



Opportunities and Challenges of Using AI Against Empowering Superior and Competitive MSMEs

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Abstract. Stronger national economies are largely a result of the globalization and digital transformation of small and medium-sized enterprises (MSMEs). MSMEs in Indonesia have emerged as the main engine that drives the nation's annual production of added-value goods and services, employing millions of people in the process. MSMEs are finding that digitalization is a viable way to increase the quality of their output, reach a wider audience, and be able to change with the times. The MSME business paradigm could be significantly altered by artificial intelligence (AI) as part of digitalization. As AI utilization develops, there are opportunities and problems within the MSME group itself, which is a topic that scholars would like to investigate further. This study's methodology combines empirical juridical research techniques with an observation-based sociological approach (sometimes known as a social legal approach). In order to build a better and more competitive MSME ecosystem in the global market, this research will combine business law policies that assist MSME groups' access to information and understanding of the use of AI with an exploration of the potential of AI in boosting MSME empowerment. It is anticipated that the findings of this study will be published in reputable international publications, providing opportunities for additional cooperation and MSMEs' empowerment in the digital age.

Keywords: Digitalization of Artificial Intelligence, Legal Policy, MSMEs, Opportunities and Challenges.

1 Introduction

The larger community now recognizes the advent of information technology as a common occurrence. As we all know, any nation needs to go through a fast-moving revolution like the Industrial Revolution 4.0 in order to bring about significant improvements.

The development of a technology that is currently the focus of attention in various countries, including Indonesia, is known as artificial intelligence, or AI. That's correct—artificial intelligence, or AI, is being utilized extensively in a variety of industries to boost output.

AI is now a major player and the center of attention in all domains, including a number of industrial sectors, most notably the business sector. In the modern business world, artificial intelligence (AI) integration is a critical tactic for preserving corporate actors'

competitiveness and enabling them to thrive in an increasingly digitized and globally interconnected marketplace [1].

According to a prior study, companies using AI will see a minimum 40% increase in production effectiveness by 2023. Meanwhile, in certain other countries, the industrial sector has implemented AI at a rate of nearly 56%. Regretfully, in Indonesia's business industry, the application of AI is still relatively low due to skilled laborers who lack a thorough understanding of the program's operation [2].

In the age of the digital economy, artificial intelligence (AI) is crucial for offering creative and practical answers to problems that businesses face. Artificial Intelligence (AI) in the business sector can lead to increased productivity, better business decisions, and higher-quality services. MSMEs view barriers to the use of AI as unacceptable in and of itself. These include inadequate knowledge of legal regulations, human resources, acceptance of digital technology, and uneven distribution of technological infrastructure, such as internet connection, throughout Indonesia.

Undoubtedly, the advent of digitization presents Micro, Small, and Medium-Sized Businesses (MSMEs) with new prospects. AI technology has been adopted by numerous MSME firms in order to boost their production and competitiveness. The road to using AI hasn't always been easy, though. When it comes to using AI in conjunction with legal policies, MSME actors still employ it at a relatively low degree of competence.

AI offers current MSME groups a lot of promise for utilization, but it also comes with some risks and benefits that the community should be aware of. Because AI really has a big impact on employment automation, it sometimes changes the need for human workers.

Without more precise rules, the widespread use of AI in the online business sector has the potential to destabilize society [3]. In order to build a stronger and more competitive MSME group, the use of AI, which has grown increasingly important in the business sector over the years, must undoubtedly take opportunities and obstacles into consideration as one of the assessment indicators.

Researchers advise carrying out more research on the potential, difficulties, and opportunities of using AI to support better and more competitive MSMEs

2. Method

This study combines quantitative and qualitative research approaches to conduct empirical legal research. This method focuses on tracking and examining actual data that is collected from the community. Through the integration of legal considerations with actual evidence obtained from sociological methodologies (sociological approach). This study offers a more thorough and precise grasp of society and the law. The sociological approach turns into a tool for multiplying and comprehending the meaning that a group or individual perceives in the issue that is occurring. This study uses a Google form to do a basic observation-based data search in order to assess the urgency of utilizing artificial intelligence to empower MSMEs in order to create a more superior and competitive MSME group.

3. Result and Discussion

Goods and commodities are produced, manufactured, and processed by Micro, Small, and Medium-Sized Enterprises (MSMEs). Because MSMEs’ operations foster the development of an entrepreneurial culture in a nation, they are crucial in creating jobs and closing the gap between rural and urban economic activity [4].

The MSME group is the lowest tier of a business system that provides general support to the small-, medium-, and large-scale industrial sectors while also making a substantial contribution to the GDP of a nation [5]. MSMEs must use information technology in the digital age in order to boost competitiveness, gain access to a larger market share, and improve operational efficiency. Artificial Intelligence (AI) is a byproduct of information technology development, which is a crucial component of MSME development and helps to optimize MSMEs for the global market [6].

To promote the development of an integrated market and enable MSMEs to grow both domestically and internationally, they must be able to compete on a global scale. This indicates that MSMEs have access to opportunities, assistance, and government-provided legal protection. Firm assistance for MSME organizations entails supporting profitable ventures established by the local community [7].

Artificial Intelligence (AI) technology is intended to assist human operations by mimicking human intelligence. AI is being used by MSME groups to help business players, sellers, and online retailers communicate and share information with customers and consumers in order to meet needs [8]. Artificial Intelligence (AI) is a computational program that can create a machine that functions similarly to the intelligence of the human brain.

According to one interpretation, artificial intelligence (AI) is designed to serve the same or even greater purposes than human intellect when it comes to assisting or replacing humans in a task or deed. Based on this investigation, scholars have derived basic conclusions about the application of AI for current MSME groups.

The study’s Figure 1 provides an explanation of the findings from the investigation of MSME groups’ comprehension and use of AI.



Figure 1. Results of observations on the level of AI utilization by MSME groups

The study's findings demonstrate that MSME organizations have used AI, and that doing so has a significant potential to boost their companies' capacity for innovation and creativity. AI technology is being employed in the MSME business sector to optimize the system for producing products that consumers will eventually use, while also cutting costs and time requirements.

The opportunities presented by the use of AI to empower MSMEs include improved business decisions related to data analysis, the ability to predict demand and business risk for better business planning, increased sales where MSMEs can reach a wider market and develop new products, and assistance in setting the right price in accordance with global market prices.

Furthermore, AI can aid MSME actors themselves by improving their access to financing and providing them with training on how to be more innovative and creative. AI support also makes it simpler for MSMEs to produce high-quality content using online resources and apps that MSMEs may use for free to support their photography and videography businesses. AI has a lot of promise to empower MSMEs and enable them to build better, more competitive MSMEs as a result of these fantastic chances.

However, a lot of MSME groups are still hesitant to apply AI for their business activities due to the challenge of their lack of knowledge about AI itself, not least from the outcomes of the data that researchers have acquired. Furthermore, other MSME groups experience instability due to the lack of intellectual and smart people resources to employ AI appropriately.

Another reason MSME groups may not use AI in their business operations is a lack of confidence in the technology. This is because of concern over data loss or invalidity brought on by the application of AI technology. Even so, a number of MSME groups that have employed AI themselves have stated that it was quite beneficial in analyzing their customer data.

The difficulties posed by the advancement of artificial intelligence (AI) are discussed in legal literature over time. The primary obstacle is the general issue of ambiguous legal aspects, thus it is believed that there is no way to resolve any issues that may arise in the future when MSME groups start using AI [9].

A Circular Letter of the Minister of Communication and Information No. 9 of 2023 concerning Ethics of Artificial Intelligence was released by the Ministry of Communication and Information of the Republic of Indonesia at the end of 2023. This letter serves as a guide for AI ethics and supports the kinds of activities required to organize the effective use of AI. To remind us of the growth of the digital economy, artificial intelligence (AI) can optimize the sensible distribution of pertinent components and give realistic decision-making by applying efficient information from big data [10].

According to this reference, the Minister of Communication and Information's Circular Letter No. 9 of 2023 was issued in the hopes that it would raise awareness of the significance of AI ethics in Indonesia and promote the development and application of AI that is ethical and advantageous to society, particularly for MSME groups. With this policy, the rights and interests of AI users will be protected.

4. Conclusion

AI has a tremendous potential to empower MSMEs and build a stronger, more competitive MSME group. But with this AI technology, there are still a number of

obstacles to be solved. It is anticipated that the release of the Minister of Communication and Information's Circular Letter No. 9 of 2023 concerning Artificial Intelligence Ethics will help to safeguard the rights and interests of AI users, promote the development and responsible application of AI, and raise public awareness of the significance of AI ethics.

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