



Impact of Covid-19 on Digital Transformation and Sustainability in Small and Medium Enterprises (SMEs): A Conceptual Framework

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Abstract. This paper aims to develop a framework for sustainability in SMEs. SMEs are most vulnerable to the effects of covid-19. The implementation of social distancing makes people limit activities outside their home, consequently sales turnover decreases. Therefore, SMEs need to change the mindset in running business by using technology transformation. It is believed to continue the sustainability of SMEs. However, some SMEs do not have knowledge about digital skills that are relevant to their business. In fact, during covid-19 condition, online business can result sustainability in their business that can take place now and in the future.

Keywords: Covid-19 · Digital transformation · Sustainability · Small and Medium Enterprises (SMEs)

1 Introduction

The outbreak of Covid-19 pandemic in various parts of the world gives a major impact on health and economy in terms of trade, investment and tourism. Likewise, in Indonesia, the implementation of social distancing makes people very careful by limiting activities outside their home so that it impacts on various business actors, including SMEs.

All this time, the role of SMEs is believed to be able to drive the economy of a country. However, since covid-19 pandemic, SMEs are most vulnerable compared to other business. It is because this type of business is very dependent on the velocity of money from merchandise sales, so that the decreased demand disturbs the company's cash flow.

Government policy imposes social distancing and physical distancing limits travel and consumption. Thus it impacts on transactions in the market. Various elements affected are restaurants, markets, shopping centers, online transportation, and SMEs. As the result, people in several regions have changed their shopping patterns and fulfilled their basic needs online. Some SMEs are worried about the government's rule to stay at home or work from home (WFH) which can cause a decrease in productivity. In fact, the WFH system can actually be run effectively.

The business people who rely on physical space, such as supermarkets, traditional food markets, restaurants, car dealers, cinemas, fitness centers, they suffer losses. It is in contrast to online markets. In a situation like covid-19, the use of technology is the best solution to keep the sustainability of SMEs. Some SMEs do not know about digital skills that are relevant to business, so this condition forces them to learn online business.

The crisis due to the covid-19 pandemic has become the right moment for SMEs to improve the quality of their products or services and to develop various strategies for offering goods or services based on their business' concern. Covid-19 should not be a barrier for SMEs to increase sales, because the SMEs actors can promote their business through digital marketing.

The digital approach will work well if SMEs have digital transformation so that they can compete intensively. The strategy is changing their offline store to online purchases for the sake of safety and convenience. During this pandemic condition, SMEs can intensify promotions through online applications both for sales and logistics. Since SMEs are part of digital economic ecosystem, transformation and innovation in digital skills is needed so that business sustainability can take place now and in the future.

2 Literature Review

During covid-19 pandemic, the aspects that can be considered are the economic process going well as well as the sales. It can be realized by facilitating purchases safely and comfortably. In addition, the importance of logistics is not only related to the delivery of goods to consumers, but also related to the supply chain of raw materials. Moreover there is a decline in stock in the market. As the solution, it needs digital approach to have digital transformation. In order to avoid a drastic reduction in sales turnover, the government prepared a stimulus for SMEs to survive by delaying debt repayments to banks. In addition, the government helps handle complaints such as the distribution of disturbed goods, and others. Thus, SMEs actors continue to carry out business strategies so that income remains stable. It is expected that SMEs actors can make strategic business decisions based on data, and be prudent to pursue business financial management.

In the current conditions, technology plays a big role in the sustainability of company operations. Case in point is by adopting cloud-based technology through accounting software. It ease the owners to monitor and access financial reports safely and at affordable costs. In addition, companies have access to systems that include tracking inventory, sales, and expenses as well as creating workflows that can save valuable business time. Therefore, cloud-based accounting services can be used as an alternative for companies to drive their business. Efforts must be made to move SMEs to be part of the digital economic ecosystem. It can be achieved by providing opportunities for transformation and innovation.

2.1 Digital Transformation

In general, digital transformation is a radical and comprehensive shift in the use of technology with the aim of improving company performance. One of digital transformation definition is from [3], digital transformation is a change caused or influenced by the use

of digital technology in every aspect of human life. In contrast to the definition of [9], that digital transformation is as the use of technology with the aim to generally improve the performance or reach of a company.

Another definition is from [4], where digital transformation is the third and highest level of digital skills achieved. It happens when the digital use also facilitates innovation, creativity and it encourages significant changes in the professional or knowledge fields. In addition, digital transformation is “a change in all strategies quickly because the demands must change, the operations must be digital and extended supply chain relationships must be extended.

Furthermore, it needs functional use of the internet in design, manufacturing, marketing, sales and presentation which is a data-based management model” [9]. It also includes security, simulation, internet, cyber security and blockchain [6]. Some of these definitions indicate that there is a comprehensive motivation, innovation and consequences when using digital transformation. Thus SMEs can easily carry out digital design of business model choices, use of information technology and understanding, evaluation, digital value network design, also feedback from customers [9]. In addition, establishing transparent communication between entrepreneurs and information technology specialists can be fraud prevention [7].

Digital transformation for SMEs must be supported by governments and stakeholders [1]. It aims to change business models and company operations in a good way in order to classify themselves into digital maturity categories [5]. These factors can be classified into: company characteristics, lack of qualified personnel, limited knowledge of the technology needed, infrastructure, lack of marketing, adoption of ICT and e-commerce [8], lack of technology road maps and ecosystems for digital transformation, ensuring the environment reliable [2].

Digital transformation is an effort to accelerate business by using technology tools and lookig at opportunities that can help business processes, o that the target market is wider. When businesses are forced to change because of a pandemic, the advantage is that they can intensify promotions through online applications. As the result, they can solve problems in sales and logistics channels. Digital transformation can work if there is a commitment of SMEs, such as in offering products through social media, giving discounts, and so on. There are four things that can be implemented for digital transformation: (1) ensuring business to remain competitive, (2) bringing efficiency in business processes. (3) Increasing customer satisfaction and (4) making it easier for business people to make various strategic decisions.

Digital transformation is very useful when businesses are forced to shift, suppose that online applications can solve two problems at once, namely sales and logistics. The supply chain can start relying on online platforms that can connect business people with raw supply producers.

There are three things related to digital adoption, first, the urgency of digital transformation is not just about technology, but more about how businesses can compete more intensively because it can reduce costs in many aspects. Second, improving digital

knowledge and skills related to business. The fact is that not all businesses need a website, some only need to promote through the appropriate channels. Lack of understanding often makes digital transformation decision taken is less appropriate to the needs of the business itself. Third, using integrated e-wallet services.

2.2 Sustainability in SMEs

In dealing with the impact of Covid-19, the steps taken to result sustainability in SMEs, they are: (1) Using social media to promote products or businesses. It can be started by actively displaying products or businesses and giving promotions. Companies promote their brands more effectively through digital media, so they can build online communities in new ways in order to build customer loyalty. Digital marketing provides new tools for getting to know customers effectively, on a large scale and proactively developing and enhancing customer experiences. In addition, the owner can do a digital marketing analysis to find out a good performance. (2) Cashflow must be maintained in order to manage cash optimally. The current situation causes late in billing and payment to business partners. Therefore using online software can help in making billing and payment documents easily. (3) Re-budgeting, by sorting out which budget items are the priorities and adjusting the budget to the current conditions. It is in order to keep the business running with the anticipated risk. Business owners make income and expenditure budget items as a reference when recording the realization of sales and operational expenses, so that profit margins can be controlled. Furthermore, business owners can conduct an analysis of income and expense reports, to make it easier in making decisions on items that cost a lot and need to be controlled for their expenses. (4) Monitoring business transactions, where business owners can automatically reconcile banks on all cash and bank accounts. In addition, in term of cash and bank balances that have not been recorded and match transactions based on the same number, date, or description of transactions, to accelerate the reconciliation process. (5) Inventory, which is periodically and a real time monitoring of inventories that aim to find out average buying and selling prices. It also informs the availability of goods stock, such as the stock of most demanded products so that the availability of goods is guaranteed [1].

3 Conceptual Framework

Sustainability framework is designed to enhance SMEs-based digital transformation in order to facilitate knowledge for business actors during social distancing of covid-19. This framework can be illustrated in Fig. 1.

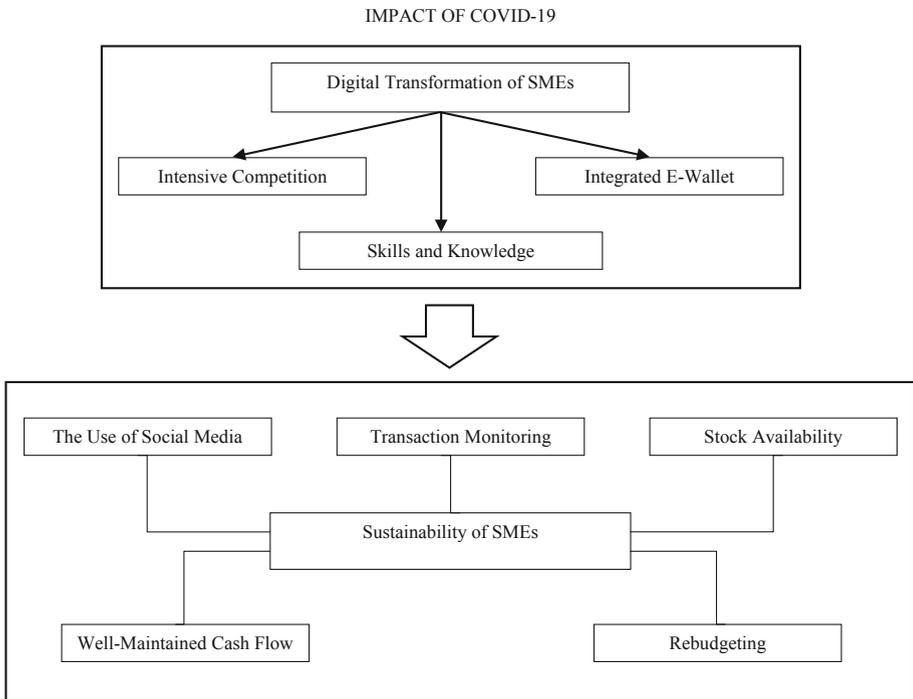


Fig. 1. Conceptual framework of sustainability in SMEs

4 Conclusion and Future Research Agenda

Covid-19 can result sustainability in SMEs with digital transformation. The government and stakeholders can encourage business actors to develop through various policies, such as dispensation in loan installments and tax exemption. The results of this study are expected to provide recommendations to related parties, especially in an effort to increase the existence of SMEs that have an impact on the sustainability of SMEs.

Further research can elaborate by validating the framework design. The data collection will use a questionnaire survey approach and in-depth interviews with creative industry stakeholders.

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