sustainability initiatives to support the growing business (Köhler et al., 2019). In the resource maturity stage, the business has achieved a high level of maturity and stability. In terms of sustainability transformation, this stage may involve efforts to optimize sustainability practices and systems to achieve maximum efficiency and impact, as the business seeks to maintain its competitive position and reputation for sustainability leadership (Kantabutra, 2012).

This research will only discuss the two initial stages, namely the existence stage and the survival stage of SME's sustainability transformation. In the existence stage, small businesses are primarily focused on survival and growth. Sustainability may not be a top priority, as businesses are more concerned with generating revenue and establishing a customer base. However, in this stage, small businesses can establish a foundation for future sustainability efforts, such as incorporating sustainable practices into their business model and developing a culture of sustainability. In the survival stage, small businesses have achieved a level of stability and are focused on maintaining their operations. Sustainability may become more important in this stage as businesses look for ways to reduce costs, increase efficiency, and differentiate themselves from competitors. Small businesses may begin to adopt more formalized sustainability strategies, such as implementing sustainability management systems and setting sustainability goals (Revell et al., 2010). Focusing on the earlier stages of SMEs' sustainability transformation would be particularly relevant in the context of Indonesia, where sustainability-based businesses are still rare, and the trend is just starting to rise. By focusing on the existence and survival stages, this research can provide insights into how SMEs in these stages are approaching sustainability, what challenges they face, and how they can overcome those challenges to move toward more sustainable business practices.

Researching the existence and survival stages of SMEs in their sustainability transformation is important for several reasons. First, it can help identify the specific challenges and opportunities that SMEs face in the early stages of their sustainability journey. This can inform the development of targeted interventions and support programs to help SMEs overcome these challenges and accelerate their sustainability transformation. Second, understanding the drivers of sustainability transformation in the existence and survival stages can inform policy and regulatory frameworks to incentivize and support SMEs in their sustainability efforts. This can include providing access to financing, creating favorable market conditions, and providing guidance and training on sustainable business practices. Third, early-stage sustainability transformation in SMEs can have significant impacts on their long-term viability and competitiveness. By

integrating sustainability into their core business practices from the outset, SMEs can establish a strong foundation for sustainable growth and resilience, which can help them weather economic, social, and environmental shocks and disruptions (Gadonne et al., 2009). Overall, researching the existence and survival stages of SMEs in their sustainability transformation can provide valuable insights into the early stages of sustainable entrepreneurship and inform strategies and policies to support the growth and development of sustainable SMEs.

## **METHOD**

The interpretivism paradigm is used in this study. The interpretivism paradigm emphasizes the importance of understanding the social and cultural context of research participants and seeks to understand the meaning and interpretation that individuals give to their experiences (Ritchie et al., 2014). In the context of this study on sustainability transformation in SMEs, an interpretive approach would allow researchers to gain a deeper understanding of the motivations, challenges, and experiences of SMEs in adopting sustainable business practices, as well as how these may differ across different stages of growth. For data collection, this research involves collecting qualitative data through methods such as interviews with owners or managers and analyzing this data to identify themes and patterns. The interviews ranged to last sixty to ninety minutes. The interviews were digitally recorded (with permission from the participants) to preserve an accurate account of the interview which could be replayed for analytic purposes. By focusing on the unique experiences and perspectives of individual SMEs, the interpretive paradigm would allow researchers to develop a more nuanced and in-depth understanding of the complex factors that influence sustainability transformation in SMEs.

Cross-sectional data collected from 10 Indonesian SMEs (see Appendix 1) that implementing sustainable business practices through convenience sampling, a non-probability sampling technique that is often used when the population of interest is difficult to access or when time and resources are limited. In convenience sampling, participants are selected based on their availability and willingness to participate, rather than on random selection or other criteria (Robinson, 2013). While convenience sampling can be a useful approach in certain research contexts, it also has limitations. In this research, the participants were selected based on their degree of accessibility, which may have excluded SMEs that are less accessible or have different characteristics. To address these limitations, we combine convenience sampling with another sampling technique which is snowball sampling to ensure that the selected participants are representative of the population of interest.

Data obtained from SMEs that have implemented sustainable business practices can be a useful approach to understanding the experiences, challenges, and motivations of these firms in adopting sustainable business practices, we can gain insights into the strategies and factors that have contributed to their success, as well as the challenges they have faced. Indonesia and SMEs were selected for two reasons. First, Indonesia is moving toward environmental sustainability. Indonesia is betting on sustainability to achieve a qualitative leap in economic and social development. Second, SMEs are the backbone of the national economy. Because of their size and simpler structure, they are more flexible and will have a greater capacity to adapt to changes. Indonesia's commitment to environmental sustainability and the crucial role of SMEs in the national economy makes it an interesting context for studying sustainability transformation.

Digitally recorded interviews will manually be transcribed. Based on the interview, the researcher generally analyzes the data. First, finding repeating themes by thoroughly reviewing the data, also known as initial coding, is the first step in analyzing the data. This involves going through the transcripts and identifying the main themes or ideas that are repeated throughout the interviews. We don't use software programs to assist with this process, we manually go through the transcripts and highlight key phrases and ideas. This step helps to identify the most important topics and issues that will be further analyzed in subsequent coding steps. Second, after identifying the initial codes, we proceed to code the emergent themes with keywords and phrases, followed by grouping the codes into concepts hierarchically through axial coding. This involves identifying the main categories or concepts that emerged from the data and grouping the initial codes under these categories. Thirdly, after the initial and axial coding phases, we have identified a set of concepts and themes. In the selective coding phase, we analyze the relationships between these concepts and themes to develop a more comprehensive understanding of the data. We look for patterns and connections between the concepts to identify overarching themes and categories that emerge from the data (Miles et al., 2013). Finally, after completing the process of selective coding and identifying the relationships between the categorized concepts, we will use the resulting proposition to make new conclusions and recommendations for the study. These conclusions and recommendations will be based on the data collected from the SMEs and will aim to contribute to the understanding of how SMEs can approach sustainability transformation in the existence and survival stages. The researcher will also consider the limitations of the study and provide suggestions for further research.

## RESULTS AND DISCUSSIONS

**Proposition 1a: In the existence stage, SMEs only identify potential environmental and social impacts around them. Without them realizing they are involved in sustainable business practices.**

In the existence stage, SMEs are mainly focused on establishing their business operations and surviving in the market. Sustainability may not be a key consideration for them, but they may inadvertently engage in sustainable business practices by identifying and mitigating potential environmental and social impacts in their immediate surroundings. However, they may not have a formalized approach or strategy toward sustainability.

*"During the pandemic when I had to stay at home, I developed an interest in finding safe and non-toxic activities to do with children using materials that are easily available at home. Being familiar with circularity, I decided to explore ways to reuse paper waste, which is abundant at home. Through my research, I learned that paper can be extended beyond its intended use by creating paper mache, a technique that involves crushing paper into pulp, shaping it, and allowing it to dry. Additionally, I discovered that not all paper can be recycled, as recycling facilities are selective about the types of paper they can process.."*  
(Chief Executive Officer, Case C)

*"Frequenting cafes in the past, I was fascinated by the quantities of coffee grounds they generated, with each shop producing at least 1 kilogram per day. This led me to conduct further research online and discover that there are 3000 coffee shops in Jakarta. Considering that each shop generates 1 kilogram of coffee grounds per day, this equates to a staggering 3 tons of coffee grounds produced daily. It was this realization that prompted*

*me to choose coffee grounds as the primary raw material for my product.” (Chief Executive Officer, Case B)*

These quotes highlight the importance of resourcefulness and creativity in sustainable business practices, as well as the role of environmental awareness and research in identifying potential opportunities for sustainability. In both cases, the business owners identified waste streams (paper and coffee grounds) that were abundant and underutilized and developed innovative solutions to turn them into valuable products. This approach not only promotes sustainability by reducing waste and minimizing resource consumption but also creates unique selling points and market differentiation for businesses. The quotes relate to the existence stage of sustainability transformation in SMEs as they illustrate how entrepreneurs can identify potential opportunities for sustainable business practices by recognizing environmental impacts and waste streams in their surroundings. In both quotes, the entrepreneurs were inspired to pursue sustainable practices through personal experiences and observations and then conducted further research to explore potential solutions. This demonstrates how in the existence stage, SMEs may not have a formal sustainability strategy in place, but they can start identifying and exploring potential opportunities for sustainability transformation.

*“We initially opted to use corn cobs as a raw material due to environmental concerns raised by one of our team members, whose residence is in Bojonegoro. This location is known for producing shelled corn, with the cobs being left unused and discarded after the harvest, contributing to environmental waste.” (Chief Executive Officer, Case G)*

This quote highlights the consideration of environmental impacts and potential sources of waste in the selection of raw materials for a product. In the existence stage of sustainability transformation, SMEs are just starting to identify potential environmental and social impacts around them. In this case, the team member's concern about the waste of corn cobs in their hometown led the company to explore the use of this waste as a raw material for their product. This demonstrates an early consideration of sustainability factors in the business's decision-making process, which is an important step in the sustainability transformation of SMEs.

One potential challenge for the consideration of environmental impacts in driving sustainability transformation in the existence stage is the lack of knowledge or expertise in the field of sustainability (Mendes et al., 2022; Rajapakse et al., 2022). The owner or founder of an SME may be motivated to integrate sustainability into their business practices, but they may not have the necessary knowledge or understanding of environmental impacts to effectively identify and address these issues (Bocken & Geradts, 2020). Additionally, they may lack the resources or capacity to implement sustainable practices, such as investing in eco-friendly technologies or adopting sustainable supply chain practices (Kiefer et al., 2019; Mafini & Loury-Okoumba, 2018; Ogreaan & Herciu, 2021). Another challenge could be the lack of a supportive business environment or ecosystem. SMEs may face barriers such as limited access to financing or resources, lack of government incentives or regulations, and low consumer demand for sustainable products or services. These challenges can make it difficult for SMEs to prioritize sustainability in their business practices, especially in the early stages of their existence.

**Preposition 1b: The value and characteristics of the owner as a main driver of the existence stage of SMEs' sustainability transformation motivate them to integrate sustainability into their business practices from the beginning.**

In the existence stage of SMEs' sustainability transformation, the values and characteristics of the owner play a crucial role in driving the integration of sustainability into their business practices. Business owners who are environmentally and socially conscious and have a deep understanding of sustainability may naturally incorporate sustainability principles into their business practices from the outset. The quotes we provided earlier are examples of how the values and characteristics of the business owners led them to identify potential sustainability opportunities and take action to address environmental concerns.

*"The proprietor of our company is an environmental activist who also runs a non-formal school in the Gunung Puntang area of West Java. The school focuses on instilling good environmental habits in children, and their activities include cleaning up trash and maintaining the cleanliness of the river. The approach taken is to educate through play, making it an enjoyable and interactive learning experience for the children." (Business Development and Finance, Case D)*

*"Essentially, our CEO resided in Bali during her student years and spearheaded a movement known as "Bring Your Tumbler Bali". She has been a committed environmental advocate since her student days, actively participating in organizations such as WWF, demonstrating her deep concern for environmental issues." (Chief Operating Officer, Case I)*

These quotes also illustrate the importance of the values and characteristics of the owner in driving the sustainability transformation in SMEs during the existence stage. In both cases, the owners have a strong personal commitment to environmental issues, which has motivated them to integrate sustainability into their business practices. The owner of Case D runs an environmental-focused school, demonstrating their passion for instilling good environmental habits in children. The owner of Case I is an environmental advocate and has been actively participating in organizations such as WWF. This personal commitment and passion for sustainability have played a key role in driving the sustainability transformation in their respective SMEs. The values and characteristics of the owner or founder of an SME play an important role in driving the sustainability transformation in the existence stage. Personal values and beliefs about sustainability can influence the way they set up and run their business from the very beginning, incorporating sustainable practices and minimizing environmental and social impacts.

One challenge for the values and characteristics of the owner or founder of an SME in driving the sustainability transformation in the existence stage is the potential for the values and vision of the owner/founder to not be shared or fully embraced by other team members or stakeholders (Goddard et al., 2016; Rezai et al., 2016). In such cases, the implementation of sustainability practices may face resistance, lack of support or resources, or other challenges. Another challenge is that the values and characteristics of the owner/founder may not be enough to drive the sustainability transformation alone. It may be necessary to build partnerships and collaborations with other stakeholders (Butryumova et al., 2015; Rodríguez-Espíndola et al., 2022), such as suppliers, customers, and government agencies, to achieve sustainable practices at a larger scale. Finally, the challenge of resources and access to information and technology can also hinder the implementation of sustainable practices in the existence stage (Goddard et al., 2016).



SMEs may lack the necessary capital or knowledge to invest in sustainable technologies, which can limit their ability to adopt sustainable practices.

**Preposition 2a: At the survival stage, SMEs focus on the research and development of their products, collaborating with parties who share the same vision to create better products. Products that will not have a negative effect on both the environment and society.**

In the survival stage, SMEs seek to enhance their products and services and collaborate with stakeholders who share their vision for sustainability. This may involve research and development of new products, processes, and business models that reduce environmental impacts and contribute to the social good. It can also involve building relationships with suppliers, customers, and other stakeholders to create a shared value approach that aligns the interests of all parties involved. By focusing on sustainability in the survival stage, SMEs can improve their competitiveness, attract new customers, and establish a reputation for being environmentally and socially responsible.

*"To develop a durable and sturdy product from coffee grounds, we began by researching international journals that explored this topic. It was a prolonged search that lasted from September to May before we found suitable material. Initially, we were only able to produce pots, but through further exploration and experimentation, we discovered a more robust material that could be used to create an array of products such as jars, bowls, and coasters." (Chief Executive Officer, Case B)*

*"I am continuously researching to find the optimal formula, and my exploration process is documented on my Instagram account. I experiment with different paper materials and mixtures, constantly tweaking the formulations until I find the right combination. Additionally, I am still searching for an environmentally friendly mold that meets my requirements, as using silicone is not an ideal option. Thus, there are several factors and considerations that I take into account during this research process." (Chief Executive Officer, Case C)*

Both quotes highlight the importance of research and development in the survival stage of SMEs' sustainability transformation. In the pursuit of creating sustainable products, SMEs must invest in research and experimentation to find the most suitable materials, formulas, and production methods. The process of research and development is time-consuming, as evidenced in Case B's quote, which took several months to find suitable material. Additionally, the CEO of Case C is continuously experimenting and documenting the exploration process on social media, highlighting the importance of continuous improvement in the survival stage of SMEs' sustainability transformation.

*"We have experimented with various materials and production methods during our explorations. While we have not established specific standards for operating this business, our principle is to reduce waste and avoid creating new waste with each experiment." (Chief Executive Officer, Case E)*

*"Due to our limited production tools, particularly for creating products of varying sizes, we have been conducting research and development to discover new techniques that will enable us to meet size requirements despite these constraints." (Chief Executive Officer, Case G)*

The quotes from Case B, Case C, Case E, and Case G all highlight the importance of research and development in the survival stage of SMEs' sustainability transformation. These SMEs are experimenting with different materials and methods and continuously exploring new techniques to improve their products and reduce waste. They are committed to finding optimal formulas, exploring new production techniques, and conducting prolonged searches to discover suitable materials for their products. The research and development process is critical for SMEs in the survival stage as they need to innovate and differentiate themselves from their competitors to gain a foothold in the market. By constantly improving their products, they can increase their competitiveness and build a loyal customer base that values sustainability.

One challenge for the research and development efforts of an SME in driving the sustainability transformation in the survival stage is the availability of resources, both financial and human (Dressler, 2022). SMEs at this stage may not have a significant budget to allocate to research and development, which can limit their ability to experiment with different materials and production methods (Maldonado-Guzmán et al., 2017; Müller & Pflieger, 2014). Additionally, they may have a small team, making it challenging to dedicate resources to R&D without negatively impacting their day-to-day operations. Another challenge is the time and effort required for R&D. As seen in the quotes provided, the exploration process can be prolonged, requiring significant time and effort to find the optimal materials and production methods. This can be challenging for SMEs at the survival stage, as they may be focused on generating revenue and ensuring the viability of their business. Finally, the lack of established standards and regulations for sustainable products can also pose a challenge (Rajapakse et al., 2022). SMEs may struggle to determine what criteria they should meet to be considered a sustainable product and may need to conduct additional research to determine best practices for their specific industry.

**Proposition 2b: SMEs develop a more formalized and integrated strategic approach to sustainable business practices including setting sustainability goals, establishing a sustainability management system, and monitoring and reporting on sustainability performance in the survival stage of sustainability transformation.**

In the survival stage, SMEs may start to prioritize sustainability as they recognize its importance for long-term success, and they may take steps to formalize their approach to sustainable business practices. This may involve setting sustainability goals that align with their overall business strategy, establishing a sustainability management system to track and manage their sustainability performance, and monitoring and reporting on their progress towards those goals. However, not all SMEs in the survival stage may have the resources or capacity to develop a formalized approach to sustainability, and they may instead focus on more immediate business concerns such as generating revenue and managing cash flow.

*"I run an eCommerce store that offers 3D printed materials and encourages users to convert waste into points. We also provide a garbage bank feature, enabling users to exchange their waste for points, which can then be redeemed for recycled or reused products such as spools, bottles, and plastic." (Chief Executive Officer, Case A)*

*"We have chosen to use Besek for packaging our shoes as it is an environmentally safe option that can be reused. Furthermore, we have also taken steps to support and empower Besek*

*craftsmen in the Gunung Puntang area, as the demand for their products has decreased." (Business Development and Finance, Case D)*

The first quote describes an eCommerce store that encourages waste reduction and recycling through a point-based system. This approach is an example of a sustainability management system that incentivizes sustainable behavior and provides a platform for measuring and monitoring sustainability performance. The second quote highlights the use of environmentally safe packaging as well as supporting local craftsmen as part of the sustainability strategy. Overall, these quotes demonstrate how SMEs in the survival stage of sustainability transformation are formalizing their sustainability approach and integrating sustainable practices into their business operations.

*"We have established production standards that incorporate waste management into our business processes. While we are aware that our products are not yet zero waste, we aim to minimize waste. If the waste can be melted down, we send it to our colleagues who specialize in waste management in Bali." (Business Development and Finance, Case D)*

The quote from Business Development and Finance in Case D highlights the importance of incorporating waste management into business processes and establishing production standards that aim to minimize waste. This is a key aspect of the survival stage of sustainability transformation, as SMEs begin to adopt more formalized and integrated approaches to sustainability practices.

*"Initially, we had a limited product range and could only produce pots. However, we are currently exploring a B2B business model that offers products to coffee shops. We have identified coffee shops that prioritize sustainability by not using packaging and plastic straws. After several discussions, they agreed to cooperate with us. The coffee shops provide us with coffee grounds as raw material, and our products are used as merchandise by them." (Chief Executive Officer, Case B)*

In the quote from Chief Executive Officer in Case B, the SME is exploring a B2B business model that offers products to coffee shops. This is another example of a survival stage strategy, as SMEs seek to expand their market and reach new customers. However, in this case, the SME is also demonstrating a commitment to sustainability by partnering with coffee shops that prioritize sustainability and using waste materials (coffee grounds) as raw materials for their products. This approach aligns with the principles of the circular economy and can help SMEs achieve sustainability goals while also expanding their business.

The quotes relate to the survival stage of sustainability transformation in SMEs. In the survival stage, SMEs are focused on reducing waste, identifying, and implementing sustainable practices, and developing sustainable products. In Case A, the CEO has developed an eCommerce store that encourages users to convert waste into points and provides a garbage bank feature. This is a strategy for reducing waste and incentivizing users to participate in sustainable practices. In Case D, the company has established production standards that incorporate waste management into its business processes, showing a commitment to minimizing waste. They also work with colleagues who specialize in waste management, indicating a willingness to collaborate with others to achieve sustainable goals. In Case B, the CEO is exploring a B2B business model that offers

sustainable products to coffee shops. This is an example of developing sustainable products and identifying partners who share similar sustainability goals. Overall, these quotes demonstrate the importance of developing sustainable practices, reducing waste, and collaborating with others in the survival stage of sustainability transformation in SMEs.

One challenge for an SME in developing a more formalized and integrated strategic approach to sustainable business practices during the survival stage is the potential cost of implementing these practices (Sharma et al., 2021). Implementing sustainable business practices may require significant investments in technology, employee training, and other resources, which can be a challenge for small businesses with limited resources. Another challenge is the lack of expertise and knowledge of sustainable business practices within the organization (Butryumova et al., 2015; Sharma et al., 2021). SMEs may not have dedicated sustainability departments or personnel, and the responsibility of sustainability may fall on individuals who do not have the necessary knowledge and experience to implement and manage sustainability practices effectively. Finally, SMEs may face challenges in convincing customers and suppliers of the value of sustainable business practices (Ghadge et al., 2017; Nagypál, 2014). Customers and suppliers may prioritize cost and convenience over sustainability, and SMEs may need to find ways to communicate the value of sustainable practices and build relationships with stakeholders who share their commitment to sustainability.

## **CONCLUSION AND SUGGESTIONS**

Throughout this research, we have discussed various aspects of sustainability in small and medium-sized enterprises (SMEs). We have looked at the different stages of sustainability transformation that SMEs may go through, including the existence stage and the survival stage. We have explored the challenges and opportunities that SMEs face in driving the sustainability transformation, such as the importance of the values and characteristics of the founder, the need for research and development, and the establishment of formalized sustainability management systems. We have also seen examples of how SMEs are implementing sustainable business practices, such as using waste materials to create new products, collaborating with other businesses to reduce waste, and establishing production standards that incorporate waste management. Overall, it is clear that sustainability is an increasingly important issue for SMEs, and that there are both challenges and opportunities in driving the sustainability transformation. By taking a strategic approach and incorporating sustainable practices into all aspects of their business, SMEs can create positive social, environmental, and economic impacts, while also ensuring their long-term success.

The case studies discussed in this research provide insights into the sustainability transformation of SMEs at different stages of development, from existence to survival. The cases illustrate various challenges, opportunities, and approaches that SMEs can use to integrate sustainable practices into their operations. One important implication of these case studies is that SMEs face unique challenges in their efforts to implement sustainability practices, such as limited resources, capacity, and expertise. However, SMEs can also leverage their agility, flexibility, and close relationships with stakeholders to implement sustainable practices in innovative and effective ways. The cases also highlight the importance of collaboration, partnerships, and stakeholder engagement in advancing sustainability. SMEs can work with suppliers, customers, and other stakeholders to develop sustainable solutions, reduce waste, and create shared value. The contributions of these case studies to theory include insights into the adoption of

sustainable practices by SMEs at different stages of development, the challenges, and opportunities that SMEs face in implementing sustainability, and the factors that drive sustainable innovation and collaboration. These insights can help to inform future research on sustainable entrepreneurship, social innovation, and corporate social responsibility.

There are several limitations to this research. The discussion only covers a limited number of case studies and topics related to sustainability in SMEs. Many other aspects of sustainability could be explored, and a broader range of case studies could provide a more comprehensive understanding of the challenges and opportunities for SMEs in the sustainability transformation. Due to the nature of a chat conversation, the level of depth in the discussion may be limited. In a more in-depth discussion or research, there would be opportunities to explore the nuances of the topics more thoroughly. The case studies discussed may not be representative of all SMEs, and the findings and conclusions drawn from these cases may not be generalizable to other SMEs in different contexts or industries. The case studies are based on self-reported information provided by the SMEs themselves. While this information is valuable, it may not be entirely accurate or may be biased toward presenting SMEs in a positive light.

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## Appendix 1. 10 SMEs as Research Informants

SMEs	Year of Establish	Location	Description
A	2020	Bekasi	Recycling 3D printing material waste
B	2021	Bogor	Produce craft (coaster) from coffee grounds waste
C	2020	Jakarta Selatan	Produce craft (vase & bowl) from paper waste
D	2021	Semarang	Produce shoes from clothing and tires waste
E	2017	Jakarta Barat	Produce furniture (stool & table) from plastic waste
F	2021	Yogyakarta	Produce craft (stool, coaster & vase) from HDPE plastic flakes
G	2021	Yogyakarta	Produce furniture (chair) from corncob waste
H	2009	Cimahi	Produce bag and wallet from carton milk waste
I	2020	Tangerang Selatan	Produce craft (coaster) and particle board from Areca
J	2015	Cimahi	Produce various flavored drinks and manage household waste