



Transformation of Traditional Msme Business Models in Gorontalo City Due to Digitalization: Analysis of Adaptation and Challenges in the Digital Economy Era

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Abstract

The business environment has undergone significant changes due to global digitalization, and MSMEs in the city of Gorontalo are no exception. The difficulties faced by MSMEs in surviving and maintaining sustainability have become a significant issue requiring attention from various stakeholders. However, digitalization also provides opportunities for MSMEs to increase their market share and enhance their competitiveness. Therefore, the aim of this research is to understand how digitalization has transformed the conventional business models of MSMEs, identify strategies for adaptation, and comprehend the challenges that arise during this process. This study examines MSMEs in the city of Gorontalo using a case study methodology and a qualitative approach. Data analysis will be conducted using the Digital Transformation Framework to examine the factors that drive and hinder the digitalization of SMEs, the Dynamic Capabilities Framework to assess how easily SMEs adapt to digital changes, and the Business Model Innovation theoretical approach to understand the changes in business model elements of SMEs. The research results show that (1) Digitalization has brought significant changes to the business models of traditional MSMEs. The use of BMI suggests that digitalization impacts not only marketing and distribution aspects but also product innovation, operational efficiency, and customer relationships. (2) The main factors influencing the level of adaptation include the desire to expand markets, improve efficiency, and keep up with the times. (3) The main challenges faced by traditional MSMEs in the process of business transformation towards digital are production capacity, logistics costs, technology management, customer response, and promotion costs.

Introduction

Globally, digitalization has transformed the business environment, and Micro, Small, and Medium Enterprises (MSMEs) in Gorontalo City are no exception. Due to factors such as shifting consumer demand, low digital literacy, and limited access to technology, traditional MSMEs face difficulties in adapting to the digital economy (Zhou et al., 2023; Monoarfa & Dewi, 2025; Cahya et al., 2025; Maghfiroh, 2025). Challenges related to MSMEs' survival and sustainability have become crucial issues that require attention from many parties (Lestari & Choirunnisa, 2025; Alfazzi, 2023; Kurniasih et al., 2023). However, digitalization also offers MSMEs opportunities to increase their market share and become more competitive. Therefore, this study aims to examine how digitalization has transformed the business models of traditional MSMEs, identify adaptation strategies, and understand the difficulties faced throughout this process.

The foundation of Indonesia's economy, including in Gorontalo City, consists of Micro, Small, and Medium Enterprises (MSMEs). The sustainability of small and medium enterprises (SMEs) has received increasing attention in recent years due to their substantial impact on the global economy (Abonguie et al., 2025; Martins et al., 2022; Bilali, 2022; Raihan, 2024; Afolabi et al., 2023). However, amid technological advancements and the growth of the digital economy, traditional MSMEs face significant challenges in maintaining their competitiveness (Telagawathi et al., 2022). Not all MSMEs can shift their marketing strategies to digital marketing, as recent developments in digital technology have transformed marketing practices across industries, including micro, small, and medium enterprises (Diantoro et al. 2024). With the rise of digitalization in the business world, people are required to keep up with the latest trends (Diantoro et al. 2024; Usmanbet al., 2024; Osei et al., 2023).

The adoption of technology can offer several advantages, including lower costs, greater market reach, and increased operational efficiency (Siswantini & Juliannisa, 2022; Obiki-Osafiele et al., 2024; Hendrawan et al., 2024). However, the biggest challenge in this digital transformation process is the lack of access to technological infrastructure and digital literacy (Arifin and Anisa 2024). For SMEs that continue to use traditional business methods to grow, they must adapt to these developments (Siahaan et al., 2025; Quansah et al., 2022; Yuen & Baskaran, 2023). In Gorontalo City, which has distinctive socioeconomic characteristics, adapting to digitalization presents a unique challenge for traditional SMEs.

Several MSMEs in Gorontalo City have begun using digital technologies, including data-driven marketing tactics, digital payment systems, and social media and e-commerce marketing. However, many business actors still face challenges, including inadequate infrastructure, limited digital literacy, and insufficient knowledge of digital business strategies (Rujitoningtyas et al., 2024; Permana et al., 2024; Mahlaule et al., 2024; Shatila et al., 2025; Gupta et al., 2023).

This study offers an approach that integrates three major theoretical frameworks to provide a more comprehensive analysis of digital transformation in SMEs. The first framework, the Digital Transformation Framework (Verhoef et al., 2021), is used to analyze the factors that drive and hinder digitalization in SMEs, a framework that is still rarely applied in local-level research. By using this framework, the study can explore the challenges and opportunities faced by SMEs in adapting to digital technology (Shahadat et al., 2023; Díaz-Arancibia et al., 2024; Kahveci, 2025).

The second framework, the Dynamic Capabilities Framework (Teece, 2020), is used to evaluate the readiness and capability of SMEs to adapt to changes resulting from digitalization. This framework provides a deeper understanding of how SMEs can manage rapid changes in the digital world and maintain the flexibility needed to grow. Meanwhile, the third framework, Business Model Innovation (Shams et al., 2021), is used to understand the evolution of SMEs' business models in response to digitalization, focusing on changes in the value offered, the operations carried out, and the digital marketing tactics employed.

In addition to a multidimensional approach, this study also adopts a local contextual approach, focusing on traditional SMEs in Gorontalo City. Gorontalo City was chosen because it has characteristics that differ from those of other regions, making it an intriguing setting for analyzing the digital adaptation of SMEs in a more specific and contextual environment. This study also incorporates local social and cultural elements into the analysis.

The novelty of this research lies in integrating three distinct theoretical frameworks to provide a deeper, more comprehensive analysis. With the advantages and innovations this study brings,

it is expected to make a significant contribution to understanding and promoting digital transformation in traditional SMEs in Gorontalo City. This research is expected to help SMEs become more adaptive and competitive in the rapidly evolving digital economy.

Thus, the purpose of this study is to examine how the business model of traditional MSMEs in Gorontalo City is transformed by digitalization, the factors that influence this transformation, and the challenges encountered in this process. The problem formulation in this study is: 1) What form of business model transformation has occurred in traditional MSMEs in Gorontalo City as a result of digitalization? 2) What factors influence the level of adaptation of traditional MSMEs to digitalization in Gorontalo City? 3) What are the main challenges traditional MSMEs face in the process of transforming their business towards digitalization?

This research is highly urgent considering that digitalization has become a key factor in business sustainability in the digital economy era. Traditional SMEs in Gorontalo City are at risk of falling behind and losing competitiveness if they fail to keep pace with technological changes.

Methods

This paper will use a qualitative research design to gain both a detailed and contextual insight into the impact of digitalization on the business models of traditional Micro, Small, and Medium Enterprises (MSMEs) in Gorontalo City, the forces that drive the process of digital transformation, and what challenges are faced during the digital transformation. It is considered to be a qualitative approach due to the fact that the study aims to investigate the experience, perception, and adaptation strategies of MSME actors as opposed to quantify the connection between predetermined variables.

The study is a case study based study, which involves traditional MSMEs that have started adopting digital technologies in conducting their businesses. The choice of the research setting is the Gorontalo City, which possesses specific socioeconomic features and the increased role of MSMEs in the local economy. This localized provision enables the study to bring into focus the concrete realities of digital adaptation in a non-metropolitan region, where technology access, digital literacy, and institutional aid is not similar to larger cities.

Qualitative methods are used to collect data using several qualitative methods that guarantee thoroughness and trustworthiness. The primary data will be gathered by conducting in-depth interviews with the owners of MSMEs that have undergone the shift in the traditional to the digitally facilitated business practices. The interviews will be aimed at investigating the reasons to go digital, the perceived advantages, the challenges that have been faced and how business operations have re-arranged. Alongside interviews, the process of participatory observation is carried out to learn more about the everyday business operations, the utilization of digital platforms, and the communication with the customers. Focus Group Discussions are also conducted with the participation of relevant stakeholders, such as MSME facilitators and institutional actors to address more perspectives of the digital transformation process. Supporting data are provided with documentary sources, i.e., training materials and institutional reports.

This study combines three analytical frameworks to help guide the data analysis. The Digital Transformation Framework is utilized to determine forces that facilitate and inhibit digitalization, such as technological preparedness, market relations, regulatory framework, and institutional facilitation. The ability of MSMEs to perceive opportunities, exploit digital opportunities and realign resources due to technological change is examined by the Dynamic Capabilities Framework. At the same time, the Business Model Innovation approach is used to

analyze the transformations in the major business model elements, such as value propositions, operational processes, distribution channels, and customer relationships.

The analysis of data is based on an interpretative thematic method. The transcripts of the interviews, observation notes and supporting documents are coded and categorized according to emergent themes according to the three analytical frameworks. Patterns and relationships in different cases are then established to build an overall picture of the ways digitalization is transforming the traditional MSME business models and processes of adaptation.

Result and Discussion

Forms of Business Model Transformation Occurring in Traditional MSMEs in Gorontalo City Due to Digitalization

Before the emergence of digital technology, traditional MSMEs in Gorontalo City operated within a business environment that relied heavily on personal interaction and localized networks. Business activities were dominated by word of mouth promotion, direct offline transactions, and customer relationships rooted in social closeness. Daily operations were managed manually and were oriented toward maintaining trust within familiar communities rather than expanding market reach. This mode of operation enabled MSMEs to sustain their businesses at a small scale but simultaneously limited their growth potential and operational efficiency.

“Before using digital platforms, I only focused on selling products to people around me, mostly friends and people I already knew.”

Before digital adoption, marketing practices among MSMEs were largely conventional and labor intensive. Business owners actively promoted their products through door to door sales, direct offers to institutions, and informal recommendations within local communities. Internal business management, including financial recording and inventory control, was also handled manually, which constrained efficiency and delayed decision making. Market reach during this period was narrow and highly dependent on close social networks, making MSMEs vulnerable to external disruptions such as mobility restrictions during the COVID nineteen pandemic.

“We promoted our products directly, going door to door or offering them to local shops and institutions.”

“All financial records were written by hand in notebooks. It was inefficient, but we were used to it before using digital cashier applications.”

“The old promotion methods were very limited, especially during the pandemic, because customers could not come directly.”

The adoption of digital technology marked a significant shift in how MSMEs managed and perceived their businesses. Social media platforms, online marketplaces, and digital payment systems enabled MSMEs to overcome geographical limitations and access broader markets. As a result, market reach expanded beyond local boundaries, allowing MSMEs to engage with customers from other regions and even international markets. This shift represented a fundamental transformation in the scale and orientation of MSME operations.

“After going digital, our market is no longer only local. Orders now come from outside the region.”

Alongside market expansion, digitalization transformed promotional practices and customer engagement strategies. Online platforms allowed MSMEs to promote products more efficiently, increase visibility, and communicate value more effectively. Promotion became

more visual and interactive, which contributed to improved sales performance compared to the offline period. These developments encouraged MSMEs to reconsider how they attract and retain customers in an increasingly competitive environment.

“Promoting products online is much easier. With one post, many people can see our products.”

“Since selling online, our sales have increased compared to when everything was done offline.”

Changes in promotional practices also reshaped customer acquisition strategies. MSMEs gradually moved away from community based interactions and began adopting more structured digital marketing approaches. Social media visibility, content creation, and influencer collaborations became important tools for expanding brand awareness beyond personal networks. In addition, promotional efforts increasingly emphasized consumer education rather than direct selling alone.

“Before, customers mostly came from exhibitions or community events. Now, most new customers find us through social media.”

“Now we plan promotions with influencers so that more people know our products, not just acquaintances.”

“We do not only sell anymore. We also explain the quality and advantages of our products so customers understand why they should buy.”

Digital platforms played a central role in supporting these new strategies. Platforms such as Facebook, Instagram, and TikTok became primary channels for promotion and sales, while tools like WhatsApp Business improved ordering efficiency and customer service responsiveness. Digital adoption accelerated rapidly during the pandemic period, reinforcing the importance of online channels as essential components of business operations.

“Facebook, Instagram, and TikTok are now our main platforms for promoting products.”

“After actively using social media, sales increased significantly, even reaching around eighty five percent.”

“Using WhatsApp Business with the catalog feature makes ordering much faster and easier for customers.”

Despite these benefits, digitalization also introduced new competitive pressures, particularly within online marketplaces where price competition was intense. To remain competitive, MSMEs adopted adaptive strategies such as product bundling. At the same time, some business owners recognized the growing role of artificial intelligence in supporting digital promotion, while also acknowledging limitations in human resources.

“Competition in marketplaces is very tight, especially on price, so we use bundling strategies to attract customers.”

“AI features on social media really help sales, but we still lack people to manage all the platforms.”

Beyond marketing and sales, digitalization encouraged innovation in products and services. MSMEs adjusted packaging designs to meet digital market expectations and utilized online platforms to follow trends and gain inspiration. Digital payment systems such as QRIS became widely adopted, improving transaction efficiency and customer convenience. Participation in

digital training programs further supported these innovations by enhancing skills and improving product quality.

“We changed our packaging from simple to more professional so it looks attractive when displayed online.”

“I often use Pinterest and TikTok to find ideas for packaging and product design.”

“Most customers now prefer QRIS because it makes transactions easier and faster.”

“The training we attended helped us improve product quality and develop new product ideas.”

Overall, these findings demonstrate that digitalization has fundamentally transformed the business models of traditional MSMEs in Gorontalo City. The transformation extends beyond changes in marketing channels to include shifts in how value is defined, created, and captured. Through digitalization, MSMEs expanded their market reach, reorganized operational practices, and strengthened their capacity for continuous innovation, thereby enhancing their competitiveness in the contemporary business environment.

Factors affecting the level of adaptation of traditional SMEs to digitalization in Gorontalo City

Various interrelated factors influence the level of adaptation of traditional MSMEs in Gorontalo City to digitalization. To fully understand how MSMEs adapt to digital transformation, this study employs the Digital Transformation Framework and the Dynamic Capabilities Framework as analytical lenses. Through these frameworks, adaptation is understood as a process shaped by motivation, constraints, external support, and learning capacity. To explore these dimensions empirically, several interview questions were posed to five MSME owners in Gorontalo City.

The first question focused on motivation and asked what encouraged MSME owners to begin implementing digital technology in their businesses. Interview results indicate that the primary motivation was the desire to expand market reach and improve operational efficiency. Digitalization was perceived as a means to simplify business processes and reduce physical effort in daily operations. In addition, some MSME owners viewed digital adoption as a necessary step to remain relevant in a rapidly changing business environment.

“Digitalization makes everything easier, from marketing to delivery, so the work is not as heavy as before.”

“The main reason is to keep up with the times. If we do not follow developments, we will be left behind.”

“I wanted to reach more customers, not only people around me, but also those outside the region.”

After identifying the motivations behind digital adoption, the analysis moved to the obstacles encountered during the early stages of digitalization. MSME owners reported that limited access to equipment and infrastructure was one of the most significant barriers. The lack of adequate laptops, smartphones, and stable internet connections constrained the use of certain digital features and slowed the adoption process. These technical limitations were often compounded by human resource constraints.

“I cannot use live streaming properly because the internet connection and devices are limited.”

“Some employees do not have internet access, so it is difficult to involve them in digital activities.”

In addition to infrastructure limitations, labor shortages emerged as another major challenge. Several MSME owners explained that managing digital promotion required dedicated personnel, which was not always feasible given their limited resources. Others highlighted difficulties in adapting to rapidly evolving technologies, particularly artificial intelligence based tools. Increasing demand generated through digital promotion also created pressure on production capacity and access to raw materials.

“We really need an admin to handle online promotion, but we do not have enough people.”

“Learning new technology like AI is not easy for everyone.”

“Orders increased, but raw materials and production capacity did not increase at the same time.”

Given these obstacles, the study further explored the role of external support in facilitating MSME adaptation to digitalization. Interview results show that support from government institutions played a crucial role in overcoming early barriers. MSME owners received assistance in the form of training programs, equipment provision, infrastructure support, and business development facilities from various government agencies and state owned institutions.

“The government helped us by providing production facilities and internet access.”

“Support from Diskumperindag and Bank Indonesia really helped us start digitalization smoothly.”

Beyond government assistance, support from family and the community also influenced the adaptation process, although its intensity varied across informants. Some MSME owners benefited from family support in the form of internet access and encouragement, while others experienced limited understanding of their digital activities from family members.

“My parents helped by providing internet access and giving advice about business development.”

“My family does not really understand digital business, so the support is limited.”

Training and capacity building emerged as another critical factor affecting MSME adaptation. MSME owners actively participated in various digitalization training programs organized by government agencies, financial institutions, and digital platforms. These trainings covered a wide range of topics, including social media marketing, marketplace management, digital financial recording, and the use of artificial intelligence for promotion and content creation.

“Most of the training I attended was organized by Diskumperindag and Bank Indonesia.”

“The training usually targets MSMEs that already have legal business permits.”

“We learned how to use social media, marketplaces, and even AI like ChatGPT.”

In addition to formal training, some MSME owners engaged in independent learning through seminars and online resources. This combination of formal and informal learning contributed to greater confidence in using digital tools.

“I also learned a lot from free training on YouTube and business seminars.”

“I attended training from BRI about managing Shopee and TikTok.”

After participating in digitalization training, MSME owners were asked about their learning process in mastering new technologies. Most informants reported that they were able to learn digital tools relatively quickly, particularly when training involved hands on practice. Enthusiasm and personal motivation were identified as important factors that supported continuous learning.

“I am very enthusiastic about learning new technology, so I try to improve my skills continuously.”

“Face to face training makes it easier to understand how to use digital tools.”

At the same time, MSME owners acknowledged that learning digital technology is an ongoing process that requires continuous adjustment and access to supporting infrastructure.

“Even though progress is quite fast, learning technology never really stops.”

These findings indicate that the adaptation of traditional MSMEs to digitalization in Gorontalo City is shaped by a combination of internal motivation, external support, resource availability, and continuous learning. Practical training, adequate infrastructure, and a strong willingness to learn play a key role in strengthening MSMEs' capacity to adapt to technological change.

Main Challenges Faced by Traditional SMEs in the Business Transformation Process Towards Digital

Digital transformation for traditional SMEs is not limited to the adoption of technology but involves broader changes in organizational structures, business processes, and entrepreneurial mindsets. This transformation process presents a range of challenges that need to be examined systematically using the Digital Transformation Framework. In the local context of Gorontalo City, this framework is still rarely applied, making it important to provide a comprehensive picture of the difficulties faced by traditional SMEs as they move toward digital business practices.

When asked about the biggest challenges in managing their businesses in the digital era, MSME owners highlighted several critical issues. One of the most prominent challenges relates to production capacity, which must adjust to the increasing demand generated through digital promotion. As sales volumes grow, MSMEs face pressure to scale production while maintaining quality. In addition, logistics costs, particularly shipping expenses for deliveries outside the region, were identified as a significant burden. Some MSME owners also reported difficulties in producing consistent and engaging digital marketing content, which is essential for maintaining visibility on social media platforms.

“Orders increased after we went digital, but our production capacity did not increase at the same pace.”

“Shipping costs are quite expensive, especially when sending products outside the region.”

“Creating content for platforms like Facebook is not easy, but it is necessary for digital marketing.”

Beyond production and logistics, MSME owners also faced challenges related to market expansion, particularly at the international level. Some businesses had managed to reach overseas markets, but further expansion remained difficult due to limited experience and resources. This challenge reflects the complexity of entering global markets, which requires

not only digital presence but also compliance with international standards and sustained marketing efforts.

“Our products have only reached Taiwan so far, and expanding to other international markets is still a challenge.”

“We hope to become an exporter from Eastern Indonesia, but the process is not easy.”

The challenges identified by MSME owners are also closely related to the availability and quality of supporting infrastructure. Reliable internet connections and stable electricity supply play an essential role in supporting digital business activities. When asked whether infrastructure supports their digital operations, all informants stated that internet and electricity services were generally adequate and functioned well. This indicates that, in the Gorontalo context, infrastructure is no longer a major barrier to digitalization.

“The internet and electricity here are quite stable, so digital activities can run smoothly.”

“Infrastructure support is very important and really helps us carry out digital business activities.”

Although physical infrastructure was not considered a significant obstacle, the ability of MSME owners to manage digital applications emerged as a more complex challenge. Most informants reported that they did not experience major difficulties in understanding how to use digital applications such as marketplaces, social media platforms, and QRIS. However, managing these digital tools simultaneously with production activities posed a substantial challenge, particularly due to limited human resources.

“Using digital applications is not difficult, but managing everything at the same time is the real challenge.”

“We need dedicated staff to handle social media and marketplaces so production is not disrupted.”

In terms of payment systems, digital transactions such as QRIS and bank transfers were generally well accepted by customers, including older consumers. This suggests that technological literacy among customers is improving, although internal management constraints remain a concern.

“Most payments are now made through QRIS or transfers, and even older customers are getting used to it.”

Customer responses to digital transformation also influenced the challenges faced by MSMEs. Interview results indicate that customer acceptance of digital changes varies based on age and digital literacy. Younger and digitally literate customers tend to adapt quickly to online ordering systems and digital catalogs, while older customers often prefer manual communication and face to face interaction. As a result, MSMEs are required to maintain hybrid service models to accommodate diverse customer preferences.

“Customers who are familiar with technology respond very quickly through digital catalogs.”

“Customers over forty five usually prefer to ask prices directly and communicate manually.”

In addition, some MSME owners noted that maintaining close relationships with customers remains important, even in a digital context. Digital tools are used not only for transactions but also for product innovation and customer engagement.

“We still maintain routine visits to customers while using digitalization to innovate products.”

Finally, financial constraints emerged as a significant challenge in sustaining digital promotion and technology use. While some MSMEs experimented with paid advertising on social media platforms, the results were not always satisfactory. High promotion costs made it difficult for smaller businesses to rely on paid digital marketing consistently, leading some to postpone collaborations with influencers or limit advertising to special occasions.

“We tried paid advertisements on Instagram and Facebook, but the results were not very significant.”

“The cost of digital promotion can reach four million rupiah per month, and that is quite heavy for our business.”

At the same time, other MSME owners managed promotion costs by adjusting their strategies to match their financial capacity, demonstrating varying levels of financial adaptability among businesses.

“We adjust promotion expenses based on our financial condition, so it does not become a burden.”

Overall, these findings show that the main challenges faced by traditional SMEs in the digital transformation process are not purely technical but structural and managerial in nature. Issues related to production capacity, logistics costs, human resources, customer diversity, and financial sustainability shape how effectively MSMEs can optimize digital technologies. While adequate infrastructure and basic digital literacy provide a strong foundation, addressing these deeper challenges is essential to ensure that digitalization leads to sustainable business growth.

The business models of SMEs in Gorontalo City have changed significantly due to advances in digital technology. Before digitalization, SMEs used traditional business methods such as offline marketing, word-of-mouth advertising, and local social networks. However, SMEs have begun adopting technologies that revolutionize their operations and customer interactions, driven by the emergence of social media, online marketplaces, and digital payment methods. Business Model Innovation (BMI) offers a framework for understanding these changes, particularly in value creation, value proposition, and value capture strategies.

Overall, the implementation of Business Model Innovation (BMI) in the digital transformation of SMEs in Gorontalo City shows that digitalization affects not only marketing and distribution but also product innovation, operational efficiency, and the development of closer customer relationships. Therefore, in addition to being a tool for market expansion, digitalization is also a key driver of business model innovation, helping SMEs grow amid increasing competition in the digital era.

Meanwhile, the extent to which traditional SMEs in Gorontalo City have adapted to digitalization depends on several interrelated factors, including their internal operations and the external assistance they have received. This study uses the Digital Transformation Framework (DTF) and the Dynamic Capabilities Framework (DCF) to gain a deeper understanding of these issues. While the DCF shows how SMEs can build dynamic capabilities to adapt and grow amid rapid technological changes, the DTF helps identify aspects of digitalization that impact SMEs. Overall, several key factors, including the desire to expand

markets, infrastructure constraints, and strong external support from the community and government, influence the adoption of digitalization by SMEs in Gorontalo. Overcoming obstacles and advancing the sustainability of digitalization heavily depends on SMEs' dynamic capabilities, including their capacity to learn and apply new technologies (Vo Thai et al., 2024; Saputra et al., 2024; Philbin et al., 2022). Accelerated technology adoption is determined by SMEs' willingness to learn, adequate infrastructure, and appropriate training support.

In addition, for traditional SMEs in Gorontalo City, digital transformation involves significant adjustments to organizational structure, business procedures, and entrepreneurs' mindsets, alongside the adoption of new technologies. There are many internal and external obstacles that SMEs must overcome during this process. The Digital Transformation Framework (DTF) is used to delve deeper into the elements that influence and hinder the digitalization process of SMEs in Gorontalo, enabling a systematic examination of these difficulties. Overall, production capacity, shipping costs, technology management, customer responsiveness, and digital promotion expenses are among the obstacles SMEs in Gorontalo face in the process of digitalization. However, SMEs can overcome these obstacles and maximize the benefits of digitalization if they have strong infrastructure, effective human resource management, and high adaptability. To address these digitalization challenges, dynamic capabilities in technology management and adaptable financial capacity are critical (Faro et al., 2024; Saputra et al., 2024; Irfan et al., 2022). These findings highlight the importance of internal aspects (such as technology and human resource management) and external aspects (such as infrastructure and funding) working together during the digital business transformation process for SMEs in Gorontalo.

Conclusion

Based on the results and discussion of the research, it can be concluded that:

Digitalization has brought significant changes to the business models of traditional SMEs. The use of BMI shows that digitalization not only affects marketing and distribution but also product innovation, operational efficiency, and customer relationships.

The main factors influencing the level of adaptation are the desire to expand the market, improve efficiency, and keep up with the times.

The main challenges faced by traditional SMEs in the business transformation process towards digital include production capacity, logistics costs, technology management, customer response, and promotion costs

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