

## CHAPTER V: CONCLUSION AND RECOMMENDATIONS

### 5.1. Conclusion

Indonesia is one of the largest economies in Southeast Asia and is experiencing a significant evolution in digitalization with the adoption of Industry 4.0. Indonesian small and medium enterprises (SMEs) have already contributed significantly to this country's economy, in the contribution of gross domestic product (GDP), in employment for most of the national workforce, and in attracting almost all investments. Existing researchers have already demonstrated that the commitment of SMEs to implement new technologies and innovate in their operations has also had a significant impact on the country's economy.

The current author, in this study, choose to use secondary data that was collected by the Global Entrepreneurship Monitor (GEM) in 2020 to understand the motivation factors that drive SME managers and owners to adopt digital technologies. The data is based on Indonesian Adult Population Surveys (APS), classifying entrepreneurs based on their entrepreneurial activity and demographic factors such as age, education level and location. The study also examines psychological factors, such as entrepreneurs' attitudes towards opportunities, and motivation factors, such as starting their business for financial gain, job shortages or family business continuity.

Based on the research results, it can be confirmed that there is an influence of these motivation, demographic and psychological factors on owners or managers entrepreneurs of Indonesian SMEs to adopt technology.

Demographic factors influence the technology adoption of SMEs, considering that age and education level affect the use of technology. Younger ones are more tech-savvy than older ones, and those with higher education levels are more open to technology adoption. Fear of failure is also an important factor to consider in demographic factors, where nascent entrepreneurs may be afraid of failure due to their lack of experience in the field and others due to a lack of digital knowledge. On the other hand, owner-manager entrepreneurs tend to be reluctant to change, especially if they have been successful with traditional business models. This can lead to decreased trust in digital technologies, especially due to concerns about security, privacy, and reliability, which could lead to technology-related disruptions. The digital divide is also one of the demographic factors to consider in cases where the level of digital infrastructure and internet connection is different in rural and urban areas.

Psychological factors can also influence the technology adoption of SMEs by given that the perceptions and attitudes of entrepreneurs in Small and Medium Enterprises (SMEs) significantly influence their decisions to adopt new technology. In this scenario, the fear of failure continues to be a significant barrier that hinders some entrepreneurs from recognizing business opportunities, even when they possess knowledge in the area, or from seizing these already identified opportunities. Most entrepreneurs fear of failure appears to stem primarily from outdated thinking and operating methods, hindering their ability to evaluate the potential of new technologies like online platforms, e-commerce, and digital marketing. This may be due to a lack of knowledge or information, especially in rural areas.

The adoption of new technologies by SMEs can also be influenced by the motivation factors developed by GEM researchers, as most entrepreneurs start their businesses to provide a solution to their current issues, such as having an income or great wealth, earning a living due to a lack of jobs, and being able to continue a family tradition. All these motivations are valid, but they pose challenges when combined with the adoption of new technologies. These challenges include a lack of digital literacy skills for digital tools and platforms, the absence of internet infrastructure in some remote rural areas, and a lack of financial resources due to low-income levels.

In the context where the growth of SMEs adopting technology can influence the countrys digital economy, the researcher focused on two types of SMEs: those of nascent entrepreneurs and those of owner-manager entrepreneurs, according to the data provided by GEM. According to the results, nascent entrepreneurs have more influence on technology adoption due to their young age and familiarity with new digital platforms. They quickly develop and implement new technologies that can stimulate economic growth by increasing productivity and efficiency, creating new jobs in the digital sector, and attracting more investment and financing. Owner-manager entrepreneurs, on the other hand, often still show resistance to change due to dependence on traditional and non-digital business practices and a lack of digital culture and knowledge. Nevertheless, according to the results, the adoption of technology has enabled the growth of SMEs managed and owned by nascent and established entrepreneurs, whose growth can contribute to the countrys digital economy.

## **5.2 Recommendations**

The digitization of small and medium-sized enterprises (SMEs) plays a central role in the development of the digital economy of Indonesia. As important in the country's economic structure, SMEs represent an important part of employment and GDP.

Knowing the demographic, psychological and motivation factors that drive their digitalization is essential for the collaboration between SMEs and their stakeholders to create an empowering environment for digital transformation and which will improve not only the competitiveness and resilience of SMEs but will also stimulate global growth and the Development of the digital economy of Indonesia.

However, the perception and attitude of the way of thinking of the managers and owners of these SMEs based on motivational factors and preventing them from adopting these new technologies remains a challenge hindering the growth of the digital economy that most of the stakeholders of these SMEs have been facing until now. The Global Entrepreneurship Monitor (GEM), established in 1999, provides an annual analysis of the entrepreneurial landscape based on needs and motivational factors focused on opportunities such as those in the use of new technologies. The current author chose to use these data, taken as secondary data of the research, to make an analysis and understand the attitude of entrepreneurs towards motivation, demographic and psychological factors, as well as to provide recommendations to the managers or owners of these SMEs and their stakeholders.

### **5.2.1. Recommendations for Small and Medium Enterprises (SMEs)**

According to the research findings, education level and fear of failure are important demographic factors that influence the digitalization of Indonesian SMEs. Higher education levels among SME owners and employees are correlated with a higher propensity to adopt digital technologies. Educated individuals are more likely to understand the benefits of digitalization and have the skills to effectively implement and manage digital tools. Fear of failure when starting a business can hinder digital adoption. This fear often stems from a lack of confidence in understanding and using digital technologies, which can be mitigated through targeted education and support programs.

SMEs can put priority on continuous education and skills development of their managers and employees. This can be done through online courses, workshops, and training programs focused on digital skills and business management. Support from free or subsidized educational

resources provided by government or other private organizations can improve digital literacy and business acumen by fostering creativity and opportunity recognition. Additional training from stakeholders on risk management and mitigation training to build confidence in managing potential business failures.

Employees with digital skills within the organization can form innovation teams to explore new digital initiatives, which will facilitate the future integration of digital tools into core operations. They can also participate in developing small-scale pilot research projects to test new tools with the support of universities and its partners with policymakers, rural leaders, and other stakeholders to develop collaborative projects strategies.

### **5.2.2. Recommendations for stakeholders**

The findings also highlight the psychological influence of fear of failure in implementing the identified opportunities as a major obstacle. Psychological resistance to digitalization often manifests itself in the fear of failing to exploit the identified digital opportunities. This fear can paralyze decision-making and prevent SMEs from taking the necessary steps towards digital transformation.

To counter this fear, stakeholders can develop effective change management strategies with clear communication, training, and support to facilitate the transition to digital technologies. Digital platform providers or developers can offer specialized training and development programs on digital literacy and technical skills by designing training modules that cater to the specific needs and levels of SMEs. They can deliver these trainings through various methods, including online platforms, in-person workshops, and mobile applications, to meet different learning preferences. They can create knowledge-sharing platforms within SME networks by encouraging collaboration between SMEs and large enterprises in the field of technology adoption.

An educational partnership with educational institutions that can offer workshops, seminars, and courses focused on digital skills and technology adoption. These partnerships can include internship programs for students who help SMEs with their various digital projects.

Financial institutions such as banks can also provide financial support and monetary incentives to SME digitalization efforts by expanding existing financing programs explicitly for SME digital projects, such as offering low-interest loans specifically designed for digital transformation projects or providing flexible repayment terms to fit the initial investment

period. Banks can develop innovative financing options by creating digital payment solutions that simplify transactions for SMEs and their customers.

Banks can develop revenue-based solutions that link repayments to the SMEs revenue, thereby reducing the risk of default. Financial literacy training for SME entrepreneurs can mitigate their risk aversion with modules on digital project financing and digital investment management, as well as a bank advisory service that will help owner-managers develop sound financial strategies for their digital transformation initiatives and select the right digital tools and technologies. Choosing the right digital tools can also result from the bank partnering with technology providers to offer bundled services that combine financing with access to digital tools and resources at discounted rates, as well as access to software, hardware, and technical support through these partnerships.

Another beneficial partnership for SMEs is between banks and government or international organizations to provide grants and subsidies to SMEs undertaking digital initiatives. Government agencies can offer credit guarantees for loans granted to SMEs for digital transformation, thereby reducing the financial risk for both the SME and the bank. International organizations can develop insurance products that protect SMEs from risks associated with digital investments, such as cyberattacks or technology failures.

In addition, by supporting the digitalization of SMEs, financial institutions can expand their customer base as more SMEs become financially stable and grow their businesses. This will develop long-term relationships with customer loyalty and repeat business, such as the quality of the loan portfolio, an increase in the market base, and cross-selling opportunities with other financial products and services, such as insurance, investment products, and Treasury management services.

Contributing to SMEs digitalization contributes to overall community development, which can have long-term positive effects on the local economy and, by extension, on the financial institutions operating environment.

### **5.2.3. Recommendations for government**

Findings on motivation factors also indicate that the main reasons why businesses do not adopt technology are the desire to start a business for their livelihood, employment, or to perpetuate a family tradition. Some businesses prioritize immediate financial stability over long-term digital investments, driven by the need to earn a living or create jobs. This short-term focus can delay digital adoption. Others, through the continuation of family traditions, may resist digital transformation due to a preference for maintaining established practices and methods.

Government support can help provide grants and subsidies to SMEs specifically for digitalization projects, as well as facilitate access to low-interest loans and credit guarantees for SMEs undertaking digital transformation by partnering with financial institutions to create special financing programs for digital initiatives. Setting up centralized online government portals can facilitate SMEs accessing information on available support programs, grants, and incentives, such as national campaigns to promote digital literacy and raise awareness of the importance of digital skills for economic development. The government can also provide support by investing in robust digital infrastructure, including high-speed internet access, especially in rural areas. Public-private partnerships can facilitate this development and maintenance of digital infrastructure in all regions, including remote and rural areas, by granting them access to dependable digital infrastructure. Collaboration with technology companies can be beneficial to deploy SME-friendly digital solutions in each remote area.

In addition, the government can encourage SMEs to take the digital path by implementing relevant regulations and designing policies to increase the SME sectors receptiveness to digitalization and innovation. They can also establish task forces throughout the government to monitor the progress of the digitalization process in the SME sector and work together with technology companies to develop cost-effective solutions.

For future researchers, my recommendation would be to do an empirical study analysis of the use of technology on other research findings or other reports years from GEM based on other key factors such as the customer base in each area or abroad, on SME investors, and on SME product exports.

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