

Digital Transformation of SMEs:

A capacity approach for SMEs' digital transformation

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MSc Management of Technology



Digital Transformation of SMEs in Indonesia:

A capacity approach for SMEs' Digital Transformation

A qualitative study to investigate the influence of SMEs' capacity on SMEs' digital transformation performance through a case study of Indonesia SMEs

Master thesis submitted to Delft University of Technology in partial fulfillment of the requirements for the degree of

Master of Science

In Management of Technology

Faculty of Technology, Policy, and Management

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To be defended in public on August 25, 2021

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Executive Summary

SMEs are in the midst of a digital economy driven by the rapid growth of technologies, pushing them to change or be excluded from the system. Compounded by the COVID-19 outbreak, SMEs are required to catch up with the transition quickly. Governments and policymakers have previously conceived numerous policies to support SMEs' digital transformation in most countries. Nevertheless, in Indonesia, these efforts are dominated by digital literacy development programs while paying little attention to the holistic entrepreneurial capacity. Whereas only as a part of a comprehensive approach digital literacy can be developed. As SMEs are part of a system, the holistic entrepreneurial capacity should encompass internal and external capacity, from SMEs' capacity as an entity, the availability of enabling environment, and the synergy.

This research attempted to solve the research question: *"How to raise the SMEs' capacity in Indonesia to perform digital transformation?"*. The proposition was studied by carrying a multiple embedded case study of Indonesian SMEs to determine the existing capacity, barriers and ultimately answer the research question. The case study includes 18 SMEs with different business scales assorted into three categories according to the entrepreneurial capacity and digital literacy level. Data collection in this case study combined semi-structured interviews and observations. Additionally, three inclusive case descriptions are presented to illustrate the profile of targeted companies in the Government's digital transformation agenda. Furthermore, cases were cross-analyzed to reveal their capacities based on the value and institutional context of each company, and also the relation to its digital transformation phase. Meanwhile, data about the current landscape and the interaction with SMEs are collected from a literature review and interviews with four experts from Kemenkop, Bank Indonesia, and eCommerce.

The empirical results reveal that Indonesia's current landscape is shifting within traditional and more modern practices. Numerous policies, regulations, development programs, and financial supports exist to boost SMEs' digital transformation. However, there are manifold barriers at this level. There is a solid patrimonial system and bureaucracy in a decentralized Government system, compounded by a sectoral ego that creates disintegration and hampers coordination. In addition, the lack of arrangement and regulations enforcement due to the Government's limited capacity generates suboptimal outputs. Next, lack of capacity is the central barrier to digital transformation at the SME level. However, the empirical evidence showed that this issue is beyond the lack of knowledge and skills in technology utilization. Hence, capacity building should not only concentrate on improving digital literacy but also the overall SMEs' capacity. Another noteworthy finding is that some SMEs with high capacity prefer to stay out of the systems and refuse to take digital transformation due to weak regulations enforcement from authorities and lack of incentives.

On the other hand, SMEs utilizing digital technology both in transition business model and digital business model obtain several benefits from their participation. First, they enjoy the broader market and network up to national also international markets. Such a network will also lead to cost savings and access to funding. Next, they can have better engagement with

customers that contribute to their innovation capacity. Then, combining the broader market, network, and customer interaction enables SMEs to create demand-based innovation, leading to better product value. Participating in the digital platform and the motivation for business escalation also affect the SMEs' compliance level. As they try to develop the business and increase the product value, they will register their business and strive to obtain relevant certifications. Ultimately, with intensive assistance and consecutive improvements, the company's overall performance would be enhanced, and in turn, this will promote business sustainability.

This study confirms that SMEs' digital transformation requires comprehensive knowledge and skills, a supporting mindset, and enabling environment. Therefore, we propose a comprehensive SMEs development program for the Indonesian Government, namely ***SCALE-UP: SMEs Capacity Development and Upgrading Program***. This program is a *top-down approach* for the Government and relevant authorities that focus on providing appropriate capacity building for SMEs according to their needs reflected on capacity assessment output. So, the capacity development between SMEs might vary. The traditional enterprises with a lack of capacity in most aspects will get different development plans than the SMEs with higher entrepreneurial capacity but lack digital literacy, as they need a more entrepreneurial mindset and attitude. This capacity development should be followed by intensive assistance and collaboration with civil society. Eventually, regular evaluation and more vigorous enforcement are essential to monitor progress and anticipate obstacles. Nevertheless, this development program requires more transparency, cooperation, and compliance within Government institutions. To deal with the sectoral ego, a dedicated working group for SMEs development consisting of Government and relevant authorities is required. In addition, the Ministry of SMEs and Cooperative, as the SMEs authority, can build a showcase of progressive SMEs that is accessible for investors, financial institutions, NGOs, and relevant stakeholders. This showcase can be an incentive to encourage SMEs to take digital transformation and participate in the formal economy voluntarily.

Keywords: SMEs, Entrepreneur Capacity, Capacity Approach, Digital Transformation, Social Transformation

Acknowledgements

Writing this part feels surreal for me as I feel about accomplishing this thesis report. I want to express my most enormous gratitude to Allah Almighty, who has given me an abundance of blessings up to this point in life. Allah has realized my dreams with the beyond-imagined scenario.

This thesis marks the end of my two years of student life at the Delft University of Technology. It has been a postgraduate school and academy of life all at once. Hence, I would like to thank my very supportive husband, Bondan Ranukusumo, for allowing me to pursue my dreams. It must be tough stepping back in your career life in Indonesia to live in the same house in a foreign country. I would not go this far without your love, patience, and sacrifice to accompany me throughout this MSc journey.

I would also like to thank the members of my graduate committee. First of all, Dr. J. O. (Otto) Kroesen, my first supervisor, for his willingness to support me before his retirement. I remembered the difficult time of seeking a thesis supervisor and was grateful that I finally found a suitable supervisor with a passion for entrepreneurship in a developing country. Thank you for your direction, abundance of time, insightful discussions, and valuable feedback on this study. My most considerable appreciation for your understanding and patience on my overthinking, perfectionist, and suddenly disappear. Finally, I can finish this report. Second, Dr. ir. Z. (Zenlin) Roosenboom-Kwee as my second supervisor. Thank you for providing me valuable insights and critical feedback from the academic and MOT side. I appreciate your time and discussions amidst your tight schedule. Finally, Prof. dr. C. (Cees) van Beers, as the Chairperson of my committee. Thank you for recommending the Delft Centre of Entrepreneurship to help me finishing this project and being a part of my graduate committee.

I use this opportunity to return the priceless experience to society by studying SMEs development. Although it is only a drop of water in the ocean, at least I am a part of that. It would be only possible with the help of all the interviewed SMEs and experts. Thank you for the valuable time and insights that help me in this study, although you are dealing with a tough time due to the pandemic.

Nevertheless, the happiness of accomplishing my long-time dream of pursuing a master's degree in the Netherlands is strongly overshadowed by the grief of my late mother, Mamah Wiwik. Hence, I would like to thank my family as the most powerful support system in Indonesia. My parents in Palembang taught me the importance of education and hard work. Mamah Wiwik and Papah Sudarmono, for the belief in my dream and courage, whenever I wanted to give up. Thank you for the endless pray. My twin sister (Reni Adriani) and my younger brother (Rusdyansah), thank you for the calls and messages that help me going on this journey. Go fight for your dreams and live. The two years living in the Netherlands would never be feasible without my family and friends in Delft. Thank you, Mas Tofan, Krisna, Stella, Pranvi, Jacqueline, and Bisma, for the friendship, support, time, struggles, and laugh.

Last but not least, thank you to my company, Bank Indonesia, for a priceless opportunity so I can live my dream in the last two years. Thank you to my humble referee, Bapak Ronald Waas, living inspiration for me.

Rena Adriana
Delft, August 2021

“Dedicated to my late mother, Mamah Wiwik, who wanted to see me graduate like no others yet lost her battle to Covid-19.”

Thank you for supporting me from the very beginning of my MSc journey. Regularly came to Surabaya, accompanied and waited for me during the IELTS test, cheered me up when I failed. Thank you for all the breakfast I brought proudly to the office, taking 15 hours flight to NL in ensuring my first day at school run well. Not forget how you also encouraged Mas Bondan to support me, listen to the ups and downs within, and still wonder about my thesis progress during your critical time fighting against Covid. Too many dreams and plans awaited Mah. I hope you are proud of this accomplishment.



List of Contents

Executive Summary	i
Acknowledgements	iii
List of Contents	vi
List of Tables	viii
List of Figures	viii
List of Abbreviations	viii
1. Introduction	1
1.1 The Urgency of Digital Transformation for SMEs	1
1.2 The Challenges for SMEs' Digital Transformation	1
1.3 The Need for a New Approach for SMEs' Digital Transformation	2
1.4 Problem Statement	3
1.5 Research Objective	3
1.6 Research Questions	4
1.7 Thesis Outline	4
2. Literature Review	6
2.1 Small Medium Enterprises (SMEs)	6
2.1.1 Definition of SME	6
2.1.2 SME in Indonesia	6
2.2 Transformation Model	7
2.2.1 Digital Transformation on SMEs	7
2.2.2 Social Transformation Model	10
2.3 The Study on SMEs' Digital Transformation	11
2.4 Capacity Theory	13
2.5 Conclusion on Theories	16
3. Research Methodology	19
3.1 Case Study Design	19
3.2 Case Study Selection	19
3.3 Research Flow	21
3.4 Data Collection	22
3.4.1 Desk Research	22
3.4.2 Semi-structured Interviews	22
3.5 Data Analysis	25
4. Indonesian SMEs' Landscape	27
4.1 Profile of Indonesian SMEs	27
4.2 Involved Actors and Dynamics	28
4.3 SME Policies, Supports, and Challenges	31
4.4 Digital Transformation Programs of SMEs	33
4.5 Social Transformation of Indonesian SMEs	34
5. Case Study	37
5.1 Findings Summary	37

5.2 Multiple Cross-case Analysis	56
5.2.1 Company Level	56
5.2.1.1 Traditional Business Model	56
5.2.1.2 Transition Business Model	57
5.2.1.2 Digital Business Model	58
5.2.2 Civil Society Level	59
5.2.2.1 Suppliers	59
5.2.2.2 Customers	59
5.2.2.3 Competitors	60
5.2.2.4 NGOs ad Entrepreneurial Community	60
5.2.3 State Level	60
5.2.3.1 Regulation and Informal Network	60
5.2.3.2 Accountability	61
6. Discussion	64
6.1 Barriers on SMEs Level	64
6.2 Barriers on State Level	66
6.2.1 Disintegration, Lack of Coordination, and Power	66
6.2.2 Lack of Arrangement and Capacity	67
6.3 Benefits of Participating in Digital Ecosystem	67
7. Conclusions and Recommendations	72
7.1 Conclusions	72
7.2 Recommendation	74
7.3 Generalizability, Theoretical and Practical Contribution	76
7.4 Reflection, Limitations, and Recommendation for Future Research	77
Bibliography	79
Appendix A: Case Study – Extensive Descriptions and Reflection	87
Appendix B: Interview Questions for SMEs	110
Appendix C: Interviews Questions for Top-level Actors	115

List of Tables

Table 2.1 Digital Transformation Framework	9
Table 2.2 Kroesen's Social Transformation Model	10
Table 2.3 Study on SMEs' Digital Transformation in Developing Country	12
Table 3.1 The Sources of Primary Data and Potential Respondents	23
Table 5.1 Summary of Interviewed SME in Group A	38
Table 5.2 Summary of Interviewed SME in Group B	42
Table 5.3 Summary of Interviewed SME in Group C	49

List of Figures

Figure 2.1 Digital Transformation Process from "Understanding digital transformation: A review and a research agenda" (Vial, 2019, p.122)	8
Figure 2.2 Entrepreneurs Capacity Model According to Kroesen (2019)	15
Figure 3.1 Design for Multiple Embedded Case Study	20
Figure 3.2 Research Flow	21
Figure 3.3 SMEs' Embedded Case Study	24
Figure 4.1 Profile of Indonesia SMEs according to Kemenkop, 2018	27
Figure 4.2 The Figure of Involved Stakeholders of SMEs Development in Indonesia	28
Figure 4.3 SMEs Go Digital Program of Bank Indonesia	34

List of Abbreviations

Kemenkop	Ministry of Cooperative and SMEs (<i>Kementerian Koperasi dan Usaha Kecil dan Menengah</i>)
Kemenkominfo	Ministry of Communications and Information Technology (<i>Kementerian Komunikasi dan Informatika</i>)
SMEs	Small and Medium Enterprises
BUMN	State-owned Enterprises (<i>Badan Usaha Milik Negara</i>)
BKPM	Capital Investment Coordinating Board (BKPM)
KUR	People's Business Credit Programme (<i>Kredit Usaha Rakyat</i>)
OSS	One Single Submission (<i>Centralized Platform for Business Registration</i>)
PTSP	One-stop Service (<i>Pelayanan Terpadu Satu Pintu</i>)



1. Introduction

1.1 The Urgency of Digital Transformation for SMEs

The world is evolving, disruptive innovations are increasing, and technology is already in every part of humans' lives. Technology has transformed many activities from purchasing goods to product marketing and development to business strategy and customer engagement in economic activity. We are in the digital economy era, and the world within this time is just one click away. Nevertheless, the digital economy's luxury can only be possessed by the connected party (Deloitte, 2020). Hence, any player intending to stay in the game requires a digital shift that necessitates an open innovation mindset, resources, adaptation, and transformation strategy. Such transformation is essential and not an optional strategy for SMEs' sustainability. This transformation's urgency rises during the COVID-19 outbreak as it unfavorably affects small businesses (Gregurec et al., 2021). Social distancing impedes in-store purchases and diminishes SMEs' revenue, causing SME owners to minimize costs and lay off their employee, and some even have to terminate their businesses (Thorgren & Williams, 2020); particularly those with a traditional business model that solely rely on the physical store as their selling channel. From 2020 and 2021, voluminous studies discussing COVID-19 impacts on SMEs' sustainability, risks, challenges, and the exit strategy (e.g., Shafi et al., 2020; Li et al., 2021; Razumovskaia et al., 2020; Tsilika et al., 2020), further accentuated the exigency for the digital transformation within SMEs.

Despite the urgency, every organization has different capacities and resources that lead to different digital transformation pace (OECD, 2019). Large firms tend to have better capacity in terms of knowledge, capital, and resources than SMEs. The capacity gap between the two entities is notable. SMEs need to quickly adjust with the transition otherwise they will lag further and lose. Another issue is that the SMEs' capacity diverges between advanced and emerging countries. The interest and awareness of digital transformation are better in developed nations than their developing counterparts. Regardless the limited resources, SMEs hold a crucial role as the backbone of most economies. Studies demonstrated that SMEs possess copious advantages for a country such as strengthening economic growth (Toma et al., 2014), enhancing Gross Domestic Product (GDP) and job creation (van Scheers, 2016; Meyer & Meyer, 2017), as well as promoting innovation (Bosma et al., 2020; OECD, 2010). Therefore, SMEs' development and their digital shift have become a strategic discussion and require significant attention from the Government, policymakers, SME owners, and related stakeholders.

1.2 The Challenges for SMEs' Digital Transformation

Although SMEs have an essential role in many economies, they still encounter various problems to grow. In an advanced economy (e.g., the United Kingdom (UK)), facets negatively influencing SMEs include the economic situation, high costs, taxes, lack of loan and human resources capacity, inadequate cash-management, clear plan deficiency, ineffective leadership, and weak execution. Meanwhile, SMEs in developing countries have to meet obstructions above in the challenging situation (Kroesen, 2019) related to (i) the style of internal management; (ii) external relationship, partners, and customers; (iii) the governance and regulatory frameworks; and (iv) social transformation processes. With such voluminous

problems, SMEs strive to enter and benefit from the digital economy (PricewaterhouseCoopers, 2018).

In terms of digital transformation, SMEs have to cope with substandard perception, strategy in adopting digital technologies (Pelletier & Cloutier, 2019), lack of resources, IT-related experience, open innovation mindset, skilled labor (APEC, 2020), as well as lack of confidence on cybersecurity (Asia, 2019). Hence, considering the digital economy will be a new standard, the existing barriers might harm the SMEs' business continuity. Responding to this condition, the government and policymakers in most countries have formulated and conducted SMEs' digital transformation strategies. However, many discussions and policies (e.g., Rvspk et al., 2020; Bosma et al., 2020; Werber et al., 2015; Eniola & Entebang, 2015) framed digital technology mastery essential factor to get in the digital shift on SMEs. From the group of emerging countries, Indonesia has focused on studying and improving SMEs' literacy, mainly financial and digital literacy (Sariwulan et al., 2020; Erlanitasari et al., 2020; Widyastuti et al., 2016; Zahro, 2020). Indonesia Government keeps increasing the target of digitalized SMEs, although literacy improvement still requires some time to prove its effectiveness (Catriana, 2020; CNN Indonesia, 2021).

Digital Transformation or digitalization is beyond digitization - data conversion from analog to digital (Prause, 2016), even less the adoption of the latest technology. Vial (2019) studied 23 unique definitions of digital information and defined this as improvement process of an entity by combining digital technologies aspects that trigger major changes to features of that entity. Referring to this definition and considering the fundamental problems and digitalization barriers on SMEs, it is apparent that the challenges are not limited to digital technology utilization and financial knowledge. In essence, it is about the readiness and response of SMEs towards emerging innovation: the capacity or the ability to get things done (Balassanian, 2006). This SMEs capacity, or also called entrepreneurial capacity in this study requires other aspects like competence, character, mental orientation, and an enabling social environment (UNDP 1997).

1.3 The Need for a New Approach for SMEs' Digital Transformation

Compared to entrepreneurship, digital transformation is relatively new, although it has been an attractive issue in recent years. The standard definition and framework are yet available, even though multiple frameworks exist with several approaches (Westerman et al., 2014; Cognizant, 2014; Solis & Szymanski, 2016). The present literature commonly highlighted the importance and advantage of digital transformation as summarized in Vial (2019), from *operational efficiency* (through automation, cost-savings, fast response, and decision-making process), *organizational performance* (through better innovativeness, financial performance, company growth, and competitiveness), and *high-level improvements* on the industry and society level. Those benefits become the motivation for firms to take this path for the sake of their competitive advantage and connection in the digital economy (Vial, 2019). Besides, scholars also focused on formulating practical approaches by studying the causative factors and assessed the positive impact of particular technology-based transformation like platform adoption or business model application to firms' performance. The most recent studies also consider digital transformation as a surviving strategy amidst the COVID-19 outbreak (Coballero-Morales, 2021; Seetharaman, 2020).

In real practice, the applied strategy seems narrowed down on raising critical literacy as many countries make intervention strategies against the lack of knowledge and literacy (Steyn,

2018). Technology is a vital variable for economic advancement, but the capacity to deal with technology also an essential factor (Kroesen, 2019). Solving the digital transformation issues on SMEs will be insufficient with a few seminars on digital technologies and how to utilize them. When SMEs take a digital shift, it will not be sufficient to know how to use e-mail and join eCommerce. Their perception towards the needs of digital transformation is the first thing to ensure. Besides, they should also be able and willing to change other aspects like the product and services to be more attractive visually, marketing method through social media campaign and Internet of Things (IoT) promotion, a process like shipping mechanism, and organization by connected to other networks like technological and the expedition company. To do so, they should have adequate capacity. The capacity is the ability to get things done (Balassanian, 2006), which requires competence, character, mental orientation, and an enabling social environment (UNDP 1997). According to Kroesen (2019), the capacity of SMEs consists of internal and external capabilities divided into three layers: (i) IESA: Information, Experience, Skills, and Algorithm; (ii) VAB: Value, Attitudes, and Beliefs; and (iii) SI: enabling Social environment and Institutions. Capacity building of SMEs should consider not only the firms' capability but also their surrounding.

Researchers and practitioners are still constructing the proper approach to how SMEs can utilize digital technologies, while the assessed challenges imply capacity problems. Hence, the study of SMEs' digital literacy by taking the capacity factor into account offers a comprehensive approach to help SMEs survive the digital economy. An in-depth study of SMEs with various capacities, digital literacy levels, business fields, and regions will allow us to assess the impact of capacity towards digital transformation's progress. This type of study that also considers traditional value orientation and transformation from System I to System II has not been conducted, and this study will fill that gap.

1.4 Problem Statement

The main problem highlighted in the proposed study is the increased urgency of SMEs' digital transformation to connect with the digital economy strengthened by the crisis during the COVID-19 pandemic. However, the real practice often narrows down the change into digital technology utilization and puts literacy improvement as the focus in many strategies and policies while paying little attention to entrepreneurs' capacity factor. Digital technologies are only part of the digital transformation; another important aspect is the people behind and how they utilize them (Kroesen, 2019). Other reasons to study the interrelation between SMEs' capacity building and digital transformation are SMEs' role in the economy, particularly for developing countries, and the fact that most of them are yet connected to the digital ecosystem. This study will observe the SMEs' digital transformation through a comprehensive entrepreneurial capacity approach through a case study of SMEs with different levels of literacy and capacity in Indonesia. Only as a part of a comprehensive approach that takes into account other aspects of a company's entrepreneurial capacity and skills also digital literacy can be improved.

1.5 Research Objectives and Deliverables

This study investigates the transformation in a society, particularly the digital transformation of SMEs with the entrepreneurial capacity approach, embodied in a case study of SMEs in Indonesia. The social transformation model will describe the current SME landscape at the state, civil society, individual enterprises, and the social movement. Furthermore, the entrepreneurial capacity approach will help gain a deep understanding of SMEs' digital

transformation capacity, including their knowledge and skills, mindset, and surroundings. This research is expected to fill the knowledge gap on SMEs' comprehensive capacity approach to digital transformation, where most of the literature focused on raising digital literacy and hardly pay attention to the essential role of SMEs' capacities in general. Merely focusing on digital literacy does not solve transformation issues without ensuring that SMEs have sufficient capacity to do such change. This research mainly aims to add to the body of knowledge of entrepreneur capacity study, digital transformation, and the business management field. A contribution to digital transformation study is also included, concentrating on firms' capacity to perform the shift and their practical implementation. In addition, the study case of SMEs in Indonesia will contribute to entrepreneurship literature in a developing country. The findings from SMEs capacity assessment in this study will also provide insight for the government and policymakers in formulating the appropriate approach.

1.6 Research Questions

Many SMEs are still outreach of the digital economy due to their limited capacity to be in this ecosystem. On the other hand, the government, policymakers, and other related institutions in Indonesia try to enable SMEs to be inside the digital environment by improving their digital technology literacy and knowledge. Meanwhile, literature shows that literacy or knowledge is only a part of a holistic capacity required to perform a digital transformation. Thus, the main research question of this study is the following:

“How to raise the SMEs’ capacity in Indonesia to perform digital transformation?”

The following Sub-research questions (SQs) are defined to obtain the required input for answering the main research question:

SQ1: What is the current landscape and characteristic of SMEs in Indonesia?

SQ2: How is digital literacy related to the entrepreneurial capacity of SMEs?

SQ3: What are the requirements for the comprehensive approach towards the enhancement of digital literacy?

1.7 Thesis Outline

This thesis is divided into seven chapters. In this chapter, the background of this study along with the existing problems are presented, followed by the research objectives, research questions and thesis outline. Next, chapter 2 will provide a literature review. This includes the description of Indonesian SMEs, transformation process both digital and social transformations, capacity theory, and a conceptual research model. In chapter 3, research methodology will be provided. This includes a case study design, selection, and analysis. In the next chapter, the current landscape of Indonesian SMEs will be presented. Involved actor, internal management, civil society, and state governance, as well as the current social transformation, challenges for Indonesian SMEs to perform digital transformations are presented. The fifth chapter will start with a capacity description and evaluation of the individual companies, followed by a summarized capacity matrix of interviewed SMEs, concluded with the multiple cross analysis of group B and group C. The last chapter will draw conclusions for this research project. It will firstly answer research questions proposed in this chapter. Next, a reflection on the research and the outcomes will be provided. Lastly, recommendation for future research will be discussed.



2. Literature Review

This literature review part will provide an overview of SMEs' digital transformation and relevant theories, gathered from multiple sources: prior academic researches, grey literature, and news articles. The searching process in the academic journal portal (Scopus, Research Gate, Google Scholar) and TU Delft repository website conducted using several keywords ("SMEs," "SMEs in Indonesia", "SMEs' capacity", "Digital Transformation", "Social Transformation") and their combination. Other than the book and academic publications, white literature like a paper published by institutions like World Bank, APEC, the European Commission, and company reports are also included to provide perspective from relevant practitioners. Besides, the information from online newspapers, government and company websites provides an overview of local conditions in the selected case study area.

2.1 Small-Medium Enterprises (SMEs)

2.1.1 Definition of SME

There is no universal description and terminology of SME. According to World Bank, SMEs are mostly defined by the number of employees, revenues, and financial loans (Pinar Ardic et al., 2011). Those criteria will further define each firm in the small, medium, or micro category based on the respective particular threshold. In the European Union, SMEs represent 99% of businesses, employ more than 100 million people, and contribute to more than 50% of Europe's GDP. SMEs categorization refers to combining the number of employees and turnover or balance sheet total (European Commission, 2017). The medium-sized firm has a staff headcount of less than 250 and a turnover \leq of €50 million or \leq €43 million balance sheet total. Furthermore, a small firm has 10 to 49 employee and turnover \leq of €10 million or total balance sheets range from more than €2 to €10 million; and (iii) Micro firm has less than ten staff and turnover or balance sheet total up to €2 million.

In the United States, SMEs, known as Small and Medium-sized Businesses (SMBs), are firms with fewer than 500 workers (US ITC, 2010). They contribute to about two-thirds of new job creation in the private sector. Further division of SMBs varies per sector based on the number of employees and annual revenue. Likewise, SMEs account for 98% of total businesses, 66% nationwide employment, and 38% of Asia's GDP (ADB, 2016). Most SMEs in the region employ less than 100 people. Furthermore, in general, SMEs' categorization is the same as in the EU and US that refers to the number of employees, although some use amount of assets, trade volume, and production size.

2.1.2 SMEs in Indonesia

In 2018, there are 64.35 million SMEs mostly micro-enterprises (98%) that absorb 97% national workforce and contribute to about 60.34% of Indonesia's GDP (Ministry of Cooperatives and SMEs, 2018). According to SMEs Act - number 20 the year 2008, SMEs in Indonesia or Usaha Menengah Kecil dan Mikro (UMKM) are self-managed firms or business entities. The classification for each group refers to the net total worth (excluded land and business building) and annual sales with the following detail:

- a. *Micro-enterprise*: net worth of 50 million Rupiah and annual sales up to 300 million Rupiah.
- b. *Small-enterprise*: net worth ranges from more than 50 to 500 million Rupiah and maximum annual sales between more than 300 million to 2.5 billion Rupiah.

- c. *Medium enterprise*: net worth ranges from more than 500 million and up to 10 billion Rupiah while annual sales are between more than 2.5 to 50 billion Rupiah.

All enterprises are part of one economy, either in the formal or informal sector. In a developing country, the informal economy is the crucial engine for jobs and livelihoods. There have been many studies and debates about the definition and characteristics of the informal economy. Chen (2012) discussed the dominant school about the informal economy are activities that are unrelated to formal economy (*Dualist*), subordinated of the formal economy (*Structuralist*), micro-entrepreneurs that choose to operate informally (*Legalist*), and informal businesses that avoid regulation and taxation due to the cumbersome registration procedures (*Voluntarist*). Furthermore, the existence of an informal economy has been driven by some factors, from the imbalance of growth between population, available employment, the advancement of technology, capitalism of formal firms for cost efficiency, a hostile legal system, and entrepreneurs' choice.

Referring to Indonesia SMEs Act and typical characteristics of each enterprise group, Bank Indonesia (Bank Indonesia & LPPI, 2015) defined the characteristics of each SMEs' group, and large firms are as follow:

a. Micro-enterprise

Unfixed Product/ commodity (easy to change), the business location is not permanent, no financial administration, lack of entrepreneurship character, low education background, generally not connected to a bank, has no business license, and other required legal documents like tax identification number.

b. Small-enterprise

Fix product/ commodity and (semi)permanent business location. This group has better financial management with simple administration, separated business and family finances, balance sheet, and capital access to the bank. This group also has better legal aspects as the SMEs have a business license and other required legal documents, including tax identification numbers. Furthermore, they have experienced human resources but mostly cannot do business management, e.g., making a business plan.

c. Medium enterprise

SMEs in this group have better management and organization with clear task division. Besides, they also have better financial management, which refers to the standard accounting system and legal aspect by having business and environment license also following labor's rule and organization. They have adequate access to bank financing as well as experienced and educated human resources.

d. Large enterprise

This group consists of state-owned, private, joint ventures, and foreign business entities with net worth and more than medium enterprises' annual sales.

However, majority of enterprises in Indonesia (93%) are informal although there is clear characteristic division for each group (Rothenberg et al., 2016). Small and Medium enterprises are often do not have the sufficient legal document.

2.2 Transformation Model

2.2.1 Digital Transformation

Due to the fast growth of digital technologies, broad implementation scope, and dynamics domain, there is no standard digital transformation definition. In essence, transformation is

about adaptation capability, as we know in Darwin's evolution theory. Before, there have been prior transformation theories in an organizational setting like a business and IT-enabled transformation. Business transformation is the significant organizational changes induced by the significant modifications of practice related to business efficiency, workforce empowerment, opportunity discovery, business objective, and company direction (Ismail, 2017). On the other hand, IT-enabled transformation focuses more on the notable advances forced by transformational information technology. Lucas et al. (2013) in Ismail (2017) argued that such IT transformation should be presented in at least three of the following aspects: processes, new organizations, connections, user experience, markets, customer, and interruption. Notably, both transformation theories have the same characteristics: require strategy, changes conducted in several stages, and aim for the significant improvements for organization performance.

Vial (2019) studied 23 unique definitions of digital information and defined digital transformation as *"a process that aims to improve an entity by triggering significant changes to its properties through combinations of information, computing, and connectivity technologies."* The main distinctions of digital transformation in that studied definitions are: the shift from non-digital to a digital organization, integration of digital technologies into business, and the expected output from such transformation are, among others, significant performance improvement as well as the innovative value and opportunity creation. Furthermore, the digital transformation domain covers multiple business dimensions from the product, business model, people, customer experience, operations, and network (Ismail, 2017). Thus, in this study, we define digital transformation as *"a process of major change in SMEs' properties driven by the utilization of digital technologies that enable business improvements and new value creation to remain competitive."* The holistic digital transformation process is summarized from the scattered discussion in existing literature, as shown in Figure 1 (Vial, 2019).

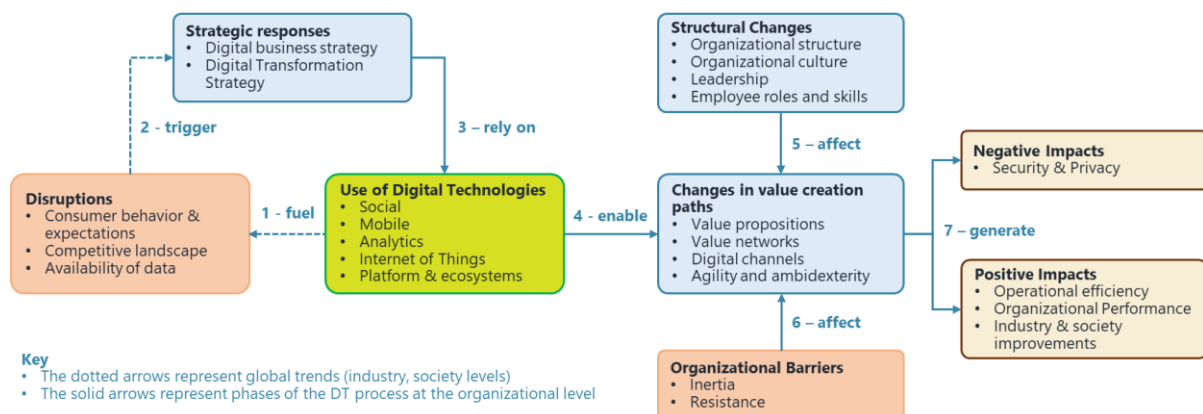


Figure 2.1 – Digital Transformation Process from “Understanding digital transformation: A review and a research agenda” (Vial, 2019, p.122)

The digital transformation process (Vial, 2019), as shown in Figure 1, shows that digital transformation is not limited to the knowledge on how to use and utilize digital technologies. It supports the purpose of this study that a comprehensive approach to digital transformation is required. Vial (2019) defined the digital transformation process from digital technologies utilization that creates disturbance and triggers a strategic response in the digital business and transformation strategy. These strategies are firms' response that is in Kroesen's framework depends on the firms' capacity. Strategic responses and required changes will only

work when enterprises have sufficient capacity; Otherwise, inertia and resistance towards innovation will be present.

A digital transformation framework is a guide for a company to take the complete digital transformation process. As the firms' characteristic differs in terms of transformation goal, resource availability, business strategy, culture, and challenges, then the strategy for each company will also be unique. However, many business advisors try to build a general digital transformation framework with some examples, as shown in Table 1, based on the transformation impact, stages, or implementation method. The impact-based approach is in line with the impact of digital transformation on the three organizational dimensions (Vial, 2019).

1. External – customer-centered approach and changes the entire life cycle.
2. Internal – transforming firms' internal environment.
3. Holistic – affecting the overall business and can lead to a different business model.

Table 2.1 – Digital Transformation Framework

Framework	Components	Source
The Nine Elements of Digital Transformation	<ol style="list-style-type: none"> 1. <i>Customer experience</i>: customer understanding, top-line growth, and customer touch points. 2. <i>Operational process</i>: process digitization, worker enablement, and performance management. 3. <i>Business model</i>: Digitally-modified business, new digital business, and digital globalization. 	Westerman et al., 2014
Cognizant's Digital Transformation Framework	Digitalization on the four important area: <ol style="list-style-type: none"> 1. <i>Products and services</i>: connected products, pay per use, predictive usage. 2. <i>Operations</i> (processes and systems): customer-centric standard platform, agile approaches to work, availability. 3. <i>Organization</i>: collaboration and innovation; skills and virtual workforce; dynamics partner ecosystem. 4. <i>Customer experience</i>: digital marketing, omni-channel, customer insight. 	Cognizant, 2014
The Six Stages of Digital Transformation	<ol style="list-style-type: none"> 1. <i>Business as Usual</i>: company stays in the status quo considered it still relevant to digital ecosystem. 2. <i>Present and Active</i>: experimentation occurred, literacy and creativity increased, with the aim to transform business function. 3. <i>Formalized</i>: experimentation occurred but lack of executive support. 4. <i>Strategic</i>: collaborative experimentation with digital transformation roadmap. 5. <i>Converged</i>: a dedicated digital transformation team with new infrastructure. 6. <i>Innovative and Adaptive</i>: a new ecosystem established. 	Solis & Szymanski, 2016

The nine elements framework has recently been updated with new additional blocks, employee experience, and digital platforms to enable further innovation (Westerman & Bonnet, 2020). Westerman and Bonnet (2020) explained that employees could be either the inhibitor or enabler for digital transformation in the updated framework. Hence, it is crucial to also transforming *employee experience* on augmentation (potential replacement of human labor with robots), *future-readying* (importance of skills to keep up with dynamics and competitive environment), and *flexforcing* (talent agility in the fast-paced digital ecosystem).

Meanwhile, the *digital platform* is more about transforming technology from the core platform (operational and transactional systems), *externally facing platform* (front end systems), and data platform (intense analytical functions).

2.2.2 Social Transformation

Social transformation is a significant change in society, either gradual or incremental over some time (Khondker & Schuerkens, 2014). This research's social transformation describes a changing society, particularly a business entity, where firms move towards the digitalized firms. Some firms can utilize digital technology while other firms like SMEs are struggling with the traditional way. Therefore, the digital shift is expected to help SMEs improve their capacity to generate more revenue and contribute better to economic and job creation as their businesses grow. This illustration shows the linkage of SMEs to social transformation. Hence, it is essential to also look at the change of SMEs from a broad perspective.

Kroesen (2019) proposed a social transformation model that combines governance, institutions, and company values. Social transformation model, as shown in Table 1, illustrates a moving society: from System I to System II, and not limited to the move of traditional to modern society or from pre-modern to modern society. However, in this study, the movement will be described as pre-digital transformation SMEs environment (System I) to digitally transformed SMEs' environment (System II). Furthermore, each system's institutions and values at the level of the state, civil society, and individual enterprises enable comprehensive mapping of social transformation in society.

Table 2.2 – Kroesen's Social Transformation Model

	System I		System II	
	Institutions	Values	Institutions	Values
State	Patrimonialism at the top, granting favors and privileges in return for services.	Obedience and loyalty, hierarchy, status, personalized relationship, particularism.	Rule of law, equal access, strong but accountable state institutions, property protection, contract enforcement.	Universalism, equal access, justice, transparency.
Civil Society	Closed in-groups, vertical networks, little cooperation.	Lifelong solidarity, adaptation to the group, traditionalism, uncertainty avoidance.	Civil society, open cooperation at the bottom, changing coalitions (apart from family loyalty and state authority)	Open attitude, mutual adaptation, multiple memberships, pluralism of opinions
Individual Enterprises	Family based, distributed activities, dependent on position and opportunities in the vertical network.	Command and control, status through position, closed in-group ethos, loyalty counts more than efficiency, synchronic time management privileged treatment of in-group members.	Open labor market, contracts, instrumental working relations, both of competition and cooperation between competitors.	Individual judgement, professional attitude, initiative, status by achievement, planning and innovation, cooperative attitude, equal treatment, teambuilding

Social transformation is an on-going shift within the systems. Society consists of System I and System II with different compositions in every country. In such circumstances, firms have to participate in the transformation itself and keep moving towards System II. Thus, to enable

enterprises to move between two systems, Kroesen (2019) argued that several issues need to be addressed.

1. *Reframing the notion of corruption.*

In developing countries, the allowance culture to facilitate trust and closed in-group ethos prioritizing family members' involvement as a solidarity network is prevalent. However, their presence in large quantities and irresponsible way when involving public funds on a large-scale and for private gains will turn into what people call corruption. Navigating social transformation in this society should honor its culture; otherwise, the object of reforms will resist change.

2. *Niche management and civil society.*

Introducing new technology or a novel way of doing business in developing countries requires a network and openness to build a favorable social environment. Small businesses should develop trust and collaboration in their environment through a network, particularly with partners, consumers, government agencies, and other institutions like NGOs. That network will work with an open mindset that allows shared learnings, even though there might be a risk of being rigged. Nevertheless, the most critical thing in this social transformation is continuously moving on the right path.

3. *The changing role of the state.*

Bureaucratic behavior might hamper the social transformation process. Social transformation towards System II requires a more universalistic society that has conducive policies and regulations by promoting transparency, equal access, supporting the law, and law enforcement. However, then comes to another challenge as a universalistic society requires an open society.

Ultimately, from this model, Kroesen (2019) highlighted the importance of both the bottom-up (change initiatives from enterprises) and top-down approach (transformation facilitation from the state). Although there is an increased effort of the state to create a socially responsible environment, entrepreneurs should positively respond to those efforts and enrich the transformation process by creating entrepreneurial initiatives for business improvements. The increase in SMEs' capacity can help entrepreneurs in creating such initiatives and positive responses. In terms of digital transformation, the increase of entrepreneurial capacity will help SMEs have improved digital literacy and drive a positive response to technological changes and their importance. Thus, enterprises will be the driver of the social transformation process as they move more towards System II.

2.3 The Study on SMEs' Digital Transformation

The great interest in digital transformation is reflected in a large number of researches on this subject. Vial (2019) gathered and analyzed the current studies on digital transformation that cover the subsequent topics:

- a. *Digital technologies cause disruptions* in terms of consumer behavior and expectations, competitive landscape, and data availability.
- b. *A strategic response to digital disruption* consists of Digital Business Strategy (DBS) and Digital Transformation Strategy (DTS). DBS is more about the organizational approach of utilizing digital resources to create differential value. Meanwhile, DTS is a holistic change of products, processes, and organizational aspects caused by new technologies with a future orientation.

- c. *Value creation is the expected outcome of digital transformation.* Available studies discuss: (i) Transforming value creation and capture processes from value propositions, value networks, and digital channels, to agility and ambidexterity; (ii) Required fundamental modification to change the value process: organizational structure, organizational culture, leadership, as well as the role and skills of the employee; and (iii) Obstacles to change value creation and capture process: inertia and resistance.
- d. *Impact of Digital Transformation* on an organizational level (operational efficiency and organizational performance) and higher-level (societal impacts and well-being; the negative impact of security and privacy issues).

Although there are many studies on digital transformation as gathered in Vial (2019), the study of SMEs' digital transformation, particularly in developing countries, is still underexplored. Furthermore, the discussion area of prior studies listed in Table 2 concentrated on particular digital technology (eCommerce, social media, IoT). Meanwhile, the holistic study of SMEs' digital transformation in a developing country is limited.

Table 2.3 – Study on SME's Digital Transformation in Developing Country

Country	Digital Transformation Domain	Research and Findings	Sources
Turkey	Digital transformation process	<p>Study of digital transformation of SMEs in manufacturing sector in Turkey.</p> <ul style="list-style-type: none"> • <i>Influencing factors of rapid digital transformation:</i> the advancement of technology and innovation, digital and sharing economy, globalization, industry 4.0, Internet of Thing (IoT), New consumers' expectation, Emerging technologies (Artificial Intelligence, blockchain, cloud computing, chatbots, big data, Augmented Reality, Nanotechnology, Robotics), increase use of smartphones, and Digital Supply chain. • <i>The Digital Transformation process requires:</i> initiation and action of management, adopting a learning culture, a clear business roadmap and goal towards digital transformation plan, awareness of the digital and supportive environment, network with experienced or expert institutions, and Government support. 	Ulas (2019)
	Digital transformation platforms (eCommerce)	<p>This research studied the potential of eCommerce to globalize SMEs.</p> <ul style="list-style-type: none"> • The utilization of eCommerce can benefit firms in terms of improved business processes and cost efficiency. • <i>Factors that hinder SMEs in adopting eCommerce</i> are the perception that product are not suitable for online sales, logistics and payments issues, security and legal framework, high cost, lack of awareness and knowledge of eCommerce. <p>Lastly, this research also argued on the need of conducive landscape for SMEs in getting maximum benefit of eCommerce utilization.</p>	Savrul et al. (2014)

Country	Digital Transformation Domain	Research and Findings	Sources
Pakistan	Digital transformation platforms (Social media)	Study of social media adoption of SMEs in Pakistan with Technology-Organization-Environmental (TOE) approach. <i>Social media adoption significantly impacts</i> cost efficiency, better customer relationships and engagement, and market expansion.	Qalati et al. (2021)
Morocco	Digital transformation platforms (eCommerce)	Study of eCommerce adoption among SMEs in Morocco. The barriers of eCommerce adoption can be grouped into financial, cultural, technological, and organizational factors. <i>The financial factor</i> (high cost, lack of price transparency, and lack of financial resources) and <i>technological factor</i> (lack of IT knowledge, lack of trust, and confidence in technology) appear the most critical ones.	Dahbi & Benmoussa (2019)
Oman	Digital Transformation process	Study of digital transformation process with TOE approach. This study's findings are: (i) TOE has a significant impact on SMEs digitalize ability; (ii) the crucial role of managers to simplify the process of digital transformation in the organization and SMEs' owners to invest in digital technologies.	Alraja et al. (2021)
Indonesia	Digital Transformation Path	Study of the degree of digital transformation based on the firms' contextual factors. The digital transformation path is divided into three: 1. <i>Digitalized firms</i> for SMEs with high digital literacy 2. <i>Digitalize the sales function</i> for firms with low digital literacy and face a liquidity problem 3. <i>Digital partner</i> for SMEs with high social capital yet minimal digital literacy	Priyono et al. (2020)
	Digital transformation platforms (eCommerce)	There are 11 variables categorized into four factors (Technological, Organizational, Environment, and Individual) observed in this study. However, only some showed a significant impact on eCommerce adoption, namely <ul style="list-style-type: none"> • perceived benefits (Technological factor); • technology readiness (Organizational factor); • Owners' innovativeness, IT experience, and IT Knowledge (Individual context). It reveals that the individual capacity of SMEs' owners plays the most significant role in eCommerce adoption.	Rahayu & Day (2015)
	Influencing factor of Digital Transformation	Digital Literacy is the imperative problem for SMEs digitalization program. Digital Literacy measured by the capability in using technology, conducting digital marketing, and utilizing digital payments.	Erlanitasari et al. (2020)

2.4 Capacity Theory

As explained in sub-2.2.1, Vial (2019) defined the digital transformation framework that starts from digital technologies utilization that disturbs the consumers' behavior, competitive landscape, and data availability, which then triggers a strategic response in the form of the digital business digital transformation strategy. Such strategies rely on technology utilization to enable the change in the value creation path and generate positive impacts to the company. This process will be affected by the structural changes and barriers within the organization.

Strategic responses and required changes will only work when enterprises have sufficient capacity; Otherwise, inertia and resistance towards innovation will be present. Therefore, it is essential to go into the capacity problem to bring about more digital literacy.

The capacity gap between small and large firms and between SMEs in developed and developing countries has been the essence of various SME development studies. The same issue also emerges in the digital transformation domain. As mentioned in the Social Transformation section of this study, transformation in society relies on entrepreneurs' responses, and their capacity highly contributed to that response. Although capacity has been used in many studies, there is no unique term in any field (Hindle, 2007). Balassanian (2006) described that capacity is about getting things done. UNDP (1997) formulated that capacity consists of four dimensions: (i) individual, for instance, skills, knowledge, salary, and value; (ii) organizational dimension by becoming part of the larger entity; (iii) the interrelationships and arrangements between organizations; and (iv) enabling social environment from the state level and civil society to the private sector. In the more recent literature, UNDP (2006) added that capacity also includes change.

Hindle (2007) developed another capacity model by studying 78 works related to entrepreneur capacity. The studied definitions discussed the entrepreneurial capacity more about knowledge, skills, experience, and absorptive Capacity (Edwards & Muir, 2005; Hindle & Yeneken, 2004; Bygrave et al., 2003; Audretsch & Lehmann, 2006, De Soto, 1999); the ability to change knowledge into economic value (Hindle, 2002; Otani, 1996); and the required and sufficient condition of performing entrepreneurship behavior in the level of individual, organization, and society (Collins et al., 2006). Furthermore, Hindle (2007) defined *entrepreneurial capacity* as the human ability to recognize opportunity and design ways to transform such opportunity into realizable economic value. Furthermore, he explained the ability in exploring, discovering, and evaluating the opportunity require (i) resources; (ii) conviction (human desirability and feasibility); (iii) alignment between skills, resources, team, and task; and (iv) contextual factors like political condition, economic climate, and industry setting that will vary from one country to another.

Kroesen (2019) offered the more comprehensive approach by taking the aspect of entrepreneurs' Value, Attitude, and Beliefs (VAB) into account. According to Kroesen, the VAB is the core factor that will affect firms' overall capacity of running the company. Furthermore, the most important values/ attitudes for successful entrepreneurship are: *initiative*, *dealing with uncertainty* (taking risk), *frugality*, *time management*, *team spirit*, *universalism* (equal treatment, sticking to the rules, freedom of giving opinion and expression), *orientation outside the closed we-group of the family*, and *individual judgment*. From the capacity definition and models above, we can see that capacity and response influence each other. As the capacity affects the entrepreneurs' actions, the responses should also indicate entrepreneurs' capacity to finish the tasks. Entrepreneurs with high digital capacity imply their high entrepreneurship capacity, and vice versa, those without digital capacity lack entrepreneurial capacity.

In Indonesia, the transformation program has been introduced long time ago, large amount of development budget has been distributed, many SMEs capacity building initiatives have been introduced. However, those efforts just show insignificant progress indicating problems in SMEs' capacity that affect their responses to participate in and success the transformation program. It is important to study the VAB of Indonesia SMEs to find out the reason behind the lagging progress. Nevertheless, the existing literature and practice, only pay little attention to the role of VAB in SMEs development program that might be the big problem in Indonesia.

Later, Vial (2019) corroborated the importance of firms' response towards digital transformation, sensing the disruption, seizing the opportunity and benefits, and reconfiguring their business model elements accordingly through dynamic capability. Furthermore, Integrative Capabilities (IC) as one form of dynamics capability is the essential factor for a firm to successfully participates in a digital platform or ecosystem. IC is an iterative and reliable communication and coordination capability towards introducing and transforming firms' properties. The concept of digital maturity then emerged to measure an organization's capacity in responding to digital transformation. Williams et al. (2019) studied 25 digital maturity models and proposed an SME digital maturity model consists of six essential dimensions: strategy, product/ services, technology, people and culture, management, and process. The authors also found that people and culture is the most significant dimension in SME digital maturity model.

Considering the interrelation between digital transformation, capacity, people and culture, as well as the essential role of VAB, the entrepreneur capacity model from Kroesen (2019) can be useful for investigating SMEs' digital transformation. Kroesen argued that SMEs' sustainability in developing countries relies on their capacity to deal with obstructions in the dimension of state, civil society, and individual enterprises. Hence, capacity development is essential for technology transfer and re-design in emerging countries. Ultimately, he defined entrepreneur capacity as the function of internal and external capabilities consists of three layers, as shown in Figure 2.

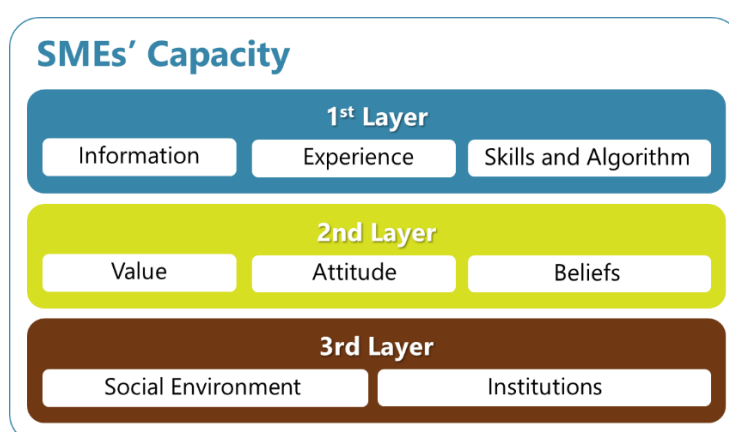


Figure 2.2 – Entrepreneurs Capacity Model according to Kroesen (2019).

The first layer, Information, Experience, Skills, and Algorithm (IESA), is about knowledge and skills. The second layer about the internal aspect of entrepreneurs' Values, Attitudes, and Beliefs (VAB). This layer is the core of capacity related to mindset and will define the subsequent actions. When an entrepreneur values innovation and believes that (s)he can do that change, it will be expressed in her/his attitude by actively seeking the information related to innovation or learning the supporting skills. Next, the third layer is about the supportive external aspect, enabling Social environment and Institutions (IS). Capacity building of SMEs should consider not only the firms' capability but also their surrounding.

Accordingly, we can translate that SMEs' digital transformation capacity depends on their holistic capacity as business entities. The first layer includes required knowledge and skills to remain competitive amidst the moving society: product, marketing, and digital technologies knowledge. To successfully perform the digital transformation, SMEs will not only need the knowledge and skills related to technology, but also the capacity to adjust and align related

business processes or features along with the technology utilization. For example, Sales digitalization will not be succeeded only through the skills in using the mobile devices and register to eCommerce or have their website to promote their product. Selling product online also requires SMEs to adjust the product appearance to be attractive visually, supported with the marketing knowledge, customer engagement, and complaint handling. Furthermore, the second layer is what entrepreneurs' value and believe in running the company. This core layer will affect the overall response and performance of SMEs, from how they value and believe on their ability to survive, grow, and change. In terms of digital transformation, SMEs need to value the innovation and believe that the shift will benefit them, the processes are feasible, and the most important is that they need such transformation. Those value and belief later will be reflected through their attitude. Ultimately, the third layer of conducive digital transformation environment with enabling social environment and institutions. The cumbersome institutions will hamper business players to grow, for instance in joining the formal economy or acquiring bank loans where firms should go through complex procedures that require a lot of documents.

2.5 Conclusion on Theories

The literature review shows no fixed definition of SMEs while huge attention for SMEs development presence, particularly in the developing countries. Some developments for SMEs are improving entrepreneurs' capacity and introducing technology to scale up SMEs' performance. However, the social transformation model by Kroesen (2019) tells the society is also shifting from traditional to more modern enterprises. In other words, SMEs should adapt to the transforming society by making some changes. In Indonesia, most SMEs are informal enterprises (93%) at the micro-level (98%), and only 13% took a digital shift.

The studied literature showed that discussions on entrepreneur capacity are more available than digital transformation. However, the discussion of a comprehensive approach, which also takes into account entrepreneurial capacity, to SMEs in a developing country is minimal. Furthermore, digital transformation is still ongoing discussions, where most of them are in the technology utilization, change domains, benefits, and the role of particular actors. Furthermore, the study on digital transformation and the requirement of holistic capacity is limited. Therefore, the theory of digital transformation and entrepreneurs' capacity provided the primary motive and guided this study. The relation between theories also justifies why SMEs' comprehensive capacity is critical in performing a digital transformation.

Vial (2019) explained that digital transformation is not only about technology utilization but also requiring strategic response and structural changes that influence value propositions. An organization should have adequate capacity to perform such changes; otherwise, inertia and resistance will create organizational barriers. Meanwhile, the digital transformation framework is more a case basis approach. The framework for one institution is not duplicable to other institutions with different values.

Kroesen (2019) capacity model helps enterprises assess their current capacity to perform a digital transformation. This comprehensive capacity model includes three aspects: (i) IESA: *Information, Experience, Skills, and Algorithm*; (ii) VAB: *Value, Attitudes, and Beliefs*; and (iii) SI: *enabling social environment and Institutions*. In this model, entrepreneurs' capacity is not limited to knowledge and skills but also the value and responses towards particular issues, including the environment and institutions. For example, two SMEs with the same technology-related knowledge and skills level yet have different values toward technology role

in their business will have different digital transformation progress. The progress can be seen in the technology utilization, changes, or management responses between companies. Meanwhile, the poor implementation of digital transformation can provide information on how entrepreneurs value innovation and technology, also their environment and institution factors. Ultimately, the two theories can confirm how SMEs' capacity influences their digital transformation process and how the digital shift related to SMEs' capacity.



GEPREK BAKAR

3. Research Methodology

3.1 Case Study Design

The answers to the main research question and sub-research questions use following methodologies: literature study, case study, observations, and interview.

Interviews and literature study will help answer the first research question (*What is the current landscape and characteristics of SMEs in Indonesia?*). The mapping of the current landscape is presented from the management level, society to the governance level based on the publicly available data and information. Profile of Indonesian SMEs will give an overview of Indonesian SMEs' characteristics, followed by the map of involved actors. The identification and extensive description of involved actors and their dynamics will illustrate the Indonesian SME landscape. Besides, the relevant policies, support, existing development programs, and current challenges will help understand transformation within the society.

Next, the second and third questions (*How is digital literacy related to the entrepreneurial capacity of SMEs? What are the requirements for the comprehensive approach towards digital literacy?*), will be answered by investigating the owner and managers of a group of SMEs in a case study. The assessment of each entrepreneur's capacity is conducted in the layer of knowledge and skills, mindset (VAB), and ability to cope with social environment and institutions. An intervention will be introduced to SMEs with low digital literacy by providing capacity building to identify how digital literacy is related to SMEs' capacity. In the end, we will present recommendations on SMEs' capacity improvement as the answer of the third question that will be validated through an interview with the representative of SMEs' authority.

3.2 Case Study Selection

Most Indonesian SMEs are micro-enterprises that are part of the informal economy as they are not registered, have no required licenses, and not paying tax (Syamsulbahri, 2018). However, the case selection in this study tried to represent SMEs from the multi-business scale (micro, small, and medium enterprises) and different capacities to illustrate each SME group properly. Hence, the selected SMEs are divided into three groups based on the initial assessment of their digital literacy and capacity strength, as depicted in Figure 6. Each group consists of some enterprises related to the formal economy, and others are not.

First, we searched for SMEs in two areas: high (Jakarta) and low (outside Jakarta) digital literacy. Second, we listed the potential samples from Bank Indonesia (assumed to have an excellent high network and better capacity as they receive assistance from Bank Indonesia), the eCommerce/ social media channels (assumed to have high digital literacy and capacity as they started the business through the digital platform), and the direct sampling for the traditional group. Third, we grouped them based on their enterprise-level (net worth and assets). Although the study focuses on transforming SMEs with low entrepreneurial and digital capacity, other SMEs will be investigated with the same list of questions and degree of analysis. This embedded case study focuses on the relationship between SMEs' capacity and their response towards digital transformation. For validity and generalizability, each group

consists of six enterprises with two representatives SMEs from each business scale (micro, small, and medium enterprises).

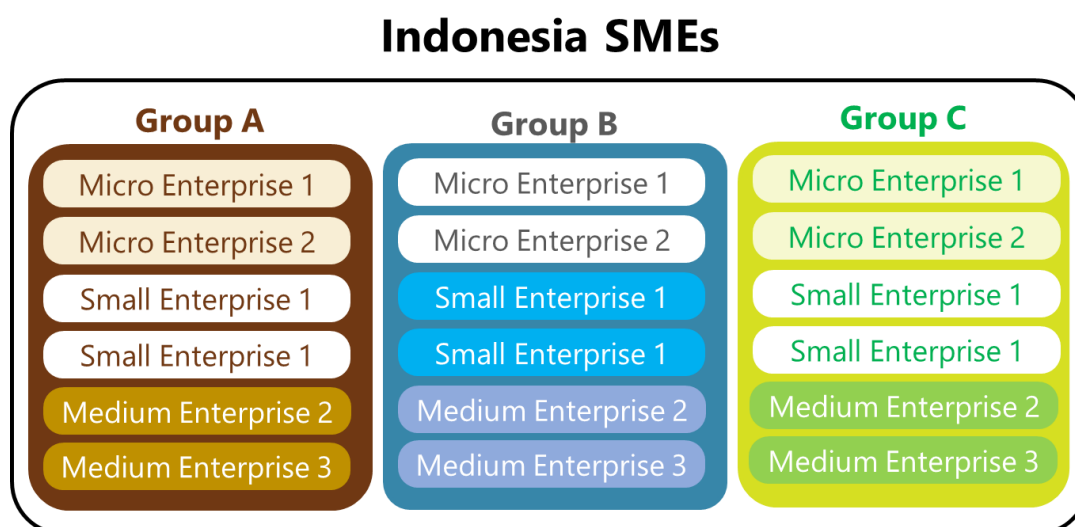


Figure 3.1 – Design of Multiple Embedded case study

The descriptions of each group arrangement are as follow:

- Group A - SMEs with low capacity and low digital literacy**
 This group of SMEs is the most traditional or conventional form of SMEs, relies on a physical store, is not connected to any more powerful institutions (government, large firms, banks), and does not receive any financial assistance and loan. Furthermore, the SMEs do not know and do not utilize digital technologies for their businesses. For example, fish farms/ lobster farms or textile SMEs distribute the product to the market).
- Group B - SMEs with high capacity and low digital literacy**
 This group of SMEs is in the traditional level of entrepreneurship, yet they have the better entrepreneurial capacity. The SMEs in this group have better knowledge through entrepreneurship education background or courses and eagerness to develop their business. Besides, they also have adequate social capital by connecting to powerful institutions like large firms through CSR programs or obtaining loans from banks and other financial institutions. However, they do not have the knowledge and do not utilize digital technologies for their businesses. For example, fish farms/ lobster farms or textile SMEs distribute the product to the market).
- Group C - SMEs with high capacity and digital literacy**
 This group is the most advanced in the sample. They have high entrepreneurship capacity in terms of knowledge, network, financial access, and mindset towards company development. Furthermore, they have utilized multiple digital technologies in the business function like the official website, social media, digital inventory, and digital accounting system. This SME type is usually mostly located in Jakarta, Indonesia's capital city, and the region with the country's highest digital literacy. These businesses usually own and lead by young entrepreneurs.

By investigating the relationship between SMEs' capacity and their response towards digital transformation, the study can identify the supporting knowledge and skills, mindset, and enabling environment, allowing entrepreneurs to have an adequate digital maturity level.

Besides, simple capacity building like introducing digital technology with a shifting mindset approach to the SMEs with low digital literacy will provide information of challenges to shift.

3.3 Research Flow

Figure 3.2 presents the research flow and report outline with a list of questions to illustrate what will be included in each chapter.

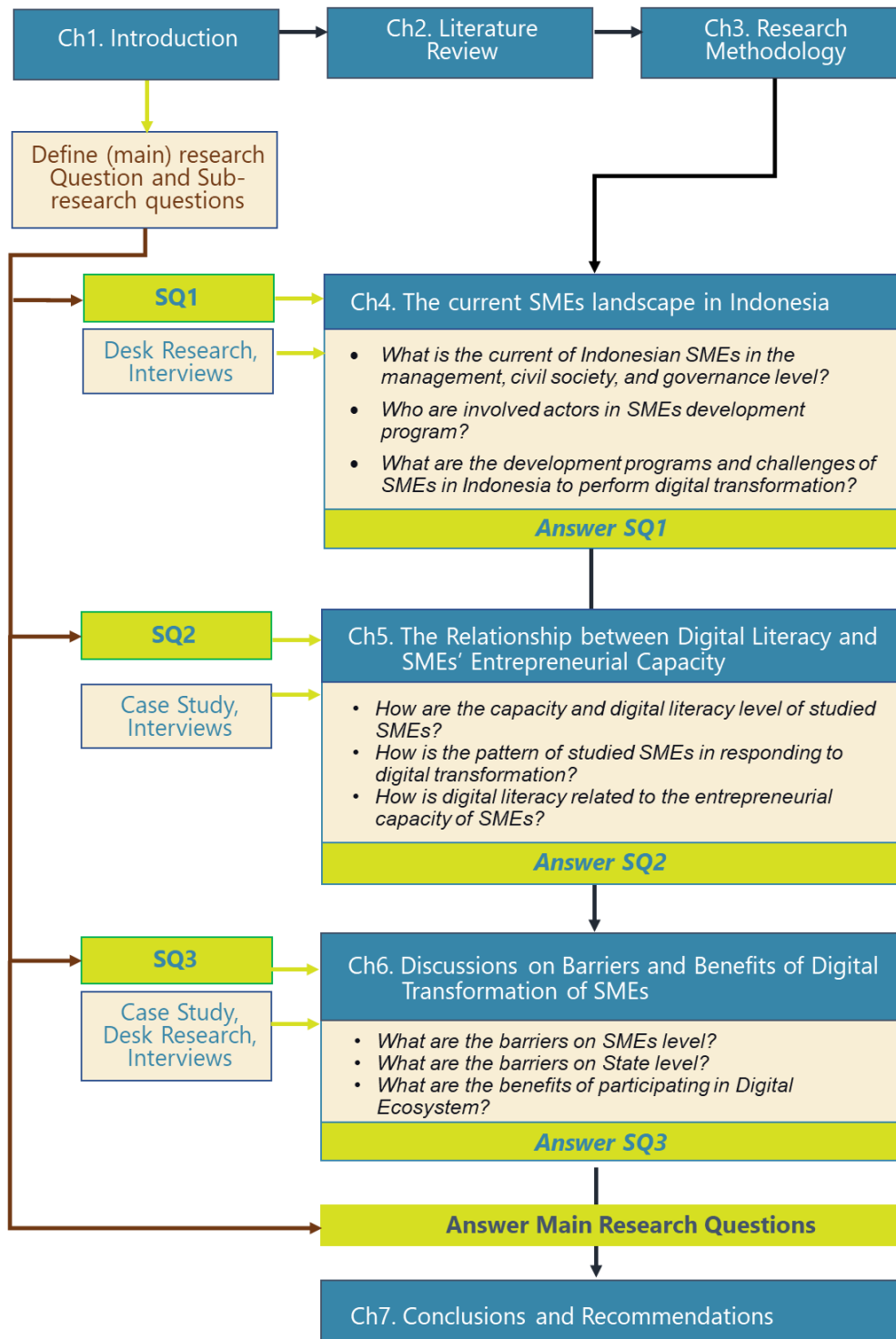


Figure 3.2 – Research Flow

3.4 Data Collection and Analysis

To answer the research questions, data in this study are collected through desk research and semi-structured interviews. To develop a keen understanding of the case in a limited time, we provide a research briefing to explain the study and its goals. For SMEs, a short description of the study's purposes and interview plan is introduced in advance through the instant messaging application. Meanwhile, for the experts, we send a summary of the research proposal and a list of questions followed by confirmation and discussions in the scheduled time.

3.4.1 Desk Research

Desk research gathered information from multiple sources: prior academic researches, grey literature, and news articles. The searching process in the academic journal portal (Scopus, Research Gate, Google Scholar) and TU Delft repository website was conducted using several keywords ("SMEs," "SMEs in Indonesia," "SMEs' capacity," "Digital Transformation," "Social Transformation") and their combination. Other than the book and academic publications, white literature like a paper published by institutions like World Bank, APEC, the European Commission, and company reports are also included to provide perspective from relevant practitioners.

It is conducted to identify the current study and knowledge gap in related fields and is especially important in answering SQ1, SQ2, SQ3. The desk research provides information about the strong relationship between capacity and the digital transformation process and the requirements of comprehensive capacity for digital transformation. Furthermore, it helps to find relevant literature about the ecosystem of Indonesian SMEs and current practices about SMEs development programs to help them taking digital transformation. The literature review of the existing SME landscape and digital transformation program is obtained from governments and related institutions (Bank Indonesia, Kemenkop), relevant articles, laws, and regulations, including other public sources like news articles and company reports. In some points, we rely on the Government statements on the official website or news article of SMEs statistics due to the absence of an integrated database of Indonesian SMEs.

3.4.2 Semi-structured Interviews

The interviews with the group of SMEs plays important rules in this study. It is conducted to generate a thorough assessment of SMEs' capacity and responses towards digital transformation by considering each of their capacity layer (Knowledge and Skills; VAB; and enabling social environment and Institutions). With many assessment variables and different background of the entrepreneurs, trust becomes a crucial aspect. Creating trust will help the interviewee to provide sufficient information and hence reducing bias of the interview. Therefore, we chose a semi-structured interview method as it provides flexibility for the interviewer to have additional questions beyond the designed questions (Edwards & Holland, 2013) when required.

Interview questions are developed from the capacity and digital transformation models. The comprehensive assessment of SMEs' capacity referred to the elements of capacity layers in Kroesen (2019) capacity model. The business model framework from Osterwalder et al. (2005) was used to get sufficient information of SMEs' perception towards and the stage of their digital transformation. Meanwhile, the questions for experts were focused on how they define the SMEs' digital transformation, existing policies and development programs, the challenges,

also the opportunity of implementing potential recommendations. The interview questions can be found in the Appendix B for SMEs and Appendix C for the experts.

a) Participants

The participants of these interviews are 18 SMEs owners/ managers and four experts from Government institutions, relevant authority, and eCommerce that meet the criteria as listed in Table 4.

Table 3.1 - The Sources of Primary Data and Potential Respondents

No	Affiliation	Potential Respondents	Criteria
1	SMEs	<ul style="list-style-type: none"> Indonesian SMEs 	Detail criteria of selected SMEs is as described in the section 3.2 of this Chapter.
2	Government/ Policymakers	<ul style="list-style-type: none"> Ministry of SMEs and Cooperative Bank Indonesia (Department of SMEs Development and Consumer Protection) 	<ul style="list-style-type: none"> Responsible of SMEs development, Involved in the SMEs digital transformation programs, Has experience/ knowledge in conducting development programs for SMEs, and Has experience/ knowledge in SMEs' digital transformation policy and practice.
3	Marketplaces/ eCommerce	The big two eCommerce in Indonesia	<ul style="list-style-type: none"> In charge of relationship with merchants (SMEs), or In charge of merchants' developments, or In charge of CSR programs to the small entrepreneurs, and Have experience/ knowledge in conducting development programs for SMEs, or Have experience/ knowledge in improving SMEs' digital literacy and capacity.

Although most Indonesian SMEs are micro-enterprises that do not use the digital platform, finding the eligible SMEs was challenging. Most of them have low education levels, do not use digital platforms, and are not attached to a particular network. Therefore, we used personal contact to reach these SMEs in the targeted locations. During the process, some SMEs had to be replaced due to their eligibility and availability. One example was when conducted site visit, we did not find business activity at the address provided by the SMEs. In another case, some samples did not give positive feedback and keep postponed the interview time. Meanwhile, most SMEs with high capacity was reached through the list of SMEs managed by Bank Indonesia. Then for the advanced group of SMEs, we used social media to look for eligible respondents, and further check their presence in eCommerce and the availability of their official websites. After all the selection process, the interviewed SMEs can be seen in Figure 3.3.

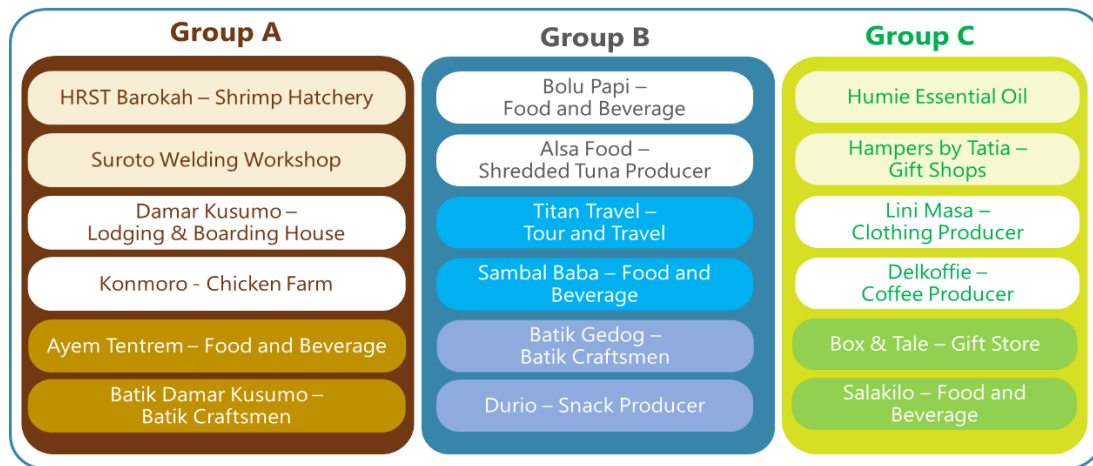


Figure 3.3 – SMEs' Embedded case study

b) Interview Locations and Protocol

The ideal situation in interviewing the SMEs is through a face-to-face manner. This type of interview can help the interviewer adapting critical questions, perceive non-verbal cues, clarify doubts, and confirm the proper understanding of the response (Sekaran & Bougie, 2012). Besides, it can help reduce the bias caused by a lengthy online interview and make it more suitable for interviewees in the area with inadequate infrastructure supports (internet connectivity or phone reception). However, the pandemic situation and several constraints (geographical, time, and financial) limited us to conduct face-to-face interviews with all respondents. Face-to-face interviews were prioritized on the SMEs with low capacity to avoid the misinterpretation of the questions and answers. Besides, considering their educational background, technology skills, and availability, including the opportunity to do direct observations during the interviews.

A small part of interviews (8 out of 18) managed to be conducted face-to-face in the SMEs' location. Nevertheless, the interview for the remaining SMEs and experts was conducted through an online Zoom meeting. The online interviews have enabled in reaching SMEs in a broader location and provide flexibility in scheduling interviews. Nevertheless, it was also challenging for the SMEs located in the area with limited infrastructure. The interview of one SME needs to be conducted at two different times due to an electrical issue, and one SME had to fill out the answers in a written document followed by confirmation through voice notes due to connection disruption in one area.

The interview protocol is developed to guide the interview process, assure the fulfillment of ethical aspects, and ensure the questions are well understood. The interviews used the following procedure in the same manner for each respondent.

1. Invite the respondent to participate in the study through various strategies. A personal approach for the SMEs with low capacity, help from Bank Indonesia as the mediator to its potential SMEs, and direct contact through social media or contact feature in the company website of digitalized SMEs. In each contact, we provided a brief explanation of the study. For the experts, we also send a research summary, proposal, and list of questions.
2. Once the participant agreed to an interview, we set the schedule for an interview time. Before the interview, we give a brief explanation of informed consent, ask permission to record, and provide the option of remaining confidential. None of the interviewees requested to remain confidential from the SMEs group, and only two interviewees from the

experts requested to remain confidential (eCommerce representative), which has been acknowledged in this report.

3. In the beginning, we explain the background, purpose of the study, and expected insights from the interviewees. The pre-formulated questions then came after this explanation.
4. We provide approximately one and a half hours of the interview time, based on the respondent's availability and things that need to be confirmed. In some cases, the interview can be up to two hours. All the face-to-face interviews were audio-tapped, and the records of online interviews are available.
5. After the interview, the recording is transcribed into capacity and digital transformation matrix. This matrix accommodates takeaways of interview questions in each assessment aspect.

3.5 Data Analysis

The analysis in this research consists of a reflection on the focused group of SMEs and multiple cross-case analyses of 18 studied SMEs. The summary matrix reduces data from the interviews into important takeaways in assessment aspects for all SMEs. At the same time, it also helps to visualize the data and to find the pattern. Due to time limitations, the extensive descriptions are only available for three enterprises in Group A - SMEs with low entrepreneurial capacity and digital literacy. These descriptions can be found in Appendix A. Besides; these SMEs are in the targeted group of the Indonesian Government because they have low capacity and yet utilized digital technology in their business. Furthermore, the extensive illustration and reflection on these three cases aim to serve the reader's imagination with data and describe the human type behind the business.

The multiple cross-case analysis was conducted to distill the contradicting and coinciding between the sample groups. The takeaways in each assessment variable were translated into the values and institutions of each SME. Next, these findings were cross-analyzed within a particular group and towards the overall SMEs. These consequently will form the traditional and modern value- and institutional sets represented in these studied cases and Indonesia's business contexts. Besides, it facilitated us in finding patterns and distinctions of each group to recognize the missing value in a particular group or strength of the other group. The business models and digital transformation state are studied in the first part, followed by analyzing business culture and civil society cooperation. The multiple cross-case analysis will end with a discussion of the state and governance in Indonesia.



4. Indonesian SMEs' Landscape

4.1 Profile of Indonesian SMEs

SMEs are the backbone of Indonesia's economy as it contributes to 99% of employment and 60.34% of Indonesia's GDP (Kemenkop, 2018). These businesses have demonstrated their resistance and saved Indonesia's economic growth during the economic crises in 2008 (Tambunan, 2018). The number of SMEs kept increasing in recent years and concentrated in Java Island (BPS, 2016), with 88.20% micro firms. However, number of entrepreneurs in Indonesia is still relatively low compared to its total population, approximately 3.47% in 2020 (Merdeka, 2021). Entrepreneurs still perceived as a risky job choice, in line with Indonesian characteristic that have high tendency in uncertainty avoidance (Novianti, 2018). Furthermore, Indonesian SMEs struggle with financing issues since only 1.52% (1 million) of total SMEs received bank loans for their business development (Bank Indonesia, 2019). Bank Indonesia constructed a SMEs database to help SMEs develop: SMEs that are eligible for financing, SMEs with export quality products, and SMEs profile based on product or services (Bank Indonesia, n.d.). The financial loan database helps SMEs assess their bank loan eligibility and financial institutions to choose the eligible firms; Bank Indonesia made the database of SMEs eligible for bank financing.

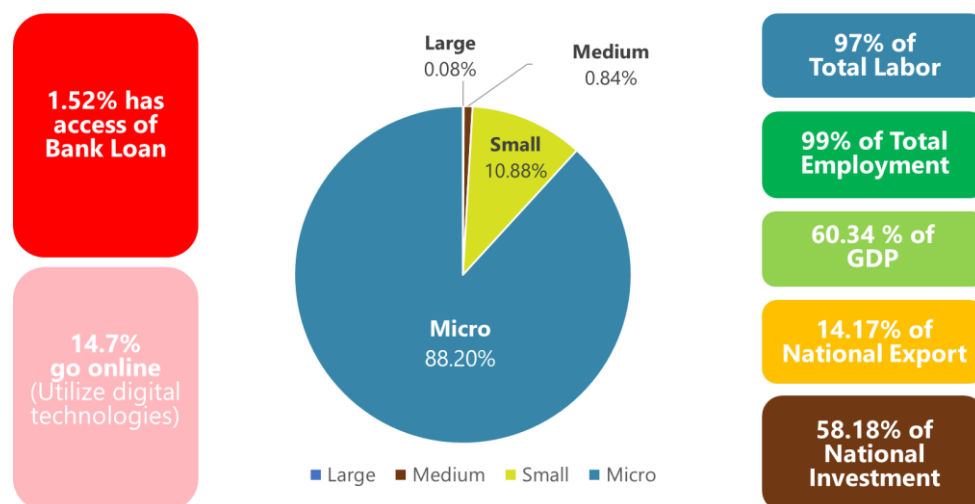


Figure 4.1 – Profile of Indonesia SMEs according to Kemenkop, 2018

On the other hand, the Indonesian digital revolution attained notable growth by becoming the 5th country with the most startups globally in 2019 (Aprilianda Sukandar, 2019). Among those startups, eCommerce is one of the contributing and promising sectors that increased 54% with the \$32B Gross Value Market (GVM) in 2019 and will continue to grow in 2021 by 21% (Google et al., 2020). Using the development and diffusion pattern of Ortt & Schoormans (2004), Indonesia marketplaces even has reached the beginning of the commercialization stage, marked by dozens of players, intense competition, and one dominant company. The competitive market also made a potential marketplace specialized in selling local products surrender in only four years (Putri, 2019), showing that entry to the market is limited. Most SMEs can only witness the rise of the digital economy through startups and intense competition of marketplaces.

SMEs' digital transformation program is not an entirely new thing in Indonesia. The go-digital campaign has been introduced in the year 2000 and 2005 that encourage SMEs to have a personal blog/ website to promote their products. The urgency of digital transformation also has been acknowledged as Indonesia's critical agenda before the pandemic transpired. In 2019, the Government launched several projects under the "go digital" program (Suryowati, 2020) and targeted 30 million SMEs to go digital in 2024 (Kominfo, 2021). Today, there are only 9.4 million out of 64 million SMEs have adopted digitalization to their businesses (CNN Indonesia, 2020). However, there is no detailed information of SMEs that have digitalized their businesses, including information of digital technology or platform they utilize.

4.2 Involved Actors and Dynamics

As the network is a crucial element in introducing emerging technology or a new form of doing business (Kroesen, 2019), it is necessary to understand the involved actors in that network. SMEs development program involves multi actors with respective roles and authority, as shown in Figure 4. This multi-actor network creates dynamics and requires intensive coordination to succeed. Thus, it implies that raising SMEs' capacity to perform digital transformation would require a strategic approach by studying the relationship and dynamics between SMEs and actors in the network. These actors contribute to SMEs' capacity, particularly in creating the enabling social environment and institutions.

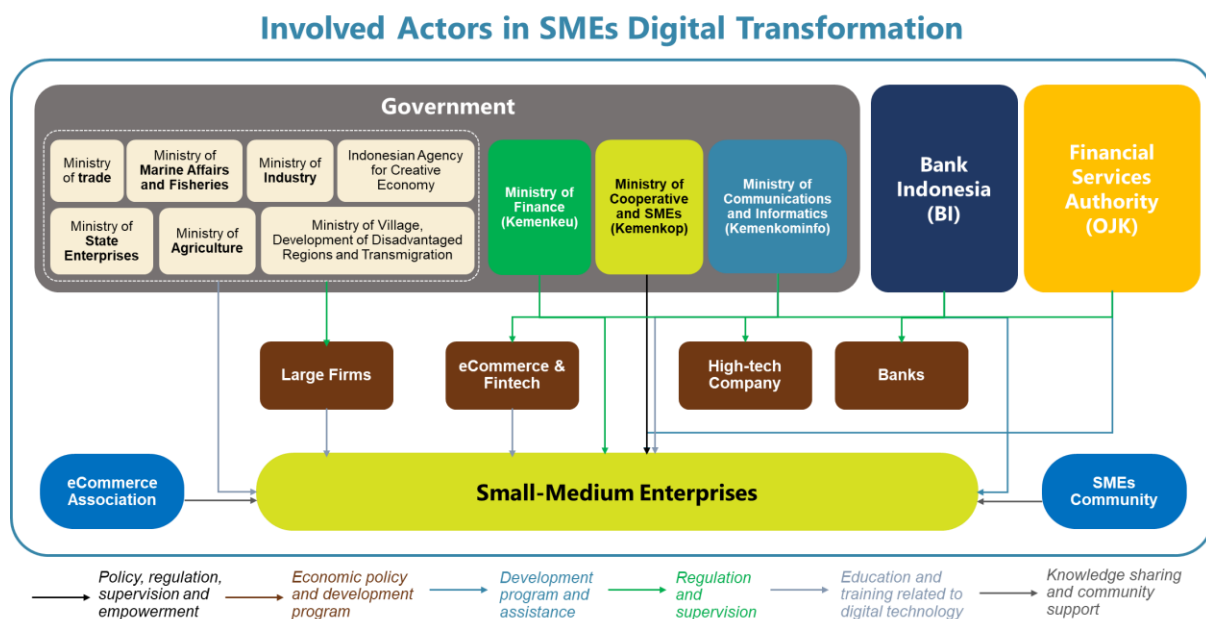


Figure 4.2 – the figure of involved stakeholders of SMEs development in Indonesia

a. Government

Government has the most prominent role and interest of SMEs, considering its responsibility of maintaining economic growth, low unemployment, and realize social welfare. Ministry of Cooperative and SMEs (Kemenkop) is the authority that is responsible for regulating, developing, supervising, and empowering SMEs (Kemenkop, 2021a) under the Coordinating Ministry of Economy. Five out of six strategic programs of Kemenkop in 2021 focus on SMEs capacity development, among others, through the transformation from informal to formal enterprise also business assistance, and information technology development (Kemenkop, 2021b). At the regional level, there are 34 Cooperative and SME agencies at the province

level and 514 agencies at the district/ city level. Kemenkop used to have a technical authority to distribute working plans and targets to its regional representatives and conduct direct intervention at the regional level when required. However, after the reformation of Act number 39 the year 2008 about the Ministry of State, Kemenkop only has authority regarding policy formulation and coordination. Therefore, these regional representatives have their respective authority and working plan due to hierarchical division between national and regional level according to business scale. The Cooperative and SMEs Agency in the district/ city level can only intervene to micro enterprises, the province level authorized for the small enterprises, and the medium enterprises are under Kemenkop's authority (Kemenkop, 2021). Besides, the regional representatives also have a vertical relationship with the regional leaders. Hence, their working plan should be synchronized and aligned to the regional development program.

Furthermore, due to the crucial role of SMEs in the Indonesian economy, Kemenkop is not the only institution authorized and responsible for SMEs. *"Based on our evaluation, there are 28 out of 34 Ministries in Indonesia that have a working program related to SMEs at the national level"* (Kemenkop, 2021). These ministries also have regional representatives at the province, city, and district levels. According to the economic field, several government institutions interested in SMEs' development are the Ministry of trade, Ministry of State Enterprises, Ministry of Marine Affairs and Fisheries, Ministry of Industry, Ministry of Agriculture, and Indonesian Agency for Creative Economic. In terms of the digital transformation of SMEs, the Ministry of Communications and Informatics (Kemenkominfo) is responsible for providing technology infrastructure and conducting research and human research development in the informatics and communication area (Kominfo, 2020a); one is improving society's digital literacy.

Nevertheless, these institutions keep doing their respective working programs, targets, and performance measurement related to SME development independently. Except the Indonesian president, there is no single orchestrator. Even though the Coordinating Ministries conduct working program alignment and evaluation with 11 Ministries under it, but there is no official task force and clear technical guidance of workflow to achieve the designated target. This condition shows a lack of coordination among institutions. A large number of Government institutions involved and complex hierarchical coordination lines cannot be separated from the implementation of decentralization government system in 2000 through Act Number 22 the year of 1999 about Subnational Government. The governmental reformation provided subnational Governments more power and more extensive authority to execute a wide range of responsibilities and manage their resources. From this time, the democratic country changed its 55 years strong centralized Government system after independence that once adopted to safeguard the state unitary (Nasution, 2016). Such a centralized government system was introduced long before Indonesia's independence, particularly during the hundred years of colonialization manifested in its culture.

b. Bank Indonesia and Financial Services Authority

As a Central Bank, Bank Indonesia has three main functions: reach and maintain Rupiah stability measured by inflation and exchange rate, maintain financial system stability, and creating a robust payment system and cash management (Bank Indonesia, 2021). SMEs development is one of the domains in ensuring financial system stability besides regulating policy and conducting macroprudential supervision on financial systems. The scope of SMEs' development by Bank Indonesia focuses on: supporting inflation control, particularly the volatile food from supply-demand, supporting SMEs with export potential and supporting

tourism, and increasing financial access for SMEs (Bank Indonesia, 2021). In practice, Bank Indonesia creates supporting policy and regulation and assists in business and product development for the potential SMEs. Before 1999, Bank Indonesia as a development agent and part of the Government could directly support SMEs by providing liquidity facility in the subsidized scheme through several credit programs like farmers Loan (*Kredit Usaha Tani*), working capital credit (*Kredit Modal Kerja*), and mortgage loan (*Kredit Pemilikan Rumah*). However, Bank Indonesia's independence, as stated in Act Number 23 in 1999, the economic crisis, and unresolved credit defaults make Bank Indonesia no longer able to provide such a facility (DUPK – Bank Indonesia, 2021). As the urgency of digital transformation increases, Bank Indonesia, as the payment system authority, builds a conducive digital economy and financial ecosystem in several stages as set out in Indonesia Payment Systems Blueprint 2025 (Bank Indonesia, 2019). With this blueprint, Bank Indonesia aims to include 91,3 million unbanked people and 62,9 million SMEs in the formal financial and economy through a digital transformation program.

On the other hand, SME development is highly related to financial and capital access that became the authority of OJK as the Financial Services Authority since the functions of Bank regulation and supervision moved from Bank Indonesia to OJK in 2011. OJK also has the authority of other financial services sectors like capital market and non-bank financial institutions. With this authority, OJK, as regulated in the Bank Indonesia regulation Number 14/22/PBI/2012, obliged the Bank to distribute at least 20% of their total loan for SMEs and conduct capacity building for SMEs to be eligible in obtaining Bank loans (OJK, 2012), and encourage fintech companies to provide lending facilities for SMEs. OJK further supports SMEs through consumer education and protection functions by creating working programs to increase Indonesian financial literacy and financial inclusion. Furthermore, OJK established PELAKU – the center of education, consumer service, and financial access for SMEs in 2015 to facilitate SME empowerment and access to the financial services sector (OJK, 2015).

c. Large Firms

Besides the actors above, large firms like state-owned enterprises, eCommerce, hi-tech companies, and other private corporates also participate in the SMEs' development endeavor. As the development agent of Government, since 1989 through Ministry of Finance Decree Number 1232/KMK.013/1989, BUMN can provide financing facilities for cooperative and small enterprises development taken from its annual profit. The recent regulation of this financing facility is the Regulation of Minister of BUMN Number PER-07/MBU/05/2015 the year of 2015. This facility is available for non-bankable small enterprises with annual revenue up to IDR 2.5 billion. Meanwhile, other large firms usually involve in SME development through their CSR programs. In Act Number 25 the year of 2007 about Capital Investment and Act Number 40 the year of 2007 about Limited Company, corporates related to natural resources are obliged to conduct corporate social and environmental responsibility. Social and environmental responsibility should be regulated in the companies' annual working plan with a balanced and appropriate budget.

From the above explanation, it is evident that the connection between large firms and SMEs have existed for years. Nevertheless, this connection is more about financial and capital assistance also people empowerment in general. Today, eCommerce and high-tech companies also pay attention to SME development despite their responsibility as a limited company to conduct CSR programs. These large enterprises value profit and hence favor increasing digital transaction value and fostering the digital transformation of SMEs. The more

SMEs connected to digital platforms, the more revenue they will get. Therefore, eCommerce companies are actively involved in the SMEs development program by conducting capacity building for their merchants to enhance SMEs' performance (eCommerce, 2021). Besides, they also collaborate with the Government conducting training to increase SMEs' eligibility to join digital platforms. On the other hand, high-tech companies like digital technology providers offer financing sources alternative and business development assistance for SMEs (Reily, 2018). Recently, Google and Facebook provide financial assistance to help SMEs affected by COVID-19 outbreaks.

d. Civil Society

As a sizeable populated country with over 270.20 million people scattered across a sprawling archipelago, it is challenging for Indonesia Government to achieve equitable development for SMEs throughout the country. Providing intensive assistance with regular evaluation is difficult and hence opening the gate for civil society development, helping the Government reach the outreach enterprises from the existing policies and practice. In terms of legal entities, civil society grows in several forms of limited liability company, foundation, cooperative, and association (Pranoto & Sutanti, 2016). These non-governmental organizations and institutions help SMEs by providing capacity-building programs, business assistance, and funding opportunities.

Cooperative is the old form of civil society in Indonesia and was the only community-based organization the Government accepted between 1965 and 1998 (Pranoto & Sutanti, 2016). It is a member-based organization that aims to build a people-centered economy. Currently, there are 127,124 cooperatives with more than 25 million members. However, there is a lack of interest in Cooperative within the young generation since they perceive cooperative as a more social and traditional enterprise than for-profit member-based economic institutions (Kemenkop, 2021). Another challenge here is the complex authority division that differentiates cooperative treatment between financial service and non-financial cooperative. Cooperative with financial service is under the authority of Kemenkop, while other cooperatives are the domain of other Ministries relevant to their sector.

Furthermore, there are also enabler organizations in Indonesia civil society like the British Council, UNDP, and Kibar (British Council & United Nations ESCAP, 2018). These organizations provide critical supports like training facilitation, consultation services, advancing incubation, funding opportunity, and community development. Besides, there are also technology-based companies that provide business supports like accounting (Jurnal.id by Mekari, Sleekr), legal (Kontrak Hukum, Socolas, Lexar), and media support (The big circle show, Filantropi) for individual and SMEs (British Council & United Nations ESCAP, 2018). In addition to the mentioned organizations, the entrepreneur's community also flourish in Indonesia like Sahabat UMKM, which creates the bridge between SMEs and the Government and private sector and provides workshops, training, and assistance for its members. Then, there is also #Startuplokal, a community for more modern enterprises. Lastly, universities in Indonesia also support SME development, from providing entrepreneurship centers and incubation facilities to conducting business assistance and community outreach programs.

4.3 SME Policies, Supports, and Challenges

SMEs growth has been a government's concern and included in the strategic agenda of Indonesia's development plan for years, translated into various favorable policies and enormous support. Nevertheless, the significant impacts have been perceived in less than ten

years, especially during President Joko Widodo, referring to the improvement in Indonesia EODB rank from 122nd in 2010 to 73rd in 2020 (World Bank, 2020). This rank often is used as a reference for the capital owners to invest their money in particular countries. The historical reports of Indonesia EODB show continuous improvement of governmental policies that enable shorten registration time (from 60 days in 2010 to 10 days in 2020) and lower cost in starting a business (from 26% of income per capita in 2010 to 5.7% of income per capita in 2020). Several policies contribute to this improvement: the implementation of online business processes minimized paper-based works and allowance practice, costs reduction and tax incentives, and implementation of SLA in the registration process. Furthermore, there is also implementation of Online Single Submission (OSS) service as a single platform for business licensing and integrated one-stop service (PTSP) in the national and regional level managed by the Capital Investment Coordinating Board (BKPM).

Another essential policy for SME development in Indonesia is deregulation. As mentioned in section 4.2 of this study, many involved actors are supported by legal basis and regulation to conduct their functions. Those regulations also authorize actors to create their respective regulations, goals, and performance measurement that create disharmony and complicate things. For example, there were different definitions of SMEs and performance measurement methods among Government institutions. Therefore, President Joko Widodo took revolutionary policy by issuing The Job Creation Act Number 11 in 2020 or Omnibus Law that synchronized multiple regulations to build a supporting ecosystem for SMEs. The omnibus law provides broad benefits for SMEs. First, implementation of Business Identification Number (NIB) as a single identity for SMEs in obtaining all business licenses, from example business and distribution permits to SNI and halal product certification. Second, incentive policy for large firms that partner with SMEs. Third, integrated SMEs development through collaboration between national and regional Government as well as stakeholders. Fourth, the ease of financing facilities and fiscal incentives simplifies tax administration, tax incentives, free business registration process, and customs incentives for export SMEs. Fifth, particular budget allocation for business assistances to micro-enterprises followed by legal aid and protection to maintain SMEs' business continuity. The seventh and eighth benefits are implementing 40% of Government spending in procurement for SMEs' products and minimum allocation of 30% public infrastructure for SMEs' business development and promotion. The last one is the ease of establishing a Cooperative (Kemenkop, 2021). To ensure those benefits, Kemenkop set 11 strategic activities for SMEs' development in its national mid-term development plan 2022 – 2024.

In addition to favorable policies, the support to Indonesian SMEs is also shown from the availability of financial support, capacity building, and other initiatives from universities and NGOs. In terms of financial support, Indonesia Government has a particular budget allocation for SME development.

“In 2021, about IDR4.4 trillion from total national budget distributed to 28 Ministries and allocated for SMEs development, particularly improving human resource capacity. Such capacity building involves training, fintech, assistance, promotions and exhibitions, protection of MSME products such as patent, Indonesia national standard (SNI), and Intellectual property rights (HAKI)” – Kemenkop, 2021.

In addition, as discussed in section 4.2, there are multiple financing facilities provided by Banks, fintech, financial institutions, non-banks, and large firms supported by official regulations, besides financing support from NGOs (BBC News Indonesia, 2009). This ample financial support aims to solve SMEs' capital and financial access issues for bankable and non-bankable enterprises. However, bank loans for SMEs are still underutilized due to strict

requirements such as having a business license and providing collateral (Coordinating Ministry of Economy, n.d.).

Following support for SME development is capacity building and business assistance from various institutions. Kemenkop as the Cooperative and SMEs authority, provide education and accessible business consulting service for SMEs throughout the country. An entrepreneur incubator also conducts the capacity building for a technology-based SME.

“We provide consulting and business assistance through our integrated business service center (PLUT). In this facility, we provide experts to help SMEs in institutional strengthening, production improvement, financing, marketing, human resources, partnership, and information technology. PLUTs are available at the national, province, and city/subdistrict levels. The national PLUT, located in Jakarta, functioned as a one-stop service for SMEs and conduct several activities from SMEs’ product curation, trading house, and business incubation. In each PLUT, we provide about 7-10 Business Development Services (BDS) or assistants to actively help SMEs at the regional level. Those assistants actively approach potential SMEs in the area and get incentives from SMEs’ growth, for instance, the number of registered SMEs. This service is expected to accommodate the need of business assistance in the regional level” – Kemenkop, 2021

Meanwhile, other initiatives in supporting SME development come from the university. Some universities have entrepreneurship centers or business incubation facilities besides providing business assistance and conducting capacity building for SMEs (Munthe, 2014; UKM Indonesia, 2018; UGM, 2020; Unpad, 2021). However, this form of initiative is still limited.

With existing regulations, policies, and supports, the Indonesia ecosystem seems ideal in enabling SME development. However, there are challenges caused by a lack of coordination and harmony in the implementation. Involved actors appear to run their functions independently without a single orchestrator to synchronize working programs, optimize budgets, ensuring target achievement, and regularly evaluate the progress. The following issue is the weak regulation enforcement. Many regulations are set up to improve SMEs’ capacity through NIB, business license, and tax identification number, but there is no precise mechanism and technical guidance to enforce that regulation in the field. Next, the complex requirements make the available financial facilities for SMEs perceived as ‘expensive funds,’ and capital loans become underutilized. Furthermore, the abundant capacity building programs more focus on training to increase SMEs’ knowledge with limited intensive assistance, followed by weak monitoring and evaluation due to the absence of single integrated database for SMEs that accessible for related stakeholders. On the other hand, the existing consulting services is relatively new (established in 2017) and make it is not widely known. Besides, the limited number of assistants can assist limited number of SMEs. The last issue is the reformation and improvements are concentrated in Jakarta and Surabaya as the respondents of the EODB survey.

4.4 Digital Transformation Programs of SMEs

Digital transformation of SMEs has been acknowledged as Indonesia's critical agenda before the pandemic happened. In 2019, the Government launched several projects under the "go digital" program (Suryowati, 2020) and targeted 30 million SMEs to go digital in 2024 (Kominfo, 2021). To realize this target, Kemenkop conducted several development programs for SMEs, from digital literacy and eCommerce training in several cities, the SMEs digital hero campaign. Participating in the transformation program, various Ministries conduct supporting activities and capacity building for SMEs. Kemenkominfo creates the traditional market goes online

program that provide digital technology training for SMEs (Kominfo, 2017; Kominfo, 2020b). Furthermore, Ministry of Finance (Setiawan, 2020), Ministry of trade, Ministry of State Enterprises (BUMN, 2020), Ministry of Marine Affairs and Fisheries, Ministry of Industry, Ministry of Agriculture, Ministry of Village, Development of Disadvantaged Regions and Transmigration, and Indonesian Agency for Creative Economy also creates programs to accelerate SMEs' digital transformation. Most development programs are in the form of training about digital technology, digital literacy, and eCommerce.

As the payment system authority, Bank Indonesia regulates eCommerce platforms, ensuring the consumer protection conducting transaction within the platforms. Additionally, Bank Indonesia also provides capacity building for SMEs to support the achievement of its responsibility through financial literacy and inclusion, also providing funding facility for SMEs. Bank Indonesia has a particular development program of SMEs' digital transformation, namely the SMEs onboarding program in some regional offices. This program included literacy training and onboarding practice in one digital technologies platform (social media, eCommerce, or search engine). Furthermore, the process and output divide the SMEs' digital maturity into three parts: Go Digital – Basic, Intermediate, and Advance, as represented in Figure 5. OJK issued a supporting policy of digital financial services, digital financial innovation, and consumer protection. OJK also held Fintech Days in several cities providing education and literacy training, product showcase of fintech financing that can help SMEs' financial needs.

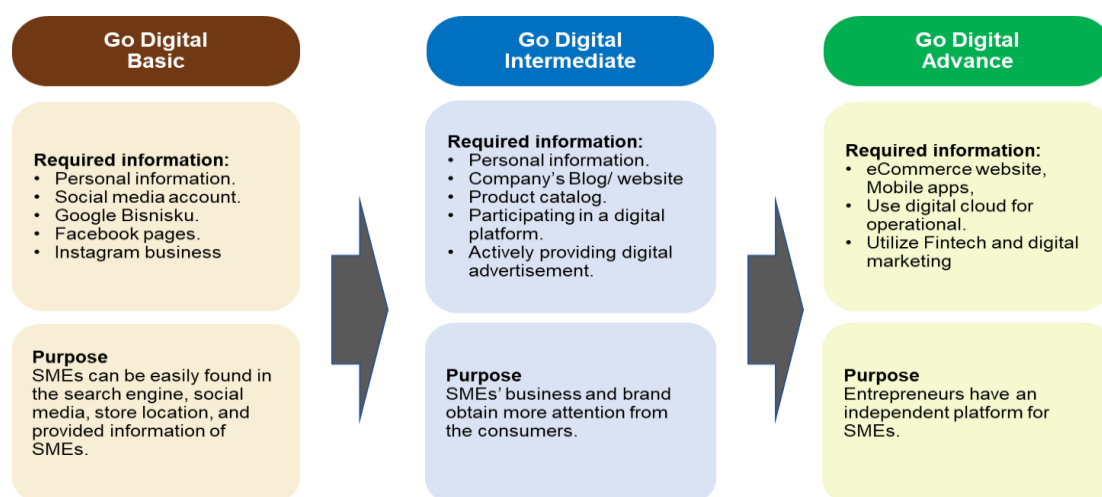


Figure 4.3 – SMEs Go Digital Program of Bank Indonesia

Ultimately, large firms and eCommerce also conduct training programs for SMEs independently (Gojek, 2019; Praditya, 2018). Large firms provide training on digital technology development and the importance of market expansion through technology utilization. On the other hand, eCommerce and high-tech companies like Tokopedia, Gojek, Google, and Facebook offering education on how SMEs can participate in the platform. Besides, the community like the eCommerce association and entrepreneur's association also actively provide digital technology training for their members (Kominfo, 2020b).

4.5 Social Transformation of Indonesian SMEs

Indonesia is in the transition phase. On the one hand, it struggles to bring traditional SMEs to a modern state, while on the other hand, startups and technology-based enterprises with a modern and open organization are burgeoning and put this country as the fastest-growing

internet economy in Southeast Asia. In the current landscape of Indonesian SMEs, the majority of Indonesian SMEs are micro-enterprises with no legal entity (British Council, 2018) and limited access to formal financing facilities (Bank Indonesia, 2019). At the same time, 12 million, or approximately 13% of the SME population, take a digital shift (Portal Informasi Indonesia, 2021). The transformation at the individual company level will further be shown by analyzing interviewed SMEs in the following chapter of this research.

The transformation also occurs at the state level as the Government strives to create enabling policies and regulations to stimulate SMEs' growth and modern enterprises like startups and fintech companies. However, this modernization is more concentrated in Jakarta and some big cities. Besides, there is still a solid patrimonial system shown by the long coordination line from the President, a large number of ministries at the national level, and their representative offices at the regional level added with communication with the corresponding regional leader. Such Government conditions limit each agency to work according to its authority and create little coordination among institutions. For example, Kemenkop, at the national level, only authorized medium-enterprise and was not allowed to intervene with the small and micro-enterprises.

Transformation of paper-based to online processes in Government-related activities and a single platform for business licensing show the effort to provide equal access and transparency. However, there are still privileges access and a small illegal fee, for instance, when the Government provided financial assistance for SMEs affected by COVID-19. Furthermore, the Government's limited capacity to reach and provide intensive assistance for all SMEs has created room for civil society existence. From cooperative and association to community, several forms of civil society try to fill existing policies and practice gaps. They provide capacity-building programs, business assistance, and funding opportunities for SMEs.



5. Case Study

5.1 Findings Summary

This section illustrates and examines the findings collected from 18 cases. Due to time and space limitations, the key findings are presented in the summary matrix of each sample group (Group A, Group B, and Group C), as can be found in Table 5.1, Table 5.2, and Table 5.3. For more convenient analysis, SMEs, as listed in Figure 3.3, are renamed with a particular code consist of one character for group, two characters for business scale, and one character for enterprise number (e.g., AMC1 is the micro-enterprise 1 in group A and CMD2 is the medium enterprise 2 in group C). The findings are presented in four sections: business operations, business culture, civil society, and state regulation. The assessment components in the business operations aspect are taken from the business model framework from Osterwalder et al. (2005). The aims of analysis in business operations are to see the business operation in general and the implementation of digital transformation from their knowledge, information, and skills regarding digital technology. Nevertheless, the answers also contribute to the SMEs' overall capacity assessment through information about their value, attitude, and beliefs towards digital transformation and innovation in general.

The next assessment aspects are business culture, civil society, and state regulation, taken from Kroesen (2019) capacity approach. Business culture aspect is used to describe the cooperation within the company. Then, the civil society aspect shows SMEs' relationship with their surroundings and how they utilize the network to support their development. Civil Society cooperation is more about trust and cooperation/ competition between different companies and other civil society actors. Finally, state regulation aspect was assessed to see SMEs' comprehension and response of relevant regulations and surrounding environment in the state level. With all the key findings, we can distinguish the enterprises are more into System I or System II.

After the summary matrix, the multi-cross analysis of the overall interviewed SMEs. The analysis was conducted on all SMEs in four assessment aspects: business operations, business culture, civil society, and state regulation. The purpose of this multiple cross-case analysis was conducted to distill the contradicting and coinciding between the sample groups. Takeaways were then translated into the values and institutions, referring to the values and institutions in Kroesen's (2019) approach. Next, these findings were cross-analyzed within a particular group and towards the overall SMEs. These consequently will form the traditional and modern value- and institutional sets represented in these studied cases and Indonesia's business contexts. Besides, it facilitated us in finding patterns and distinctions of each group to recognize the missing value in a particular group or strength of the other group. The business models and digital transformation state are studied first, followed by analyzing business culture and civil society cooperation. The multiple cross-case analysis will end with a discussion of the state and governance in Indonesia.

Table 5.1 Summary of Interviewed SME in Group A

No	ASSESSMENT ASPECT	AMC1	AMC2	ASM1	ASM2	AMD1	AMD2
1.	Business Operation						
	Key Partner	Broker supplier and distributor.	Broker for eCommerce; Hardware shops.	a marketplace for renting private accommodation	animal feed supplier; wholesale buyer	raw material suppliers; eCommerce company	Wholesale customers; cloth cutter; fabric supplier.
	Key Activities	cultivates the freshwater shrimp seeds into Benur	Produce iron-based furniture, sometimes combined it with wood.	Renting accommodation in monthly and daily basis.	Cultivating high-quality chicken	selling chicken-based foods	Producing ready-to-wear Batik clothes.
	Key Resources	Hatchery ponds; human resources, brokers, and shrimp seeds	Human resources; Knowledge and Skills	Building; Capital.	Chicken coop; human resources.	Raw material; human resources;	Raw material (fabric), human resources, and capital
	Value Propositions	No value propositions - produce the same product to its competitor in the same price	Made by order; Innovation by combining iron and wood into an aesthetic furniture.	Strategic, quiet, and comfortable place.	High-quality chicken (more than 2 kg each)	special taste (well marinated chicken)	the stylish and up-to-date designs, good material with stable price, and personal marketing approach
	Customers	Ditribution broker	Retail buyers in Sragen and Solo area; also, Broker	College students and frequent visitor to Jogja	Distributor company (broker).	Solo residents (retailers and wholesale buyers)	wholesale and retail customers, mostly outside Solo
		Not pay attention to it, as he has stable supply and demand from the brokers	Not pay attention to relationship with customers. Only trying to deliver the qualified product	As the main product of this company is service, the owner perceives it is important to maintain customer relationship. Customer reviews can be seen publicly for lodging house connected to eCommerce platform. It can affect company's revenue.	Maintaining customer relationship is important to sustain demand since the main customers are wholesale buyers. Hence, looking for new wholesale buyers required sometimes and effort.	Sunarman believes that focusing to maintain his product quality helps to manage customer relationship. The best quality product will be related to the positive review customers give in the eCommerce platform	Maintaining customer relationship is important, therefore April maintain personal approach in marketing her products. She directly handles the first meeting with potential customers.
	Channels	Broker, through phone communication	On-site buying and through broker for eCommerce	Conventional (visiting the accommodation) and digital (eCommerce)	on-site buying	Conventional (on-site buying) and digital through eCommerce platform	Personal selling, Batik gallery, and social media.

No	ASSESSMENT ASPECT	AMC1	AMC2	ASM1	ASM2	AMD1	AMD2
		No knowledge of Digital Technologies and Media	Using digital platform for personal purpose	Self-study, started from using digital platform for personal to business purpose	No knowledge of Digital Technologies and Media	Using digital platform for personal purpose	Self-study, started from using digital platform for personal to business purpose
	Cost Structure	Cost of the seeds is the most crucial cost. Besides, generator and its fuel to back up electricity failure.	Raw material (iron) and generator with the fuel to back up electricity failure.	Investment cost to build the infrastructure (lodging and boarding houses). Other are the operational cost and eCommerce fee.	Cost of the chicks is the most crucial cost. Besides, workers' salary.	The rent fee and raw ingredients.	Cost of the seeds is the most crucial cost. Besides, generator and its fuel to back up electricity failure.
		No book-keeping	No book-keeping	Digital Book-keeping provided by eCommerce company	Digital Book-keeping	No book-keeping	No book-keeping
	Revenue Streams	Benur (shrimp seeds) sales with the same price with its competitor, applied by the broker	Product sales	Rent fee	Product sales	Product sales to its customers, with average market price	Product sales (ready-to-wear Batik clothes production)
		Payment and profit distribution by cash	Cash and bank transfer to personal account	Cash, bank transfer, and card payment.	Bank transfer	Multiple payment channels: cash, electronic money, debit/ credit card, mobile payment	Multiple payment channels: cash payment, bank transfer, or cheque
2.	Business Culture						
		1 (Imam) and casual laborer in harvesting time	1 (Yudha) and casual laborer for large order	3 workers	3 workers and 1 manager	3 workers	10 worker (included 1 marketing)
		No organizational structure and written job description	No organizational structure and written job description	No organizational structure and written job description	There is organizational structure, job description, SOP, and working contract	No organizational structure and written job description	No organizational structure and written job description
		Not motivating the seasonal employee	Not motivating the seasonal employee	Not motivating his employee	Motivating employee through bonus for target achievement	Not motivating his employee	Motivating employee through high salary and entrepreneurship motivation
		No family/ relatives work in	The part-time workers are	No family/ relatives work in the company. One worker	No family/ relatives work in the company.	Beside 3 workers, Sunarman's wife help	Workers comes from family

No	ASSESSMENT ASPECT	AMC1	AMC2	ASM1	ASM2	AMD1	AMD2
		the company. The part-time workers are surrounding residents.	Yudha's friends in high school and former company (has required skills and experience)	(cleaning service) is the resident nearby the lodging house	Employees are hired through job vacancy	monitoring the operational activities. Meanwhile those 3 workers are their acquaintances	recommendation; acquaintances, and some neighbors
		Daily wages (in case of high-demand)	Daily wages (in case of high-demand)	Monthly salary	Monthly salary	Monthly salary	Monthly salary
		No clear vision and mission.	No clear vision and mission.	Value profit but has no clear vision and mission	Value company growth with no clear target and plan	Value profit but has no clear vision and mission	Value profit but has no clear vision and mission
		Part-time workers have the same ethnical background, speak the same language, and live in the same environment.	Part-time workers have the same education background and experience, all men, also have the same ethnic background, language, and live-in similar environment.	There is no grouping, workers are mixed in terms of gender, ethnic, and educational background.	Workers are men, speak the same language, and live-in similar environment.	No intentional grouping.	Part-time workers have the same ethnic background, speak the same language, and live in the same environment.
		Never collaborated or cooperated for the same goal/ project.	Never collaborated or cooperated for the same goal/ project.	Never collaborated or cooperated for the same goal/ project.	Never collaborated or cooperated for the same goal/ project.	Never collaborated or cooperated for the same goal/ project.	Never collaborated or cooperated for the same goal/ project.
3. Civil Society Cooperation							
	Vertical Network	Not attached to Government institutions or large companies.	Not attached to Government institutions or large companies.	Not attached to Government institutions or large companies.	Not attached to Government institutions or large companies.	Not attached to Government institutions or large companies.	Not attached to Government institutions or large companies.
		Never receive capacity building program.	Never receive capacity building program.	Received technical training from eCommerce, regarding technology usage.	Never receive capacity building program	Received technical training from eCommerce regarding technology usage.	Never receive capacity building program
	Membership	No	No	Yes, group of eCommerce partners	No	No	No
4. State Regulation							

No	ASSESSMENT ASPECT	AMC1	AMC2	ASM1	ASM2	AMD1	AMD2
	National and Local Government	Not aware of Government's role as the company thinks it is outreach Government program. Besides, not actively seeking the information.	Not aware of Government's role as the company thinks this company is still to small to follow any regulation. Besides, not actively seeking the information	Government policy and regulation related to construction and business establishment. In lodging and boarding house business, there are multiple regulation to follow before the business running (time and cost consuming)	Government's regulation regarding minimum distance to residential area in avoiding pollution or animal-related epidemic disease	Aware of Government's role and regulation, but consider it's not mandatory to follow them. Argue that only large companies have to follow such regulation	Government policy in responding to COVID-19 hampers the speedy economic recovery, that affects her business
		Asymmetric information	Asymmetric information	-	-	-	-
	Rules and Regulation	Not register and not having any required license	Not register and not having any required license	Has business license for lodging and boarding house; Crowd license.	Has business License	Not register and not having any required license	Not register and not having any required license
	Accountability	Not mandatory to follow the regulation, since the company is too small. Furthermore, there is no issue since the company is established	It is not mandatory to follow the regulation, since the company is too small. Furthermore, there is no issue since the company is established	As the product is service and it involves people as the main users, the owner consider the rules and regulation is important to follow.	It is important to follow the rule to ensure a conducive environment (no protest from neighborhood) and smooth business situation	Unless the owner wants to expand the business or urgently needs a large capital loan, then it should follow required regulation. Otherwise, it can run as it is	The company has been running for 20 years without any socialization and supervision from related authority,
	Finance	Never receive financial assistance from Government and bank loans.	Never receive financial assistance from Government and bank loans.	Never receive financial assistance from Government and bank loans.	Never receive financial assistance from Government and bank loans.	Never receive financial assistance from Government and but often use loan facility from Banks.	Never receive financial assistance from Government and bank loans.
		No tax identification number	No tax identification number	No tax identification number, even though has good financial literacy, but choose not to pay tax for his business	Has a tax identification number under the company's name and actively paying tax	No tax identification number. Argue that most enterprises also do not pay tax, but the large companies	No tax identification number. Argue that most enterprises also do not pay tax, but the large companies

Table 5.2 Summary of Interviewed SME in Group B

No	ASSESSMENT ASPECT	BMC1	BMC2	BSM1	BSM2	BMD1	BMD2
1.	Business Operation						
	Key Partner	raw material suppliers	Tuna fishermen, packaging distributor	Ticketing company, transportation providers,	Chili supplier and other raw material supplier, packaging supplier, machine supplier	Individual Batik craftsmen, eCommerce, Distributor like department store	Raw materials (squid egg) supplier, resellers outside Belitung,
	Key Activities	Sponge cake producer	Shredded Tuna and Tuna-based foods producer	Tour and travel service provider	Sambal producer	Batik producer, mostly ready to process fabrics and small number of Batik clothes	Producing squid egg-based snacks as the iconic food from Bangka Belitung province
	Key Resources		Raw materials, Production house, Human resources, Skills and knowledge	Human resources, Knowledge and Skills, Technology	Raw materials, Human resources, Capital, Knowledge and Skills, Technology,	Private cotton field (limited quantity), Raw materials (cotton, yarn, fabric, and chemicals) suppliers, craftsmen	Raw materials (squid egg) supplier, production house, human resources
	Value Propositions	Durian flavor sponge cake with unique texture and taste	High quality shredded tuna with export standard	Customized travel package with competitive price, multiple routes, and service excellence	Combination of Asar fish and Sambal. Asar fish is a typical Papuan fish. In total there are 25 product variants.	Hand-made batik with nature colors, high quality and durable materials	44 variants of food product. She believes that persistence plays big role in her business success.
	Customers	Palembang residents, mostly individual buyers, Wholesale buyers can be accepted upon request	Before pandemic, the main customers are local and international visitors to Pacitan. Besides, people outside Pacitan through eCommerce	Local and international travelers consist of public, large companies, and Government institutions	The company conducted study of its customers. Mostly women (70%) in the productive age. They further can be grouping to spicy food lovers or fish-based lovers. Besides, people live in the mountain area or cold place	Retail buyers visiting the store, Exhibition visitors, Government institutions, wholesale buyers like Department store and large-scale batik sellers. Besides, distributor for overseas market	Before pandemic, the main customers are local and international visitors to Belitung
		Maintaining customers' relationship is	It is important to maintain customer relationship,	For service provider, it is important to maintain customer relationship. Good impression	Customers is one of measurement for company growth.	It is important to maintain customer relationship. She	It is important to maintain customer relationship. She

No	ASSESSMENT ASPECT	BMC1	BMC2	BSM1	BSM2	BMD1	BMD2
		important. He would ask the customers' opinion regarding the product, particularly for new customers. Besides, he also opens to special request for wholesale purchase.	particularly through eCommerce and the wholesale buyers. She regularly reviews customers' feedback in digital platform.	(word-of-mouth) can be promotion tool to reach larger customers.	Hence, it is important to maintain customer relationship. Exhibition helps to communicate directly to the customers and study further regarding market response and demand.	provides after sale service or her product like answering questions or complain related to the product	believes in the word-of-mouth power when
	Channels	Social media	Physical store (souvenir shop), exhibition, eCommerce, social media, halal food eCommerce facilitated by Istiqlal Mosque	Social media, eMail	Exhibitions, social media, eCommerce, Youtube, Website	Physical store Batik showroom, exhibitions, social media, eCommerce (just joined the platform, not active)	Physical store (souvenir shops), eCommerce, social media
		Self-study, started from using digital platform for personal to business purpose	- Self-study, started from using digital platform for personal to business purpose - Participating in digital literacy training from Bank Indonesia and other Government Institutions	Self-study, started from using digital platform for personal to business purpose	- Buy several books about social media for business development - Participating in digital literacy training from Bank Indonesia	Participating in digital literacy training from Bank Indonesia and other Government Institutions	Participating in digital literacy training from Bank Indonesia and other Government Institutions
	Cost Structure	Raw materials, Operational cost	Raw materials, Production house and Operational cost, packaging cost,	Digital marketing, down payment related to ticketing, tour activities, and tour facility.	raw materials (chili) as this commodity have fluctuate price,	Relatively high price compared to the average market	Egg squid price depends on the fishermen's fishing quantity, raw material (mostly foodstuffs), human resources, packaging, physical store
		No book-keeping. Has learned to use digital book-keeping app but cannot catch up as he	There is a digital book-keeping (using Ms.Excel) reviewed regularly. She can	There is digital book-keeping	Has a proprietary book-keeping system, besides the sales report in the	Has a traditional book-keeping yet already received digital book-	There is book-keeping as in the cashier application in the physical store.

No	ASSESSMENT ASPECT	BMC1	BMC2	BSM1	BSM2	BMD1	BMD2
		runs all the activities alone. However, he realized the importance of a proper book-keeping to evaluate business performance	track there is decrease in sales and compared the revenue from last year to the current year		eCommerce platform. The company also invested to digital book-keeping yet it's still underutilized due to infrastructure limitation	keeping application from Bank Indonesia	Besides, the traditional book-keeping for the whole production.
	Revenue Streams	Product sales to its customers, sponge cake	Product sales (tuna-based snacks) with slightly higher price than its competitors	Service provider (tour and travel)	Product sales (sambal with Papuan smoke-fish based)	Product sales (fabrics with multiple patterns in nature colors and small number of Batik clothes)	Product sales (egg squid-based snacks, chips, traditional fabric), Slightly higher price from the average market yet it is constant from the company was established (2000s)
		Cash and Bank Transfer	Multiple payment channels: cash, electronic money, mobile payment	Cash and Bank Transfer	Cash, Bank Transfer, Mobile payment	Multiple payment channels: cash, electronic money, debit/ credit card, mobile payment	Multiple payment channels: cash, electronic money, debit/ credit card, mobile payment
2. Business Culture							
	Labor	1 (Dimas) worker and casual laborer in peak season	3 workers for production activity	4 permanent workers and 8 temporary workers	6 permanent workers and 4 temporary workers	20 permanent workers and 30 daily workers	20 permanent workers and daily workers in peak seasons
		No organizational structure and written job description	There is organizational structure, job description and SOP	There is organizational structure, job description and SOP. Besides, there is also unwritten policy that will be explained to all workers during weekly discussion or before one project start.	There is organizational structure, written job description and SOP	No organizational structure and written job description	There is organizational structure and daily meeting (briefing) of production activity
		Not motivating the seasonal employee	Not motivating the employee, tend to have single command relationship	Motivating employee through incentive or profit sharing when they can recommend customers	Motivating employee to manage their integrity and be responsible of what they do	Most of the employee own their own farm or financially settled, so they often not coming to the work and return when they need money	Motivating her employee to innovate by creating new products and offer the opportunity to sell their product in Durio Gallery. After

No	ASSESSMENT ASPECT	BMC1	BMC2	BSM1	BSM2	BMD1	BMD2
							sometimes, Lita will allow her workers to have their own packaging and brand for their products.
	Work Relation	The part-time workers are Dimas' neighbors	There is one family (sister) work to handle in-store sales. She chose to employ her sister as family member can be assigned and have flexibility to do multiple tasks. Meanwhile, the workers for production activity are people living surrounding the store.	The co-founder and chief of operational of this company are Tyan's cousins.	His brother helps him since the beginning of business establishment. Meanwhile, for other employee, Yamin usually announces the vacancy in social media and conduct selection process	It's family business. Strategic, exhibition, digital platforms are her responsibility, while the supervisor for operational activity and communication with craftsmen are the responsibility of her mother. The workers mostly individual craftsmen coming to the company seeking for job	There is no family member or relatives working in this company.
		Daily wages (in case of high-demand)	Monthly wages in cash. In case there is overtime in peak seasons, the workers will get hourly bonus	Wages per project in Bank transfer	Monthly salary through Bank transfer	Wages per piece of production in cash payment	Daily wages in cash payment
		Long-term goal is making the sponge cake a souvenir cake from Palembang	Long-term goal is bringing the shredded tuna to international market. Besides, Rina also wants to developed canned tuna. There is daily plan for production output that have be achieved by the workers	Its vision is to be the best travel partner for its customers.	Long-term goal is to reach international market share for Papuan unique product	Long-term goal is reaching international market share	The long-term goal is to export the product and add the product up to 100 variants. For short-term, there is no particular planning in terms of production but focusing on producing the limited stock product

No	ASSESSMENT ASPECT	BMC1	BMC2	BSM1	BSM2	BMD1	BMD2
	Cooperation	Part-time workers have same ethnical background and live in the same environment. The cooperation is limited to tasks completeness, as the part-time workers only deal with technical activities.	There is no intentional grouping, as the workers have diverse gender. The man worker is assigned to handle more physical work. In terms of communication and cooperation within the company, there is only single command from Rina to her employees. As the workers are only responsible for production activities, there is no room for initiative or suggestion for company development.	There is no particular grouping. As the workers are in the young age, most of them are active and highly initiatives. Therefore, there is dynamic discussion for the company operation and growth.	There is no particular grouping with room and flexibility to express the workers' opinion or initiatives.	All of the craftsmen are women while the workers for fabric dyeing or production activity that involve chemicals are man. Besides, the administrator for physical store is college student or fresh graduate	All of the workers are housewife and live surrounding the Durio production house. The close relationship helps conflict resolution through discussion. She accepted workers from any ethnical background and found out better performance for workers come from outside Belitung.
	Relationship with Competitor	Never collaborated or cooperated for the same goal/ project.	Never collaborated or cooperated for the same goal/ project.	Never collaborated or cooperated for the same goal/ project.	Never collaborated or cooperated for the same goal/ project.	Never collaborated or cooperated for the same goal/ project.	Never collaborated or cooperated with competitor for the same goal/ project.
3. Civil Society Cooperation							
	Vertical Network	Not attached to Government institutions or large companies	Attached to Bank Indonesia, member of Rumah BUMN (community for digitalized SMEs) managed by Ministry of State-Owned Enterprises,	Not attached to Government institutions or large companies	Attached to Bank Indonesia, DISNAKER's partner, the regional office of Indonesian Ministry of Manpower. Besides, attached to Bank as the winner of innovative SMEs program in 2019	Attached to Bank	Getting development assistance from Ministries and Bank Indonesia
		Never receive capacity building program	Received capacity building and development	Never receive capacity building program	Received capacity building and	Received capacity building and development assistance	Received capacity building and development

No	ASSESSMENT ASPECT	BMC1	BMC2	BSM1	BSM2	BMD1	BMD2
			program from Bank Indonesia,		development program from Bank Indonesia	from Ministry and Bank Indonesia	assistance from Ministry, Bank Indonesia,
	Membership	No SMEs community is not really valuable in terms of knowledge sharing and network	SMEs community (managed by regional representative of Ministry of SMEs and Cooperative) that discussed entrepreneurship matters	ASITA (association for travel agent companies in Indonesia)	Joined SMEs some communities initiated by Ministry of Creative Economic and Bank Indonesia	Joined Batik craftsmen community in Tuban, Association for Batik craftsmen in East Java	National community of SMEs in Indonesia
4. State Regulation							
	National and Local Government	The regional representative of Ministry of Cooperative and SMEs is very supportive by actively spreading information about license and certification facilities. Besides, the South Sumatera Governor also supporting SMEs development by promoting SMEs' product through the official account of this Government institutions.	Aware and actively seeking the apply regulation, as they are important for company's growth.	Government's regulation and policy related to social distancing and regional lockdown, significantly decrease the number of travelers. Besides, the obligation of providing negative test result before travelling increase the cost that will be passed on to the customers.	Government regulation and process for Halal certified product is quite costly as it is the same for all level of SMEs	Government's regulation and policy related to social distancing and regional lockdown, included the limitation for activity triggering crowd like exhibition, have strike the craft industry with really slow pace in returning to pre-COVID-19 condition	There is different and unstandardized mechanism in processing BPOM certificate between national and regional office, that's also different with another authorized institution for standardization. It is complicate the process to obtain business license and certificate
		Asymmetric information as there are several groups of SMEs that have contact to authorized institutions.	-	-	Asymmetric information	-	-

No	ASSESSMENT ASPECT	BMC1	BMC2	BSM1	BSM2	BMD1	BMD2
	Rules and Regulation	seeking the apply regulation, then consider to register the business once the business grow	<ul style="list-style-type: none"> - Business license - Halal certificate - Home-based industry certificate - In the process to obtain BPOM certificate for food and beverage products - Has standardized the production house in part of obtaining export license 	<ul style="list-style-type: none"> - Business license as tour and travel service provider 	<ul style="list-style-type: none"> - Business license - BPOM certificate for food and beverage products - Halal certificate - Home-based industry certificate 	<ul style="list-style-type: none"> - Business license - Company registration certificate 	<ul style="list-style-type: none"> - Business license - Halal certificate - BPOM certificate for food and beverage products - In the process of obtaining export license for food and beverage - Patent
	Accountability	As it is home industry and most activities conducted by Dimas, then he has not considered to register the business	Rina perceives that following the required rules and regulation for her business is important for the company growth. Hence, she tries to complete the requirement and obtain the related licenses.	It is important to have required licenses and follow applied regulations, since the legality foundation is a key in dealing with large companies	It is important to have required licenses and follow applied regulations, since it is a part of legality of the company. Besides, it is important to support further company development.	Has insurance for the company, for instance in case of fire because almost all the equipment and production tools are wooden based.	The owner considers it is important to follow the rule, particularly to reach larger market share by entering international market (export).
	Finance	Dimas received financial assistance to develop his business by submitting business plan and compete with other potential SMEs	Got capital loan from regional office of Ministry of Cooperative and SMEs.	Got financial assistance from Facebook for company development and advertisement	Never receive financial assistance from Government and Banks loan	Never receive financial assistance from Government yet get loan facility from Bank through People's program credit	Received financial assistance from The Ministry of Marine Affairs and Fisheries
		Has personal identification number and pay tax as self-entrepreneur	Has a tax identification number and pay tax as self-entrepreneur	Has a tax identification number under the company's name and actively paying tax	Has a tax identification number under the company's name and actively paying tax	Has a tax identification number under individual name as the company license is for self-owned company	Has a tax identification number under the company's name

Table 5.3 Summary of Interviewed SME in Group C

No	ASSESSMENT ASPECT	CMC1	CMC2	CSM1	CSM2	CMD1	CMD2
1.	Business Operation						
	Key Partner	Supplier for Craft raw materials and eCommerce company	Raw material supplier, Distributors (Member, re-seller, agent, drop shipper)	Fabric (linen) supplier, tailor partner,	Gift components suppliers, packaging supplier, eCommerce company, shipping company	Coffee bean suppliers, coffee machines suppliers, eCommerce company	Jackfruit farmers, raw material suppliers, NGO from Netherlands, Mulawarman University, eCommerce company, ride-hailing company, re-seller
	Key Activities	Gift and hampers service	Essential oil producer	Linen clothes producer	Customized Gift and hampers service	Coffee producers	Jackfruit-based cakes and snacks producer as the iconic food from Balikpapan
	Key Resources	Raw materials (gift and hampers components), human resources, technology	Human resources, Raw materials, and Technology	Raw material supplier, tailor partner, technology, human resource	Raw materials (Gift and hampers components, packaging), human resources, technology	Raw materials, machines and equipment, capital, human resources	Raw material, research and development (knowledge), human resources
	Value Propositions	The package options of available product and made by order package. The creative design with detail and personal touch are the strength of Tria's product	Multi-variants oil (3 bundles of essential oils consist of 21 essential oil, 3 carrier oil, and 5 diffuser) with affordable price There is a dedicated research team to develop product	10-20 products from dress, jacket, family linen set to praying set. Lini believes that her product is simple, durable, and quality in a reasonable price	Personalized gift/ hampers platform, enable customers to create their own gift/ hampers for special occasion. It is the first company provide this service.	Didin has four business categories: trading, supplying, roasting, and exporting coffee beans. The standard and all licenses he obtained, are the valuable aspects in convincing the quality of his products	There are multi-variants of jackfruit-based products, from cake, sambal, syrups, to snacks. She believes that teamwork and good coordination with partners are the key in her company success. Besides, the eagerness to learn and innovate.
	Customers	Tria's customers are the social media users with age range from 21 - 40, mostly women	Women, both housewife and workers. particularly from middle down segment	Women from middle economic reached through social media and company website	The box and tale customers are people with age range from 21 - 40 and middle to high economic capacity	The main customers are coffee shops in Balikpapan, wholesale buyers for coffee beans, and the coffee shop visitor	Before pandemic, the main customers are local and international visitors to Balikpapan. After the pandemic, she has multiple

No	ASSESSMENT ASPECT	CMC1	CMC2	CSM1	CSM2	CMD1	CMD2
							customer segments: Balikpapan residents, online buyers, exhibition visitors
		It is important to maintain customer relationship as the business core activity is providing service and customers' good impression can help in promoting the company.	It is important to maintain customer relationship. The company offer guarantee for defect/ imperfect product. Besides, they also ask the feedback from customers regarding the impact of the product	It is important to maintain customer relationship by providing high-quality product and reviewing customers' feedback in social media and eCommerce regularly.	Maintaining customer relationship is important, particularly in digital era, as the customers review can easily spread out in digital platforms. The company has a policy in case there is a mistake in order, for example through product replacement	It is important to maintain customer relationship. Hence, Didin directly handles the marketing for wholesale buyers like hotels	It is important to maintain customer relationship, because customer review in digital platform can be a footprint and affect the potential customers
	Channels	Online store (social media) and eCommerce	social media and eCommerce. There is no physical store and the office only function for packing and research center.	Social media, eCommerce, Company website	Company website, social media, eCommerce	Physical store and coffee shop, eCommerce (international),	Physical store, eCommerce, social media, Company website, Exhibition, re-sellers
		Self-study, started from using digital platform for personal to business purpose	Self-study, started from using digital platform for personal to business purpose	Self-study, started from using digital platform for personal to business purpose	The founders start this business from a final project in their business school that encouraged the utilization of digital technologies	Self-study then participating in digital literacy training from Bank Indonesia and other Government Institutions	Self-study then participating in digital literacy training from Bank Indonesia and other Government Institutions
	Cost Structure	The raw materials price particularly in peak season, Due to no official partnership, some suppliers can suddenly sell the materials to other buyers.	Raw materials, research, marketing with affordable for middle down customers	Raw materials (linen fabric) and the tailor service	The biggest costs are for website development and maintenance, and warehouse. Besides, the ready stock for gift components.	Coffee bean also machine and equipment are the most expensive part in this business, besides warehouse.	the raw materials usually fluctuate along with market price. Yuni sells her product with a relatively high price (middle up segments)

No	ASSESSMENT ASPECT	CMC1	CMC2	CSM1	CSM2	CMD1	CMD2
		There is digital book-keeping	There is a digital book-keeping	There is an online cashier system, eCommerce sales report, and sales report in the website	There is a digital book-keeping besides eCommerce and sales report from website	There is a digital book-keeping system, Didin purchase a premium book-keeping application to monitor upstream to downstream costs in his business	There is a digital book-keeping besides eCommerce report and cashier transaction report
	Revenue Streams	Product sales and services with slightly higher price compared to the average market price	Product sales with affordable price (middle down segment)	Product sales with affordable price (middle economic), as linen-based product usually expensive, Lini targeted the middle price	Product sales with high price compared to the average market price	Product sales. The coffee beans processed in this company are sold with high price and targeted the premium customers	Product sales. The products have slightly higher price compared to average market price, but still lower than the big players' prices
		Bank transfer and Payment gateway	Bank transfer	Bank Transfer, Payment Gateway, Electronic money	Bank transfer, Payment Gateway	Bank transfer, payment gateway, card payment, electronic money	Bank transfer, payment gateway, card payment, electronic money
2. Business Culture							
	Labor	1 (Tria) and 3 temporary workers for peak seasons	8 permanent workers and 45 partners	5 workers consist of administrator and courier	3 founders, 3 permanent workers (administrator and production) and several freelancers in peak season	6 workers, 1 marketing officer for local market	10 permanent workers, several Freelancer for marketing and digital matters
		There is no organizational structure as she manages most activities alone	There is organizational structure, SOP, and several schemes for partnership (member, re-seller, drop shipper, agent)	There is no organizational structure, but there is reporting mechanism of operational activities	There is organizational structure, clear task division, and SOP.	There is organizational structure, clear task division with regular rotation, SOP refer to National Standard	There is organizational structure, clear task division with regular rotation, SOP, briefing and penalty system in case of underperformance
		Not motivating the employee, still do multi-tasks by herself.	Motivating labor by providing capacity building, assistance, and award of monthly target achievement.	Lini creates a weekly donation program taken from the sales percentage. By having this program, Lini hopes to motivate her employee to do more alms and she also give reward for	Bernard and his team motivate their workers in a regular meeting, by giving example on how to handle the customers or deal	There is no regular meeting, unless there is preparation to obtain standardization or licenses certification. He used to make contract	There are several ways that Yuni conduct to motivate her employee. First, she passes on the knowledge of

No	ASSESSMENT ASPECT	CMC1	CMC2	CSM1	CSM2	CMD1	CMD2
			Furthermore, Tria also provides scholarship to improve her workers' education	the outstanding worker or no-complain from the customer in a month	with complain. Besides, they give the flexibility for the workers to express their opinion and suggestion related to product or business process	in recruiting his workers but that did not work, so he no longer use contract for the workers.	entrepreneurship or standardization training she receives to the employee. Second, in the regular meeting, she encourages her workers to review customers feedback in the digital platform and reflect on it. Third, she teaches and gives examples to the worker on the expected process, activity, and quality.
	Work Relation	There is no family member or relatives working in this company.	The co-founders are former business partners and friends, while other employee in the office selected through job recruitment	There is no family member or relatives working in this company	There is no family member or relatives in this company. The co-founders come from the same University and major.	There is no family member or relatives working in this company. All of them are college students	There is no family member or relatives working in this company.
		Daily wages in cash payment	Monthly salary through Bank transfer	Monthly salary through Bank transfer	Monthly salary through Bank transfer	Monthly salary through Bank transfer and cash payment	Monthly salary with various payment instrument, some workers prefer cash payment and others prefer transfer
		Long-term goal is having an official workshop and larger market share	The company has long-term goal of providing high-quality essential oil, involving in people empowerment (particularly woman), and contribute to social, economic, and health fields	The vision of this company is creating long-lasting and sustainable product with affordable price	Long-term goals are be the leading gift purveyor in Indonesia and can reach a larger market share in Indonesia	Long-term goal is to have larger and settled international market share,	Long-term goals are to be the pioneer in jackfruit-based product, introduce product to international market, empower more people in the surrounding, and help more poor people

No	ASSESSMENT ASPECT	CMC1	CMC2	CSM1	CSM2	CMD1	CMD2
	Cooperation	The temporary workers are women, recruited by information or recommendation from neighbor and her housemaid	This company involve women in most business aspects, from co-founders, workers, and partners. However, workers in the office are youth (college students) that caused high turn-over	The workers come from the recommendation of former employee or her relatives. However, they should perform high integrity and religious aspect, besides having knowledge and skill in computer and social media	The workers are selected through recruitment mechanism. All of them are college graduate in young age.	The workers are selected through recruitment mechanism. Most of them are college students/graduate.	The workers are selected through recruitment mechanism. Most of the workers are senior high school graduate
	Relationship with Competitor	Never collaborated or cooperated with competitor for the same goal/ project	Tria ever collaborated with friend's business with different field, but never with the competitors	Never collaborated or cooperated for the same goal/ project.	Never collaborated or cooperated with competitor for the same goal/ project	Never collaborated or cooperated with any competitor for the same goal/ project	Never collaborated or cooperated with competitor for the same goal/ project
3. Civil Society Cooperation							
	Vertical Network	Not attached to Government institutions or large companies	Not attached to Government institutions or large companies	Not attached to Government institutions or large companies, and considers it is not important to have contact with Government or particular organization	Not attached to Government institutions or large companies	Attached to Bank Indonesia	Attached to Bank Indonesia, State-owned Enterprise (Large companies), Ministry of Industry
		Never receive capacity building program	Never receive capacity building program	Never receive capacity building program	Having business education background	Bachelor graduate in economic and Bank retiree. Allocated first six months in his business life to do a deep and comprehensive research of supply, process, and distribution aspects	Bachelor graduate in Engineering. Receive multi capacity building programs from several organizations both Government and Private. Another competitive advantage is the ability to speak English
	Membership	Not involved in SMEs community	Involved in SMEs community	Not involved in SMEs community	Not involved in SMEs community	Not involved in SMEs community	Involved in national SMEs community
4. State Regulation							

No	ASSESSMENT ASPECT	CMC1	CMC2	CSM1	CSM2	CMD1	CMD2
	National and Local Government	Tatia is not aware of Government's regulation and policy apply to her business, considering it is a new home business	Tria is aware of Government's regulation and policy that is getting better time to time, more supportive for business climate. However, she considers that she has no close contact to Government institutions, and not really find the impact in her business.	Lini is not ware of Government's regulation and policy for her business	Some regulation and policy that affect his business is about import regulation as several gift components are import product. It is important to have contact in the Government institutions because the asymmetric information might delay business registration process.	The policy and regulation during COVID-19 outbreak hamper exporting activity for coffee bean as it is one of restricted product for overseas shipping during the outbreak	Yuni highlights the changes in the process to register her business, as Government implements online registration system and she found it is complicated for the small business to learn the new platform while completing the requirements.
		-	-	-	-	-	-
	Rules and Regulation	Has no business license and required legal documents	Has no business license and required legal documents, due to limited financial capital. Up to this time, Tria prefer to use the budget for her employee empowerment.	Has no business license and required legal documents, as the process in her office is only for accepting sales, inventory control, packing, and sending the products	Has business license and required legal documents	<ul style="list-style-type: none"> - Business license - Halal certificate - BPOM certificate for food and beverage products - Expired date and brand registered (20 brands) - In the process of obtaining export license for food and beverage 	<ul style="list-style-type: none"> - Business license - Halal certificate - BPOM certificate for food and beverage products - Brand registered and patent - In the process of obtaining export license for food and beverage
	Accountability	The owner considers it is important to follow the rule and regulation when she wants to escalate her business	The owner considers it is important to follow the rule for the sake of business escalation. However, there is still culture allowance practice to accelerate the administrative process in	The owner considers it is not important to follow the rule, as her business has been running well these past 4 years	Bernard and his team are aware of Government's regulation and policy, then try to follow the rules in stages.	Didin considers it is important to follow the rule for company growth and support selling price of the product. Hence, although the business is relatively new, he has obtained relevant licenses.	The owner considers it is important to follow the rule for the sake of company development. Yuni has insurance for the company and her workers. Furthermore, she also has applied and received award of applying standard

No	ASSESSMENT ASPECT	CMC1	CMC2	CSM1	CSM2	CMD1	CMD2
			Government institutions.				security system in her business process
	Finance	Never received financial assistance from Government or financial institutions. Fully relies on personal funding from previous job.	Tria has not received any financial assistance to develop her business. She feels it is quite hard to obtain such assistance and capital loan as she needs to have business license or supporting legal documents. Hence, she relies on sales and participates in some competition to fund her business.	Lini has not received any financial assistance both from Government and financial institutions	This company has not received financial assistance from Government, financial institutions, or potential investors, and fully relies on self-funding. They consider having investors might interfere the decision-making process in their business.	Didin has not received any financial assistance and not planned to take Bank loans. He also has limited knowledge on capital assistance from Government or large companies, considering that coffee processing equipment's are expensive. Up to this time, he relies on personal funding.	Yuni has utilized financial assistance from a state-owned organization, joined some competitions, get capacity buildings from Bank Indonesia
		Has no tax identification number	Has personal identification number and pay indirect tax when purchasing raw materials (e.g., through eCommerce) or in other production process	Has no tax identification number	Has a tax identification number under the company's name and pay tax	Has tax identification number, pay tax, and use a consultant service for the company taxation	Has a tax identification number under the company's name, pay tax, and use a consultant service to handle the company taxation

5.2 Multiple Cross-case Analysis

This section will discuss the multiple cross-case analysis of 18 studied SMEs. The purpose of this section is to distill the contradicting and coinciding business practices into values and institutions from differences and some similarities found through cross-analyzed. These consequently will form the traditional and modern value- and institutional sets that are represented in these particular cases and commonly entrenched in the Indonesian business context. In the first part, the business models and digital transformation state are studied, followed by analyzing business culture and civil society cooperation. This paragraph will end with an analysis of the state and governance in Indonesia. The number between brackets behind the statements indicates how many of the 18 interviewed SMEs expressed this statement. Nevertheless, it is noteworthy that not all interviewees explicitly stated several statements, but numerous interviewees may have echoed this sentiment in their response to the inquiries. Hence, when confirmation is conducted towards whether or not interviewees concur with the assertion, the results would indicate that the statements have widespread support.

5.2.1 Company Level

The studied SMEs have the various business field from food and beverage, handicraft, fashion, tour, and travel services. Nevertheless, there are three business models: traditional business model without utilizing the digital technology, utilizing technology in some business functions, and advanced utilization of digital technology (both self-operate and operated by the third party).

5.2.1.1 Traditional Business Model

Companies with this business model (6) are primarily *informal and do not utilize digital technology in the business process*. If the company participates in the eCommerce platform, it is not the owners' initiative and minimally uses the features.

These companies use less technology in their businesses and communicate with their partners traditionally. *Physical infrastructure* like store and gallery then *face-to-face interaction* and phone communication mainly *facilitates company interaction with suppliers, distributors, and customers*. The SMEs usually have face-to-face interaction for new partners, while further communication will continue in phone or message communication (4). Most of their customers are retail buyers (6) conduct fluctuating orders, while only two companies serve wholesale buyers. The limited utilization of technology narrows the market of these companies for local customers. Meanwhile, one company can have wholesale customers in multiple cities because the owner directly approached and visit the potential customers in person. Such an approach is costly and time-consuming.

In this business model, the companies demonstrate *a lack of knowledge and skills* (IESA) and an *enabling environment* (SI). However, *capacity and values* (VAB) appear to be the main issue. All the companies show *inertia* on the utilization of digital technology due to the perception that technology is complicated (2) and not suitable for their business model (1), also *opportunistic behavior to stay out of the system* (3). The latter makes limited interaction with Government institutions and is not involved in any entrepreneurial community. This condition illustrates how mindset and value system (VAB) are related to acquiring skills and knowledge (IESA). Meanwhile, most entrepreneurs in the selected cases own a smartphone (5), have a high education level (4), and have been using social media for personal purposes (5). The finding that most of them have a good education is due to case selection which is not

typical for the majority, as the domination of Indonesian SMEs is in the micro-level. Hence, a larger sample of micro-enterprises will give a better illustration that they tend to have low education levels. Afterward, these companies do not utilize the technology and have no plan to invest in digital technology. This situation shows how the utilization of skills and knowledge (IESA) depends on the attitude (VAB) that translates into an entrepreneur's action.

Lastly, the *enabling environment* (IS) also performs a role as they foster these informal businesses through weak regulatory enforcement and limited coverage. Such circumstances enable enterprises to have no tax identification number and do not pay tax for their business (5). Besides, they also have no book-keeping system that hampers their interaction with financial institutions while protecting them from unexpected supervision of the authority. Although relevant regulations and policies are there, the SMEs alone find the information and initiatively (not) register. Besides, there is a misinterpretation of the Government institutions translating the limited utilization of technology on SMEs into the lack of digital literacy (IESA), then they will provide technology training/ workshop as a capacity building for SMEs.

5.2.1.2 Transition Business Model

The transition business model combines traditional and digital aspects through technology utilization in some business functions (8). However, the utilization of digital technology is relatively recent, and they are adapting to the tools after the companies have run traditionally for some time.

This group *mixed between hierarchical management style and egalitarian*. Key responsibilities are *distributed* among employees through organizational structure, clear tasks division, and SOP. Although the innovation is still concentrated in the owners and company growth majorly driven by their efforts, most companies strive to distinguish their products from competitors and expand their business. For example, BMC1 put shredded tuna as its main product in modern packaging, while her competitors stick to tuna tofu products that are simply packed for years. Another example is BMD2 that decided to produce catering food to compensate for the sudden drop in sales due to no tourists coming to the town. Later, they try to *enhance innovation from the workforce* by motivating them in various forms like financial incentives of target achievement, providing selling channels for the employee new products, also encouraging integrity and responsibility for employee development.

These enterprises *connect to more parties and broader markets*. Most companies receive an order from out of town enabled by *social media and participation in eCommerce*. Nevertheless, they still manage physical stores (5) and participate in the SMEs exhibitions (4) to promote and sell their products. The critical activity is mainly transforming raw materials into valuable products/ services, *labor-intensive situations*. Only BMD1 sells products from other artisans in its gallery and during the exhibition with the profit-sharing mechanism. Furthermore, all the companies have a *digital bookkeeping system*, both simple and advanced (paid software), and regularly review company performance. They also provide *multiple payment channels* to accommodate customer preferences, from cash, bank transfers, card payments, and electronic money.

In this model, the companies have entrepreneurial experience but *lack digital knowledge and skills* (IESA). However, their beliefs on the learning process and responses to technological changes demonstrate strength in *Values, Attitudes, and Beliefs* (VAB), with the help of the network and capacity building from Government and relevant institutions - Social environment and Institutions (SI). *In the beginning*, these companies realize that they lack digital literacy. Hence, the owners exert themselves of digital technology, although they found the transition

challenging. They actively seek information by contacting relevant authorities, joining a business community, buying several books about social media for business development, and participating in digital literacy training managed by various institutions. Most enterprises self-operate the digital platform (4) or help by another family member (2), while some assign digital workers (2) to manage social media and create digital content. After participating in digital platforms, these companies figured out that they lack digital marketing ability for further growth and expecting to receive capacity building related to this matter (VAB). In line with Bank Indonesia's statement, *"it is understandable when the companies said digital technology, particularly digital marketing part is challenging, because the training is technical, complex, and requires extra effort from the SMEs to understand in the short time and continue with the practice."*

To deal with the complex bureaucracy and limited information about regulations, these companies create contact with the relevant authority and joining the entrepreneurial community to build an *enabling environment* (IS). All the companies were directly visiting the institutions' offices to acquire necessary information. This contact usually provides information about Government's entrepreneurial community in the company area. This attitude helps the enterprises acquire *skills and knowledge*.

5.2.1.3 Digital Business Model

Companies with this business model commenced their business from a digital platform mostly without having the physical infrastructure to display products or interact with customers. This business model is dominated by young entrepreneurs, including millennials (5). At the same time, only one company lead by a Gen X. Besides, all the owners have high education and language skills other than Bahasa.

These companies show more *professional attitude* and grow in stages. They start the business efficiently without physical building like store or gallery while company building functions as office and workshop simultaneously. These companies commonly offer innovative products and believe *innovation* is essential to keep competitive. Hence, the value towards innovation is translated in the clear task division and particular time for business and market research (3), collaboration with universities (2), or have research functions in the job description (1) - VAB. With access to *digital platforms*: company website, eCommerce (local and international), social media, and email, these companies can reach a larger market.

The owners provide *adequate and continuous training* in knowledge sharing, capacity building, regular meetings, and open dialogue for initiative or suggestions that allow *interactive decision-making*, besides creating charity programs to encourage workers to do more alms. In addition, they are more aware of *shared labor* and believe that smooth coordination contributes to company growth. They realize that they cannot achieve their goal without teamwork. They *value the workers* as company representative that have direct contact with customers. Hence, the owners ensure the workers have adequate capacity and encourage team spirit within the company. Besides, they also motivate workers with *performance-based remuneration* of target achievement (2).

All companies are considered customer-oriented businesses. They have a well-defined customer segment, concern with customers' feedback, and provide multiple and more advanced payment channels like payment gateway services in the payment process. Besides, they *regularly review customers' feedback*, have a *replacement policy* and *product warranty*, then demonstrate flexibility by accommodating customized orders. Furthermore, with more

developed insights about market and customers profile, these companies set a higher price for their products than average market prices.

According to this situation, the strength of this group is in entrepreneurial knowledge and skills, including digital literacy, foreign language proficiency, financial literacy, supported by the fact that most companies are located in Jakarta - the area with the highest digital and financial literacy index in the country. Nevertheless, all companies perceive that dealing with business licensing and certification is challenging because of a lack of transparency and complex bureaucracy (IS). For example, some companies hire freelance tax consultants (3) to handle company taxation. Besides, they do not feel it is necessary to connect with the Government institutions or join particular communities in supporting business growth.

5.2.2 Civil Society Level

This section deals with civil society and market in Indonesia by respectively focusing on the relationship with suppliers, buyers, and competitors on competition/ cooperation, and finally the NGOs and entrepreneurial community.

Nearly all companies maintain an informal relationship with their partners that rely on the bond of trust. It makes *cooperation and information sharing are limited*, and the collaborative contract is missing. A contract is not typical in Indonesia as it ranked 139th of 190 countries in EODB rank for contract enforcement (EODB, 2020). Most companies mentioned that the batch order and relatively small quantity make contracts unnecessary (12). Besides, some companies argued that contracts might stiffen communication with their partners (5). Despite the lack of trust in their partners, these companies also indicate that no contract might be somewhat helpful if they suddenly stop the collaboration or violate the agreement. In these circumstances, no contract makes entrepreneurs not need to be involved in judicial processes and quickly move to other suppliers.

5.3.2.1 Suppliers

As companies have to deal with limited market information, they should find out the information alone. They refer to social ties to look for the trusted partners, and building trust is essential in this circumstance. The owners will handle the initial process, and when bonds of trust have been established, the consecutive activities will be conducted mainly over the phone or handled by the workers. Further communication with the suppliers will be limited to ordering new batches and price negotiation, then the communication archive will be used for accountability. This type of relationship creates risk as the bond of trust can be violated. For example, in the case AMD2 when the fabric supplier in the local market sells the material to other buyers with higher price without early notification. Besides, it is not common for the companies to order the raw materials without advance payment, as stated by CMD1 that he will not receive bean stocks unless he fully paid for the order before. Only AMD2 that uses installment payments mechanism with the suppliers while receive the raw materials in advance. Another violation occurs in the case of AMD1, potential partners approached him to expand the restaurant business with the franchise scheme. The missing contract enabled that company to cut off cooperation during the project and cause the owner to suffer financial losses.

5.3.2.2 Customers

Most companies reach the customers in their business location (14), while the transition company also uses exhibitions (4). In contrast, modern companies and those in transition also utilize digital platforms to reach and interact with their customers (14). Companies with digital

business model have more connection to necessary knowledge, market, and partners. They enjoy *access to the developed and international market* through their digital-related capacity. Nevertheless, retail purchases dominate the transaction, then only AMD2 and CMD1 serve wholesale buyers. Furthermore, none of the companies allow delayed or installment payments to avoid a violation, while some charge a down payment to secure business production (2). In contrast, advance payment is a common thing for order validation in all digital transactions. Subsequently, the contract for wholesale buyers still unavailable, and only ASM2, CMC2, CSM2, CMD1 that ever use contracts with particular buyers. Nearly all the companies (16) acknowledge the importance of customers feedback, but not all of them respond positively to that and take an introverted attitude by justifying that they focus on improving product quality as it can influence customers' feedback (4). Nevertheless, some companies maintain customer relationships by providing customer service facilities or aftersales service.

5.3.2.1 Competitors

The last one is the relationship with competitors. None of the companies have collaborated with their competitors. They argued on the unique selling points of their products; they are the unique taste (6), high-quality product (5), multi-variants (5), and customization (4). Still, these claims are debatable since only limited companies have required certificates for their product (6). Products without certification can easily be found in Indonesia, from local markets to department stores. With little feedback from customers and introverted behavior towards customers, competition-based innovation is available. It influences the companies to treat their competitors as threats. Ultimately, Most SMEs have no legal capacity and knowledge to utilize contracts in their relationship with partners.

5.3.2.2 NGOs and Entrepreneurial Community

There is a negative perception of the entrepreneurial community. AMC1 highlights his experience that community will only benefit particular people, like the group leader, while AMD1 and BMC1 observe that such community does not give added value in terms of knowledge sharing and network but the show-off event. In addition, AMD2 views that as unnecessary because her company can develop well without joining any community. This situation clearly shows the trust issue of the owners towards the external environment outside themselves. Therefore, only 6 out of 18 studied SMEs are involved in the entrepreneurial community. In contrast with the introverted companies, six enterprises enjoy access to relevant information and inspiration from successful companies through their participation in the community. Nevertheless, only CMC2 experiences assistance from an international NGO. High education and foreign language skills enable *cooperation and information sharing* with international networks.

5.2.3 State Level

The extensive description of the Indonesian SME landscape with involved actors, supporting policies, and challenges, including the social transformation summary, can be found in Chapter 4 of this report. Therefore, this section mainly deals with the institutional business environment from SMEs' perspective to determine how the enterprises cope with the applied rules and regulations, including the challenges.

5.3.3.1 Regulation and Informal Network

Although current policies and regulations support SMEs' growth, the arrangement to access information and obtain assistance is still too complex and has not yet been felt by most SMEs.

Most of the studied SMEs have no informal networks and never received capacity building from the Government (12). They are traditional companies and SMEs that start their business through digital platforms. Meanwhile, those who connect with the Government stated that they receive capacity-building programs mostly in a one-day training on particular topics like licensing, relevant certification, and funding information (6). Nevertheless, there is a lack of further monitoring and evaluation of those activities, while PLUT facilities provided by Kemenkop are not well-known. At the same time, these companies also connected with Bank Indonesia and argued that they get access to intensive assistance and monitoring except funding. Bank Indonesia provides infrastructure assistance and connects the SMEs to the universities for product research and development, including market through *business matching* and *onboarding programs* to the digital platform. The Government and Bank Indonesia also offer an opportunity for these SMEs to promote their products in entrepreneurs' exhibitions. Many SMEs often neglect this opportunity and let other SMEs that grab the opportunity to participate in training and exhibitions frequently.

More than half of the studied SMEs *have registered their businesses* and have *tax identification numbers* under personal and company name compliance with regulations. However, the companies with traditional business models mainly do not register their business, have no connection with Government, and no tax identification number. In contrast, Food processing companies have more licenses to comply with and certification to obtain for their businesses. Besides the business license, they also have multiple certifications such as halal certificates, food and medicine certificates, home-based industry certificates, national standard certificates, and obtaining export licenses. Companies with the long-term goal of market expansion seem to strive to *comply with various government regulations and standards*, although they concur that many *governmental systems are bureaucratic* (5). They consider compliance with regulations and ownership of relevant licenses to *help elevate the value of their products*.

Furthermore, they appreciate current Government effort in providing *equal access without extra incurred costs* through the implementation of OSS that limits *corruption and bribes*. *Even though they found this transformation is* challenging as they have to adapt to new systems while having *limited information* from authorized institutions. Still, some companies have to deal with *arbitrary and unannounced decision-making* through double standards and different requirements between standardized organizations, which is *time-consuming* to follow and confirm (2). Besides, BSM1 also have to face *allowance fees* and *petty corruption* under circumstance when the company wanted to obtain cash disbursement as Government's financial assistance for SMEs affected by Covid-19 (1). The owner of BSM1 explained that the chairman of the neighborhood asked for the benefit of helping SMEs and requested allowance fee in return to the service.

Eventually, all the companies express inconsistent treatment regarding regulation enforcement and support from the regional leader and the Government agencies at the regional level. In some regions, Government agencies create enabling environment for SMEs through informal WhatsApp groups for their supported SMEs to accelerate information and knowledge sharing, while some regional leaders promote SMEs' products in their area through social media platforms (3). In contrast, asymmetric information occurs in some areas, and regulation enforcement is missing (2).

5.3.3.2 Accountability

In general, there are two kinds of attitudes towards rules and regulation from the entire study cases. First, *ignore Government regulation and relevant policies* as long as there is no direct

impact on business. This condition is influenced by limited knowledge and capital (3), besides the tendency to stay out of the system (5). Second, *comply* with the relevant regulations and standards required, *although there is a heavily bureaucratic system* (10). For example, some even use third party services to deal with the company taxation (3).

The first group *utilizes the weak regulation enforcement* and justifies their action by bringing the fact that many more SMEs in the surrounding also disobeyed the rules. The absence of an SME's integrated database accessible across authorized institutions makes regulation enforcement in Indonesia challenging. Regional Governments should conduct enforcement as they have direct access towards enterprises in the regions. They control the unlicensed business primarily by conducting sudden visits and ask for business licenses. However, it is only applicable for traditional businesses with prominent buildings and is limited to the Business Activity Permit (SIUP), Business Location Permit, and construction permit (IMB). This type of regulation enforcement is not standard and might not available in some areas. Besides, the arrangement is unclear because it depends on the government leader's policy and initiative and institutions at the regional level.

Meanwhile, the traditional enforcement like sudden visit might be less effective for the companies with tendency to stay out the system. These companies can hide behind the traditional and small workshops (3) or sell cheap products (2), including having no book-keeping system, so they can argue on their obligation to register the company in case of sudden visits occur. Such traditional control might be more challenging for technology-based companies, as they use limited physical infrastructure and limited workers that make business activities become unobvious.

The same problem also occurs in taxation matters. Although the classification of SMEs has set their obligation of tax rules, the compliance remains low. Currently, only 2 out of 60 million SMEs are registered as taxpayers and pay their taxes (Pebrianto, 2018). Waluyo (2018) reveals that low compliance in SME taxation is due to insufficient tax knowledge, unfair perception of the tax rate for SMEs, and weak tax administration. However, it is noteworthy that tax compliance requires voluntary agreement from the taxpayers (Waluyo, 2018). This study cases show a lack of knowledge of taxation in general, except for some developed SMEs with adequate tax knowledge but have no intention of fulfilling their obligation (4). These tax evaders utilize the weak tax administration and enforcement caused by disintegrated information between citizen identification, tax registration number, and bank account managed by different authorities. Besides, there is high distrust in Government due to a lot of tax corruption cases involving tax officers (Pebrianto, 2021; Lumbanrau, 2017; Hikmawati, 2014).



6. Discussion

Chapter 4 and 5 of this report provide an extensive assessment of the entrepreneurial landscape, SMEs' capacities, and their response towards the existing environment. Referring to the empirical data, digitalization challenges appear both at the SMEs level (bottom) and the Government and authorities (top). This chapter discusses the barriers for digital transformation on SMEs at the enterprises level and the Government level, following by the benefit of participating in digital platforms.

6.1 Barriers on SMEs Level

The analysis on state governance level and 18 SMEs reveals that the SMEs are partly or entirely lack capacity indicated by their value and institutions in the adopted business model, business culture, relationship with civil society, and the connection with state governance. This further confirms the typical problems of SMEs development like limited knowledge, access to information, network, and financing. However, the data also show *lack of trust* between the owner and workers within the company, as well as to the external environment like partners and competitors. Another issue is the relatively *low compliance level* on regulations despite the SMEs capacity and business model. Accordingly, we figured out that indeed the lack of capacity is the barrier for SMEs digital transformation. However, it is not limited to the IESA aspect so the capacity building should not only focus to information/ knowledge improvement.

Furthermore, it is noteworthy that the empirical data show the essential role of VAB in defining companies' respond towards digitalization. Related to that, SMEs need to value the innovation and believe that the shift will benefit them, the processes are feasible, and they need such transformation. Those values and beliefs later will be reflected in their attitude. In short, how SMEs *value* technological changes and participation in the formal economy, including *beliefs* in the benefit of their participation, define their *attitude* in (not) taking digital shifts. The following paragraphs will describe the barriers or strengths that influence SMEs' digital transformation, categorized according to their capacity level and response.

a. SMEs with high capacity and positively respond to formal economy

Based on the output, this group of enterprises might have limited *Information, Experience, Skills, and Algorithm* (IESA) on digital technology. However, these companies value change and learning processes (VAB) that influence their *attitude* to create and optimize their networks to cope with the social environment and Institutions (SI). The network is the crucial aspect for this group to mobilize knowledge and create further development. The empirical data reveals that those who positively respond to digital transformation have more connections in the network.

SMEs with transition business model demonstrate this situation. They have entrepreneurial knowledge and experience as they have been doing business for sometimes. However, there is a *lack of capacity in utilizing digital technology*. Intervention introduced for these SMEs through capacity building and onboarding program from the Government and state institutions. Consequently, they have registered their business and can access broader market although the adaptation is ongoing. The greatest incentives to formalize for these companies is broadening access to international market. Consequently, fulfillment to the required capacities, and regulations become acceptable for them. Nearly all of the SMEs have licenses and certifications other than business permit.

b. SMEs with lack of capacity and negatively respond to formal economy.

This group of SMEs is lack capacity in all three aspects of *Information, Experience, Skills, and Algorithm* (IESA), *Value, Attitude, and Beliefs* (VAB), and the *Social environment and Institutions* (SI). However, the main problem is in their VAB aspects. These companies do not value innovation and learning processes, supported by their responses towards the utilization of digital technology in their business. AMC1 perceived the learning process as complicated and burdensome, considering the load of current business activities. He also added that his business is not suitable for the digital business model. Meanwhile, AMC2 is satisfied with the status quo of its business. Besides, he considered handling the digital platforms as difficult and time-consuming. This condition, at the same time, indicates the lack of managerial capacity.

As they have no intention to present in the digital ecosystem, they ignore the regulations that apply to their business. Furthermore, they neither interact with the external environment nor create contact with Government, relevant institutions, or communities in the surrounding. This introverted behavior hampers the movement of valuable information and contributes to their lack of IESA. Bringing this group of SMEs to the digital platform by merely providing the technology-related capacity building is inappropriate and insufficient. These groups require an intensive approach to improve their entrepreneurial mindset and better understanding their business.

c. SMEs with high capacity but negatively respond to formal economy.

This group includes well-developed SMEs that have not utilized digital technologies and started their business digitally but have a minimum connection with civil society and the Government. Furthermore, the maximum value profit is either afraid of financial loss when participating in the formal economy or considering participation insignificantly beneficial. Typical problems for these groups are: (i) *high distrust of Government*; and (ii) *compliance level is low while the enforcement is challenging*.

All company owners have a high educational background and are familiar with the system to work around the system, for example, in AMD1. This company has utilized financial services for its business without having business licenses and relevant certificates for its food and beverage products. Besides, there is AMD2 with the highest revenue among traditional SMEs. She acknowledges the advantage of digital technologies on her business, particularly when creating demand after COVID-19 attacks the tourism industry. She further stated her intention of utilizing the platform but ended up continuing the traditional business model. The owner argued about her limited capacity in controlling all business activities, so she decided not to use digital technology. In contrast, the company does not have required licenses also tax registration numbers and indeed does not pay tax. Besides, the company also does not have a book-keeping system. The overall situation reveals *that intentionally stay in the informal economy makes company reluctant to be present in the digital platforms*.

Nevertheless, some companies that started their business digitally also fall into this category, as they show introverted behavior by not having a relationship with Government and the community. This situation is influenced by the fact that they have broad access to information, market, competitors, and financing as they have knowledge and skills in digital technology and have been familiar with financial systems and services. These strengths influence their behavior in running the business. They have access to their responsibilities complying with relevant regulations, but three out of five companies with digital business models have no business license and tax registration number, then indeed not paying tax. In addition, the fact that there is no impact on their business while there is a lack of enforcement from the relevant

authority strengthens the lack of incentive to formalize. This implies that *company with high capacity can remain informal due to lack of regulations enforcement*. However, this might be an issue for business escalation, particularly to reach the international market.

6.2 Barriers on State Level

This section will discuss the barriers for digital transformation on Indonesia SMEs on the state level, based on the empirical data and existing literature. Several issues arise from the state level, like the lack of coordination between ministries, the disintegration of the SMEs development plan, regulations disharmony and weak enforcement, also the absence of an orchestrator and platforms for monitoring and evaluation. Mapping these issues to the social transformation model, we found out that this condition is influenced by some traditional values and institutions (System I), also the lack of capacity in the state level.

6.2.1 Disintegration, Lack of Coordination, and Power

Disintegration and lack of coordination have been classic problems in many discussions and studies related to Indonesia's development, particularly economic matters. Furthermore, According to ADB (2015), over-regulation and poor coordination within and between government agencies hamper doing business in Indonesia. Many studies confirmed the essential role of government intervention and support in SMEs development, including the urgency of increasing coordination and regulations alignment (Bhinnekawati, 2016; ADB, 2015; Irjayanti & Azis, 2012).

In addition, this study also figured out disintegration and lack of coordination between involved actors occur in digital transformation programs for SMEs. There are 28 eight ministries at the national level that have a working program related to SMEs. These ministries have their respective representative in 34 provinces and 514 districts/ cities. Besides, the regional Government in each province, city, and district level also has authority upon SMEs in their region. Multi actors' involvement has created a complex situation as each actor may value SMEs development differently and respond to it in various ways. As happened in the study cases, some regional governments perceived SMEs development as a priority while others consider it costly and will not contribute to increasing regional income, hence not paying attention to SMEs. This condition forms hyper-regulations, hamper coordination, and not favorable for SMEs' digital transformation.

This complex relationship cannot be separated from Indonesia's political journey. After having a centralized government system for more than 50 years, Indonesia's suddenly changed it to subnational authorities in 2000 (ADB, 2016). However, considering the immediate change with lack of preparation and coordination, Seymour and Turner (2002) argued that decentralization exercised more to yield separatist tendencies instead of democratic and effective regional autonomy. With regional autonomy, cities and districts have higher authority, political power, and economic resources apart from the provinces.

Along with that, the regional Government can issue necessary policies and regulations that frequently overlap and even oppose other existing regulations due to the absence of evaluation and monitoring institutions. Furthermore, this newfound autonomy has created difficulties coordinating among regions, as there are no formal mechanisms for intergovernmental cooperation, while competition increased and created distrust between regions (Miller, 2013). Regulations and bureaucracy are likely created as intermediaries to expose the power of regional governments. Consequently, coordination and information movement become difficult. These circumstances last until today.

6.2.2 Lack of Arrangement and Capacity

Apart from the coordination and hyper-regulations issues, the lack of arrangement at the Government level becomes another barrier to the success of SME digital transformation. Several arrangement problems gathered from the empirical data comprise:

- a. the absence of access to SMEs information in respective regions;
- b. the missing of standard assessment and reference on SMEs capacity, also the monitoring and evaluation functions;
- c. The narrowed down definition and scope of digital transformation, also necessary capacity building into information and knowledge;
- d. The format of capacity building is primarily packed in the one-day training program with minimum evaluation and monitoring functions; and
- e. Weak regulations enforcement.

This lack of arrangement indicates the lack of Government overall capacity. If we analogize the government as a company while the regional representatives and related authorities as the workers, we can assess government capacity and issues using capacity model. First, the knowledge and experience should be balanced, while they should have the same value. Second, the coordination between local and national governments should be favorable for initiative and innovation growth. Third, the IESA and value of Government (local and national) would translate in their response towards particular subject.

Lack of capacity in the regional level highly influenced by big bang governmental change. A long tradition of centralization creates a capacity gap between Governments at the national and regional levels. The local administrators had been typical to accept top-down decision making and development planning for a long time. On the one hand, centralization ensured synchronization between national and regional administrators. On the other hand, it made local governments merely focus on implementing national development policy and achieving the target. This repetitive process, in the long run, stifled their capacity enhancement. Besides, there was no preparation period before the shift. Consequently, regional Government has insufficient capacity to execute the newfound power, particularly in the information, Experience, Skills, and Algorithm (IESA).

6.3 Benefits of Participating in Digital Ecosystem

By distinguishing three groups of SMEs with different capacities and digital literacy, this study discovered the barriers to digital transformation on traditional SMEs as well as the advantages of digital transformation to those utilizing the technology. Hence, this subdivision will present the positive impacts that SMEs experience by taking digital shifts based on the empirical data and referring back to what has been discussed in this report's literature review.

a. Broader Market and Network

There is a significant gap in the market and network between traditional enterprises and enterprises that adopted digital technology. Micro and small traditional companies rely on brokers' availability to connect with customers and even suppliers. Meanwhile, medium-level companies only treat the local market (AMD1); otherwise, they should exert more effort and cost to reach the potential market and suppliers like AMD2. This condition affects their network to remain small as they have limited information and resources to reach customers, suppliers, or possible partners. Hence, their network remains small.

In contrast, companies that use digital platforms in transition or those who started digitally enjoy access to broader markets and networks, supporting the existing studies (Vial, 2019;

Kergroach, 2020; Matarazzo et al., 2020; Qalati et al., 2021). First, by optimizing search engines and utilizing a social media account, these companies can obtain more reliable information about the suppliers with no physical boundaries and more efficient costs. CSM2 can contact local suppliers providing imported materials through the internet rather than directly order to overseas suppliers that require longer processes and higher costs. Before deciding, the owner could compare prices in local importers to the prices in the origin supplier.

Second, these companies can serve a broader market. Nearly all these companies serve the market outside the city (13) and even international (CMD1, CMD2). Although BMC1 does not ship its products to other cities due to product durability, social media facilitated receiving orders from people outside the city. For example, some customers would like to send BMC1's product as a gift to people within the firm's area. Another example is CMC1 that expands its market with reseller and membership mechanisms rather than physical stores in multiple cities. More example is BSM1 utilizing promoting features in his social media that enable him to select targeted customers outside the company location.

Lastly, most of the companies also can connect to national entrepreneurial communities (6). These companies stated that joining national communities can connect them to other companies in the same industry, offer a benchmark from more advanced companies, and knowledge sharing. Companies like CMD1 and CMD2 can indeed link to the international market. CMD1 registered its company to international eCommerce, while CMD2 received support from international NGOs to trade its products in the international market. Nevertheless, this opportunity required foreign language skills.

b. Better Engagement with Customers and Customer-based Innovation

Traditional companies have limited interaction with their customers. In AMC1, it does not even contact end-customers, while contact with the broker only happens to arrange and conduct harvesting time. Other companies like ASM2 and AMD2 had direct contact with customers at the beginning of the mutual relationship, following production output close to delivery time conducted by the workers. Further communication only conducted when there is an issue like the quantity and quality matters or price negotiation. Another method is by visiting the company location, but it requires a longer time and higher cost. In contrast, in line with Qalati et al. (2021), digital platforms facilitate better customer engagement and create customer-based products/ innovations.

Customers can observe the company and offered products through social media, eCommerce platforms, or company websites from their location. Later, they can ask the detailed information about a particular product before the actual transaction by simply leaving comments, sending an email, or direct message to this enterprise's account. Companies like BMC1, BMD1, CMC1, and CSM2, use this opportunity to serve customized orders. It allows the companies to have better information about customers' demands. CSM1 usually uses social media to create early announcements of upcoming products or request customers' feedback on preferable products to be restocked.

c. Improved product and Better Value

The utilization of digital technology also influences product quality and value offered by the company. All the traditional enterprises have a lower possibility to improve their products/ services due to uncertainty avoidance and coping behavior. AMC1, ASM1, ASM2, and AMD1 limit the product variants, while AMD2 limits its products to one particular fabric and low-price characteristic. Furthermore, they also demonstrate copying behavior since many competitors offer similar products/ services, which gives less opportunity to put a better value on their

products/ services. AMC1 and AMC2 have to accept fixed prices set by the broker, no matter how good their products/ services are.

With greater access to information, broader connection to market and network, and customer feedback, firms with adopted digital technologies can develop their products/ services. Among others, BMC2 and BMD2 affirmed that following national communities empowered them to see better products and become motivated to improve their products, like renewing packaging to make products more visually attractive as it is an imperative component in digital platforms. Therefore, maintaining product quality with new packaging allows the companies to set better prices for their products. Meanwhile, in some cases, improving products can also mean making a distinction or uniqueness relative to the competitors. As an illustration, CSM2 was the first company in Indonesia that provides customized gift platforms, while CMD2 is the pioneer of jackfruit-based foods.

d. Compliance and licenses

Although it is not always the case for the SMEs that start the business digitally, participating in the digital platform and motivation to reach a broader market would encourage companies to have better compliance and participate in the formal economy. There are eight out of ten companies have registered their businesses and obtain relevant licenses. Most of them are food-processing companies (BMC2, BSM2, BMD2, CMD1, and CMD2) with an ambition to sell their products internationally. As part of the export requirements, these companies have to register their companies, have tax registration numbers, and relevant licenses like halal certification and the national standard process for food products. Having a halal certificate would be necessary for exporting the products, mainly to Islamic countries. CMD1 and CMD2 registered their brands, while CMD2 also register a patent for some products. It shows better knowledge in protecting the company's innovation. Eventually, this point would be an attractive basis for regional leaders to invite more enterprises connecting to the digital ecosystem, as it can contribute to regional income.

e. Cost-savings and Access to Finance

As discussed in the earlier part of this subsection, digital technology allows companies to access more considerable information, have a broader market, and engage better with customers at a more efficient cost. The empirical data confirms Kergroach's (2020) findings that digital transformation can help reduce costs and save time and resources. Like CSM2, obtain imported raw materials from local suppliers with the help of the internet, while CMD1 can reach the international market by simply registering in international eCommerce. Without the internet and digital technologies, these processes will require a lot of costs and time. CSM2 needs to find information about potential overseas suppliers with the network it has and then contact the supplier one by one. Meanwhile, CMD1 should ask for information from relevant government agencies or more established competitors to find market information.

The extra benefit of connecting to a digital ecosystem is the access to finance in terms of assistance or loans. Digital platforms enable companies to have transaction records in the provided feature by the eCommerce or communication history with customers if the transaction is made in social media. It makes companies easier to make their bookkeeping system, that is required in loans proposal to banks. Furthermore, the free, abundant information on the internet also creates opportunities for financial assistance from Government, large firms, NGOs, or others. BSM1 received financial assistance from Facebook, Inc. amidst the outbreak by filling the survey on SMEs affected by Covid-19. Another example is BMC1 that received financial assistance from the regional Government to develop its business by submitting business plans and competing with other potential SMEs.

f. Growth and Business Sustainability

The above benefits of engaging in digital platforms come with the required improvements exercised by the enterprises. The empirical data also exhibits digital transformation as a surviving strategy amidst the COVID-19 outbreak (Coballero-Morales, 2021; Seetharaman, 2020) for most enterprises (14). However, several firms should execute some innovations, like BSM1 that facilitated human resources training in tourism destinations, reacting to the restriction of tour activities. A different example arises from the food-processing companies that served tourists to their cities before the pandemic. Because no one comes for travel due to social distancing policies and restrictions on tourism activities, these companies have to discover a strategy to continue their businesses. BMD1, BMD2, and CMD2 offered new products like food package complemented with their original products. At the same time, these corroborate Vial's (2019) studies that digital transformation contributes to improved organizational performance through better innovativeness. Ultimately, the company's overall performance would be enhanced and promote business sustainability, with intensive assistance and adjustment over time.



7. Conclusions and Recommendations

This report started with an introduction, which included the research questions articulated in section 1.6. This chapter will conclude the research project by answering the research questions based on the empirical data and the subsequent discussion. Next, a reflection will follow to discuss the limitation of various aspects of the research, including the data gathering, analysis, and discussion. Recommendations will consequently be presented, comprise practical recommendations for relevant actors in the state levels like Government and policymakers, Indonesian SMEs, and end with a recommendation for later research. Ultimately, some final remarks on entrepreneurship digital transformation on Indonesia SMEs.

7.1 Conclusions

SMEs need to have sufficient capacity to survive competition in the changing environment. Although SME development has been a concern in many countries, the COVID-19 outbreak reinforces the urgency of SMEs to participate in the digital ecosystem. This research focuses on the broader approach in assessing SMEs' capacity to cope with digital transformation insistence in changing society. This study suggests a more comprehensive approach to succeed SME digital transformation through an embedded case study on Indonesia SMEs categorized into three groups with varying size, capacities, and digital literacy. Hence, the study findings are limited to SMEs in developing countries that exert digital transformation. The insights presented in this study also demonstrate the barriers of digital transformation in SMEs beyond the information and knowledge factors and the benefits of doing the transition. The following paragraphs present the summarized answers to each sub-question.

SQ1 - How is the current landscape and characteristic of SMEs in Indonesia?

The answer to this question is obtained by conducting a literature study and interviews. The current landscape of Indonesia SMEs is observed from the characteristic of SMEs following by the involved actors, SMEs policies, supports, and challenges, including the particular development program for SME digital transformation. Kroesen's (2019) social transformation model is used to assess that transition. By doing that, we figured out that the current landscape of Indonesian SMEs is changing from traditional to more modern environments. The majority of Indonesian SMEs are micro-enterprises outside the formal economy, while at the same time, 13% of those companies are taking a digital shift.

The transformation also occurs at the state level as the Government strives to help traditional SMEs migrate to the digital ecosystem by enabling policies, regulations, financial assistance, and development programs. In contrast, they have to cope with the rapid growth of modern enterprises like startups and fintech companies, although this modernization is still concentrated in Jakarta and some big cities. With that challenging mission, several variables within the state level hamper the transition. Some traditional values and institutions like a solid patrimonial system of complex bureaucracy and little coordination among Government agencies, besides the insufficient capacity to do the proper capacity building required for SME digital transformation.

SQ2 - How is digital literacy related to the entrepreneurial capacity of SMEs?

The answer is obtained by conducting a multiple embedded study case and referring to relevant models presented in the literature review part. Kroesen's (2019) capacity model also capacity includes three aspects: (i) IESA: *Information, Experience, Skills, and Algorithm*; (ii)

VAB: *Value, Attitudes, and Beliefs*; and (iii) SI: *enabling social environment and Institutions*. The empirical data show that digital literacy connects to all three layers of SMEs' capacity. In case SMEs lack digital technology-related information, experience, and skills (IESA layer), yet at the same time they have strong beliefs on the advantages of digital transformation (VAB), they will still respond positively to technology utilization. Another case also indicates the challenges in the upper layer (IS); For example, some SMEs with high capacity and digital literacy also have started their business digitally but prefer to stay out of the systems due to weak regulations enforcement from authorities and lack of incentives to participate in the formal economy. Therefore, *the digital literacy and transformation phase can indicate that either SMEs are lack capacity or lack incentives and take digital transformation and participate in the formal economy.*

SQ3 - What are the requirements for the comprehensive approach towards digital literacy?

There is an interrelationship between digital literacy and entrepreneurial capacity. As digital literacy is part of the holistic capacity of SMEs, the improvement of digital literacy should also put the overall capacity into account. First, the results of this research can be used as the screening tool of SMEs' capacity. Second, the assessment output help to define the more appropriate capacity building by focusing on the main barriers on particular SMEs. As shown by the empirical data, companies with low digital literacy but not value digital transformation will negatively respond to digital transformation and not participate in the formal economy. For this kind of SME, giving entrepreneurial capacity building related to their business understanding and mindset of continuous change environment would be more appropriate than registering them to digital platforms. In line with Kroesen (2019), capacity building and training include the information, experience, skills also algorithm (IESA), and values, attitudes, and beliefs (VAB). In conclusion, the digital literacy level combined with the comprehensive approach of SMEs capacity help to define the more appropriate capacity building.

The previous answers of the sub-questions show that sufficient capacity is the prerequisite for SMEs to perform digital transformation. Besides, the unfavorable state level due to disintegration, little cooperation, and lack of capacity in the top-level actors is the barrier for digital shifts. Next, this circumstance is essential as the basis to formulate policy or strategy expected in the main research question.

“How to raise the SMEs’ capacity in Indonesia to perform digital transformation?”

To answer the main research question, we reflect on the theoretical and empirical findings. Consequently, we acknowledge that the barriers for SMEs' digital transformation in Indonesia are located at the state, civil society, and enterprises levels. Hence, to raise the SMEs' capacity in Indonesia, there should be a holistic approach by solving those problems and improving the interaction in between. At the state level, better coordination and improved capacity are required. Since it would be complex and time-consuming in arranging the coordination legally, a task force across institutions for SMEs' digital transformation programs can be an option. A dedicated task force will enable the institutions to provide support based on their expertise, minimize the overlapping interaction with SMEs, and reduce cost. Besides, there should be a leader that orchestrates the development plan.

At the civil society level, entrepreneurial communities, large firms, and NGOs can help SMEs by providing networks and access to broader information. These organizations are also indispensable to provide financing channels while Government strives to accommodate more

affordable funds for SMEs. Lastly, the capacity building for enhancing SMEs' capacity must be arranged in a holistic approach at the enterprises level. The capacity building should be appropriate with the capacity layer that required improvement. It is only possible by assessing the current level of SMEs' capacity and their state of digital transformation to find the main barriers for their digital transformation. With this information, grouping is feasible according to capacity level and barriers. Hence, the Government, policymakers, and relevant authorities can generate a more suitable plan. No one size fits all policy and mechanism, so the capacity building for SMEs that lacks IESA capacity should not be the same with SMEs with VAB issue or the SMEs with high literacy but low compliance level.

7.2 Recommendations

This section will present recommendations based on the findings packed in a roadmap called **SCALE-UP: SMEs Capacity Development and Upgrading program** for Indonesian SMEs. This program is more a proactive effort from the Government and relevant authorities (*top-down approach*) with following considerations. First, the focus of the digital transformation program is the traditional SMEs dominated by micro-enterprises and a small number of more developed companies that want to stay out of the formal ecosystem. Second, developing this group of SMEs requires direct and intensive assistance, because these SMEs generally lack of capacity with main barrier in the VAB layer. Hence, changing the SMEs' VAB will require longer time without direct intervention. The SCALE-UP Program consist of following activities.

a. Capacity Assessment on Pre-Capacity Building

An integrated SMEs database that utilizes big data of Indonesian entrepreneurs using AI to generate appropriate capacity-building recommendations is the expected yet ideal scenario. However, the construction of this tool needs a long time to realize. On the other hand, it is essential to assess the SMEs' capacity before capacity building for optimum impacts. Besides, the empirical data show that different groups of SMEs with different business models will have weaknesses in different capacity variables; also, there is no one size fits all program. Hence, we proposed the conventional capacity assessment on digital transformation state and capacity variables then categorized them according to the problems and required interventions. Based on the findings in this study, we can have three different groups of SMEs in need of different treatments.

- 1) Traditional Businesses. These companies are lacking in most capacity aspects. However, VAB is the essential layer, so the required capacity buildings are more related to the VAB aspect. Therefore, these traditional enterprises need more entrepreneurial mindset and attitude. These companies should reflect on their business, resources, and current development, also what they expect from this business in the future.
- 2) Transition Companies. As they have strong motivation to develop their business, the capacity building can be focused on the digital capacity. The relevant capacity buildings on technology-related topics introduce digital technologies and benefits, success stories from successful companies, onboarding them in digital platforms, and providing education and training on digital marketing. Nevertheless, this group should be equipped with additional capacity to prepare them to enter a larger market, like language skills, contract enforcement, and legal and patent knowledge to protect their innovations.
- 3) Digital Business Model. With ample access to information, market, and funding, the issue for this group is more about expanding business, particularly to the international market. Otherwise, they can keep introverted from the formal and digital ecosystem by not registering the business and not paying tax. The necessary improvement for this group is

creating a conducive business environment that does not make businesses anxious to stay out of the system. In doing so, there should be more transparency, cooperation, and compliance within Government institutions. Hence, these firms are motivated to voluntarily participate in the formal economy and contribute to the regional and national income. However, firms that started their business digitally from social media platforms would be more challenging to reach since the Government does not have authorized access to international apps. Consequently, Government can collaborate with eCommerce companies to make the digital companies formalize their business by requiring business licenses and relevant permits when registering to the platforms. Besides, the digital business model should be equipped with legal, patent, and human resources management.

This capacity assessment can be an opportunity to increase cooperation with regional leaders and Government agencies at the subnational level. Asking them to participate in conducting capacity evaluations on SMEs in their area will provide incentives for better information about potential SMEs that can contribute to regional income. Furthermore, there should be a standard assessment matrix distributed to SMEs to learn to assess their capacity. This self-assessment matrix would help to reduce time and improve the assessment quality.

b. Potential SMEs Showcase

Direct intervention through more appropriate capacity building should be complemented with incentives to change. Because most micro-enterprises have traditional business models and are in the informal economy, there should be an incentive for traditional companies to move into the digital ecosystem. Otherwise, they will not figure out influential triggers to change as there is no added value or different treatment between enterprises in the formal and informal economy. Besides, companies with high digital literacy and capacity that chose to remain informal indicate the lack of incentives for these companies to join digital platforms.

A simple recommendation for Government is to build a *showcase platform* that displays the list of registered SMEs, information on their relevant licenses or awards, and a short company profile. This platform should be accessible for the public to use the information as a reference for potential SMEs. For example, financial institutions, both banks, and fintech can access the information of potential customers and at the same time be assured of the SMEs' quality by referring to provided information. This platform should also allow international investors and organizations to connect them with SMEs expecting capacity building. With this arrangement, SMEs can be more encouraged to deliberately formalize their business, use digital technologies, and continuously improve their business.

c. Active Assistance and Collaboration within Civil Society

As the number of informal micro-enterprises that not utilize digital technologies is still significant; providing active assistance would be challenging for Government alone. Optimizing civil society by collaborating with entrepreneurial communities and having contact with large firms or NGOs, to provide network and access information for micro-enterprises would be an alternative. Government should create a supporting policy for collaboration within civil society in the designated arrangement. Large firms should utilize most of their CSR program on SME assistance and development. Next, the NGOs can help human development and Cooperative to provide funding for SMEs in the rural area. Lastly, the universities can join SMEs development through product research and community services.

d. Regular Evaluation and Enforcement

Government should conduct regular evaluations on the progress of SMEs' digital transformation to enable information movement within the task force. This regular evaluation can be an opportunity for shared programs, for instance, between regional representatives of Kemenkop with subnational Government and regional tax officers for regulation enforcement in particular regions. Next, there should be single identification that integrates citizen numbers, Bank customer identification, tax registration number, and business licenses to enable automated, systemic, and more vigorous regulation enforcement.

7.3 Generalizability, Theoretical and Practical Contribution

This thesis provides both academic and managerial contributions. The literature study reveals limited attention on firms' capacity approach and its connection to traditional value and ongoing societal transformation. The discussion is even limited in the domain of firms' digital transformation. This study has filled the gap. The case study setting of SMEs with diverse characteristics, business scale, and involvement of digital technology provides the opportunity to explore the relationship between firms' capacity and the digital transformation they take in an empirical setting. It also enriches the field of entrepreneurship in developing countries and digital transformation in small businesses. This research confirms the requirement of a comprehensive capacity for SMEs to be able to take digital transformation while at the same time dealing with the moving society. Besides, this study also gives an exciting finding that it is a matter of capacity that entrepreneurs did not take a digital shift and due to the intention to stay out of the system (Government), especially for the entrepreneurs with high capacity. This group of SMEs still opts to enter the digital space because of the lack of trust in the Indonesia Government and considers such transformation does not provide attractive incentives.

This study explores the generalizability of (1) the role of comprehensive capacity in supporting SMEs' Digital Transformation, (2) the role of top-level management (Government) in entrepreneurs' development in developing countries, and (3) the development strategy according to SMEs capacity level. The study findings on the influence of capacity on digital transformation are generalizable, although the number of samples is limited, especially micro-enterprises, compared to the total SMEs population. Indonesia is not unique in terms of social conditions and institutions. Besides, the research setting and sample selection with a multi-embedded case study support the generalizability of this study. Furthermore, the characteristics of Indonesian SMEs are not much different when a more significant number of SMEs are involved in the research. In terms of the Government's role, the study shows that the institutional environment is not always enabling but also constraining. This condition is not different from other developing countries like India and Africa, although it should be confirmed with further research. In Indonesia, Government is more present/ more powerful, and hence, people who opt out of the system can be easily governed. Ultimately, such research also not sufficiently conducted that also supports the contribution and generalizability of this study.

From the managerial perspective, the study marks two critical issues experienced by the small firms and the Government. The first one is on how the limited capacity hinders the development and digital transformation of SMEs. Besides, the limited capacity hampers SMEs from formulating a strategy to develop their business and cope with the environment. The assessment matrix can further be standardized as an assessment model for SMEs to help them understand their business and formulate the possible actions. Second, on how the Government can comprehensively develop entrepreneurs' capacity as top-level management at a state level. The study reveals the essential role of value, attitude, and beliefs in defining

firms' response towards digitalization while confirming that it is difficult to take over an attitude and training are needed to entrepreneurs' mindset. Hence, the capacity roadmap supports the comprehensive approach of Government and policymakers in providing appropriate development strategies for SMEs according to their capacity and expected development. Besides, it provides insights for the Government on reaching the SMEs with high capacity but reluctant to be in the system through increased regulations enforcements and regular evaluation.

7.4 Reflection, Limitations, and Recommendation for Future Research

This paragraph will reflect on the research and bring some limitations in this study, including the data collection process, analysis, and interpretation of the findings.

Data collection combined the literature review, interviews, and study cases in Indonesia. The empirical data was collected by combining on-site observation and interviews, also zoom sessions to cope with the lockdown policy. On-site data collection focused on the centers of this study, enterprises that have not utilized the digital platforms. The first limitation with this setting is related to the fact that the domination of Indonesia SMEs are micro-enterprises, that is not fully represented in the study case arrangement and sample selection, in terms of quantity. Most of the traditional micro-enterprises are informal businesses run by self-entrepreneur, and located in the rural area. Although they are large in quantity and easily found in the field visit, yet direct approach without informal networks might be intimidating for these enterprises. Besides, the required time is beyond the scope of a thesis research.

The second limitation is related to the characteristics of qualitative research and case studies subject to erroneous interpretation, and the quality will be associated with the researcher's capacity. Hence, researcher bias is inevitable and might affect the judgments inferred from the case study. Nevertheless, 18 cases of various industries with diverse business scales and come from several locations in Indonesia (central of development and the other cities) help produce a vast amount of information to support more profound analysis and valid conclusions. Besides, the insights from the experts support the study setting and findings, where the characteristics, challenges, and dynamics of micro-enterprises and Indonesian SMEs in general are the same.

Therefore, there are some recommendations for future research. First, to conduct the comprehensive capacity approach by more focusing on traditional micro-enterprises in a larger quantity and include other developing countries. Next, future research could look at particular industries to find out different characteristics or barriers that might influence their response towards digital transformation. Third, a prospective study can also compare the micro-enterprises capacity in two regions with favorable and unfavorable environments and check the essential factors hindering or supporting SME digital transformation.



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Appendix A – Case Study Descriptions and Reflection

This section provides descriptions of three study cases in Group A - SMEs with low entrepreneurial capacity and digital literacy. This illustration provides detailed information on SMEs in group A. We picked one SME in each business scale. There are two considerations of providing extensive descriptions of these three cases. First, these SMEs are in the targeted group of the Indonesian Government because they have low capacity and yet utilized digital technology in their business; Second, the extensive illustration aims to serve the reader's imagination with data and describe the human type behind the business. Furthermore, these companies also have mixed attitudes towards the application of digital technology in their business. The selected enterprises have the following business models: a traditional business without technology utilization (AMC1), a company that should gain the benefit of digital technology yet consider it is unnecessary (AMD1), and a more developed company that prefers to stay outside the digital ecosystem and formal economy (AMD2).

1. Company1 – HSRT Barokah Santosa – Shrimp Hatchery (AMC1)



Figure 6 – Imam Arifin in his Shrimp Hatchery Ponds

This microenterprise is located on the outskirts of Tegal, where there are many similar shrimps hatchery businesses. Imam Arifin is 35 years old Tegal citizen that has experience in shrimp hatchery. He cooperated with Joko Santosa in 2010 to establish the company with a profit-sharing mechanism. In the early years of their business, Joko Santosa was involved in operational activities. However, start from January 2019, Joko gave full authority to Imam to handle the whole operational activities from upstream to downstream. Meanwhile, Joko Santosa acts as the investor that will receive the profit in each harvest period. Besides, Dul is responsible for ensuring the shrimp ponds during the night since he lives in the building right in front of the ponds.

During the interview, he showed that the hatchery area consists of four ponds filled with shrimps seeds with several maturity levels, some are still at an early age, and others are ready to harvest in few days. He also shows the inventory and equipment warehouse where he stores the feed and vitamin for the shrimps, include the small generator and oxygen tube to back up the electricity in case of power failure. Imam stated that the company does not

experience a significant impact due to the COVID-19 pandemic. The product output relies on the treatment during the entire hatchery process, and in the end, affects the profit they will receive.

1) Business Operation

- *Key Partners*

This enterprise has a partnership for both shrimp seed's suppliers and distributors for hatchery output in the form of intermediaries. It is easy for Imam and other similar enterprises to contact the middlemen as the area is well-known as shrimp's hatchery area, there are many middlemen offer their services to the enterprises. However, these brokers have high control over the price by applying the same selling price for all the enterprises. In the beginning, Imam will buy the seeds in small quantities and evaluate the quality before deciding to partner with the brokers. Once he is satisfied with the quality and agreed with the price from intermediaries, the partnership will run without any written agreement. A similar partnership process also occurs for the distributor-partners. The supply partners for this company come from Cilacap – Central Java for Windu shrimps and Tuban – East Java for Vaname shrimps. Meanwhile, the distributor partners go to Indramayu – West Java.

The company communicates with its partners in a relatively traditional manner. Imam will contact the brokers through messaging or call as soon as he needs the seeds or ready to sell the hatchery output. As there is no written agreement, Imam puts high trust over the suppliers to provide sufficient seeds whenever needed, and the distributors will buy the hatchery output as soon as the company contacts them. On one side, the company values the simplicity of the order process and buyer assurance, yet on the other side, it also concerns the fixed price set by the brokers without further actions.

- *Key Activities*

The company cultivates the freshwater shrimp seeds to certain age called benur. Then, the company will sell Benur to other enterprises that will further cultivate Benur to be the grown shrimps we commonly find in the market by other enterprises. There are two variants cultivated in this company, the Vaname and Windu shrimps. In general, the shrimp seeds require two weeks to transform into Benur. However, the Vaname shrimps require longer hatchery time compared to Windu. The shrimp seeds will be located in the first two ponds and moved to the others ponds once they achieve a particular age in about one week. At the end of the second week, Benur usually ready for harvest. Imam will open the small watergate in the pond's corner connected to smaller ponds in the harvesting time. Due to their micro size and transparent color, it is impossible to count the total Benur precisely; Imam depends on his experience and assumes that each bag is equal to a particular amount of Benur.

- *Key Resources*

The company's three critical resources from the interview are human resources, brokers, and shrimp seeds. The heart of this micro-enterprise is Imam, as he solely runs the company for the entire processes but funding. Joko's decision to transfer the whole business activities and become an investor strengthened the fact that the company highly relies on Imam's capacity: knowledge, skill, mindset, and motivation.

Another critical resource for this shrimp hatchery business is the broker. Imam expects a stable seed supply and demand for benur. Up to this time, brokers can provide such stability both in supply and demand. However, this condition put Imam and other similar enterprises in the neighborhood to have weak positions towards the brokers since they

are dependant on the broker and have no written agreement for the guaranteed supply and demand. There is asymmetric information in this market because brokers directly contact the suppliers and customers, along with all valuable information. While Imam only has access to the brokers with limited knowledge of the original suppliers and the potential customers. Hence, once the brokers break the deals, the maximum effort the company can make is to ask for the promised deal with the very least possible to be responded. The last vital resource for this company is the shrimp seed from the suppliers in Cilacap and Tuban. The seeds' quality and continuity rely on suppliers' performance and their market decision. Even though the brokers might have several suppliers, the suppliers' decisions can affect brokers' actions, such as seeds' price or benur buying price.

Imam does not value technology utilization in his business. He perceived it is challenging to use the technology and perform the current activities into the new processes that involved technology. He also thinks that his business is not suitable for entering the online market as his products are living objects. Besides, selling his products online will lead to scammers or fake consumers who will not pay for their products or return them after receiving them due to unmatched quality. However, within the interview, Imam stated that he would accept the online transactions as long as customers paid for the product before delivery and will not return the product.

- *Value Propositions*

The company has neither a clear vision and mission nor an ambitious goal but financial gain to support its members' lives. Although Imam values profit in his business and demonstrate that value through his effort to monitor the shrimp's quality and quantity, he stated several times that the very least target is Break-Even Point (BEP). In enhancing shrimp's quality and quantity, Imams performs technical innovation. With his previous experience, he conducts trial and error, as well as accepting suggestions from friends. The technical innovation can be seen through the watering and oxygen system in the cultivation area, besides the positioning of hatchery ponds and the harvest ponds. However, he does not plan to utilize technology in his business process in the near time. Hence, the company does not have competitive advantages in terms of product quality and price. With relatively few shrimp ponds, many other shrimp hatcheries in the surrounding, and the disability to set the price and connect to both supplier and buyer, HSRT Barokah Santosa has no unique value to other shrimp hatcheries. Unless the company has more capital and expand its output capacity, it will remain as one of Benur cultivator in the area.

- *Customers*

This company has no direct contact with its end customers as the supply and distribution of its product conducted through the brokers. Imam will only need to contact the distribution broker several days before he will harvest the benur. Brokers will come to the site to take the harvested benur, and afterward, they will distribute the benur to Indramayu – West Java, Indonesia. With this type of relationship, Imam cannot get feedback from the end customers about his product. Therefore, within the interview, Imam mentioned his expectation to reach the direct customers and get a better price, yet he is unsure of his ability to reach the customers without brokers' help.

- *Channels*

HSRT Barokah Santosa only has a single channel in reaching its customers, that is, through the middlemen. Besides the missing contact with the end customers, this company also has no adequate infrastructure to distribute its product to the market, for

instance, private transportation to ensure the safe distribution for its living product (benur). In terms of marketing the product through an online channel, Imam stated that the learning process is complicated, and he is also afraid of being scammed.

- *Cost Structure*

In this shrimps hatchery business, the cost of the seeds becomes the most crucial cost as the seeds price varies for each variety, related to the selling price and harvesting time, and at the end contributed to the final revenue the company will receive. The seeds mixing strategy between Vaname and Windu shrimps cannot be separated from the cost concern. Although the Vaname shrimp is more profitable as the selling price is better than the Windu shrimp, Vaname seed also has a higher buying price than another variant cultivated in this company. The company also should allocate some funds for electricity since power failure occurred quite often. Consequently, Imam purchased a small generator and have to prepare the fuel for the case of power failure.

According to Imam, the company does not have good bookkeeping; his wife helps him make simple notes of the expenses and sales in the harvest period. He does a simple evaluation merely about the profit by calculating the capital, expenses, and sales in general, before distributing the profit to Joko in a cash payment. This traditional mechanism highly relies on Joko's trust as Imam's partner since he is not physically present in the field.

Furthermore, Imam emphasizes that he does not involve in the financial matters related to the capital, funding sources, or any investment plan but the operational costs. As the one in charge of this domain, Joko confirmed that the company has no official bank account and never received any financial assistance or loan from the financial institutions. Joko has a bank account for personal purposes and does not plan to make a bank account for the company or get any loan shortly.

- *Revenue Streams*

The company has a relatively low bargaining power towards selling and buying prices as the middlemen determine the prices. Unless the company changes the middlemen, it will not get different prices from other surrounding enterprises. Although Imam values profit in his business and express that value through his effort to monitor the shrimp's quality and quantity, he stated several times that the very least target is Break-Even Point (BEP). All the payments are conducted on-site through cash payment based on benur quantity. The sales income will be distributed between Imam and Joko after calculating the capital for the next hatchery round and getting the net revenue.

2) Business Culture

- *Labor*

This micro-enterprise has no formal organizational structure as there are only two permanent members, Imam as the person in charge of the operational activities and Joko as the person in charge of the financial matters (investments). Hence, Imam performs most operational activities alone. He will hire the day laborers only in the harvesting time. As the job relationship and responsibility only last within the harvesting time, Imam does not think that it is necessary to motivate the day laborers. He just needs to ensure the laborers performing their task well.

- *Work Relation*

Imam relies on the casual relationship to get in contact with the day laborers. Some of them are neighbors, and some others are local residents that offer their services. There is no written and formal contract as well as the task description for the laborers. Imam

will provide information about the harvesting time, explain the harvesting procedure, and the laborers' task right after the laborers agree to help Imam in the designated time. They will receive their payment in cash every time after Imam received payment from the brokers. Ensuring the performance of each laborer will depend on Imam's monitoring ability. However, with no written contract, he can cut the non-performing laborers by not contacting them again in the next harvesting period.

In line with the absence of a written contract and tasks description, the planning for remaining activity in one hatchery cycle is unavailable. Imam relies on his experience, routine, and self-discipline in conducting all the activities. He constantly said that the hatchery cycle requires two weeks for Vaname seed and three weeks for the Windu seed. Within this cycle, Imam conducts daily activities from feeding the seeds, control the water and oxygen, and monitor the shrimps' growth. Meanwhile, the quantity planning for the new hatchery cycle will depend on the discussion with Joko by considering the recent sales.

- *Cooperation*

Although there is no particular grouping of the employee within the company, it is clear that all the members come from the same ethnical background – Javanese from the West Java province. Imam, originally from Tegal - the hometown of Joko's wife. She enables the business relationship between Imam and Joko. Furthermore, the day-laborers are the residents nearby the company location that have the same ethnical background as well. Therefore, Imam mentioned there has no been a problem of conflict among the company members. In case there is one in the future, Imam believes that it can be handled through discussion.

- *Relationship with Competitor*

The shrimps' hatchery businesses have existed in that village since the 1990s. Many similar companies become the competitors for HSRT Barokah. However, the competition is limited to benur quality and quantity because of brokers' presence and control over prices. Imam cannot compete in terms of quantity as he only has four ponds, while the benur quality depends on the seed's treatment. Imam chooses to focus on its shrimp hatchery businesses instead of collaborating with its competitors in such a condition. The company also realizes that it can get a better price by selling the product directly to the end customers instead of selling the product to the brokers, yet it was not easy to connect with end customers (shrimp farmers).

3) Civil Society Cooperation

- *Vertical Network*

The company has minimal information regarding the support or development program provided by the local Government or related authority. It is a consequence of owners' passive attitude not seeking information of what might be valuable for their growth. Imam thinks that the Government's assistance and development program does not reach his area as they have no government-related information. When informed of some financial assistance and development program from Bank Indonesia and the Ministry of SMEs and Cooperative, Imam stated that he never heard such information and asked back how he can obtain the assistance or participate in the development program.

The company runs on a day-to-day basis, without a long-term development plan. Once the company needs to deal with the required work documents, permits, and Government, Imam indicates that Joko will be the person in charge of that matter. The longstanding relationship increases the company's dependency on the brokers. Imam

realizes that he can get more profit by directly selling benur to the shrimp farmers, but he hinders the company from directly contacting suppliers and customers.

- *Membership*

The enterprise is like an isolated company as it is not attached to any institution, although there are shrimp's hatchery communities in that area. Having information from the neighbor shrimp hatchery owner, Imam used to join in one community but no longer involved in any similar organization. He said that "joining a community does not provide additional value and only a particular person will be benefited from that community, such as the leader." Imam mentioned that when there was capital assistance (a generator) from one ministry, it went directly to the community leader, and it will always happen.

4) State Regulation

Imam stated that he is not aware of any regulation, policy, assistance, and business community managed by both national and local Government that will affect his business. HSRT Barokah is not registered as it does not have a business establishment license, although Imam convinces the company has one. After some examination, the document is only a hatchery certificate from the Ministry of Marine Affairs and Fisheries – Directorate General of Aquaculture, which informs that the HSRT Barokah has obtained an excellent grade in reasonable hatchery practice requirement. The regulation of the business establishment and fisheries has been settled at the national level. However, the enforcement relies on the representative of authorized institutions (Ministry of SMEs and Cooperative and Ministry of Marine Affairs and Fisheries) at the regional level. In the last five years, no single Government institution visits HSRT Barokah. It confirms that the enforcement is feeble and triggers the entrepreneurs not to obtain the required licenses. Imam perceives the condition as a passive attitude of the local Government instead of ignoring the company's obligation and external environment. He does not understand that his business might be closed once the authority finds out the absence of a business license.

Related to the financing aspect, Imam mentioned that the company never receives any assistance and loan from any institution (Government, financial institutions, or large companies). He has once tried to obtain a business information letter to acquire assistance from the Government for SMEs affected by COVID-19 but never successfully received such financial assistance. Although he discovered some mouth-to-mouth information that some enterprises receive government assistance, he did not seek detailed information. As stated earlier, the company only has a simple-traditional book-keeping, and when informed about digital book-keeping, Imam responded that "it is very complicated and way easier to only note down the company expenses in the book."

There is precise tax regulation (Act Number 20 the year 2008) for businesses with annual revenue less than IDR300 million and net worth between IDR50-500 million. However, both the company and Imam have no business identification number. While Joko is a retired civil servant, he has a personal tax identification number but only used that to report his income during his active working period. Nevertheless, the weak enforcement, absence of monitoring from authorized institutions, and the capital is from personal financing offer no urgency for the company to register the company and have the proper book-keeping.

2. Company2 – Ayam Tentrem – Restaurant (AMD1)

Sunarman, 45 years old man, used to work in a big company before building his business in 2005. He felt uncomfortable being an employee and wanted to manage his own business. His parents that had a food and beverage business, inspired him to start his own business. He opened the restaurant in the small rented building this past 16 years and never moved. Besides the exact location, Sunarman also offers the same main menu – chicken. Some innovation occurs in the product variants without leaving its main product – the grilled chicken. This company also has no branch as Sunarman wants to self-monitor all the processes with the help of his wife. Sunarman tried to open a small branch in the same city, but it was not running well since the workers cannot give the expected performance as they have no self-belonging feeling towards the company.



Figure 7 – Ayam Tentrem Restaurant

1) Business Operation

- **Key Partners**

Sunarman has no permanent business partner but some sellers from whom he regularly buys the raw materials. He contacted the sellers directly as they are located in the traditional market nearby the restaurant. He chose the supplier by examining the price and quality of some sellers. Since then, Sunarman maintains the relationship traditionally through regular buying by simply messaging the sellers one day before his worker picks up the order, and the sellers will allocate a particular quantity for him as requested. This traditional partnership works without a written agreement and relies on trust between parties. The same ethnical background and a relatively small social circle prevent each party from breaking the agreement, as the negative rumors will quickly spread out.

During the interview, Sunarman also talks about his experience of almost being scammed by his potential business partner. One day, a company approached him and offered a partnership to expand the business through a franchise program. This

company has no restaurant but was an expert in terms of technology and business expansion strategy. Then, this company offered a partnership to build a website and handling the processes for potential partners. On the other side, Sunarman needs to prepare the standard recipe and ingredients for wholesale production.

As the first step, Sunarman needs to re-register his brand, and he has paid IDR3.2 million to his expected partner. Later, this company is inaccessible when Sunarman asked about the certificate of brand registration. There is neither update of the certificate nor the franchise plan afterward. Sunarman deeply regretted the attitude of the expected partner since they came from the same area and ethnic background. However, after considering possible harms in the future of that partnership, Sunarman chose to stop contacting the company and not have any partnership in the future. He prefers to make one-time recipe sales with one-month training and a particular amount of money deposit, where the buyers can create their brand. He also opens the possibility for wholesale buying with a discounted price under a written contract for a particular period. The contract is helpful to avoid any default.

- *Key Activities*

The company offers chicken-based food for its customers with some variants: grilled, fried, and *geprek*. Sunarman is the mastermind (key person) of his business, the only person mastering the recipe and conduct all the cooking process. He will prepare the ingredient and cook every early morning. Nobody involves in this process as it is his way to protect the secret recipe and process, showing a low trust issue. The employee will conduct the remaining processes: grill, packaging, and serve the product to end customers. The entire cooking processes are very traditional without any advanced technology. The only technology he uses is a mobile phone for receiving the order through eCommerce. Sunarman will leave the store after cooking the main ingredients, while his wife will help with the rest operational activity.

- *Key Resources*

The critical resources for this company are raw materials human resources. Sunarman stated that there is no difficulty obtaining the raw materials as they are part of staple foods in Indonesia. There are several options to obtain the ingredients from traditional markets, supermarkets, or direct producers. Considering the relatively low price and ease of access, Sunarman chose to get the raw materials from a traditional market nearby the restaurant. Nevertheless, there will be price fluctuation near the religious holidays that will affect the company's net profit. Hence, the possible price fluctuation has been incorporated in the selling price. There are two potential risks related to the critical resources. First, the sellers break the agreement by not providing the requested raw materials, and second, something terrible happens to Sunarman while nobody can prepare the standard product.

There should be a contract that binds both parties to avoid the first risk. However, it is not common to have a written contract with sellers in the traditional market, while farmers will choose to directly sell their harvest to big distributors or brokers to fix demand, and buying from farmers is inefficient. Therefore, maintaining a good relationship with suppliers is essential for business continuity. Next is the human resources issue. Up to the interview time, Sunarman has transferred his knowledge to nobody. His sons choose to prioritize their studies and prefer to build a modern business, like selling products in eCommerce as it is more profitable and requires less effort. Seeing his sons can get more profit by selling products in eCommerce, he believes technology plays a significant role and enables entrepreneurs to reach higher profit with less effort. However, he did

not plan to implement any advanced technology in his business and feel satisfied with the current growth.

- *Value Propositions*

The company has no vision and mission but maintaining the current business and sales. Although it values profit, Sunarman feels satisfied with the existing condition and does not plan to expand. During the interview, Sunarman revealed the potentiality of moving the restaurant to a different location, either to a more strategic or more extensive place. However, there has no clear plan and timeline about that. Since it was first established, the company only modify the menu by adding some chicken variants like Ayam geprek and fried chicken.

Furthermore, the company strengthens good taste as its value proposition. Sunarman believes that there should be something memorable for the customers, either the low price, taste, or location. Sunarman understands that his competitors might sell very cheap grilled chicken to attract customers, but some also offer high prices covered by the excellent food presentation. Hence, he maintains the trademark of his product: the fresh and well-blended chicken. He also ensures quality control as one of the successful drivers for his company. Besides, he considers innovation as an essential variable. Therefore, he created a chicken-based menu.

- *Customers*

Generally, the customers of this company are Solo residents with no grouping of particular customers. Other than that, are people that pass the street. As Sunarman usually leaves the restaurant in the beginning operational hours, his wife and the employee directly contact the customers through face-to-face interaction. They can recognize regular buyers, yet there has never been a specific study of customer profiles beneficial for product development and company growth. Sunarman is confident with the product taste and quality to help maintain customers even though many similar restaurants are in town. He believes that good reviews will quickly spread out over the customers through word-to-mouth. With regular customers and existing branding, Sunarman considers he does not need to maintain any relationship with customers except in the restaurant. Nevertheless, he still pays attention to customer reviews in eCommerce as it can affect its reputation.

- *Channels*

Sunarman reaches his customers through conventional and digital channels. At the beginning of his business, the strategic location significantly attracted customers passing by the store. Other customers are people in the surroundings and those who get information from Sunarman's family and friends. Today, with the strong branding, Sunarman no longer takes any marketing program to boost his sales. Besides this conventional channel, Sunarman also uses eCommerce to reach his customers. However, it is not Sunarman's initiative to apply in the new platforms. Two eCommerce representatives came to the store and approached the company to sell its products through the digital platform. The eCommerce managed the registration process and gave some training for Sunarman to use the application. In practice, Sunarman's wife monitors customer orders through a mobile phone connected to eCommerce. Currently, the coverage is only for customers in the Solo area. Sunarman recognizes a significant drop in on-site sales and a notable increase in digital sales during the pandemic and social distancing policy.

- *Cost Structure*

The rent fee is the most inherent cost for Sunarman's business as he does not own the current building. The strategic location and regular customers accustomed to the current location make no plan to relocate the store soon. Besides the rent fee, another essential expense is the cost of the raw ingredients. Sunarman only offers limited variants as its main product to optimize the business cost, even though he also offers grilled fish in small quantities to anticipate random demand. He considered that offering too many products requires way more ingredients that will significantly increase the operational cost. Besides, that will hide its main product, distract the customer focus, and open the opportunity for negative feedback of the complementary products beyond Sunarman expertise. Furthermore, it raises the risk of unused raw materials.

This company has no good bookkeeping, although its gross revenue can reach IDR2.3 billion annually. Sunarman trusts his intuition and memory for bookkeeping, cost monitoring, and budget allocation. Parent advice has the most significant role in this matter. Sunarman follows the parents' strategy to divide the revenue for the next day's operation, profit, and saving for workers' salaries and loan installment. Hence, he considers monitoring the company's financial activity through proper bookkeeping or even simple notes of income and expenses are not needed. He added, "it is good to have proper bookkeeping and I have tried once, but it bothered me to do that with all operational activities I did. Most of the time, I questioned myself like have I written this or that expenses". Instead of comparing sales in a particular period, Sunarman will follow his feeling in deciding the next-day purchase for ingredients; for instance, when the sales in the last three days decrease, he will decrease the ingredients. Eventually, when applying for a capital loan, the banks usually ask for his bookkeeping before Sunarman convincing the banks to refer to his bank account history.

- *Revenue Streams*

This enterprise earns revenue from the product sales to its customers. It sells the product on a retail basis, although there might be a large quantity order for particular events or customers on some occasions. In wholesale orders, the customers have to pay for the product in advance and take the product at the agreed time. Comparing to its competitors, the selling price by this company is still on the average market price. Although some competitors sell their products at way lower prices, Sunarman considers the current selling price is worth the quality of his products. However, there are also a small number of sellers that charge high prices for the same product. Mostly more prominent players with higher capital offer a more convenient place and can perform massive promotions. Amidst the intense competition, this enterprise has provided multiple payment channels for its customers, from cash, electronic money, debit/ credit card to mobile payment.

2) Business Culture

- *Labor*

Besides Sunarman and his wife, there are three other employees in this business. Sunarman is the owner that responsible for conducting initial cooking for the main menu. His wife is the operational head that will monitor the operational activities, workers' performance, and order through eCommerce. At the same time, the other three employees are responsible for grilling or fried the food and preparing the complementary component based on customers' orders. They communicate face-to-face in the physical store. There is no regular meeting as everybody has understood their regular tasks. If there is a special occasion, for example, wholesale order, there will be a direct instruction

from Sunarman. The workers have the flexibility to give any suggestions but cannot conduct any of them without prior discussion with Sunarman. During the interview, we also saw voluntary action of the chili supplier and eCommerce courier that help activities in the store. Sunarman will give some tips for their work. Currently, this company has no promotion mechanism as the workers perform the same tasks, and Sunarman does not prefer a stiff organizational arrangement like an owner, supervisor, and employee type. In case his business grows, he chooses to add several employees who will perform similar tasks.

- *Work Relation*

The workers in this small enterprise have a relatively close relationship with Sunarman, including his neighbor or friends. There are no written criteria and contract for the chosen employee. However, Sunarman will explain the required performance before the employee start working in his business. He strengthens the importance of integrity, also explains the working hours and main tasks. Besides, Sunarman will talk about the salary beforehand that will be paid in cash monthly. As the employee performing the same tasks, they will receive the same amount of money. They communicate in Javanese, which provides ease in communication because the customers mainly are Javanese. There is no particular division for the tasks; in practice, each of them has to perform the entire activity but cook the half-cooked food. So they grilled the chicken and fish whenever there is an order, preparing the complementary components, and put them in the packaging. Sunarman has neither short nor long-term planning for the company. The restaurant operational runs with a daily plan. Sunarman will instruct how many ingredients are needed for the next operation at the end of one working day. Sunarman stated that it is not hard to monitor employee's performance as there are only three employees in a small restaurant. Therefore, he and his wife believe that they can directly monitor the employee's performance well.

- *Cooperation*

There is no intentional arrangement of grouping in the company. However, it is clear that the employees are women, have the same ethnical background and language – Javanese, then live in similar areas – Solo residents. Among the employees, one Sunarman relative has the same task and position as another employee. As the employee has the same tasks and gets the same wages, they never have serious discussions about their job. Outside rush hours, they regularly have casual discussions. Therefore, Sunarman stated that he never dealt with significant conflicts between his employee with many things in common. Some minor miscommunications did occur in the past, particularly in the rush hour, but directly solve within an hour.

- *Relationship with Competitor*

Ayem Tentrem has many competitors in town, yet that does not trigger Sunarman to cooperate with any of them. He does not try to register a patent as it requires brand registration and other complex procedures. However, Sunarman stated that he is not afraid if another entrepreneur registers a patent for grilled chicken with a similar name after considering the value proposition of his product. He identified unfair competition among business owners, from building companies with similar names and products to confuse customers to register the brand and patent for that similar product. Asymmetric information and knowledge put the original company with not patent in a weak position once they want to sue its competitor.

3) Civil Society Cooperation

- *Vertical Network*

He trusts the importance of a vertical network through his action by transferring the process for brand registration to the expected partner who claimed to have access to important people in the related Ministry. However, he does not attach to any organization or Government institutions. He also has no information regarding Government's development program and financial assistance for SMEs. In the early time of his business, Sunarman directly contacted the related organization. For example, when he registered his brand in the Ministry of Trade, he came to the regional office to find information and submit the required document. Another example is when he required additional capital, and then he came to several banks to ask about People's Business Credit (Kredit Usaha Rakyat – KUR). This behavior is caused by the skepticism towards Government institutions that still practice allowance culture.

- *Membership*

This enterprise is not assisted by any Government institutions or large firms and never receives any capacity building from them. Furthermore, it is not involved in Solo's community, although some SME communities are in town. Sunarman never joined one because he perceives such communities are only the show-off area. The community members often boast their business process in the gathering time besides conducting fun activities, without sharing any helpful information or providing supportive networking. Sunarman mentioned that it would be nice if a group maintained by the authorized organization (Government) provided valuable information.

4) State Regulation

- *National and Local Government*

Sunarman stated that his company is beyond the Government's assistance in terms of information and financial support. He is aware of regulations and policies implemented by national and local governments that will affect his business. However, he does not think it is an obligation to follow those regulations. He argues that only large companies or settled businesses have to and can following the regulation.

- *Rules and Regulation*

This company is yet registered. Sunarman explained that registering a business license requires a copy of a building certificate while still renting the current store. He should borrow the certificate or request a copy from the owner once he will register his business. However, most building owners must be reluctant to provide that document as there are many fraud cases where people borrow the home certificate and put that in the mortgage, letting the building owners lose their properties. In 2005, he registered the brand of his product in the Ministry of Trade that must be renewed every ten years. However, when it expired in 2015, he did not renew the registration. Furthermore, because his business is categorized in the food and beverage business and most of his consumers are Muslims, he should process a Halal certificate. Nevertheless, he does not process that due to the registration cost and considers it is not mandatory. However, he understands that he cannot carelessly put the official Halal sign in the store and product packaging. Consequently, he ensures the ingredient and processes are halal then put self-made halal in his product packaging.

He justifies his action by saying that most small businesses in the neighborhood have not registered their businesses, "Only a small number of medium to big restaurants with paid value-added tax (Pajak Pertambahan Nilai – PPN) of their product that has business and crowd license." In addition, Sunarman stated that the business license would highly be needed when SMEs connect to financial institutions to take a large bank loan or for international trading (export) purposes. Besides, business owners also need such licenses to take loans for personal purposes like car leasing and housing loans. Another reason that hinders Sunarman from registering his business is that he acknowledges the process will be complicated starting from the sub-district level due to the allowance culture and administrative complexity.

- *Accountability*

From the interview, Sunarman shows that he understands regulations and policies for SMEs but perceives them as voluntary actions. He pointed and mentioned several times in the interview that many enterprises in the surrounding also do not have any permits and pay tax. Therefore, he perceives that he does not break any rules. Besides, he thinks that the rules and permits are essential only for big companies or in connection with financial institutions.

- *Finance*

He did not receive Government assistance for SMEs and said that other SMEs in the neighborhood also did not receive such assistance. He stated that he has no idea what is the target/ goal of the Government's help.

Sunarman has received a financial loan from the banks several times and has a good customer profile in the centralized bank customers database in Bank Indonesia (BI-checking). However, he never takes any loan that exceeds IDR1 Billion as this loan requires a business license and needs to be processed in the Head Quarter of the banks. The process is complicated for Sunarman, even though he is qualified to get the loan after considering his bank account transaction (sales income and saving), showing that he can pay the monthly installments. Sunarman usually takes the loans through the housing loans (KPR) program to get around the loan issue as it offers longer credit terms. On the other side, Financial Services Authority (FSA) and Bank Indonesia have provided People's Business Credit (Kredit Usaha Rakyat – KUR); this program is not favorable due to relatively short credit term that makes the monthly installment incriminating for SMEs.

With notable sales, Sunarman has no tax identity and never pays an annual tax. He once again said that most SMEs in the surrounding also do not have tax identity. Regarding the license and tax enforcement, it relies on the policy and effort of the Regional Government. In Solo, it is easy to find SMEs, but most of them have no business license and not contributing to tax payment depends on the policy and enforcement of regional Government and institutions.

3. Company3 – Batik Damar Kusumo – Batik Crasfman (AMD2)



Figure 8 – Batik Damar Kusumo Gallery

April is a 42 years old forestry graduate. She got knowledge and experience by helping her parents' business in Klerew, the largest textile market in Solo. After finishing study, April wanted to have her own Batik business. With financial support from her parents, she built her own company under Batik Damar Kusumo in 2001. Her siblings also take a similar path by having Batik enterprises with respective brands. Although having no business education, April has a good entrepreneurship capacity. She has a risk-taker behavior by choosing different markets for her product outside Solo, excellent business strategy by focusing on wholesale customers and particular fabric (cotton), besides having strong marketing power through a personal approach to the potential customers. April examined that the Batik market in Solo has been saturated, creating intense and unhealthy competition among Batik producers. The store partners sometimes suddenly break the agreement when they get lower prices from other producers. Hence, April chose a different market. Her customers are the large souvenir shops, Batik stores, and Government institutions in several cities in Indonesia, the small number of retail buyers. Batik Damar Kusumo is one of the most affected SMEs amidst the outbreak. April suffers a significant drop in sales revenue, from IDR1 billion to IDR100 million in a month. However, to keep running the business and pay her workers, she activates her social media as an online selling channel for her products. On this platform, April offers trending products like pajamas, sleeping dresses, and cloth masks. The company received a good response in the online market, yet April felt overwhelmed by dealing with end-to-end activities due to limited resources.

1) Business Culture

- *Key Partners*

As a middle and settled enterprise, Batik Damar Kusumo has multiple partners from the Souvenir shops as its wholesale customers, the cloth cutter that transforms fabric into the ready-to-wear product, and the fabric supplier. Currently, the leading partner is a large souvenir shop in Bali. The order from this customer alone can reach IDR1 billion. There might be a risk for smaller customers that cannot get the product with the existing resources. In the beginning, April sent sample products to the souvenir shops but never responded. She then searched for the contact of the souvenir shops, called the

company, and got a chance to meet the store manager. She visited and brought some samples to the souvenir store in Bali but had to wait for a partnership decision from the store owner. The next day, the store agreed to partner with Batik Damar Kusumo and prepared for a supplier agreement. This agreement is not a technical contract but an umbrella agreement that Batik Damar Kusumo is a Batik supplier for that souvenir shop. Detail information about order quantity, total value, and delivery time will vary per request. Afterward, communication is conducted through phone and messaging while the ordered products will be sent through the shipping company. April charged some deposit and will receive the remaining payment after the store receives the product.

The following partner is a cloth cutter company in Solo. It is a micro-enterprise that only processes orders from April's company. As she grows in the Batik industry environment, it is easy to contact a cloth cutter company in town. April usually sends the design images along with the required fabrics to the cloth cutter. Then, there will be an informal agreement of processing time and output quantity. In the busiest period, the cloth cutter ever processes 5 million pieces of Batik in a week. The last partner is a fabric supplier in Jakarta. She contacted the fabric suppliers through her acquaintance. She chose the supplier from Jakarta because it can give a more extended payment time (6 months), while the fabric supplier in Solo only gives three months payment period. There is no plan to add both cloth cutter and fabric supplier shortly.

Communication with partners is conducted mainly through face-to-face and telephone interaction. April usually has face-to-face interaction for the first contact with her partners, even if she has to go out of town. There is no written contract in these partnerships. Then, when asked about the possibility that her partners do not perform the required standard or cannot provide the requested orders, for instance, not paid for their obligation on time, April said she would give direct feedback or complain. However, it does not necessarily stop the partnership.

- *Key Activities*

The main activity of this company is producing casual ready-to-wear Batik clothes. First, April will ask for the electronic fabric catalog from a supplier in Jakarta, order some selected fabrics, and send them to Solo. Having a fabric catalog as a reference, April starts designing her product, from tops, outerwear, and dress to pajamas and sleeping dress. April stated that she has thousands of designs for her product, as one cloth category might have 50 designs with a different pattern. April will send the design and related fabrics to the cutting company as soon as the fabrics arrive and the checking process finishes. There is a negotiation process for delivery time considering the requested quantity, and at the agreed time, April's work will take the product. The following process is quality control and packing in the gallery. Some employees will check the product quality, while others fold the clothes and fix the minor defect if needed. Afterward, the product will be grouped in a large package for shipping purposes. Courier from the shipping company will come to take the package and send the product to designated customers. Rejected clothes and over-production will be sold in the gallery at a discounted price.

- *Key Resources*

There are two essential resources in this business—first, cotton fabric as the raw material. Batik is Indonesia's authentic fabric. There are several cities and multiple craftsmen that produce Batik with individual characteristics and material. However, April chose the cotton-based Batik for her product, considering its stable price and availability in the market. With this clear focus on product identity and many cotton-based Batik

producers in the market, it is easy to obtain the raw material. Second, human resources. The role of human resources is vital in this business, as the main activity of this company is gathering resources and connecting several parties to perform the overall business process and creates a product with value-added. April is the owner of the company and the designer, planner, and driver of the company development and marketing officer. Besides, she has the knowledge and creativity in designing the product, sensitivity to read and keep up with market demand, also knows how to communicate with her partners and customers. On the other side, April workers are also the crucial element. Even though many people want to work in April's company, it is not as easy because of the long working hours and heavier tasks. To maintain her workers, April provides the highest salary compared to her competitors. Hence, all workers have been working for more than 10 and 14 years.

In terms of technology and innovation, April considers technology valuable, and innovation is required to stay competitive in the modern market. However, she found the online market difficult and is used to doing conventional activities. Optimizing the online channel means more activities. She has to design a particular online market, upload the catalog to the online platform, communicate with retail customers, monitor the payment, and ship the products. Starting the new business model amidst the outbreak might be risky for its sustainability in the future. Besides, she mentioned her limited capacity to maintain the enterprise. Therefore, she does not plan to expand the company shortly.

- *Value Propositions*

During the interview, April stated, "sometimes there is a feeling to join and develop the online market for this business, but I am not sure I can handle more activities." She further stresses her satisfaction with the pre-COVID-19 development state of her business. She expects to continue supplying Batik to her big customers. In doing so, the stylish and up-to-date designs, good material with a stable price, and personal marketing approach are the keys to her company's success. April examines that the wholesale buyers prefer multi designs. Hence, she should create multiple and unique designs to stand out among the competitors. Besides, the sturdy material also essential to maintain the stability of the selling price. If there are huge orders, April will request for longer production time to delay payment. She can bargain for delivery time to her partners. For instance, the most significant demand will require a longer time. However, April also takes other orders with small quantities within the production process to maintain the turnover.

Furthermore, April considers that the personal approach and strategy in maintaining the relationship with her customers also play a significant role in the company's growth. April will look for the information of potential customers, contact them, and provide time to visit the customers in person. Besides, she keeps all the wholesale buyers' documents, from the contact, order, and related information. It is not easy to have a personal marketing strategy; as April stated, sometimes the discussion process might take more than one day. However, she did provide time and did not rush the potential customers to make a decision. She puts ethics first in running the company, although she found out that many competitors tend to challenge their agreements. For example, some companies send their products more than the requested quantity. Consequently, the store will send the product back.

April perceives innovation as a vital element in the clothing industry, as the entrepreneur should be creative in product and sensitive to market demand. When the sales suddenly decrease, she works around the problem by producing the popular product with the

popular material. She made a shantung-based sleeping dress. The consumers welcome the new product, but it is risky to suddenly move to a new market. The material cost for shantung also more expensive makes the company receives a smaller profit than the typical day. Shantung is a temporary material, and April does not prefer this type of business (produce the product according to trend). Many producers for the same products mean a lower selling price; the producers compete in price. She does not want to be an impulsive producer that creates a product based on market trend. April considers it is unhealthy competition, as more producers fight for the same materials and break the market price.

- *Customers*

April produces Batik for wholesale and retail customers, but the primary focus is the wholesale buyers (e.g., souvenir shop, Batik store, and Government institutions). She considers the process and communication with wholesale buyers are way efficient compared to retail customers. April supplies a large quantity of Batik clothes with low prices and regular quality for this customer segment. She usually sells her product in particular series because these wholesale customers would not be pleased to get the exact designs with other wholesale customers. Furthermore, quantity is the primary concern of the wholesale customers as the product turnover for low price clothes is very quick, and they have to ensure they have enough supply. Consequently, there should be a unique distinction in design and pattern that April delivers to each customer. April also cannot intentionally overproduce particular products to be sold in different markets like social media. If she wants to develop the digital market for her product, she should create unique designs that will not be found in her partner stores, for instance, medium to high-quality Batik.

Customer engagement is mostly conducted through face-to-face communication. April will initiate the relationship with her customers through direct contact followed by telephone or messaging communication. In the beginning, April will examine the profile of targeted customers, contact them through telephone, and scheduling a meeting; then, she will meet the potential customers in person. She believes that it is more effective to reach and convince wholesale buyers. Other customers like Government institutions usually heard about this company through word-to-mouth information, then contact April by telephone or visit the gallery. April perceives that a good relationship with customers is the significant variable for continuous order. Even though maintaining relationships with customers requires much time and cost, she considers it an investment for his business after examining the potential demand and profit. It is also the background of why the company has not developed its digital market. She realizes that selling the product on digital platforms requires more energy as she has to monitor and intensely contact the customers. Hence, there must be a dedicated worker or administrator to handle the online market, and it is beyond her current business plan.

- *Channels*

There are three channels this company uses in reaching its customers - First, the personal selling for wholesale customers. Second, a gallery or the physical store where an individual buyer can visit and buy the product. Third, social media (Instagram and Whatsapp business) and eCommerce display some available products for individual buyers. She started selling her products through the digital channel when the COVID-19 strike her business. The implementation of social distancing and the national lockdown policy significantly decrease the order from her big customers. To solve this problem, April utilizes her social media account to display and promote the products.

She created the seasonal product like pajamas and sleeping dress which demands are increasing amidst the “stay at home” condition. April was mesmerized by the power of the digital platform. In one day, she could sell more than 7.000 pieces of sleeping dress worth more than IDR100 million. On the others side, April displayed and sold the old stocks at discounted prices on the same platform. Besides, she also asked her employee to create a cloth mask and sell it as a complimentary sleeping dress or pajamas. As she has been accustomed to using digital platforms, there is no particular barrier in operating the technology. However, she feels overwhelmed by the massive order and intense communication with customers. Hence, she has yet developed a digital channel.

- *Cost Structure*

The highest costs inherent in this business are the cost for raw material (fabric) and cloth cutter service. As April has to produce Batik clothes in large quantities, she cannot purchase the fabric right before starting production. She has to plan the production and have enough fabric supply. Sometimes, she ordered excellent fabric for stock. April will only be able to fully pay for this purchase after receiving payment from her wholesale buyers. Hence, she negotiates for six months installment to the fabric supplier. The following substantial cost is cloth cutter service. Different from the fabric supplier, April usually pays the service after the cloth cutter delivers the product.

This company does not use digital technology in its operational activities but social media for recent selling channels. April also has no plan to make any investment in digital technologies soon. Although her husband is a banker and has sound financial literacy, it does not necessarily make her have good book-keeping and never received any book-keeping training before. She argues that she is only a forestry graduate. Nevertheless, she has bank accounts dedicated for Batik Damar Kusumo, using multiple payment instruments (cash, credit and debit card, cheque) and mobile-bank application for payment verification purposes. Besides, she also knows about financial services like a capital loan from Bank even she never took any bank loan to support her business. Therefore, she uses a book to write down order and expenses information, as well as physical receipt as a proof of payment for her customers. This receipt also work as a reference to trace the order or evaluate the monthly revenue when required. April relies on the cash flow information in the company bank account to evaluate her business. In anticipating financial mismatch and customers’ fraud, she estimates basic costs and charges that as a deposit that has to be paid by the customers in advance. When COVID-19 struck her business, April experienced delayed payment from the big customers and negotiated with the fabric supplier to adjust the payment deadline.

- *Revenue Streams*

This company earns revenue from ready-to-wear Batik clothes production. Customers pay for the value-added by this company through a transformation of fabrics into clothes. This company gets maximum profit from utilizing available suppliers and service providers to create its product without producing the raw material or conducting the cutting process. April considers her company offers average low price, even not the lowest one since there are many similar enterprises in Indonesia. However, the offered price combined with multiple models and personal customer relationships optimizes this enterprise’s competitive advantage compared to its competitors. Customers can use multiple mechanisms: cash payment, bank transfer, or cheque in terms of payment. The wholesale buyers usually make payments through bank transfers or cheques.

Meanwhile, April has provided an online transfer feature through bank transfer or Electronic Data Capture (EDC) machine for retail buyers.

2) Business Culture

- *Labor*

This company has ten workers with no formal organizational structure. There are four main jobs in this enterprise: First, April as the owner, designers, marketing, accountant, and supervisor at the same time. Second, one marketing officer that deals with customer relationships after April makes deals with the customers. Third, nine workers that responsible for packing, quality, and inventory checking. These workers are also responsible for fixing the products for the minor defect. All the workers come to the gallery every day, and the weekend is the busiest day for this company. Each employee has a right of several day-off in a year besides religious holiday. However, there is unwritten regulation that the employees should not break in busy days except in an emergency. Furthermore, those workers get room for showing initiative or suggestion. For example, one worker suggested making cloth masks from the remaining fabrics as the new product. April welcomes the initiatives and gives few amounts of money as a reward for that employee. As this company has no business insurance, the workers also do not get health or other insurance-related to their working activities.

Even though the order significantly declines, April did not lay off a single worker in her company. She feels responsible and prefers the resignation decision that comes from the employee. It is not easy to work in this enterprise due to longer working hours (from 9 am to 7 pm) than similar enterprises. April chooses to maximize production quantity with a fixed number of employees because adding the employee is still not preferable since it will increase operational costs. Nevertheless, the workers get compensation in the form of the highest salary among Batik enterprises in Solo – exceeding national minimum wages. Besides, April also motivates her employee to be the re-seller of Batik clothes through social media or other digital platforms and gives them the flexibility to set their selling price. All the profit of that re-seller activity goes to the workers. Having this working situation, most workers have been working for the company for more than ten years.

- *Work Relation*

The workers in this enterprise come from the recommendation of family members, acquaintances, and some neighbors coming to the company seeking a job vacancy. Even though almost all workers are women, there is no intention to specialize only in this particular gender group. In line with that, there are no written criteria and contracts for the employer-employee relationship. All goes with one-time interviews, verbal explanation of job tasks, and informal agreement of work relationship. All employees will get their monthly salary in cash as her workers prefer to receive cash payments. There is a difference between the marketing officer and other workers' salary, due to different tasks and the extra work for a man employee within the packing process. All workers but the marketing officer will perform the same regular tasks every day. There is no system operating procedure and planning for the operational activity besides single command and explanation from April that will ensure all workers perform their tasks as required. Besides, there are several CCTV in the warehouse and gallery area to monitor business operation.

- *Cooperation*

Although April stated that she welcomes every responsible person to work in her company, there is an unconscious grouping in this business. Most workers are women, Javanese, Solo residents, and speak Javanese. However, no relatives or friends work in the company because April perceives that it is easier to work and communicate with people outside her circle than with relatives or friends. Therefore, April has non-distant communication with her employees. If a conflict appears, she will process that through a discussion and talk privately to each person. Nevertheless, there is no written and formal regulation or policy to solve issues within the company, from conflict resolution, the penalty for underperformance or sanction of any fraud. April also said that she does not consider firing her workers of minor performance issues unless they do some fraud. Furthermore, April considers the same language, ethnic background, clear job description, and wages as the key to a harmonious relationship among customers.

- *Relationship with Competitor*

April fully realizes that there are many competitors for her business in Solo, then she chose to market her products outside this city. Nevertheless, Batik Damar Kusumo still has many competitors; they are Batik suppliers of souvenir shops and Batik stores. However, April believes that each Batik producer offers different value on its products. Hence, she focuses on her business and never collaborates with competitor companies toward a particular goal. Later, April highlights the multi-models and up-to-date designs, stable prices, and maintaining quality, making her company stand out among its competitors. Besides, she also stresses her approach and ethical business in customer relationships as another company's value proposition.

3) Civil Society Cooperation

- *Vertical Network*

During the interview, April expressed her belief that having contact with Government institutions or particular organizations and knowing well-connected people sometimes help ease the administrative process of doing business. Nevertheless, she never did so within her business lifetime. It is due to her low trust in Government institutions. She highlights the misdistribution of many financial assistance programs for small businesses, where unauthorized people with no business receive the assistance dedicated to SMEs. Furthermore, the financial assistance cannot reach the right goal as the fund will not support the receiver's business but for other consumptive purposes. Besides, she also focuses on the allowance culture in Government institutions, particularly at a technical level. Consequently, she chooses neither to connect nor to contact Government institutions or influential organizations. She considers it unnecessary and tries her best not to do so unless she wants to sell her products overseas.

- *Membership*

Batik Damar Kusumo is considered an independent company since it is not attached to financial institutions for capital support, the government for institutional and regulation assistance, and not even the business community in that area. The owner focuses on personal targets to have stable demands and profit. Besides, there is no single institution that approaches this 20 years old Batik producer, for example, in promoting Batik. With current revenue, April thinks that she does not need to be a member of a particular community, and there should not be any organization helping her business. It is entirely her decision in terms of business expansion. The problem is not limited financial capital

but inadequate energy to handle more significant production while she does not plan to add any employee. Therefore, she keeps the enterprise as it is.

4) State Regulation

- *National and Local Government*

April highlights Government regulation related to COVID-19 that slow recovery for the tourism industry that hardly strikes Batik producers. She hopes that the Government will focus on solving the virus distribution within the country and not opening the door for international visitors to accelerate tourism recovery. As the company is outside the radar and contact of the Government institution, April perceives that there is no influence from the local Government in her business operation, and this condition has occurred for years.

- *Rules and Regulation*

Batik Damar Kusumo has a significant and strategic gallery, and this company has existed for twenty years, but it never contacted related authorities. April stated that the large population of Batik craftsmen in the neighborhood and many larger Batik enterprises might be the reason. This middle-level enterprise has no business license, and April argues that similar companies in the surrounding also have no business license. Besides, there is no issue or disturbance to her business operation with such conditions. Hence, she has no idea and never tries to find out related policy and regulation that her company must follow.

- *Accountability*

There is an ignorance of rules and regulations applied to the company. Referring to the characteristics and revenue, this company should already have a business license and contribute to regular tax payments. However, of course, it relies on enforcement from authorized institutions. This company has been established for a long time, but there is no education and supervision of the company obligation. Hence, April considers the rules and regulations are not mandatory, and no need to follow them.

- *Finance*

This enterprise optimizes financial resources from its owner and does not receive any financial assistance either from Government, financial institutions, or large companies in any form. The owner is aware of a recent financial assistance program from the Government but not trying to get that as the company does not need financial support. In addition, the owner still has no tax identification number with its current revenue and did not pay related taxes, from business entities and products to revenue. When asked about the tax matter, April refers to the fact that she runs the business for 20 years without any issue related to tax obligation.

4. Reflection on Three Study Cases Description

The study case descriptions in Appendix A show that three companies are more into System I indicated by several *unprofessional actions*. Like most traditional companies, these enterprises had *high investment costs* to build physical infrastructure (hatchery ponds, restaurant building, gallery, and inventory). Their primary partners are raw material suppliers, yet *cooperation and information sharing are limited* because they *rely on a trust bond*, and the cooperative contract is missing. Although the raw materials are easy to find and multiple suppliers are available, they need a long time to find new trusted partners because violations may occur in the trust bond-based relationship. The presence of brokers also demonstrates *underdeveloped and inaccessible markets* for Company1.

In terms of internal management, *the power distance is high*. The owners create a clear gap between employee and employer by *keeping responsibilities at the top* and applying *top-down decision-making* due to a *lack of trust* within the company and the external ecosystem. Company owners perceive everyone besides themselves as a threat that can harm their business. Hence, these owners limit the responsibility of workers to repetitive works while keeping all the essential information to themselves. The owner of Company2 (AMD1) is the only person who knows the secret recipe of his products and conducts the initial cooking process alone, while the owner of Company3 (AMD2) directly approaches her prospective customers and keeps the marketing archive by herself.

Next, repetitive work and the absence of regular meetings make space to express opinions and suggestions unavailable, and in the end, contribute to *limited innovations from the workforce*. Although Company3 implements the highest salary among competitors, it reveals the availability of an *extrinsically motivated workforce* to retain employees. Furthermore, *obedience* and *loyalty* are essential in this group, yet it works like a two-sided coin. On the one hand, Company2 (AMD1) and Company3 (AMD2) bring up that most of their employees have been working for years with nearly nothing conflict. On the other hand, the long relationship creates hesitation in both parties to express opinions and criticism; for example, in Company2 (AMD1), when a worker mislays customer order, the owner will only confirm who did the job and remind the worker not to make mistakes hereafter. Another example is that Company3 (AMD2) will never fire her employee unless the employee submits resignation. In addition, *time management is synchronic* in this company, with *no book-keeping* and *unclearly defined goals* that make business evaluation is order-based and challenging production.

The owners are the primary chauffeur of company strategy and innovation, while they show limited innovation at the same time. They prefer *predictability* and demonstrate *resistance to change* led by *uncertainty avoidance behavior*. All three companies produce similar products with many other companies in the market with *little product differentiation*. Moreover, Company2 (AMD1) narrows the product to chicken-based foods avoiding high operational costs and raw material waste, while Company3 (AMD2) only produces cotton-based batik outfits due to price stability. Besides, they show a similar attitude in terms of technology adoption in the company. Company1 (AMC1) exonerates limited resources to take a digital shift as he has been busy with current operational activities and Company 2 (AMD1) perceives digital transformation as not required because he has created his market. Meanwhile, (Company3) AMD2 concedes that it would be beyond her capacity to harness and monitor the entire business process once she adopts the technology.

With limited usage of technology, these companies *reach customers and market their product traditionally*, with the broker's help (Company1), face-to-face marketing (Company2,

Company3), and third-party services (Company2). Company2 (AMD1) benefit from unplanned participation in the eCommerce platform to sell and promote its products because the participation is enabled by the eCommerce approach rather than the owner's initiative. He considers the company performance attracted the eCommerce inviting him to join the platform and not acknowledge the significant benefit of the eCommerce platform, but customers shifting from on-site to online purchase. Furthermore, these companies have *minimum communication* with their customers. Even though they perceive maintaining customer relationships as vital, they *do not provide customer service* and merely focus on their business (*introverted attitudes*).

Lastly, these three companies *are not registered*, never receive capacity building and financial assistance from the Government, have no tax identification number, and not paying tax. There is a lack of trust in the Government because of the challenging business environment for SMEs. First, *infrastructures in micro-enterprises locations are poorly maintained*, increasing costs due to power outages (Company1), so it has to provide a backup generator. Second, the Government provides expensive funds for SMEs because of the strict requirements like business license and property certificate as credit underlying that trigger Company 2 (AMD1) to work around the system while Company1 (AMC1) and Company3 (AMD3) to only use self-fund for business development. Eventually, there are two kinds of attitude here: i) *ignore Government regulation and relevant policies* while hiding behind the micro-business scale to justify the action (AMC1) and minimum motivation to develop the business, and ii) *avoid regulations and work around the system*. For the latter, SMEs choose to stay in the informal economy, although they should have registered their businesses. This group *utilizes the weak law enforcement* and excuses their action of not complying with the regulation and standard by bringing in surrounding SMEs that violate the rules. Company1 (AMC1) further blamed the Government for its limited information towards business and financial assistance.

Appendix B – Interview Questions for SMEs

SMEs Profile

Business Name :
Business Location :
Established year :
Respondent Name :
Gender, Age, Ethnical Background :
Education Background & Level :

1. Business operations

a. Key Partners

- Do you have business partner? Why (not)?
- Who are your business partners? Who is the main partner and why?
- Which key resources are we acquiring from partners? Which key activities do partners perform (supplier, distributor, marketing, etc.)?
- Is there any written agreement for those partnerships? If not, how would you make sure they perform the tasks/ provide the agreed quality?
- What would you do when your key partners are not in order? Who takes the responsibility? Could you give some examples?
- How many suppliers do you have? Is there a reason for that amount? Would you like to have more?
- How did you get in contact with them? Is it important to know certain people to get in contact with them?
- Did you use technology (search engine, social media) to find information about them?
- How do you communicate with them (physical, phone, email, social media)?
- On what basis do you choose your supplier (price, reliance, speed, quality)?
- Is there any written agreement for those partnerships? If not, how would you make sure they provide the required resources?
- Did you change your suppliers? Why (not)?
- Do the prices and quality of the supplies fluctuate? Are prices fair according to you? How does this affect your product and business?
- What media you use to request your supply?
- Do you do supply monitoring? Do you use any technology for that?

b. Key Activities

- How many products does your company produce or what service does your company deliver? (In case more than one) What is your main product/ service?
- What are the key activities in your business (production; problem solving; platform/ network)?

c. Key Resources

- What are your key resources (raw material, human resources, capital)? Who provides them? Is it hard to obtain them?
- Is there any risk for the resource sustainability in the future?
- Do you think digital technologies are necessary to stay competitive? Could you give examples where digital technology helped your company with this?
- What would you like to learn about digital technology that you think important and necessary to support your business sustainability?

d. Value Propositions

- What is the goal, vision and or mission of the company?

- What value have the products and services to offer (lowest cost, unique product, multi-model, ease of use, etc.)? Why did you choose this value?
 - Did you change your product/ service since it was established? Why (not)?
 - What makes your company successful according to you?
 - How many products category do you have (quality, price, packaging, etc.)?
 - How many facilities does the company have? And where are they located?
- e. Customers
- Who are your customers? Is there any grouping or particular customer target?
 - Which groups are targeted (mass market; Niche market; Segmented; Diversified; Multi-sided Platform)? Are they B2B or B2C? Who are the most important customers?
 - Why do you think the added value of your products help you to obtain and maintain customers?
 - What type of relationship do you currently have with your Customer (Personal assistance; Dedicated personal assistance; Self-service; Automated services; Communities; Co-creation)?
 - How do you engage with your Customer (face-to-face, word-to-mouth, family and friends, phone/mail, website and social media)?
 - How do you maintain such relationship with Customer? Do you actively monitor and response to your Customer? How costly are they?
 - Do you maintain services after the sale? How important is trust in the product and company for selling your products?
 - Do you think the brand of the product or the quality of the product is more important?
- f. Channels
- Through which channels do you reach and find your customers?
 - Which one works best? Which ones are most cost-efficient?
 - Do you use the digital technologies (social media, website, eCommerce, etc.) for personal or business purposes? For business matters, who operates that technologies? When did you start to use the technology?
 - Do you have supporting devices to perform online transaction (smartphones, laptop, internet connection, social media account, email)? Why (not)?
 - How do you get the knowledge to use the digital technologies (self-learning, informal education, formal education, external training)? – if operated by him/herself
 - What are the barriers to operate the technologies by yourself? – if operated by others.
 - How do you promote your product (mouth to mouth, advertisement, social media campaign/ advertisement, influencer)? Do you ever use influencer's service?
 - Where do you present and sell your products (physical store, distributor, online market)? Is this effective? Why (not)?
 - How do you deliver your product/ service (pick-up in store, delivery within city, delivery across cities, delivery across countries)?
 - How do you get feedback from your customers (direct communication, feedback feature in social media/eCommerce, mouth to mouth)?
 - Do you frequently response to your customer's feedback?
 - What would you do if there is bad comment/ impression of your product?
- g. Cost Structure
- What are the most important costs inherent in our business model?
 - Which key resources are most expensive?
 - Which key activities are most expensive?
 - Do you think the low cost or product quality is more important?
 - Did you use a loan or other means for starting your company? How did you obtain them?

- Do you use book-keeping (manual or digital)? Please explain why you use one over another.
 - Have you receive any book-keeping training (traditional or digital)?
 - Do you document your inventory, sales, etc.? Why (not)?
 - Does your company have a particular bank account for its operational?
 - Do you actively use the bank account? What features that you use to support your business?
 - How you get the financial and banking information?
- h. Revenue Streams
- What type of value do your customers pay for your product/services (Asset sale; usage fee; Subscription fees; Lending/Renting/Leasing; licensing; Brokerage fees; Advertising)?
 - Compared to your competitors, do your product/ services offer the cheaper price? Why (not)?
 - Which one do you use, the fixed or dynamic pricing?
 - Do you think your customers are willing to pay the high-price product with good quality or they are the price-sensitive customers?
 - How does your customer pay for the product/service (cash, bank transfer, credit card, electronic money)? How would they prefer to pay? Do you plan to provide the online transfer feature?

2. Business culture (individual companies)

- a. Labor
- How many employees do you have?
 - What does the structure of your company looks like, in terms of managers, employees and business units?
 - How do people communicate within the enterprise (face-to-face, email, etc.)? Are there any regular meetings? When and how often do they occur?
 - Do employees have flexibility to show initiative or suggestion (business process, product, safety, operational hour)? If yes, how do you respond to these initiatives and discussions?
 - Will showing initiatives or valuable suggestion bring special status and treatment for related employees?
 - How important is status within the company to cooperate, manage people or making sales deals?
 - Is it important for employees to have a certain cultural, family or academic background in order to gain a promotion or obtain status in your company?
- b. Work Relation
- How are your employees selected? Are there criteria, written or unwritten, and what are they?
 - How do you get in contact with potential new employees?
 - How are the tasks divided over the employees? Is there any System Operating Procedure (SOP) to perform the tasks?
 - Which employees are very important to the company according to you? Why (productivity, knowledge, family and friends, etc.)? Do these employees therefore have more job security, responsibility and freedom in the company?
 - Is there any planning? Who makes it and in what regular basis?
 - Who makes sure employees follow the planning?
 - Do your company work with targets?
 - When do the employees get their salary? Are they pay per hour or per product?
 - What is the payment instrument that you use (cash, bank transfer, electronic money)?

- How do you make sure employees do their jobs and work hard? Do you use technology (CCTV, attendance machine, etc.) to monitor the employees' performance? Why (not)?
 - Has it occurred employees don't show up for work, the day after being paid? What do you do on these occasions?
- c. Relationship with Competitor
- Do you have a lot of competition?
 - What are differences between you and your competition and what are the effects of this?
 - Do you on some occasions collaborate with them or work towards a common goal? Is/Would this be beneficial for the market? Why (not)?
 - Do you sometime collaborate with other actors in the sector? Or do other actors collaborate that you know of? What are the effects of these collaborations?
 - What do you want to know of a business partner before deals are discussed?
 - Are there topics you always want to know of a person in order to gain trust?
 - Are there technologies a user needs to use and support your product? Are you in contact with these technology providers?

3. Civil society cooperation

- a. Adaptation
- Are there certain groupings visible (age, gender, ethnical background, etc.)
 - What are the effects of these groupings in business practices, either having positive or negative effects?
 - Are there relatives or friends working in the company? Which positions? How are they performing?
 - Do employees have discussions with each other? Perhaps also concerns they are not willing to discuss with their supervisors?
 - To what extent are employees allowed to express their opinion? Could you give some examples?
 - How are conflicts among employees managed? Are there policies and practices in place to deal with groupings issues within the company?
 - Would you say there is trust and good cooperation among employees? Why?
- b. Network and Membership
- Sometimes you might need the help of someone you don't know or who is not in your network of friends and family. How would you approach this person? Calling, email, visiting, through people you know?
 - Do you have relations with organizations that help you with your business, other than the suppliers, distributors and maybe competitors?
 - Do these organizations function well? Could you explain how your relations with them work? What could be improved?
 - How do you get in contact with these organizations/ community?
 - What are the effects of the community on the company, and vice versa?
 - If you need something from someone in your social network, how would you approach such a person (or company)?
 - How important is your linkage to your community for the success of the company? Why?
 - Does your sector miss an organization that could provide you with information, contacts with other actors, funds, infrastructure, etc.?

4. State regulation

a. National and Local Government

- Could you give some examples how the Indonesian government is influencing the business practises? Does this have a positive effect or a negative effect?
- Has this changed during the period you are active as an entrepreneur?
- Does the local government also influence the business practices? What are the effects?
- Has this changed during the period you are active as an entrepreneur?

b. Rules and Regulation

- What kind of direct contacts and interactions does your company have with governments and other organisations (since your business established)?
- Do these organizations impose rules and guidelines for you company? Are these rules and guidelines aimed at certain aspects (products, safety, employees, etc.)?
- How are these rules and guidelines checked and enforced?
- Does your company require permits? How did you obtain these? How long does this take? How long are they valid and how expensive are these?
- Why do you think these permits and regulations are imposed necessary according to these organisations? Are they working well and reaching their purpose?
- Does your company have to deal with import and export procedures? How does this work? Are these procedures difficult and expensive?
- Are there organizations that controls the quality and safety of your products? How often do they come? Are the procedures to obtain the quality/safety certification, difficult and expensive?
- Who will benefit from these rules and regulations? Does the market benefit from these regulations?

c. Accountability

- What happens if you don't follow the rules and guidelines?
- What happens if you need permits for production or your products, but don't obtain them?
- What happens if you fail the safety standards and requirements?
- Do you think it is easy for a company to escape from permits and other regulations?
- Do you feel these rules and permits are important? Could you explain?

d. Ties

- What would you do if you need information or permits from these organizations? How would you try to obtain these?
- Do think it is beneficial to have contacts in the government and other organizations to obtain information, necessary documents and permits?
- Are these people willing to help you within these organizations (family, friends, etc.)? Under what circumstances and why?
- If they are willing to help, how does the process work?
- Is it important to know well-connected people in order to get the work documents (information, permits, etc.) that the company needs? Why?
- Do you think either you or your competition has better chances of succeeding? Why?

e. Finance

- Do you receive subsidies from government or financial assistance from other institutions like banks or other large firms?
- Do you have tax id and pay taxes?

Appendix C – Interview Questions for Experts

Organizational Title and Role :

Responsibility within organization :

1. What is the vision of your institutions related to Indonesian SMEs?
2. Do you prefer to focus on short-term goals (0-1 years from now) or long-term goals (3-5 years from now)? Why?
3. Could you describe the current state and the characteristic of Indonesian SMEs?
4. What is the existing development program for Indonesian SMEs? How you conduct that development program?
5. What are the impacts of this development program?
6. Do you work with targets? How often do you set and evaluate the targets?
7. Do you work with a clear planning? How to ensure achievement of planning and targets?

8. What is the digital transformation of SMEs according to you? Do you think it is essential for SMEs to stay competitive today?
9. What are the barriers and weaknesses of Indonesian SMEs to take digital transformation?
10. According to you, what is the root cause of Indonesian SMEs' growth?
11. According to you, how are Indonesian SMEs perceive digital transformation issue?
12. What is the existing strategy for SMEs' digital transformation? How that strategy is conducted?
13. What are the benefits of those strategies for the SMEs?
14. Is there any regulation related to the digital transformation of SMEs? Who makes that regulation? Do you think it brings negative or positive impacts to SMEs' growth?
15. Do you allocate a particular budget to support SMEs' digital transformation periodically? Is there any limitation? How is the distribution and accountability of that budget?
16. Is there any dedication team that deal with SMEs' digital transformation?
17. Do you provide assistance for SMEs' digital transformation? Could you describe what they are and how they work?
18. What is the impact of assistance on SMEs' digital transformation progress?
19. How do you communicate (face to-face, email, etc.) with the SMEs?
20. Do you conduct monitoring and evaluation of SMEs in the digital transformation plan? How are they performing?
21. How is the information flow and coordination regarding SMEs' digital transformation happen within your organization?
22. Do you face difficulties to encourage SMEs' getting digital transformation?

23. Do you sometimes collaborate with other actors to conduct activities in supporting SMEs' digital transformation? What are the effects of these collaborations?
24. What does the form of that collaboration look like in terms of authority, responsibility division, timeframe, budget etc.?
25. What are the key partners for your organization? What is their role?
26. Is there any written agreement to conduct the collaboration? What do you do when your partner make mistake or not provide the required deliverables? Who takes the responsibility? Could you give examples?
27. Do you work with targets? How often do you set and evaluate the targets?