



COLLABORATIVE GOVERNANCE IN DIGITAL TRANSFORMATION POLICY IMPLEMENTATION FOR MSMEs IN JAKARTA: A SOCIO-LEGAL PERSPECTIVE

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ABSTRACT

This study investigates the role of collaborative governance in the digital transformation of Micro, Small, and Medium Enterprises (MSMEs) in Jakarta Province, focusing on the Jakarta Entrepreneur ecosystem, which comprises 372,540 enterprises. Based on Jakarta Governor Regulation Number 2 of 2020, the study aims to understand how cross-sector collaboration can help drive the digital transformation of MSMEs and thereby contribute to strengthening Jakarta's competitiveness as a Sustainable Global City. Using a qualitative approach, this research explores collaboration mechanisms, factors inhibiting MSME digital transformation, and constructs a new collaborative model to empower MSMEs. Findings highlight the importance of facilitative leadership, institutional design, and supportive structures. Main obstacles include limited technology infrastructure, low digital literacy, and weak skills among MSMEs. The implementation of Governor Regulation Number 2 of 2020 has not yet been fully effective in addressing these barriers. The study suggests policy revision and enhanced collaboration through collaborative forums, communication, and transparency. It proposes the Integrated Partnership Model for Digital Transformation of MSMEs (KTDSU), which integrates public, private, academic, civil society, and media sectors. The model emphasizes technological innovation and social empowerment to help MSMEs grow and become more competitive in the digital era.

1. Introduction

The Indonesian economy is structured as a collective effort rooted in the principle of kinship, as outlined in Article 33, Paragraph (1) of the 1945 Constitution, which states, The economy shall be organized as a common endeavor based upon the principle of kinship.: This foundation is reinforced by Law No. 20 of 2008 on Micro, Small, and Medium Enterprises (SMEs), highlighting their pivotal role in Indonesia's economic landscape. SMEs are the backbone of the nation's people-centered economy, driving job creation, tax revenue, export-import activities, and entrepreneurial innovation. By narrowing income disparities, reducing poverty, and absorbing a significant workforce, SMEs are a national priority for economic development.

Polandos et al.¹ emphasize that SMEs are key pillars of Indonesia's economy, utilizing local resources, labor, and financing to foster regional growth. The growth of SMEs correlates with improved economic performance, providing income to meet daily needs and serving as a primary employment source in developing nations like Indonesia. In 2019, the Ministry of Cooperatives and SMEs reported 65.4 million SMEs employing 123.3 thousand workers, significantly lowering unemployment rates. Additionally, SMEs contribute 60.5% to Indonesia's Gross Domestic Product (GDP), underscoring their potential for further economic impact.² Integrating SMEs into global markets through the Global Value Chain (GVC) and Global E-Commerce (GEC) offers opportunities to boost competitiveness, particularly via indirect exports through domestic aggregators or foreign affiliates.

However, challenges such as innovation, digital literacy, productivity, legal compliance, financing, branding, marketing, human resources, standardization, and data management remain. The COVID-19 pandemic intensified these issues, severely affecting sectors like culinary, traditional retail, and fashion.³ Unlike the 1998 monetary crisis, where SMEs contributed up to 350% to the economy, the pandemic caused significant setbacks, with 949 cooperatives and SMEs reporting adverse impacts.⁴ Post-pandemic, Indonesia's economy has shown resilience, growing by 4.94% year-on-year in Q3 2023.⁵ This recovery is partly fueled by the digital economy, valued at USD 77 billion in 2022 with a 22% growth rate,

¹ Prisilia Monika Polandos, Daisy SM Engka, and Krest D. Tolosang., Analisis pengaruh modal, lama usaha, dan jumlah tenaga kerja terhadap pendapatan usaha mikro kecil dan menengah di kecamatan langowan timur, *Jurnal Berkala ilmiah efisiensi*, Vol.19, no.04, 2019, page.914.

² Reza Nurul Ichsan, Ali Mukti Tanjung, and Venny Fraya Hartin Nst., Pemanfaatan Website Online Single Submission (Oss) Dalam Kegiatan Usaha Mikro Kecil Menengah Dikota Medan Berbasis Maqashid Syariah, *Jurnal PKM Hablum Minannas*, Vol.2, no.2, 2023, page.58.

³ Mujianto Mujianto, Hartoyo Hartoyo, Rita Nurmalina, and Eva Z. Yusuf., The unraveling loyalty model of traditional retail to suppliers for business sustainability in the digital transformation era: Insight from MSMEs in Indonesia, *Sustainability*, Vol.15, no.3, 2023, page.2827. See too, Hayatul Cholsy, Aprillia Firmonasari, and Wening Udasmoro., Pendampingan UKM Bidang Fashion pada Masa Pandemi Covid-19 di Daerah Istimewa Yogyakarta, *Bakti Budaya*, Vol.3, no.2, 2020, page.175.

⁴ Nirfandi Gonibala, Vecky AJ Masinambow, and Mauna Th B. Maramis., Analisis pengaruh modal dan biaya produksi terhadap pendapatan UMKM di Kota Kotamobagu, *Jurnal Berkala Ilmiah Efisiensi*, Vol.19, no.01, 2019, page.19.

⁵ BPS, Ekonomi Indonesia triwulan III-2023 tumbuh 4,94 persen (y-on-y), *Badan Pusat Statistik*, 2023, accessed on March 1, 2025

positioning Indonesia as a leader in ASEAN's digital economy. Projections suggest the digital economy could reach USD 130 billion by 2025 and USD 360 billion by 2030, driven by e-commerce, transportation, food, online travel, and media.⁶ The government's digital transformation agenda for SMEs aims to onboard 30 million SMEs onto digital platforms by 2024, enhancing market access, supply chain efficiency, and product competitiveness.

In Jakarta, SMEs are critical, with 1.1 million enterprises in 2021, a 10.2% increase from the prior year, predominantly in the trade sector (44.8%).⁷ The Jakarta Entrepreneur program, launched in 2019 under Governor Regulation No. 2 of 2020, promotes integrated entrepreneurship to foster resilient entrepreneurs, reducing unemployment and poverty. By December 2023, 372,540 SMEs participated, generating over IDR 6 trillion in turnover, exceeding Regional Medium-Term Development Plan (RPJMD) targets.⁸ However, digital platform adoption remains limited, with only 77.41% of Jakpreneur participants effectively using digital channels. Despite the Jakarta Entrepreneur program's achievements, challenges persist in achieving effective digital transformation for SMEs in Jakarta. These include low awareness of digital platforms, inadequate financial reporting skills, and limited understanding of digital benefits among SMEs. Additional barriers include restricted access to capital, technology, and markets, overlapping government policies, unfair competition, and insufficient intellectual property protection.⁹ The rise of modern markets threatens traditional ones, and limited access to strategic business locations hampers SME growth. Low digital literacy and human resource quality further limit innovation and competitiveness in a digital economy.

Prior studies have extensively explored SME digital transformation in Indonesia, focusing on digital literacy, innovation, and economic contributions, but only few have examined collaborative governance as a framework to address the specific challenges within Jakarta's Jakpreneur ecosystem.¹⁰ Existing research highlights digital platforms like SiBakul Jogja and autopoietic systems in Yogyakarta, emphasizing stakeholder collaboration.¹¹ However, these studies often focus on regional contexts outside Jakarta or specific sectors, such as culinary SMEs in

⁶ Bnh Duong News, Indonesia's digital economy likely to reach 360 billion USD by 2030, *Binh Duong Online Newspaper*, 2023, html accessed on march 6, 2025.

⁷ BPS Jakarta, Profil Industri Mikro dan Kecil Provinsi DKI Jakarta 2021, *BPS Jakart*, 2021, html, accessed on January 23, 2025.

⁸ ANTARA News, 367,769 UMKM Telah Terdaftar sebagai Binaan Jakpreneur, *ANTARA News*, 2023, Accessed March 15, 2024.

⁹ Rencana Pembangunan Daerah (RPD) Provinsi DKI Jakarta tahun 2023-2026.

¹⁰ Prisilia Monika Polandos, Daisy SM Engka, and Krest D. Tolosang., Analisis pengaruh modal, lama usaha, dan jumlah tenaga kerja terhadap pendapatan usaha mikro kecil dan menengah di kecamatan langowan timur, *Jurnal Berkala ilmiah efisiensi*, Vol.19, no.04, 2019, page.916.

¹¹ Deni Aris Rismawan, Yanto Sugiarto, Sri Hermawati, and Susi Susanti., Collaborative Governance to Increase the Absorption of Alumni of Job Training Participants into Industrial World, *Devotion: Journal of Research and Community Service*, Vol.5, no.9, 2024, page.1109. See too, R. Luki Karunia, Edi Yanto, Johan Hendri Prasetyo, Erfi Muthmainah, Lely Hiswendari, Prima Setiawan, and Muhammad Aulia Putra Saragih., Digital collaboration models for empowering SMEs: Enhancing public organization performance, *Emerging Science Journal*, Vol.8, no.4, 2024, page.1493.

Batam or Palembang's government-led training.¹² In Jakarta, Sulistiyo and Rahadian¹³ noted gaps in e-order system awareness, but their analysis lacks a comprehensive collaborative governance perspective. Research on digital ecosystems and innovation clusters underscores the importance of inter-firm and cross-sectoral collaboration, yet these studies do not address Jakpreneur's unique coordination, monitoring, and capacity-building challenges.¹⁴ Additionally, while global studies explore SME collaboration, they rarely focus on governance models tailored to urban SME ecosystems in developing economies.¹⁵ The role of government support, legal frameworks, and relational governance in SME performance is well-documented, but their integration into a cohesive model for Jakarta's SMEs remains underexplored.¹⁶ This study addresses this gap by analyzing how collaborative governance, as defined by Ansell and Gash,¹⁷ can enhance SME digital transformation in Jakpreneur, identifying barriers, and proposing a model to improve productivity and competitiveness, thus contributing to both theoretical and practical advancements in SME digitalization.

This study aims to: 1) analyze how collaborative governance can enhance SME productivity and competitiveness in Jakarta through digital transformation within the Jakarta Entrepreneur ecosystem, 2) identify factors hindering effective

¹² Yeos Austin Clinton and Afianti Elsy Vanomy., Pengembangan UMKM Kuliner di Kota Batam Melalui Transformasi ke Platform Digital di Era Revolusi, *Jurnal Intelektualita: Keislaman, Sosial dan Sains*, Vol.3, no.1, 2023, page.30. See too, Asrol Safitri, Rika Lidyah, Titin Hartini, dan Muhammadinah Muhammadinah., Peran Percepatan Transformasi Digital untuk Keberlanjutan Bisnis dan Pemulihan Ekonomi Pelaku UMKM di Kota Palembang Pascapandemi, *Jurnal Intelektualita: Keislaman, Sosial dan Sains*, Vol.11, no.2, 2022, page.243.

¹³ Oki Sulistiyo and A. H. Rahadian., Implementasi Kebijakan E-Order pada Transaksi Pengadaan Langsung dengan UMKM di Provinsi DKI Jakarta, *Jurnal Ilmu Administrasi Publik*, Vol.2, no.4, 2021, page.440

¹⁴ Luciana Castro Gonçalves, Anne Berthier-Poncet, and Liliana Mitkova., Cluster governance in dynamising collaborative innovation in SMEs, *International Journal of Entrepreneurship and Innovation Management*, Vol.28, no.2, 2024, page.70. See too, Erman Aminullah, Trina Fizzanty, Nawawi Nawawi, Joko Suryanto, Nika Pranata, Ikbil Maulana, Luthfina Ariyani., Interactive components of digital MSMEs ecosystem for inclusive digital economy in Indonesia, *Journal of the Knowledge Economy*, Vol.15, no.1, 2024, page.494.

¹⁵ May Portuguese-Castro., Exploring the potential of open innovation for co-creation in entrepreneurship: a systematic literature review, *Administrative Sciences*, Vol.13, no.9, 2023, page.198. See too, Asta Pundziene and Lukas Geryba., Managing technological innovation: dynamic capabilities, collaborative innovation, and born-digital SMEs' performance, *IEEE Transactions on Engineering Management*, Vol.71, no.3, 2023, page.6969. See too, Luciana Gondim de Almeida Guimarães, Pierre Blanchet, and Yan Cimon., Collaboration among small and medium-sized enterprises as part of internationalization: A systematic review, *Administrative Sciences*, Vol.11, no.4, 2021, page.153.

¹⁶ Reniati Reniati, Badrun Susantyo, Nyi R. Irmayani, Fadillah Sabri, and Widiastuti Widiastuti., The influence of leadership strategies and social capital on the business performance and resilience of Indonesian MSMEs, *Journal of the Knowledge Economy*, Vol.3, no3, 2024, page.14. See too, Paulina Permatasari and Juniati Gunawan., Sustainability policies for small medium enterprises: WHO are the actors?, *Cleaner and Responsible Consumption*, Vol.9, no.3, 2023. Page.100122. See too, Agnes Batory and Sara Svensson., Regulating collaboration: The legal framework of collaborative governance in ten European countries, *International Journal of Public Administration*, Vol.43, no.9, 2020, page.789. See too, David Smallbone and Friederike Welter., The role of government in SME development in transition economies, *International small business journal*, Vol.19, no.4, 2001, page.65.

¹⁷ Chris Ansell and Alison Gash., Collaborative Governance in Theory and Practice, *Journal of Public Administration Research and Theory*, Vol.18, no.4, 2008, page.550.

collaboration, and construct an effective collaborative governance model to support SMEs in adopting digital technologies and 3) improving business performance. Using the collaborative governance framework of Ansell and Gash,¹⁸ this research seeks to advance theoretical understanding of collaborative governance in digital transformation and offer practical solutions for policymakers to strengthen SME development in Jakarta. The findings are expected to enrich the literature on SME digitalization and support the government's goal of fostering resilient, competitive, and digitally empowered entrepreneurs.

2. Research Methods

This study adopted a socio-legal approach with post-positivist paradigm or philosophical post-positivist perspective. A qualitative approach was chosen to explore the understanding of Collaborative Governance in implementing digital transformation for Micro, Small, and Medium Enterprises (SMEs) in Jakarta Province by designing a research framework that facilitated a deeper exploration of relevant phenomena. The conceptual framework of the study adopted the Collaborative Governance model by Ansell and Gash¹⁹ to analyze government collaboration between digital transformation and budgeting in relation to the readiness of Jakarta Entrepreneur participants for digital transformation, the implementation of digital transformation, and the utilization of digital transformation opportunities by Jakarta Entrepreneur participants. This study elaborated on the relationship between Collaborative Governance in implementing digital transformation for SMEs within the Jakarta Entrepreneur ecosystem in Jakarta Province, aiming to address the challenges of the industry 4.0 era.

The researchers have collected primary data by observing the policy process firsthand, conducting interviews with relevant stakeholders, and accessing official documents related to the policy. The secondary data used in this study includes an overview of population numbers, system implementation, program implementation consistency, resource management capabilities, program budgeting, the number of Jakarta Entrepreneur program participants, the percentage of system usage, and supporting and inhibiting factors in the implementation of digital transformation, particularly within the Jakarta Entrepreneur program.

The study employs a purposive sampling technique for selecting informants, which involves sampling data by considering specific factors, such as individuals' knowledge related to the research topic. In determining informants, the researchers selected categories of policymakers, policy recipients, and policy implementers. In this qualitative study, the researcher serves as both the instrument and data collector.

The stages of qualitative data analysis, according to Miles and Huberman,²⁰ consist of three main steps: first, data reduction, which simplifies data to meet needs and facilitate information extraction; second, data presentation, which involves

¹⁸ Chris Ansell and Alison Gash., Collaborative Governance in Theory and Practice, *Journal of Public Administration Research and Theory*, Vol.18, no.4, 2008, page.552.

¹⁹ Chris Ansell and Alison Gash., Collaborative Governance in Theory and Practice, *Journal of Public Administration Research and Theory*, Vol.18, no.4, 2008, page.561.

²⁰ Matthew B. Miles dan A. Michael Huberman., *Qualitative Data Analysis*, Jakarta, UI Press, 2007, page.174.

presenting reduced data in the form of graphs, charts, pictograms, or other formats to enhance understanding by others; and third, conclusion drawing, which entails compiling and grouping presented data to draw conclusions.

In developing the model, after conducting the research, factors that hindered the Collaborative Governance process in implementing digital transformation for SMEs within the Jakarta ecosystem in Province were identified. Following this identification, a comparison was made to determine whether the identified inhibiting factors could be integrated with existing models, such as the Ansell and Gash model.²¹ After this comparison, the new model was modified using the Penta Helix framework based on the research findings to create a model more suited to the context and characteristics of SMEs in the Jakarta ecosystem.

3. Result and Discussion

3.1. Collaborative Governance in Enhancing SME Productivity and Competitiveness

The concept of collaborative governance, as outlined by Ansell and Gash,²² emphasizes the importance of cross-sector collaboration and active stakeholder participation in decision-making and policy implementation. By involving diverse stakeholders, collaborative governance fosters holistic, sustainable, and community-relevant policies. The Pentahelix model, which integrates government, industry, academia, community, and media, enhances this approach by addressing multi-stakeholder issues and promoting sustainable innovation. In Jakarta, the government recognizes that urban challenges cannot be tackled alone, shifting its role from a mere service provider to a facilitator bridging citizens, private sectors, and non-governmental organizations to deliver solutions and incorporate public input beyond initial plans.²³

Digital transformation in governance is critical in the modern era, with rapidly advancing information and communication technologies improving operational efficiency, public services, and transparency while encouraging citizen participation. However, challenges such as complex bureaucracy, slow decision-making, and lack of transparency often hinder progress. Collaborative governance addresses these issues by uniting government, private sectors, academia, and civil society to pool resources and expertise. Effective e-Government implementation, for instance, requires active stakeholder involvement to ensure reliable, secure, and transparent systems. Digital transformation through e-Government redefines relationships among government, citizens (G2C), businesses (G2B), and inter-governmental entities (G2G), leveraging technologies like artificial intelligence and data analytics to accelerate innovation, information flow, services, and transactions. Yet, low e-Government adoption often stems from public distrust,

²¹ Chris Ansell and Alison Gash., Collaborative Governance in Theory and Practice, *Journal of Public Administration Research and Theory*, Vol.18, no.4, 2008, page.553.

²² Chris Ansell and Alison Gash., Collaborative Governance in Theory and Practice, *Journal of Public Administration Research and Theory*, Vol.18, no.4, 2008, page.558.

²³ Vojtěch Indra, Markéta Horáková, dan P. Horák., Collaboration, Participation, and Innovation: Influencing Factors of Co-Creation in a Czech Municipality, *International Journal of Public Administration*, Vol.20, no.2, 2024, page.10. See too, Bambang Eko Turisno, Ery Agus Priyono, and Yunanto Yunanto., Strengthening Corporate Governance Through Legal Compliance and Ethical Codes of Conduct, *Jurnal Hukum*, Vol.40, no.2, 2024, page.230.

necessitating a holistic and participatory approach to build trust through inclusive planning, implementation, and evaluation of digital services.

Indonesia's 2024 Digital Transformation Plan sets ambitious targets for digital economy growth, including boosting e-commerce transactions and the digital economy's GDP contribution. Cross-sector collaboration enables the government to identify challenges, design targeted solutions, and implement policies that support comprehensive digital transformation, creating a responsive, transparent, and inclusive governance system that enhances public service effectiveness and accountability. Collaborative governance not only supports digital transformation but also ensures transparency and inclusivity, fostering public trust and active participation.

The Jakpreneur program, an e-Government initiative by the Jakarta Provincial Government, exemplifies collaborative governance in supporting digital transformation for Micro, Small, and Medium Enterprises (SMEs) to advance a technology-driven people's economy. Jakpreneur integrates government, academia, businesses, communities, and other institutions to create synergies that enhance social and economic welfare, particularly for the youth. Supported by Governor Regulation No. 2 of 2020 on Integrated Entrepreneurship Development, Jakpreneur provides SMEs with training, mentoring, licensing, marketing, financial reporting, and funding access. Collaborations with 47 universities, eight major companies (e.g., Shopee, Tokopedia, Bank DKI, BRI, Gojek, Grab, Netzme), government agencies, and media have built a robust ecosystem for SME growth. By the end of 2023, 376,733 entrepreneurs had joined, reflecting significant public enthusiasm.

Jakpreneur's innovations include QRIS for SME payments and e-commerce platforms for product marketing, alongside data sharing for training, mentoring, and export preparation, as well as funding and branding campaigns. These efforts enhance SME competitiveness. The program aligns with Indonesia's target of achieving a 4% entrepreneurship ratio by 2045 to become a developed nation, with Jakpreneur significantly contributing by fostering innovative entrepreneurs. Field research highlights that inter-organizational relationships are crucial for digital transformation in SMEs, encompassing strategic partnerships and formal networks. These collaborations provide SMEs with access to technology infrastructure, training, and mentoring, creating a conducive environment for innovation. Collaborative forums and idea exchanges enable SMEs to engage in collective learning and develop solutions for digital ecosystem challenges. Key factors for success include clear shared goals, transparent information sharing, and strong commitment from all parties. In the context of Jakarta's transformation into a global city, developing a supportive business and entrepreneurship ecosystem, particularly for SMEs, is vital for inclusive and sustainable economic growth.

The seven regional agencies driving the Jakpreneur program play a pivotal role in fostering digital transformation for Micro, Small, and Medium Enterprises (SMEs) through effective inter-organizational collaboration, encompassing strategic partnerships and formal networks that build an inclusive and sustainable

ecosystem.²⁴ For instance, the Department of Food Security, Marine, and Agriculture (*Ketahanan Pangan, Kelautan, dan Pertanian*/KPKP) supports approximately 19,000 SMEs in urban agriculture, fisheries, and mangrove-based product processing, including shellfish waste utilization. The Department of Industry, Trade, Cooperatives, and SMEs (*Perindustrian, Perdagangan, Koperasi, Usaha Kecil dan Menengah*/PPKUKM) manages the Jakarta Creative Hub, providing facilities for creative industry SMEs to engage in workshops, seminars, and production in fashion, craftsmanship, and digital technology. Meanwhile, the Social Department trained 1,157 SMEs in 2023 through collaborations with entities like Bank DKI, PT Jaya Fermex, PT Egafood, PT ACE Hardware Indonesia Tbk, Dialog Desain Group, PT Pegadaian, BPJS Ketenagakerjaan, and the Indonesian Women Entrepreneurs Cooperative Center, enhancing SME capacity and competitiveness.

Strong synergy among stakeholders strengthens Jakarta's position as a sustainable business and innovation hub, positioning it as a globally competitive city. Assessing business activities and public service quality is crucial for mapping strategic steps for Jakarta's future. Concrete measures include proactive dialogue facilitation, resource sharing, and effective communication platforms to enhance stakeholder coordination and synergy. Interviews with Acting Governor Heru on February 29, 2024, emphasized these steps as critical for improving collaboration between government and stakeholders. Organizational openness, as per Weick's theory,²⁵ enables adaptability and relevance amid continuous change. Jakpreneur exemplifies this openness, involving universities, corporations, government agencies, and media to foster an innovation-friendly environment for SMEs. The KPKP Department, for instance, holds annual coordination meetings with Jakpreneur mentors and SMEs to evaluate and enhance performance. Such openness and collaboration create a conducive climate for innovation, problem-solving, and solidarity among SMEs. Consultative forums allow SMEs to share experiences, best practices, and challenges, broadening insights and boosting competitiveness. This ensures policies accurately reflect SME needs, supporting market and technological adaptation for inclusive and sustainable economic growth.

In Jakarta's context as an economic and innovation hub, open and collaborative relationships between government and external parties are key to ensuring SMEs not only survive but thrive in a rapidly changing global economy. Acting Governor Heru on February 29, 2024 reiterated the importance of proactive dialogue, resource sharing, and communication platforms for enhanced coordination. According to the Bappeda report, *Building Jakarta as a Globally Scaled Smart City*, Jakarta, with a 2022 population of 10.7 million (71.27% of productive age) and a GRDP of IDR 3,200 trillion (16.6% of the national GDP), excels in trade, ICT, manufacturing, construction, and financial services. Bappeda's Head highlighted mixed-use development and sector integration to enhance Jakarta's agglomeration. Programs like Hack4ID foster digital startup ecosystems through ICT-based innovation and expert mentoring, while Jakpreneur collaborates with 47 universities, eight major companies, and government bodies. JakWIFI provides

²⁴ Chris Ansell and Alison Gash., Collaborative Governance in Theory and Practice, *Journal of Public Administration Research and Theory*, Vol.18, no.4, 2008, page.557.

²⁵ Karl E. Weick., *The Social Psychology of Organizing*, 2nd ed, New York, McGraw-Hill, 1979, page.100.

free internet access, improving SME connectivity and information access.

The Head of the Communication, Informatics, and Statistics Department emphasized that accessible internet, paired with adequate digital literacy, enables SMEs to expand market reach and operational efficiency. However, digital literacy remains critical. The Social Department's training of 1,157 SMEs in 2023 underscores the importance of collaborative training initiatives. Open inter-organizational relationships, as seen in Jakpreneur and various departments, facilitate information and experience exchange, fostering innovation and problem-solving. Policy evaluations by PPKUKM's Industry Division through stakeholder-involved monitoring demonstrate how collaborative approaches enhance program effectiveness. Through sustained collaboration among government, private sectors, academia, and communities, Jakarta can solidify its SME-friendly status, attract innovators, and remain competitive in addressing future challenges.

Research findings indicate that the digital transformation of Micro, Small, and Medium Enterprises (SMEs) in Jakarta heavily relies on robust legal institutional frameworks. In a rapidly evolving technological era, SMEs require clear legal foundations to innovate and grow. These frameworks encompass regulations and policies governing data protection, cybersecurity, e-commerce, and intellectual property rights, ensuring clarity for businesses, consumer protection, and a fair business environment.²⁶ Legal frameworks for SMEs must be simple, comprehensible, and applicable without stifling innovation while fostering collaboration among SMEs, government, financial institutions, and private sectors. Cross-sector partnerships are vital to overcome barriers and provide SMEs with access to technology, training, and resources essential for digital transformation. Challenges in designing effective legal frameworks include rapid technological changes, cybersecurity threats, and global market complexities, necessitating responsive and relevant regulations.

Governor Regulation No. 2 of 2020, Article 2, emphasizes that one of the six objectives of Integrated Entrepreneurship Development (PKT) is to enhance human resource quality and utilization as entrepreneurs through technology and local resources to bolster Jakarta's economic competitiveness. PKT underpins initiatives like Jakarta Entrepreneur (Jakpreneur), highlighting technology integration in SME development and regional economic growth. SMEs significantly drive Jakarta's economic growth at regional and national levels. The Jakarta Provincial Government promotes domestic product use (P3DN) to support the local economy. In 2023, numerous SMEs participated in exhibitions and bazaars across Jakarta, offering products like culinary items, fashion, and crafts. Jakpreneur, a digital platform, integrates technology and stakeholders to enhance SME skills and independence.

Regular evaluation and adjustment of legal frameworks are critical for successful digital transformation policies. Existing laws may not address digital transformation's evolving aspects, necessitating updates to reflect technological advancements and SME needs. Jakarta's economy grew by 5.13% in Q2 2023 compared to Q2 2022, with a GRDP contribution of 16.6% nationally, reducing

²⁶ Sherry R. Arnstein., A Ladder of Citizen Participation, *Journal of the American Institute of Planners*, Vol.35, no.4, 1969, page.20.

poverty by 0.17% from H2 2022. The Department of Industry, Trade, Cooperatives, and SMEs (PPKUKM) promotes domestic products through initiatives like e-order, business matching, Semarak Batik Betawi, and monthly SME bazaars. Jakarta's 2023 domestic product spending reached IDR 18.1 trillion, surpassing the IDR 15.8 trillion budget commitment by 115%. Support from regional agencies, communities, private sectors, universities, and the public is crucial for these achievements. The e-Order system, an innovation by the Jakarta Procurement Service Agency (*Badan Pelayanan Pengadaan Barang dan Jasa/BPPBJ*), connects SME providers with government units, acting as an online marketplace for SMEs. Governor Instruction No. 29 of 2021 mandates direct procurement of meeting catering through e-Order, boosting SME participation. Jakpreneur data shows e-Order transactions reached IDR 502 trillion, supporting P3DN, creative industries, and equitable national economic growth.

The PPKUKM Department plays a holistic role in fostering collaboration among SMEs, tech firms, educational institutions, and stakeholders. It formulates and monitors policies to support cross-sector partnerships, identifying legal barriers and crafting regulations that promote innovation and collaboration. Continuous policy reviews ensure relevance amid technological and market changes, while ineffective regulations are revised to sustain digital transformation. PPKUKM also facilitates dialogue, coordinates stakeholder interests, and ensures inclusive decision-making. Transparent collaboration is vital for SME digital transformation, building trust, enhancing coordination, fostering innovation, and legitimizing partnerships.²⁷ Transparency is achieved through clear policies, communication platforms, information dissemination, feedback mechanisms, and open conflict resolution. By understanding decision-making, resource allocation, and evaluation processes, stakeholders gain confidence in fair and sustainable collaboration. Transparency also encourages broader participation, improving decision quality, accelerating initiatives, and ensuring stakeholder needs are met, thus driving inclusive and sustainable SME digital transformation in Jakarta.

Despite its benefits, establishing transparent collaborative processes for digital transformation in Micro, Small, and Medium Enterprises (SMEs) presents challenges, including managing information complexity, coordinating diverse interests, and balancing transparency with confidentiality. Cultural and policy factors influence transparency levels, with some organizations favoring closed decision-making while others adopt open, inclusive approaches. Understanding and addressing these barriers is crucial for successful collaborative digital transformation in SMEs, enabling economic growth, innovation, and digital inclusion. In 2023, the Jakarta Entrepreneur (Jakpreneur) program engaged 243,972 SMEs, an 8.23% increase from 225,415 in 2022, spread across Jakarta: Central (34,717), North (39,398), West (48,201), South (67,208), East (50,880), and Thousand Islands (3,496). SMEs primarily operate in culinary (167,986), fashion (18,181), handicrafts (8,275), and other sectors (49,530), with most entrepreneurs aged 40–44. The Head of the Department of Industry, Trade, Cooperatives, and SMEs (PPKUKM) stated on February 27, 2024, that transparent collaboration fosters a supportive Jakpreneur ecosystem, driving growth and

²⁷ Sherry R. Arnstein., A Ladder of Citizen Participation, *Journal of the American Institute of Planners*, Vol.35, no.4, 1969, page.25.

innovation in Indonesia's digital startup industry, projected to boost the digital economy.

The Jakarta Provincial Government, through PPKUKM, supports SMEs comprehensively, ensuring high-quality production upstream and broad marketing downstream. Jakpreneur's 7 Steps to Success include registration, training, mentoring, licensing, marketing, financial reporting, and funding. These steps aim to enhance the competitiveness and resilience of SMEs. In 2023, PPKUKM organized and participated in bazaars like Trade Expo Indonesia, domestic and international exhibitions, and monthly Jakpreneur events, showcasing SME products at global events like ANUGA (Germany), Fashion World Tokyo, and Paris Fashion Week, elevating SME visibility and competitiveness. Strong collaboration with e-commerce platforms (Grab, Gojek, Tokopedia, Shopee, Bukalapak), over 47 universities, and communities underpins Jakpreneur's success. PPKUKM formulates and revises policies to support cross-sector collaboration, identifying legal barriers and promoting innovation. Regular evaluations ensure policies align with technological and market dynamics, with monthly and annual reports detailing progress, challenges, and improvements, involving stakeholders like tech companies, educational institutions, and business associations.

PPKUKM facilitates technical training in culinary, fashion, handicrafts, and digital technology to equip SMEs for digital-era challenges. However, digital transformation involves complexities and risks, requiring continuous evaluation to align with evolving needs. Failures can impact SMEs significantly due to substantial resource and competency investments. Transparent collaboration, policy formulation, and periodic evaluations are critical for effective digital transformation. PPKUKM collaborates with the Regional Cooperation Bureau (Biro KSD) to formalize partnerships through Cooperation Agreements (PKS) and Large-Scale Social Collaboration (*Kolaborasi Sosial Berskala Besar*/KSBB) for SMEs, ensuring legal frameworks prioritize SME interests. The Head of PPKUKM's SME Empowerment Section stated on February 27, 2024, that regular progress reports and stakeholder involvement in decision-making enhance program effectiveness. Monitoring ensures compliance with commitments, fostering impactful collaboration.

Transparency, through clear communication, PKS, and KSBB, builds trust and strengthens collaboration. However, some SMEs manipulate turnover figures to meet program criteria, as noted by Ahza Patchwork on February 27, 2024, highlighting transparency's role in credibility. Informal discussions among SMEs reveal discrepancies between policy and practice, underscoring the need for robust data verification mechanisms. Over-reliance on turnover for SME classification risks dishonesty, necessitating holistic criteria that consider integrity and business potential. A comprehensive, inclusive approach enhances transparency, credibility, and sustainability in the SME ecosystem, ensuring Jakarta remains a competitive hub for innovation and economic growth.

3.2. Factors Hindering Effective Collaboration in SME Digital Transformation

The digital transformation of Micro, Small, and Medium Enterprises (SMEs) in Jakarta through the Jakarta Entrepreneur (Jakpreneur) ecosystem faces several barriers that impede effective collaboration among stakeholders. Drawing from

primary and secondary data, including empirical findings and the theoretical framework of Collaborative Governance by Ansell and Gash,²⁸ this section identifies key challenges that hinder successful cross-sectoral partnerships in supporting SME digital adoption.

3.2.1. Lack of Coordination Among Stakeholders

Effective collaboration in SME digital transformation requires coordinated efforts among stakeholders, as emphasized by Ansell and Gash.²⁹ In Jakpreneur, the involvement of seven regional agencies, 47 universities, and eight major e-commerce platforms (e.g., Shopee, Tokopedia, Gojek) creates a complex ecosystem. Despite Governor Regulation No. 2 of 2020 mandating a transparent organizational structure, coordination remains a significant barrier. For instance, the Department of Industry, Trade, Cooperatives, and SMEs (PPKUKM) trained 8,279 SMEs through e-Smart programs from 2021–2023, while the Social Department trained 1,157 SMEs in 2023 with partners like Bank DKI and PT Pegadaian. However, overlapping roles—such as PPKUKM focusing on digital marketing and the Department of Food Security, Marine, and Agriculture (KPKP) supporting 19,000 SMEs in urban agriculture—lead to fragmented initiatives.³⁰ This lack of synchronization results in duplicated efforts, with SMEs receiving inconsistent support across agencies. Acting Governor Heru, on February 29, 2024, highlighted the need for proactive dialogue and communication platforms to address this issue, yet the absence of centralized coordination mechanisms persists. The complexity of aligning 376,733 SMEs with diverse needs across Jakarta's regions (e.g., 67,208 in South Jakarta, 34,717 in Central Jakarta) further exacerbates the challenge. Without streamlined coordination, resources like the IDR 18.1 trillion spent on domestic products in 2023 are not optimally utilized, delaying digital tool adoption and reducing SME competitiveness in global markets, such as at ANUGA (Germany) or Paris Fashion Week.

3.2.2. Limited Digital Literacy Among SMEs

Digital literacy is critical for SMEs to leverage platforms like e-Order and QRIS, yet it remains a significant barrier in Jakpreneur. With 243,972 SMEs participating in 2023, predominantly in culinary (167,986) and fashion (18,181) sectors, many entrepreneurs, especially those aged 40–44, lack the skills to utilize digital tools effectively.³¹ Despite PPKUKM's e-Smart training for 8,279 SMEs from 2021–2023, covering online transactions and website development, the rapid pace of technological change outstrips training coverage. For example, only 500 SMEs in East Jakarta received financial literacy training from Bank DKI in July 2023, a fraction of the 50,880 SMEs in the region. This gap limits SMEs' ability to engage with e-commerce platforms like Grab or Shopee, which

²⁸ Chris Ansell and Alison Gash., Collaborative Governance in Theory and Practice, *Journal of Public Administration Research and Theory*, Vol.18, no.4, 2008, page.556.

²⁹ Chris Ansell and Alison Gash., Collaborative Governance in Theory and Practice, *Journal of Public Administration Research and Theory*, Vol.18, no.4, 2008, page.555.

³⁰ Marjan Modara and Alex Bennet., The impact of government-private sector collaboration on innovation in a developing knowledge economy, *ICSF 2017 Kingdom of Bahrain*, Vol.25 2017, page.513.

³¹ Charles Steinfield., Conceptualizing the role of collaborative e-commerce in geographically defined business clusters, In *workshop on The Ambivalent Relationship Between IT and Social Capital*, Vrije Universiteit Amsterdam, 2002, page.243.

reported challenges scaling digital literacy programs due to limited trainers. The Head of PPKUKM, on February 27, 2024, noted that digital training enhances competitiveness, yet the scale of SMEs (e.g., 48,201 in West Jakarta) overwhelms current efforts. Low literacy also hinders SMEs' ability to meet e-Order's compliance requirements, which facilitated IDR 502 trillion in transactions in 2023. Without broader access to training, SMEs struggle to adapt to digital ecosystems, reducing their market reach and operational efficiency, critical for Jakarta's 5.13% economic growth in Q2 2023.

3.2.3. Inadequate Policy Support and Legal Frameworks

Robust legal frameworks are essential for SME digital transformation, yet inadequate policies hinder collaboration in Jakpreneur.³² Governor Regulation No. 2 of 2020 supports integrated entrepreneurship but lacks specific provisions for cybersecurity, data protection, and intellectual property rights, creating uncertainty for SMEs and partners. For instance, e-Order, mandated by Governor Instruction No. 29 of 2021, connects SMEs to government units but imposes bureaucratic compliance burdens, deterring participation despite its IDR 502 trillion turnover in 2023. The slow adaptation of regulations to technological advancements, such as AI-driven analytics used by Tokopedia, limits innovation.³³ PPKUKM's policy evaluations, as noted by its Industry Division on February 27, 2024, aim to address these gaps, but the complexity of global market regulations—evident in SMEs' participation at Fashion World Tokyo 2023—complicates compliance. With 376,733 SMEs navigating these frameworks, unclear policies discourage adoption of digital tools like QRIS, used by only a subset of the 167,986 culinary SMEs. This barrier undermines trust and collaboration, as stakeholders face legal ambiguities, stalling progress toward Indonesia's 2024 Digital Transformation Plan goals for e-commerce growth.

3.2.4. Resource Constraints

Resource limitations, including funding and infrastructure, significantly impede collaborative efforts in Jakpreneur. Despite a 2023 domestic product spending of IDR 18.1 trillion, exceeding the IDR 15.8 trillion target by 115%, budget constraints restrict training and technology access for 376,733 SMEs. For example, KPKP supported 19,000 SMEs with a turnover of IDR 122.6 billion in 2023, but scaling such initiatives across Jakarta's 243,972 SMEs is challenging due to limited funds.³⁴ E-commerce platforms like Bukalapak struggle to provide trainers for 8,279 e-Smart participants, as noted by PPKUKM on February 27, 2024. SMEs themselves face financial barriers, with only 6,023 receiving KUR loans of IDR 1.15 trillion from Bank DKI in 2022, insufficient for digital investments like website development. Infrastructure gaps, such as uneven JakWIFI coverage for 10.7 million residents, further limit SME connectivity.

³² Sherry R. Arnstein., A Ladder of Citizen Participation, *Journal of the American Institute of Planners*, Vol.35, no.4, 1969, page.27.

³³ Chris Ansell and Alison Gash., Collaborative Governance in Theory and Practice, *Journal of Public Administration Research and Theory*, Vol.18, no.4, 2008, page.554.

³⁴ Charles Steinfield., Conceptualizing the role of collaborative e-commerce in geographically defined business clusters, In *workshop on The Ambivalent Relationship Between IT and Social Capital*, Vrije Universiteit Amsterdam, 2002, page.241.

These constraints hinder collaboration, as stakeholders cannot fully support SMEs' digital needs, slowing progress toward Jakarta's 16.6% national GRDP contribution in 2022 and inclusive economic growth.

3.2.5. Cultural and Trust-Related Barriers

Cultural differences and lack of trust disrupt collaboration in Jakpreneur, as trust is vital for effective governance.³⁵ Some agencies and SMEs exhibit closed decision-making, limiting transparency, as seen in reports of manipulated turnover data by SMEs to meet program criteria (Ahza Patchwork, February 27, 2024). This undermines the trust required for partnerships with 47 universities and eight companies. For instance, only 1,157 SMEs trained by the Social Department in 2023 fully engaged due to skepticism about resource fairness. Cultural tendencies toward informal networks, prevalent among 167,986 culinary SMEs, hinder formal collaboration structures mandated by PKT. PPKUKM's efforts to foster trust through Cooperation Agreements (PKS) and Large-Scale Social Collaboration (KSBB) are challenged by these cultural barriers, as noted by its SME Empowerment Section on February 27, 2024. With 376,733 SMEs, building consistent, transparent communication remains difficult, weakening commitment and slowing digital transformation efforts critical for global competitiveness.

3.2.6. Structural and Communication Gaps

Structural and communication barriers hinder Jakpreneur's collaborative efforts. Hierarchical setups within the seven regional agencies slow decision-making, delaying support for 243,972 SMEs.³⁶ For example, KPKP's annual coordination meetings with 19,000 SMEs are insufficient to address real-time challenges. Ineffective communication platforms, despite Acting Governor Heru's call for enhanced dialogue on February 29, 2024, limit stakeholder responsiveness. Only 8,279 SMEs benefited from e-Smart training due to poor outreach, leaving 67,208 South Jakarta SMEs underserved. The lack of robust consultative forums restricts SME input, as seen in limited participation in PPKUKM's policy evaluations. These gaps reduce collaboration efficiency, impacting initiatives like e-Order's IDR 502 trillion transactions and stalling Jakarta's progress toward a 4% entrepreneurship ratio by 2045, critical for sustainable economic growth.

These hindering factors show the lack of coordination among Jakpreneur's stakeholders—seven agencies, 47 universities, and eight e-commerce platforms—stems from unclear role delineation, a challenge Ansell and Gash³⁷ identify as critical to collaborative governance failure. Unlike SiBakul Jogja, where Karunia et al.³⁸ note structured collaboration boosted SME growth, Jakpreneur's overlapping

³⁵ Chris Huxham and Siv Vangen., *Managing to collaborate: The theory and practice of collaborative advantage*, Oxfordshire, Routledge, 2013, page.75.

³⁶ Kirk Emerson, Tina Nabatchi, and Stephen Balogh., An integrative framework for collaborative governance, *Journal of public administration research and theory*, Vol.22, no.1, 2012, page.12.

³⁷ Chris Ansell and Alison Gash., Collaborative Governance in Theory and Practice, *Journal of Public Administration Research and Theory*, Vol.18, no.4, 2008, page.553.

³⁸ R. Luki Karunia, Edi Yanto, Johan Hendri Prasetyo, Erfi Muthmainah, Lely Hiswendari, Prima Setiawan, and Muhammad Aulia Putra Saragih., Digital collaboration models for empowering SMEs: Enhancing public organization performance, *Emerging Science Journal*, Vol.8, no.4, 2024, page.1495.

initiatives (e.g., PPKUKM's e-Smart vs. KPKP's programs) create inefficiencies. Modara and Bennet³⁹ argue that intra-organizational misalignment wastes resources, as seen in Jakarta's IDR 18.1 trillion spending in 2023. Yang⁴⁰ demonstrate Wuhan's success with centralized coordination during COVID-19, suggesting Jakpreneur could adopt similar platforms to align efforts. The complexity of managing 376,733 SMEs justifies the need for a unified governance structure, as decentralized efforts dilute impact.⁴¹

Furthermore, digital literacy gaps, particularly among older entrepreneurs, reflect a broader human capital deficit, as Aminullah et al.⁴² highlight in Indonesia's MSME ecosystem. Noerchoidah et al.⁴³ emphasize that digital literacy drives sustainability, yet Jakpreneur's training (8,279 SMEs via e-Smart) lags behind technological advancements, per Steinfield.⁴⁴ Central Java study, where digital collaboration enhanced ecosystems, Jakpreneur's limited trainer capacity underscores scalability issues. The justification lies in SMEs' economic role (16.6% GRDP in 2022), necessitating tiered, sector-specific training to bridge this gap, unlike the generic approaches criticized by Indriastuti and Fachrunnisa.⁴⁵

Inadequate policy support, lacking cybersecurity and data protection provisions, creates uncertainty, aligning with Batory and Svensson's⁴⁶ findings on legal frameworks' role in collaboration. Permatasari and Gunawan⁴⁷ note that Indonesia's SME policies favor large firms, leaving SMEs navigating bureaucratic burdens like e-Order's compliance. Amsler⁴⁸ argues that legal clarity fosters trust, absent in Jakpreneur, where global market compliance (e.g., Fashion World Tokyo

³⁹ Marjan Modara and Alex Bennet., The impact of government-private sector collaboration on innovation in a developing knowledge economy, *ICSF 2017 Kingdom of Bahrain*, Vol.25 2017, page.512.

⁴⁰ Ling Yang, Zhilong Zhang, Yang Song, Shenda Hong, Runsheng Xu, Yue Zhao, Wentao Zhang, Bin Cui, and Ming-Hsuan Yang., Diffusion models: A comprehensive survey of methods and applications, *ACM Computing Surveys*, Vol.56, no.4, 2023, page.13.

⁴¹ Kirk Emerson, Tina Nabatchi, and Stephen Balogh., An integrative framework for collaborative governance, *Journal of public administration research and theory*, Vol.22, no.1, 2012, page.19.

⁴² Erman Aminullah, Trina Fizzanty, Nawawi Nawawi, Joko Suryanto, Nika Pranata, Ikbil Maulana, Luthfina Ariyani., Interactive components of digital MSMEs ecosystem for inclusive digital economy in Indonesia, *Journal of the Knowledge Economy*, Vol.15, no.1, 2024, page.497.

⁴³ Noerchoidah Noerchoidah, Martha Suhardiyah, Yunia Dwie Nurcahyanie, and Aristha Purwanthari Sawitri., Optimization of Digital Literacy Knowledge Sharing and Human Capital on Digital Economy for MSMEs Business Sustainability, *International Journal of Human Capital and Information Technology Professionals (IJHCITP)*, Vol.16, no.1, 2025, page.11.

⁴⁴ Charles Steinfield., Conceptualizing the role of collaborative e-commerce in geographically defined business clusters, In *workshop on The Ambivalent Relationship Between IT and Social Capital*, Vrije Universiteit Amsterdam, 2002, page.249.

⁴⁵ Dwi Indriastuti and Olivia Fachrunnisa., A Conceptual Model to Improve SME's Digital Innovation Capability: The Role of Digital Adoption and Entrepreneurial Orientation. In *International Conference on Complex, Intelligent, and Software Intensive Systems*, page.322. Cham: Springer Nature Switzerland, 2024.

⁴⁶ Agnes Batory and Sara Svensson., Regulating collaboration: The legal framework of collaborative governance in ten European countries, *International Journal of Public Administration*, Vol.43, no.9, 2020, page.787.

⁴⁷ Paulina Permatasari and Juniati Gunawan., Sustainability policies for small medium enterprises: Who are the actors?, *Cleaner and Responsible Consumption*, Vol.9, no.3, 2023. Page.100122.

⁴⁸ Lisa Blomgren Amsler., Collaborative governance: Integrating management, politics, and law, *Public Administration Review*, Vol.76, no.5, 2016, page.700.

2023) is hindered. Compared to Smallbone and Welter's⁴⁹ transition economies, where governments shaped SME environments, Jakarta's slow regulatory adaptation justifies urgent policy reform to support digital innovation.

Resource constraints, including limited funding and uneven JakWIFI coverage, mirror Reniati⁵⁰ findings on post-COVID SME challenges. Zulu-Chisanga⁵¹ suggest inter-firm collaboration mitigates scarcity, yet Jakpreneur's e-commerce platforms lack trainers, per Steinfield.⁵² Unlike SiBakul Jogja's public-private partnerships, Jakpreneur's resource pooling is weak, justifying the need for cooperative models like innovation consortia.⁵³ The economic stakes—Jakarta's 5.13% growth in Q2 2023—underscore the urgency of scaling infrastructure and financing, as Baah et al.⁵⁴ propose for supply chain collaboration.

Trust deficits and cultural barriers, such as informal networks among culinary SMEs, disrupt collaboration, as Huxham and Vangen note.⁵⁵ Arnstein's⁵⁶ participation ladder highlights how closed decision-making erodes trust, evident in Jakpreneur's manipulated turnover data. Rismawan⁵⁷ suggest community-driven communication, unlike Jakpreneur's formal PKS structures, which alienate SMEs. Gonçalves et al.⁵⁸ show that cluster governance builds trust through transparency, justifying stakeholder forums for Jakpreneur, unlike the skepticism noted by

⁴⁹ David Smallbone and Friederike Welter., The role of government in SME development in transition economies, *International small business journal*, Vol.19, no.4, 2001, page.69.

⁵⁰ Reniati Reniati, Badrun Susantyo, Nyi R. Irmayani, Fadillah Sabri, and Widiastuti Widiastuti., The influence of leadership strategies and social capital on the business performance and resilience of Indonesian MSMEs, *Journal of the Knowledge Economy*, Vol.3, no3, 2024, page.22.

⁵¹ Stella Zulu-Chisanga, Mwansa Chabala, and Bernadette Mandawa-Bray., The differential effects of government support, inter-firm collaboration and firm resources on SME performance in a developing economy, *Journal of Entrepreneurship in Emerging Economies*, Vol.13, no.2, 2021, page.191.

⁵² Charles Steinfield., Conceptualizing the role of collaborative e-commerce in geographically defined business clusters, In *workshop on The Ambivalent Relationship Between IT and Social Capital*, Vrije Universiteit Amsterdam, 2002, page.248.

⁵³ Cristiano Antonelli and Albert N. Link, eds., *Assessing Technology and Innovation Policies*, Oxfordshire, Routledge, 2020, page.134. See too, R. Luki Karunia, Edi Yanto, Johan Hendri Prasetyo, Erfi Muthmainah, Lely Hiswendari, Prima Setiawan, and Muhammad Aulia Putra Saragih., Digital collaboration models for empowering SMEs: Enhancing public organization performance, *Emerging Science Journal*, Vol.8, no.4, 2024, page.1494.

⁵⁴ Charles Baah, Douglas Opoku Agyeman, Innocent Senyo Kwasi Acquah, Yaw Agyabeng-Mensah, Ebenezer Afum, Kassimu Issau, Daniel Ofori, and Daniel Faibil., Effect of information sharing in supply chains: understanding the roles of supply chain visibility, agility, collaboration on supply chain performance, *Benchmarking: An International Journal*, Vol.29, no.2, 2022, page.451.

⁵⁵ Chris Huxham and Siv Vangen., *Managing to collaborate: The theory and practice of collaborative advantage*, Oxfordshire, Routledge, 2013, page.74.

⁵⁶ Sherry R. Arnstein., A Ladder of Citizen Participation, *Journal of the American Institute of Planners*, Vol.35, no.4, 1969, page.24.

⁵⁷ Deni Aris Rismawan, Yanto Sugiarto, Sri Hermawati, and Susi Susanti., Collaborative Governance to Increase the Absorption of Alumni of Job Training Participants into Industrial World, *Devotion: Journal of Research and Community Service*, Vol.5, no.9, 2024, page.11117.

⁵⁸ Luciana Castro Gonçalves, Anne Berthinier-Poncet, and Liliana Mitkova., Cluster governance in dynamising collaborative innovation in SMEs, *International Journal of Entrepreneurship and Innovation Management*, Vol.28, no.2, 2024, page.74.

Pundziene and Geryba⁵⁹ in born-digital SMEs.

Communication gaps, driven by hierarchical structures, align with Emerson et al.⁶⁰ critique of rigid governance. Westman et al.⁶¹ governance divide concept explains Jakpreneur's poor outreach (e.g., 67,208 underserved SMEs in South Jakarta). Scott and Thomas⁶² advocate dynamic tools like digital dashboards, contrasting with Jakpreneur's ineffective meetings. Caloffi et al.⁶³ highlight intermediaries' role, underutilized in Jakpreneur, justifying university-led platforms to enhance responsiveness. Portuguese-Castro's⁶⁴ open innovation model suggests co-creation forums to bridge gaps. These barriers persist due to systemic misalignments, resource scarcity, and cultural inertia, but their resolution is critical for Jakarta's digital transformation goals. A Pentahelix-based governance model, integrating centralized coordination, scalable training, clear policies, pooled resources, trust-building forums, and dynamic communication, could address these challenges, enhancing SME competitiveness and economic resilience.

3.3. Proposed Collaborative Governance Model for SME Digital Transformation

Collaborative Governance in the transformation of digital technology within the MSME sector provides a solid basis for understanding the dynamics of collaboration between government, the private sector, and society in supporting MSME development in the digital era. The model that emerges from this analysis forms the core understanding of the digital transformation process among MSMEs. The model aims to highlight a framework that guides the interaction and engagement of various stakeholders in creating a conducive environment for MSMEs to grow in the digital era. By understanding this model, it becomes possible to identify roles, responsibilities, and relationships between stakeholders in helping MSMEs adapt to technological change. Through this model, key factors that influence the effectiveness of collaboration between government, the private sector, and society in addressing digital transformation can be identified. This, in turn, assists in formulating more effective strategies and policies to strengthen the MSME ecosystem in the digital era.

Collaborative Governance is a form of governance structure where public agencies interact with non-state actor groups in a formal, consensus-oriented, and

⁵⁹ Asta Pundziene and Lukas Geryba., Managing technological innovation: dynamic capabilities, collaborative innovation, and born-digital SMEs' performance, *IEEE Transactions on Engineering Management*, Vol.71, no.3, 2023, page.6967.

⁶⁰ Kirk Emerson, Tina Nabatchi, and Stephen Balogh., An integrative framework for collaborative governance, *Journal of public administration research and theory*, Vol.22, no.1, 2012, page.19.

⁶¹ Linda Westman, Ericha Moores, and Sarah Lynn Burch., Bridging the governance divide: The role of SMEs in urban sustainability interventions, *Cities*, Vol.108, no.3, 2021, page.102944.

⁶² Tyler A. Scott, and Craig W. Thomas., Unpacking the collaborative toolbox: Why and when do public managers choose collaborative governance strategies?, *Policy studies journal*, Vol.45, no.1, 2017, page.213.

⁶³ Annalisa Caloffi, Federica Rossi, and Margherita Russo., What makes SMEs more likely to collaborate? Analysing the role of regional innovation policy, *European Planning Studies*, Vol.23, no.7, 2015, page.1245.

⁶⁴ May Portuguese-Castro., Exploring the potential of open innovation for co-creation in entrepreneurship: a systematic literature review, *Administrative Sciences*, Vol.13, no.,9, 2023, page.194.

deliberative decision-making process to formulate or implement policies and manage programs or assets. This definition guides the understanding of Collaborative Governance as a process and structure that involves various stakeholders from the public, private, and civil society sectors at different levels of government.⁶⁵ The aim of this collaboration is to achieve public goals that a single entity cannot effectively realize on its own. Collaborative Governance emphasizes voluntary cooperation and horizontal relationships between sectors.⁶⁶ As societal demands frequently surpass the capacity of a single public organization, interaction and collaboration across organizations become essential to respond to cross-sector and organizational boundary issues.

Collaboration in Collaborative Governance comprises eight key aspects that serve as indicators of success: network structure, commitment to shared goals, trust amongst participants, effective governance, access to power, division of responsibilities, information sharing, and access to resources. All stakeholders must have roles, responsibilities, and equal rights in pursuing shared goals. Ansell and Gash⁶⁷ further explain distinctions between partnerships, networks, and collaboration. Partnerships typically focus on coordination, networks center on informal cooperation, while collaboration is more formal and consensus-oriented in collective decision making.

In the era of globalization and technological progress, cross-sector collaboration becomes key to accelerating innovation and development. The PentaHelix model illustrates the integration of five main sectors within the innovation ecosystem: government, industry, academia, society, and media. The model emphasizes the importance of dynamic interaction between these sectors to create conditions conducive to innovation. The government plays a role as regulator; industry produces innovative products and services; academia provides expertise and research; society offers input and feedback; and media disseminates information and raises awareness about innovation. Cross-sector collaboration within the PentaHelix model enables stakeholders to complement and reinforce each other's roles, creating a more inclusive, responsive, and sustainable ecosystem.

Managing cross-sector collaboration, however, comes with challenges, including different interests, goals, and structural and cultural barriers. Understanding and applying the PentaHelix model can provide a strong basis for designing sustainable innovation strategies and developing more effective solutions to face globalization's challenges. Further exploration will focus on the underlying concepts of the PentaHelix model, the roles of each sector, the obstacles encountered, and strategies to optimize cross-sector collaboration in achieving innovation and sustainable development goals.

As an empirical basis for the development of the model, in an era where digital transformation increasingly dominates various aspects of life, Micro, Small, and Medium Enterprises (UMKM) are not exempt from its impact. Collaboration

⁶⁵ Kirk Emerson, Tina Nabatchi, and Stephen Balogh., An integrative framework for collaborative governance, *Journal of public administration research and theory*, Vol.22, no.1, 2012, page.16.

⁶⁶ Michael McGuire, Robert Agranoff, and Chris Silvia., Collaborative public administration, *The Foundations of Public Administration Series*, Vol.61, no.6, 2010, page.674.

⁶⁷ Chris Ansell and Alison Gash., Collaborative Governance in Theory and Practice, *Journal of Public Administration Research and Theory*, Vol.18, no.4, 2008, page.551.

between the government, the private sector, and society becomes key to ensuring the success of digital transformation in the MSME sector. In this context, the empirical basis for collaborative governance in the digital transformation of MSMEs is very important to learn and understand. Through this approach, various parties can collaborate to overcome challenges and take advantage of opportunities arising in the digital era.

The first element is the initial conditions. The identification of the strengths, resources, and advantages of each party is a key first step in collaboration. The Provincial Government of Jakarta, supported by seven regional apparatus organizations and a total of 372,540 Jakpreneurs with a turnover of 502 trillion, has great potential in this context. E-commerce companies bring a technology ecosystem that supports MSME transactions and strong human resources to help improve digital literacy through various training initiatives.⁶⁸ The collaboration conditions between the regional government and collaborators in supporting MSMEs, especially in the digital field, are quite significant. This collaboration has a positive impact on the development of MSMEs in Jakarta, reflecting the importance of strong working relationships within and between organizations.⁶⁹ Furthermore, the coordination between regional apparatus organizations related to Jakpreneur, in conformity with the Governor's Regulation on Integrated Entrepreneur Development (PKT), includes a transparent organizational structure and a strong commitment to cooperation.

This initial conditions of Jakpreneur, with 372,540 MSMEs, a total turnover of IDR 502 trillion, and partnerships with e-commerce platforms, match Ansell and Gash's⁷⁰ view that resources are a key starting point for collaboration. But in practice, overlapping roles between seven agencies make coordination difficult, as Modara and Bennet⁷¹ also observe in multi-organization settings. Steinfield⁷² highlights the role of e-commerce in improving digital skills, but training is not evenly distributed in Jakarta. Compared to Rismawan⁷³ study in Yogyakarta, Jakpreneur needs stronger ties between organizations, as McGuire et al.⁷⁴ suggest, to make sure resources are used more effectively in developing Indonesia's digital ecosystem.

⁶⁸ Charles Steinfield., Conceptualizing the role of collaborative e-commerce in geographically defined business clusters, In *workshop on The Ambivalent Relationship Between IT and Social Capital*, Vrije Universiteit Amsterdam, 2002, page.247.

⁶⁹ Marjan Modara and Alex Bennet., The impact of government-private sector collaboration on innovation in a developing knowledge economy, *ICSF 2017 Kingdom of Bahrain*, Vol.25 2017, page.519.

⁷⁰ Chris Ansell and Alison Gash., Collaborative Governance in Theory and Practice, *Journal of Public Administration Research and Theory*, Vol.18, no.4, 2008, page.556.

⁷¹ Marjan Modara and Alex Bennet., The impact of government-private sector collaboration on innovation in a developing knowledge economy, *ICSF 2017 Kingdom of Bahrain*, Vol.25 2017, page.515.

⁷² Charles Steinfield., Conceptualizing the role of collaborative e-commerce in geographically defined business clusters, In *workshop on The Ambivalent Relationship Between IT and Social Capital*, Vrije Universiteit Amsterdam, 2002, page.244.

⁷³ Deni Aris Rismawan, Yanto Sugiarto, Sri Hermawati, and Susi Susanti., Collaborative Governance to Increase the Absorption of Alumni of Job Training Participants into Industrial World, *Devotion: Journal of Research and Community Service*, Vol.5, no.9, 2024, page.1111.

⁷⁴ Michael McGuire, Robert Agranoff, and Chris Silvia., Collaborative public administration, *The Foundations of Public Administration Series*, Vol.61, no.6, 2010, page.677.

The second element is institutional design. Digital collaboration in developing MSMEs is driven by a shared objective, with the regional government acting as a connector. All parties move in the same direction with a unified strategic plan to achieve their goals. The legal framework that supports MSME development and the use of information technology plays a key role in this transformation, founded on principles of transparency and a shared mission and vision. Furthermore, transparency in the implementation process of collaboration is crucial to ensuring all involved parties can adequately follow and contribute to the process.

The institutional framework of Jakpreneur, based on Governor's Regulations, aims to create openness and shared goals, which is what Emerson et al.⁷⁵ say is key to strong collaboration. But Batory and Svensson⁷⁶ explain that legal structures often lag behind digital needs. Jakpreneur's regulations on cybersecurity are weak, although its overall framework is more adaptable than rigid structures described by Amsler.⁷⁷ The 16.6% contribution of MSMEs to Jakarta's GRDP shows how much a flexible legal framework is needed. Permatasari and Gunawan⁷⁸ suggest adding adaptable policies to help platforms like e-Order grow and align stakeholders' goals more effectively.

The third element is facilitative leadership. Commitment and initiatives from leaders are very important to this process, reflecting the necessity of facilitative leadership to drive collaboration forward. Furthermore, efforts to resolve problems and obstacles promptly help to maintain smooth collaboration among all stakeholders. A strong institutional structure that supports collaboration between divisions within the Provincial Government of Jakarta is required to provide perfect service for MSME development and collaboration with other stakeholders. This shows that effective leadership is another key to collaboration. Jakpreneur's leaders resolve problems and keep stakeholders committed, as Scott and Thomas say.⁷⁹ However, a rigid administrative structure makes decision-making slow, in contrast to the more flexible Wuhan model.⁸⁰ Reniati et al.⁸¹ highlight leadership's role in helping MSMEs recover after COVID-19, but Jakpreneur needs to empower

⁷⁵ Kirk Emerson, Tina Nabatchi, and Stephen Balogh., An integrative framework for collaborative governance, *Journal of public administration research and theory*, Vol.22, no.1, 2012, page.13.

⁷⁶ Agnes Batory and Sara Svensson., Regulating collaboration: The legal framework of collaborative governance in ten European countries, *International Journal of Public Administration*, Vol.43, no.9, 2020, page.786.

⁷⁷ Lisa Blomgren Amsler., Collaborative governance: Integrating management, politics, and law, *Public Administration Review*, Vol.76, no.5, 2016, page.705.

⁷⁸ Paulina Permatasari and Juniati Gunawan., Sustainability policies for small medium enterprises: WHO are the actors?, *Cleaner and Responsible Consumption*, Vol.9, no.3, 2023. Page.100125.

⁷⁹ Tyler A. Scott, and Craig W. Thomas., Unpacking the collaborative toolbox: Why and when do public managers choose collaborative governance strategies?, *Policy studies journal*, Vol.45, no.1, 2017, page.219.

⁸⁰ Ling Yang, Zhilong Zhang, Yang Song, Shenda Hong, Runsheng Xu, Yue Zhao, Wentao Zhang, Bin Cui, and Ming-Hsuan Yang., Diffusion models: A comprehensive survey of methods and applications, *ACM Computing Surveys*, Vol.56, no.4, 2023, page.16.

⁸¹ Reniati Reniati, Badrun Susantyo, Nyi R. Irmayani, Fadillah Sabri, and Widiastuti Widiastuti., The influence of leadership strategies and social capital on the business performance and resilience of Indonesian MSMEs, *Journal of the Knowledge Economy*, Vol.3, no3, 2024, page.21.

its leaders at different levels. Gonçalves⁸² show that a clusters' approach, supported by universities, can help connect stakeholders and improve collaboration.

The fourth element is the collaborative process. Trust among collaboration participants is a key element in creating a workplace that is trusting and supportive. The ability to view problems from a broad perspective is crucial in making appropriate decisions, while a deep understanding of the issues faced and the values underlying collaborative relationships strengthens the collaboration. Furthermore, efforts to build a strong commitment amongst participants are decisive in achieving success. Finally, identifying and addressing inhibiting factors is very important to ensuring the continuity of effective and sustainable collaboration.

Collaborative processes in Jakpreneur aim to build trust and shared decision-making, in line with Huxham and Vangen's view.⁸³ But many MSMEs operate informally and find it hard to trust a formal framework, a challenge that Arnstein highlights.⁸⁴ Rismawan et al.⁸⁵ suggest that community communication, not just formal PKS agreements, can help stakeholders connect and resolve disputes. Baah et al.⁸⁶ view on supply chain collaboration highlights the need for strong information sharing. Portuguese-Castro⁸⁷ show the Pentahelix approach lets many stakeholders innovate together. Tackling these cultural barriers, as Noerchoidah et al.⁸⁸ propose, is key to strengthening collaboration.

The Jakpreneur ecosystem shows a strong framework for MSME digital transformation. It is supported by collaborative governance and the Pentahelix model, which focuses on initial conditions, institutional design, leadership, and collaborative processes. These findings highlight the roles of different stakeholders and how they work together. However, there are still some obstacles in making this collaboration more effective. Overall, obstacles to collaboration — weak coordination, rigid policies, slow leadership, and poor trust — come from a complex

⁸² Luciana Castro Gonçalves, Anne Berthinier-Poncet, and Liliana Mitkova., Cluster governance in dynamising collaborative innovation in SMEs, *International Journal of Entrepreneurship and Innovation Management*, Vol.28, no.2, 2024, page.72.

⁸³ Chris Huxham and Siv Vangen., *Managing to collaborate: The theory and practice of collaborative advantage*, Oxfordshire, Routledge, 2013, page.71.

⁸⁴ A Ladder of Citizen Participation, *Journal of the American Institute of Planners*, Vol.35, no.4, 1969, page.21.

⁸⁵ Deni Aris Rismawan, Yanto Sugiarto, Sri Hermawati, and Susi Susanti., Collaborative Governance to Increase the Absorption of Alumni of Job Training Participants into Industrial World, *Devotion: Journal of Research and Community Service*, Vol.5, no.9, 2024, page.1110.

⁸⁶ Baah et al., Effect of information sharing in supply chains: understanding the roles of supply chain visibility, agility, collaboration on supply chain performance, *Benchmarking: An International Journal*, Vol.29, no.2, 2022, page.459.

⁸⁷ May Portuguese-Castro., Exploring the potential of open innovation for co-creation in entrepreneurship: a systematic literature review, *Administrative Sciences*, Vol.13, no.,9, 2023, page.199.

⁸⁸ Noerchoidah et al., Optimization of Digital Literacy Knowledge Sharing and Human Capital on Digital Economy for MSMEs Business Sustainability, *International Journal of Human Capital and Information Technology Professionals (IJHCITP)*, Vol.16, no.1, 2025, page.13.

context and limited resources, as Zulu-Chisanga explain.⁸⁹ Nonetheless, solving these problems is worth the effort because MSMEs are very important for the future of Jakarta's digital transformation and competitiveness. A revamped Pentahelix model, with adaptable governance, scalable training, flexible leadership, and strong platforms for collaboration, can help Jakpreneur grow into a more powerful ecosystem for MSMEs. These collaborative efforts lay a strong foundation for a more integrated and effective partnership model (Figure 1).

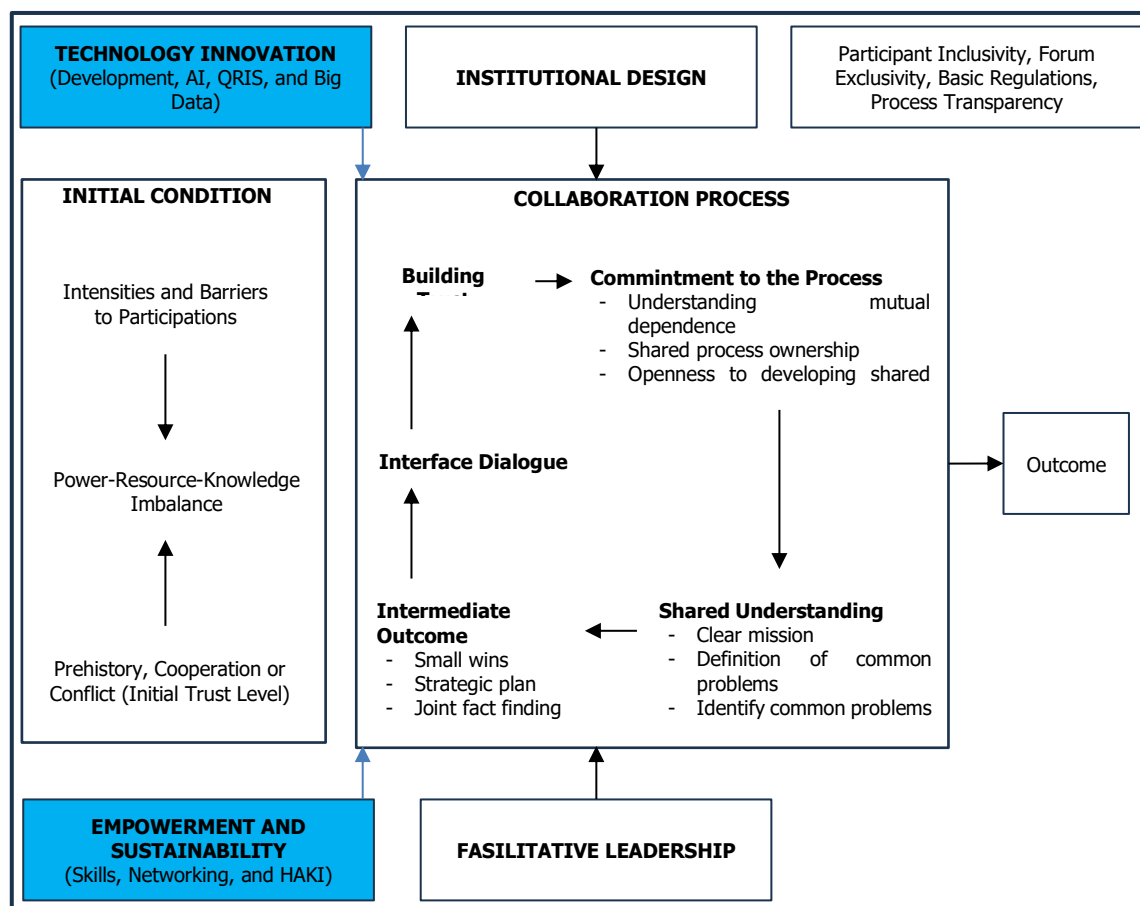


Figure 1. Integrated Partnership Model for MSME Digital Transformation

The Integrated Digital Transformation Partnership Model for MSMEs combines Collaborative Governance theory and the Pentahelix approach, aiming to unite the public sector, private sector, academia, civil society, and media in driving the digital transformation of MSMEs. At the initial stage, it is important to identify the resources and advantages that each party brings, such as the Provincial Government of Jakarta with the support of seven regional agencies organizing Jakpreneur and e-commerce companies that provide a technology ecosystem to facilitate MSME transactions and digital literacy. The collaboration between the regional government and collaborators in the digital sector positively impacts the

⁸⁹ Zulu-Chisanga., The differential effects of government support, inter-firm collaboration and firm resources on SME performance in a developing economy, *Journal of Entrepreneurship in Emerging Economies*, Vol.13, no.2, 2021, page.193.

development of MSMEs in Jakarta, where working relationships within and between organizations become key factors in strengthening and fostering collaboration.

Effective coordination among related agencies in developing Jakpreneur, in conformity with the Governor's Regulation on Integrated Entrepreneur Development (PKT), includes a transparent organizational structure and a strong commitment to cooperation. In institutional design, digital collaboration is implemented with a shared purpose in mind, allowing all parties to benefit from the collaboration, supported by legal regulations that promote MSME development and digital transformation based on principles of transparency and a unified mission and vision. Transparency in the implementation process is key to ensuring all stakeholders can follow and contribute effectively.

Committed leadership and initiatives are crucial to achieving shared goals, while addressing and preventing potential issues promptly. An institutional structure that supports collaboration across internal divisions within the Provincial Government of Jakarta is important for developing MSMEs and strengthening collaboration with stakeholders, while building trust amongst participants is essential to creating a trusting workplace environment. The ability to view problems from a broad perspective is important in decision-making, and securing the commitment of all participants is a decisive factor in success. Furthermore, identifying and addressing inhibiting factors is essential to ensuring sustained collaboration.

In implementing the model, innovation in products and technology plays a key role in improving MSMEs' competitiveness, while community empowerment aims to foster independence and improve their quality of life through enhanced digital skills and participation in the digital economy. Integrating environmental, social, and economic aspects into the development strategy helps to maximize and sustain its positive impact.

4. Conclusion

This study reveals that Collaborative Governance in organizing Integrated Entrepreneur Development in DKI Jakarta Province is not yet optimal. Some significant weaknesses were identified in the collaboration between the Provincial Government of DKI Jakarta and e-commerce companies in supporting MSMEs. Although the Jakpreneur program has 372,540 participants and a turnover of 502 trillion rupiah, it has not fully leveraged available technology and human resources. Coordination between regional agencies is often disrupted by an inflexible bureaucracy. Leadership, which should be facilitative, frequently fails to foster effective collaboration, causing many digital initiatives to fall short of their goals. The lack of leadership commitment and weak problem-solving mechanisms often undermine collaboration from within. Furthermore, the institutional structure, which is less supportive, frequently inhibits efforts to build trust among collaboration participants, thereby reducing the program's effectiveness and sustainability.

The main obstacles identified in this study include limited technology access and infrastructure, low digital literacy and skills, and a lack of supportive policies and regulations. These factors contribute to low productivity, competitiveness, and the rate of digitalization among MSMEs. Furthermore, limited resources, challenging

business environments, and weak government participation and support also affect the process of MSMEs' digital transformation. Cross-sector and institutional efforts, alongside strong support from various stakeholders, are required to address these challenges and enhance MSMEs' economic independence through sustainable digital transformation.

The Integrated Digital Transformation Partnership Model for MSMEs is a concept that combines Collaborative Governance theory and the Pentahelix approach. The model aims to unite resources from the public sector, private sector, academia, civil society, and media to drive the digital transformation of MSMEs. With a focus on inclusive governance, this model establishes an ecosystem that supports MSMEs' growth in the digital era. The model emphasizes coordinated and effective cross-sector collaboration and comprises four main dimensions: Collaborative Efforts, Tackling Challenges, Strengthening Trust, and Innovation and Technology. The model also integrates the dimensions of Technological Innovation and Sustainable Empowerment, adding an advantage over the Ansell & Gash model. The limitation of time during the model's formulation could be further addressed in future research.

It is recommended that the Provincial Government of DKI Jakarta strengthen the role of the information technology sector in digital transformation by revising Governor Regulation Number 2 of 2020 on Integrated Entrepreneur Development. The Communication, Informatics, and Statistics Agency and the Provincial Department of Education should be added as responsible regional agencies to support technology, communication, and the development of new enterprises in Jakarta, including for junior high and high school students. Furthermore, the establishment of a Collaborative Forum involving all stakeholders is strongly recommended to design strategies together and to enable active participation in decision-making and program implementation.

Considering the limitations of this study, which focuses on a single locus and utilizes qualitative methods, future researchers are recommended to conduct research in different locations and with different methods to further develop the model by integrating Collaborative Governance theory, which emphasizes cross-sector collaboration, and Pentahelix theory, which highlights the roles of the main sectors in supporting MSMEs' digital transformation. Further exploration of the factors affecting the adoption of digital technology by MSMEs and strategies to facilitate successful adoption can provide greater understanding and guidance for stakeholders in supporting MSMEs' digital transformation.

5. References

Books:

- Antonelli, Cristiano, and Albert N. Link, eds. *Assessing Technology and Innovation Policies*. Oxfordshire, Routledge, 2020, page.134;
- Huxham, Chris, and Siv Vangen., *Managing to collaborate: The theory and practice of collaborative advantage*. Oxfordshire, Routledge, 2013;
- Miles, Matthew B., dan A. Michael Huberman., *Qualitative Data Analysis*, Jakarta, UI Press, 2007, page.174;

Weick, Karl E., *The Social Psychology of Organizing*. 2nd ed, New York, McGraw-Hill, 1979, page.100;

Conference:

Indriastuti, Dwi, and Olivia Fachrunnisa., A Conceptual Model to Improve SME's Digital Innovation Capability: The Role of Digital Adoption and Entrepreneurial Orientation. In *International Conference on Complex, Intelligent, and Software Intensive Systems*, page.324. Cham: Springer Nature Switzerland, 2024;

Workshop:

Steinfeld, Charles., Conceptualizing the role of collaborative e-commerce in geographically defined business clusters, In *workshop on The Ambivalent Relationship Between IT and Social Capital*, Vrije Universiteit Amsterdam. 2002;

Journal:

Aminullah, Erman, Trina Fizzanty, Nawawi Nawawi, Joko Suryanto, Nika Pranata, Ikbai Maulana, Luthfina Ariyani, et al., Interactive Components of Digital MSMEs Ecosystem for Inclusive Digital Economy in Indonesia, *Journal of the Knowledge Economy*, Vol.15, no.1, 2024, <https://doi.org/10.1007/s13132-022-01086-8>;

Amsler, Lisa Blomgren., Collaborative governance: Integrating management, politics, and law, *Public Administration Review*, Vol.76, no.5, 2016, <https://doi.org/10.1111/puar.12605>;

Ansell, Chris, dan Alison Gash., Collaborative Governance in Theory and Practice, *Journal of Public Administration Research and Theory*, Vol.18, no.4, 2008, <https://doi.org/10.1093/jopart/mum032>;

Arnstein, Sherry R., A Ladder of Citizen Participation, *Journal of the American Institute of Planners*, Vol.35, no.4, 1969, <https://doi.org/10.1080/01944366908977225>;

Baah, Charles, Douglas Opoku Agyeman, Innocent Senyo Kwasi Acquah, Yaw Agyabeng-Mensah, Ebenezer Afum, Kassimu Issau, Daniel Ofori, and Daniel Faibil., Effect of information sharing in supply chains: understanding the roles of supply chain visibility, agility, collaboration on supply chain performance, *Benchmarking: An International Journal*, Vol.29, no.2, 2022, <https://doi.org/10.1108/BIJ-08-2020-0453>;

Batory, Agnes, dan Sara Svensson., Regulating Collaboration: The Legal Framework of Collaborative Governance in Ten European Countries, *International Journal of Public Administration*, Vol.43, no.9, 2020, <https://doi.org/10.1080/01900692.2019.1658771>;

Caloffi, Annalisa, Federica Rossi, and Margherita Russo., What makes SMEs more likely to collaborate? Analysing the role of regional innovation policy, *European Planning Studies*, Vol.23, no.7, 2015,

<https://doi.org/10.1080/09654313.2014.919250>;

- Cholsy, Hayatul, Aprillia Firmonasari, dan Wening Udasmoro., Pendampingan UKM Bidang Fashion pada Masa Pandemi Covid-19 di Daerah Istimewa Yogyakarta, *Bakti Budaya*, Vol.3, no.2, 2020;
- Clinton, Yeos Austin, and Afrianti Elsy Vanomy., Pengembangan UMKM Kuliner di Kota Batam Melalui Transformasi ke Platform Digital di Era Revolusi, *Jurnal Intelektualita: Keislaman, Sosial dan Sains*, Vol.3, no.1, 2023;
- Emerson, Kirk, Tina Nabatchi, dan Stephen Balogh., An Integrative Framework for Collaborative Governance, *Journal of Public Administration Research and Theory*, Vol.22, no.1, 2012, <https://doi.org/10.1093/jopart/mur011>;
- Gonçalves, Luciana Castro, Anne Berthinier-Poncet, dan Liliana Mitkova., Cluster Governance in Dynamising Collaborative Innovation in SMEs, *International Journal of Entrepreneurship and Innovation Management*, Vol.28, no.2, 2024, <https://doi.org/10.1504/IJEIM.2024.140367>;
- Gonibala, Nirfandi, Vecky A. J. Masinambow, dan Mauna Th. B. Maramis., Analisis Pengaruh Modal dan Biaya Produksi terhadap Pendapatan UMKM di Kota Kotamobagu, *Jurnal Berkala Ilmiah Efisiensi*, Vol.19, no.01, 2019;
- Guimarães, Luciana Gondim de Almeida, Pierre Blanchet, and Yan Cimon., Collaboration among small and medium-sized enterprises as part of internationalization: A systematic review, *Administrative Sciences*, Vol.11, no.4, 2021, <https://doi.org/10.3390/admsci11040153>;
- Ichsan, Reza Nurul, Ali Mukti Tanjung, dan Venny Fraya Hartin Nst., Pemanfaatan Website Online Single Submission (OSS) dalam Kegiatan Usaha Mikro Kecil Menengah di Kota Medan Berbasis Maqashid Syariah, *Jurnal PKM Hablum Minannas*, Vol.2, no.2, 2023, <https://doi.org/10.47652/jhm.v2i2.444>;
- Indra, Vojtěch, Markéta Horáková, dan P. Horák., Collaboration, Participation, and Innovation: Influencing Factors of Co-Creation in a Czech Municipality, *International Journal of Public Administration*, Vol.20, no.2, 2024, <https://doi.org/10.1080/01900692.2024.2428384>;
- Karunia, R. Luki, Edi Yanto, Johan Hendri Prasetyo, Erfi Muthmainah, Lely Hiswendari, Prima Setiawan, dan Muhammad Aulia Putra Saragih., Digital Collaboration Models for Empowering SMEs: Enhancing Public Organization Performance, *Emerging Science Journal*, Vol.8, no.4, 2024;
- McGuire, Michael, Robert Agranoff, and Chris Silvia., Collaborative public administration, *The Foundations of Public Administration Series*, Vol.61, no.6, 2010, <https://doi.org/10.4324/9781315134215>;
- Modara, Marjan, and Alex Bennet., The impact of government-private sector collaboration on innovation in a developing knowledge economy, *ICSF 2017 Kingdom of Bahrain*, Vol.25 2017, page.513;
- Mujianto, Mujianto, Hartoyo Hartoyo, Rita Nurmalina, dan Eva Z. Yusuf., The Unraveling Loyalty Model of Traditional Retail to Suppliers for Business Sustainability in the Digital Transformation Era: Insight from MSMEs in Indonesia, *Sustainability*, Vol.15, no.3, 2023, <https://doi.org/10.3390/su15032827>;

- Noerchoidah, Noerchoidah, Martha Suhardiyah, Yunia Dwie Nurcahyanie, dan Aristha Purwanthari Sawitri., Optimization of Digital Literacy Knowledge Sharing and Human Capital on Digital Economy for MSMEs Business Sustainability, *International Journal of Human Capital and Information Technology Professionals*, Vol.16, no.1, 2025;
- Oki Sulistiyo, and A. H. Rahadian., Implementasi Kebijakan E-Order pada Transaksi Pengadaan Langsung dengan UMKM di Provinsi DKI Jakarta, *Jurnal Ilmu Administrasi Publik* Vol.2, no.4, 2021;
- Permatasari, Paulina, dan Juniati Gunawan., Sustainability Policies for Small Medium Enterprises: WHO Are the Actors?, *Cleaner and Responsible Consumption*, Vol.9, no.3, 2023, <https://doi.org/10.1016/j.clrc.2023.100122>;
- Polandos, Prisilia Monika, Daisy S. M. Engka, dan Krest D. Tolosang, Analisis Pengaruh Modal, Lama Usaha, dan Jumlah Tenaga Kerja terhadap Pendapatan Usaha Mikro Kecil dan Menengah di Kecamatan Langowan Timur, *Jurnal Berkala Ilmiah Efisiensi*, Vol.19, no.04, 2019;
- Portuguez-Castro, May., Exploring the Potential of Open Innovation for Co-Creation in Entrepreneurship: A Systematic Literature Review, *Administrative Sciences*, Vol.13, no.9, 2023, <https://doi.org/10.3390/admsci13090198>;
- Pundziene, Asta, dan Lukas Geryba., Managing Technological Innovation: Dynamic Capabilities, Collaborative Innovation, and Born-Digital SMEs' Performance, *IEEE Transactions on Engineering Management*, Vol.71, no.3, 2023, <https://doi.org/10.1109/TEM.2023.3281722>;
- Reniaty, Reniaty, Badrun Susantyo, Nyi R. Irmayani, Fadillah Sabri, dan Widiastuti Widiastuti., The Influence of Leadership Strategies and Social Capital on the Business Performance and Resilience of Indonesian MSMEs, *Journal of the Knowledge Economy*, Vol.3, no.3, 2024, <https://doi.org/10.1007/s13132-024-02254-8>;
- Rismawan, Deni Aris, Yanto Sugiarto, Sri Hermawati, dan Susi Susanti., Collaborative Governance to Increase the Absorption of Alumni of Job Training Participants into Industrial World, *Devotion: Journal of Research and Community Service*, Vol.5, no.9, 2024;
- Safitri, Asrol, Rika Lidyah, Titin Hartini, dan Muhammadinah Muhammadinah., Peran Percepatan Transformasi Digital untuk Keberlanjutan Bisnis dan Pemulihan Ekonomi Pelaku UMKM di Kota Palembang Pascapandemi, *Jurnal Intelektualita: Keislaman, Sosial dan Sains*, Vol.11, no.2, 2022;
- Scott, Tyler A., and Craig W. Thomas., Unpacking the collaborative toolbox: Why and when do public managers choose collaborative governance strategies?, *Policy studies journal*, Vol.45, no.1, 2017, <https://doi.org/10.1111/psj.12162>;
- Smallbone, David, dan Friederike Welter., The Role of Government in SME Development in Transition Economies, *International Small Business Journal*, Vol.19, no.4, 2001, <https://doi.org/10.1177/0266242601194004>;
- Turisno, Bambang Eko, Ery Agus Priyono, and Yunanto Yunanto., Strengthening

Corporate Governance Through Legal Compliance and Ethical Codes of Conduct, *Jurnal Hukum*, Vol.40, no.2, 2024, <http://dx.doi.org/10.26532/jh.v40i2.40198>;

Westman, Linda, Ericha Moores, and Sarah Lynn Burch., Bridging the governance divide: The role of SMEs in urban sustainability interventions, *Cities*, Vol.108, no.3, 2021, <https://doi.org/10.1016/j.cities.2020.102944>;

Yang, Ling, Zhilong Zhang, Yang Song, Shenda Hong, Runsheng Xu, Yue Zhao, Wentao Zhang, Bin Cui, dan Ming-Hsuan Yang., Diffusion Models: A Comprehensive Survey of Methods and Applications, *ACM Computing Surveys*, Vol.56, no.4, 2023, <https://doi.org/10.1145/3626235>;

Zulu-Chisanga, Stella, Mwansa Chabala, and Bernadette Mandawa-Bray., The differential effects of government support, inter-firm collaboration and firm resources on SME performance in a developing economy, *Journal of Entrepreneurship in Emerging Economies*, Vol.13, no.2, 2021, <https://doi.org/10.1108/JEEE-07-2019-0105>;

Website:

Antara News., 367,769 UMKM Telah Terdaftar sebagai Binaan Jakpreneur, 2023, *ANTARA News*, <https://www.antaranews.com/berita/3720048/367769-umkm-telah-terdaftar-sebagai-binaan-jakpreneur>, Accessed March 15, 2024;

Badan Pusat Statistik., Ekonomi Indonesia Triwulan III-2023 Tumbuh 4,94 Persen (y-on-y), 2023, *Badan Pusat Statistik*, <https://www.bps.go.id/id/pressrelease/2023/11/06/2000/ekonomi-indonesia-triwulan-iii-2023-tumbuh-4-94-persen--y-on-y-.html>, Accessed March 1, 2025;

Binh Duong News., Indonesia's Digital Economy Likely to Reach 360 Billion USD by 2030, 2023, <https://baobinhduong.vn/en/indonesias-digital-economy-likely-to-reach-360-billion-usd-by-2030-a308602.html>, Accessed March 6, 2025;

BPS Jakarta., *Profil Industri Mikro dan Kecil Provinsi DKI Jakarta 2021*, BPS Jakart, <https://jakarta.bps.go.id/id/publication/2023/10/20/32235fae0803e3120424a0a4/profil-industri-mikro-dan-kecil-provinsi-dki-jakarta-2021.html>. Accessed March 6, 2024;

Regulations:

Regional Development Plan (RPD) of DKI Jakarta Province for 2023-2026;

Regional Medium-Term Development Plan (RPJMD) of DKI Jakarta Province for 2017-2022;

Regional Medium-Term Development Plan (RPJPD) of DKI Jakarta for 2005-2025.