

## **DRIVING MSME DIGITAL TRANSFORMATION IN MERUYA SELATAN: THE ROLE OF MANYCHAT AI IN SUSTAINABLE GROWTH AND INTELLIGENT AUTOMATION**

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### **ABSTRACT**

Micro, Small, and Medium Enterprises (MSMEs) play a crucial role in economic growth, yet they often face significant barriers, including limited financial literacy and digital adaptation challenges. This study explores the implementation of ManyChat AI, an artificial intelligence-powered chatbot platform, as a strategic tool to enhance MSME operations in Meruya Selatan. Through structured training, mentorship, and hands-on implementation, participants learned to automate customer interactions, improve marketing efficiency, and optimize data-driven strategies. The findings indicate that AI-driven automation significantly enhances customer engagement while reducing operational costs, as well as sustainable profit. However, challenges such as language barriers and digital literacy gaps require continuous support for effective adoption. The role of community partners (mitra) proved essential in facilitating MSME participation and aligning the training with real business needs. This research highlights the transformative potential of AI technology in empowering MSMEs, reinforcing the need for long-term digital, profits risk management literacy programs and sustainable AI integration. Future studies should investigate scalable models for chatbot automation tailored to MSME ecosystems.

**Keywords:** MSMEs, Artificial Intelligence, Chatbot Automation, Digital Marketing, ManyChat AI

### **1. INTRODUCTION**

Micro, Small, and Medium Enterprises (MSMEs) serve as pivotal drivers of economic development, job creation, and innovation, particularly in emerging economies such as Indonesia. Despite their significance, MSMEs in Srengseng Meruya Selatan encounter fundamental barriers to growth, including low financial literacy understanding, limited access to financing programs such as Kredit Usaha Rakyat (KUR), and inefficiencies in business operations. A survey conducted by the Ministry of Cooperatives and SMEs (2023) indicates that only 30% of MSMEs in Indonesia possess adequate knowledge regarding financial access, while 70% struggle with navigating credit procedures, resulting in constrained capital availability (Puspitasari & Bachtillah, 2024).

Beyond financial constraints, MSMEs face operational inefficiencies, including suboptimal customer engagement, data management, and marketing strategies, limiting their competitiveness in an increasingly digital marketplace (Hartono, 2024). The integration of artificial intelligence (AI)-based automation, particularly ManyChat, offers a promising solution to enhance operational efficiency and customer relationship management (Bahri, 2025). ManyChat, an AI-powered chatbot platform, enables MSMEs to automate customer interactions, ensuring 24/7 accessibility, rapid response times, and optimized engagement strategies. Empirical findings by Smith et al. (2022) suggest that chatbot adoption boosts customer service efficiency by 40%, with 60% of MSMEs reporting revenue growth within six months of implementation.

AI-driven automation not only improves service responsiveness but also reduces operational expenditures. A report by McKinsey (2023) underscores that AI-driven service automation reduces costs by up to 30%, making it a vital tool for resource-constrained MSMEs (Santos, Silva, & Souza, 2025). Recognizing these advantages, the Merdeka Belajar Kampus Merdeka (MBKM) program introduced the ManyChat AI for MSMEs in Meruya Selatan initiative, designed to bridge gaps in financial literacy while fostering AI technology adoption among 20 MSMEs in the region. This program encompasses training sessions, implementation guidance, and mentorship, equipping MSMEs with the knowledge and tools necessary to integrate ManyChat AI into their operational framework (Mulia, 2024).

This study investigates the impact of AI-driven chatbot technology on financial literacy, operational efficiency, and competitive advantage among MSMEs. By leveraging ManyChat, MSMEs can develop data-driven marketing strategies (Sari, 2024), enhance customer engagement, and streamline business operations, ensuring sustainable growth in an increasingly technology-centric market (Schwaেকে, Peters, Kanbach, Kraus, & Jones, 2025). The

findings contribute to the expanding discourse on AI integration within MSMEs, offering empirical insights and practical applications for enhancing business resilience in the digital economy (Anatan & Nur, 2023).

## **2. METHOD**

The community engagement program in Meruya Selatan is designed to support Micro, Small, and Medium Enterprises (MSMEs) by integrating ManyChat AI technology into their business operations. This initiative aims to enhance efficiency, expand market reach, and strengthen competitiveness through automated customer service and data-driven marketing strategies.

The program begins with a comprehensive needs assessment, where MSMEs are surveyed and interviewed to identify key challenges, such as limited customer service capacity, inefficient data management, and underdeveloped digital marketing approaches (Puspitasari & Bachtillah, 2024). These findings inform the development of training modules, ensuring that the curriculum is tailored to MSME participants' specific needs (Hartono, 2024).

Following the assessment, MSMEs are introduced to ManyChat AI, gaining insights into core functionalities such as automated responses, customer data collection, and social media integration via platforms like WhatsApp, Instagram, and Facebook Messenger (Mulia, 2024). The goal of this stage is to provide MSMEs with a foundational understanding of AI-driven automation, equipping them with the knowledge to effectively leverage this technology.

The program then transitions into hands-on technical training, where participants learn to configure chatbots for customer interactions, utilize AI-driven analytics to understand consumer behavior, and develop interactive, data-driven marketing strategies (Sari, 2024). The training, facilitated by lecturers and students, follows a practical approach, allowing MSMEs to apply ManyChat AI in simulated business environments (Bahri, 2025).

Once participants have mastered technical aspects, they proceed to deploy and test their chatbots in real business settings, assessing functionality and effectiveness (Santos, Silva, & Souza, 2025). This trial phase enables MSMEs to validate chatbot configurations, refine AI interactions, and resolve any implementation challenges. To support smooth adoption, the program provides one-on-one mentorship and consultation, guiding MSMEs in integrating ManyChat AI into daily business operations (Schwaেকে, Peters, Kanbach, Kraus, & Jones, 2025). The consultation sessions focus on customer data analysis and strategic business adaptation, encouraging MSMEs to develop innovative marketing campaigns or refine product offerings based on AI-generated insights (Anatan & Nur, 2023).

The program concludes with a structured evaluation, measuring success through key performance indicators (KPIs) such as pre- and post-training assessments, implementation rates, customer response efficiency improvement, and the impact of data-driven marketing on revenue growth and customer engagement (Yusuf et al., 2024). To ensure long-term sustainability, a knowledge-sharing network will be established, allowing MSMEs to continue learning and evolving post-program (Santosa & Surgawati, 2024).

The implementation team, consisting of lecturers, students, and MSME partners, collaborates to ensure effective training delivery, practical application, and real-world impact. MSMEs play a crucial role by actively engaging, providing operational data, and integrating AI technology into their business models.

Through this initiative, MSMEs in Meruya Selatan are expected to enhance customer service efficiency, optimize digital marketing strategies, and strengthen competitiveness in the digital economy (McKinsey, 2023). The program is designed not only to provide short-term solutions but also to create lasting transformational impact, ensuring MSMEs can sustainably leverage AI technology for business growth and market expansion.

## **3. RESULTS AND DISCUSSION**

### **Participant Engagement and Attendance**

The community engagement program in Meruya Selatan, held on February 20, 2025, received an enthusiastic response from local MSMEs. Although the initial target was 20 participants, a total of 32 attendees joined, with 22 individuals officially recorded in attendance. The discrepancy in registration numbers was likely due to late arrivals and informal participation, as the event was held in an open public space, allowing local residents to observe and join. Many participants engaged with event facilitators and speakers even before the program officially began, demonstrating high interest in the initiative. The majority of attendees were women entrepreneurs operating micro and small businesses, many of whom had substantial experience in navigating the challenges of business sustainability (Puspitasari & Bachtillah, 2024).

### **Event Coordination and Implementation**

Coordination between event organizers, MSME representatives, and local authorities was smooth and effective, ensuring clear and timely communication throughout the preparation process (Kasmo, et al, 2025). Logistical arrangements, such as tent setup, sound systems, and supporting materials, were well-managed, allowing for a structured and engaging session. The integration of ManyChat AI discussions with the broader initiative led by the Faculty of Economics and Business at Universitas Mercu Buana proved beneficial, aligning well with their focus on business sustainability in the digital era (Hartono, 2024). This collaboration reinforced the relevance of social media optimization as a key strategy for MSME digitalization (Sari, 2024).

While the event experienced a minor delay due to waiting for the local leader's arrival, this did not disrupt the overall program. The event commenced with a collective prayer, opening remarks, a group photo session, followed by speaker presentations, each addressing critical aspects of MSME digital transformation (Mulia, 2024).

#### Role of Partners in Program Success

The involvement of community partners (*mitra*) played a significant role in ensuring the success of the program. Their contributions included coordinating MSME participation, informing them about the training sessions, and assisting with technical preparations on-site. Additionally, partners helped identify challenges faced by MSMEs, enabling the program team to tailor training content to participants' needs (Bahri, 2025). This proactive approach ensured that training sessions remained relevant and impactful, addressing the specific difficulties encountered by MSMEs in Meruya Selatan (Santos, Silva, & Souza, 2025).

Beyond their immediate role in supporting event logistics and coordination, the partners expressed strong commitment to community development, viewing this initiative as part of a long-term strategy to enhance the social and economic well-being of MSMEs in Meruya Selatan (Yusuf et al., 2024). Their ongoing involvement in future programs is expected to strengthen business resilience and promote sustainable entrepreneurship among local MSMEs (Santosa & Surgawati, 2024).



Figure 1. Event Documentation

#### Preliminary Survey and Participant Expectations

Ahead of the training, a pre-event survey was conducted to assess participants' existing knowledge of ManyChat AI and their expectations for the session. A post-event questionnaire followed to evaluate changes in understanding, capturing any gaps between pre-training expectations and actual learning outcomes.

Survey findings revealed that participants rated their overall experience positively, with most indicators categorized as "satisfied" or "very satisfied". However, areas rated "moderately satisfied" included aspects related to facilities,

infrastructure, and technological support (Schwaেকে, Peters, Kanbach, Kraus, & Jones, 2025). Internet connectivity issues were identified as a key concern, limiting the ability to fully engage with AI-based demonstrations. Additionally, participants exhibited varied levels of digital literacy, necessitating extra guidance to effectively utilize the ManyChat AI platform (Anatan & Nur, 2023).

### Challenges in Technology Adoption

Despite strong enthusiasm, practical implementation of ManyChat AI presented challenges due to unfamiliarity with the platform. One major obstacle was language barriers, as the ManyChat interface is primarily available in English, limiting accessibility for participants with limited English proficiency. Fortunately, facilitators provided step-by-step guidance, allowing participants to explore basic chatbot functions, such as automated messaging for Instagram and TikTok posts to improve engagement between sellers and potential buyers (Bahri, 2025). Additionally, participants learned how to embed marketplace links within comments and posts, making product discovery and purchase easier for customers (Sari, 2024).

### Participant Learning and Program Impact

Throughout the program, participant comprehension improved, leading to higher engagement and interaction. While initial hesitance was observed in AI-driven automation adoption, hands-on practice helped bridge the knowledge gap and boost confidence in using chatbot technology. Challenges in leveraging digital media for product promotion persisted, indicating the need for ongoing education and digital literacy programs tailored to MSMEs (Mulia, 2024).

### Implications for MSME Digitalization

These findings highlight AI automation as a valuable tool for enhancing MSME efficiency and customer engagement. However, successful adoption requires preliminary education, including pre-training workshops to address digital literacy concerns. Future programs should incorporate localized language interfaces and structured onboarding support to improve accessibility (Santos, Silva, & Souza, 2025). By simplifying AI technology and making it more user-friendly, ManyChat AI can serve as a valuable tool for MSMEs, helping them optimize digital engagement strategies more effectively (McKinsey, 2023).

## 4. CONCLUSION

This study underscores the growing importance of AI-driven automation in supporting Micro, Small, and Medium Enterprises (MSMEs) business risk management, particularly in improving customer engagement, operational efficiency, digital marketing strategies, and risk management. The implementation of ManyChat AI has demonstrated its potential to streamline communication, automate interactions, and enhance MSME productivity, helping businesses stay competitive in the evolving a sustainable digital economy.

Despite the enthusiasm shown by participants, several challenges emerged, particularly in terms of technology adoption, language barriers, and digital literacy gaps. While AI tools like ManyChat provide valuable solutions, their successful integration requires structured pre-training, localized accessibility, and ongoing mentorship to ensure that MSMEs can effectively utilize these innovations.

The involvement of community partners (mitra) played a key role in coordinating MSME engagement, identifying challenges, and tailoring training sessions to address real-world business needs. Their contributions highlight the importance of collaboration in sustaining long-term AI adoption and supporting MSMEs in navigating digital transformation.

Furthermore, ensuring continued AI literacy programs, follow-up training, stronger digital infrastructure, and risk management literacy will be essential in helping MSMEs maximize the benefits of AI automation. Future research should explore scalable models for AI integration, ensuring that chatbot technology can be adapted to different business environments while addressing industry-specific challenges. When effectively implemented, AI-powered solutions have the potential to drive growth, enhance business resilience, and empower MSMEs to compete in the digital era with confidence.

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Additionally, a documentation video of this event has been uploaded to the Mercu Buana YouTube channel, further sharing insights into the training and community impact.

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