

The Role of Women Entrepreneurs in Rebuilding the Economy After the Pandemic

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Abstract

The COVID-19 pandemic significantly impacted Surakarta's economy. MSMEs, especially those led by women, are facing serious challenges. Women entrepreneurs have played a key role in economic recovery through adaptation, innovation, and digital transformation. This study examines their strategies using a qualitative case study approach, collecting data from 14 women entrepreneurs through semi-structured interviews. The findings show that they responded to the crisis by diversifying products, adopting digital marketing, and building business networks. However, they continue to face challenges such as limited capital, rising raw material costs, and balancing business with domestic responsibilities. The study highlights the need for more substantial financial access, digital literacy training, and government support to sustain women-led businesses. Strengthening these areas will enhance the resilience of Surakarta's economy.

Keywords: Women entrepreneurs; MSMEs; economic recovery; digital transformation; Surakarta

JEL classification: L26, J16, O33, R11

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1. INTRODUCTION

The COVID-19 pandemic has had a significant impact on the global economy, including Indonesia. The sharp decline in various macroeconomic indicators is clear evidence of the impact of this pandemic. Indonesia's Gross Domestic Product (GDP), for example, declined from 5.02 percent in 2019 to 2.97 percent in 2020, which is the worst economic downturn since the 2008 global financial crisis (Kemenkeu, 2022). This impact is also felt at the regional

level, including in the Surakarta Residency, where local economic sectors such as creative industries, tourism, and micro, small, and medium enterprises (MSMEs) are the most affected (Arif & Purnomo, 2017; Supriyono et al., 2021; Suminah et al., 2022). However, signs of recovery are beginning to be seen, with national GDP growth reaching 5.04 percent in the fourth quarter of 2023 and a decrease in the unemployment rate to 5.45 percent in the same year (Katadata, 2023; Setkab, 2024).

As one of the economic and cultural centers in Indonesia, Surakarta has a unique economy and is dominated by MSMEs. Based on a World Bank report (2021), more than 60 percent of MSMEs in Indonesia are owned by women, including in the Surakarta region. Of the total 11,157 MSMEs registered in Surakarta in 2022, more than 7,300 of them are managed by women (Wibowo, 2023). Women entrepreneurs in Surakarta play a strategic role in supporting the sustainability of the sector. By managing businesses in various fields such as crafts, culinary, and fashion based on local culture, they combine innovation with tradition, thereby creating relevant economic added value both at the local and global levels (Suminah et al., 2022; Kusumastuti & Sari, 2023; Mukaromah et al., 2023). These MSMEs not only contribute to job creation but also maintain the socio-economic stability of the community.

The havoc that COVID-19 produced had been mitigated by the Surakarta City Government, through several financial assistance, digital training programs, and the promotion of local products through online platforms (Demartoto, 2022). However, the effectiveness of these policies has not been evenly felt by all business actors. Pandemic-related uncertainties, including the potential for further waves, continue to pose significant obstacles to economic recovery (Kimhi et al., 2020). Psychological impacts are another crucial aspect to consider. Concerns over economic conditions and health have influenced business decision-making, compounded by mental stress and feelings of hopelessness (Balhareth et al., 2020; Kimhi et al., 2020). Nevertheless, MSMEs that swiftly innovated through e-commerce and digital marketing demonstrated greater resilience (Bichkoff et al., 2023; Gao et al., 2023). The use of digital technology has proven to sustain business continuity while opening opportunities for post-pandemic growth.

Digitalization has proven to play a vital role in supporting the sustainability and growth of MSMEs throughout the pandemic (Bichkoff et al., 2022; Gao et al., 2023; Pratio et al., 2023). Digital technologies have enabled market reach expansion and strengthened consumer engagement, even during the enforcement of social restrictions (Amalia & Melati, 2021). Collaboration between the government and e-commerce platforms has further accelerated the digital transformation of MSMEs by providing supporting infrastructure and access to inclusive financial services (Lamidi & Rahadhini, 2022).

The pandemic has catalyzed the acceleration of digital transformation as a response to the limitations on mobility and economic activities. Digital solutions not only sustained business operations but also opened new opportunities and enhanced business efficiency (Berawi, 2021; Hamdani & Amalia, 2022; Naredia et al., 2023). Local governments play a strategic role in supporting economic recovery through various policies, including financial assistance, digital training, and the simplification of licensing and certification processes,

including halal certification (Hamdani & Amalia, 2022; Purwanto & Suprihati, 2024). Other forms of support include strengthening entrepreneurship and increasing the self-efficacy of MSME actors, which have proven to contribute to improved business performance post-pandemic (Fadhli, 2022; Sucahyo et al., 2024).

The success of these economic recovery strategies cannot be separated from multi-stakeholder collaboration—among the government, private sector, and civil society organizations—which facilitates the exchange of knowledge, skills, and resources. This synergy has accelerated MSMEs' adaptation to market changes (Wulandari et al., 2023) and is reflected in the increase in economic activity and improved MSME performance post-pandemic (Pratio et al., 2023), with digitalization being a central component in enhancing operational flexibility (Amalia & Melati, 2021). The experience of navigating the pandemic crisis serves as an important foundation for future policymaking and business practices. A more adaptive, inclusive, and innovation-driven digital approach is needed to build a resilient and sustainable economic system.

Previous studies have highlighted the critical role of women in post-pandemic economic reconstruction. Their role includes creating new employment opportunities, developing innovative products and services, and strengthening local communities (Setyowati, 2009; Manolova et al., 2020; De Simone et al., 2021; Ge et al., 2022; Ahmetaj et al., 2023; Nouri, 2023; Sahi et al., 2023). These findings are further supported by Arif & Purnomo (2017), whose spatial analysis showed that the textile industry—one of the labor-intensive sectors in Surakarta—employs a large number of women and fosters the growth of female entrepreneurship. The garment industry serves as a concrete example of how women entrepreneurs act as the backbone of the regional economy, particularly through flagship products such as batik, which has become an iconic fashion symbol of Surakarta (Hasmarini & Purnomo, 2016).

However, despite the significant contributions of women entrepreneurs, various challenges have emerged. Shifts in consumption patterns, supply chain disruptions, and global economic uncertainty in the post-pandemic era remain major obstacles (Bartik et al., 2020; Carracedo et al., 2020; Donthu & Gustafsson, 2020; Harel, 2021). In addition, limited access to capital, education, and business networks further constrains the opportunities available to women entrepreneurs (Coleman et al., 2019; Babajide et al., 2022; Henry et al., 2022; Wang et al., 2022). These conditions are exacerbated in the Surakarta Residency area by intense digital business competition, shifting consumer preferences, and limited access to funding, training, and technology (Rosepti & Niasari, 2022; Waluyo et al., 2022).

While previous studies have examined women's roles in entrepreneurship and their contributions to the economy, there is still a lack of research that specifically links the strategic role of women-led MSMEs in post-pandemic economic recovery in Surakarta. Earlier studies tend to focus on descriptive aspects or general characteristics of women MSME entrepreneurs, without delving deeply into their concrete contributions to job creation, the development of innovations based on local wisdom, and the strengthening of community socio-economic resilience.

Therefore, this study offers a new contribution through a more focused analysis of the strategic role of women-led MSMEs in supporting local economic recovery after the pandemic. Specifically, it identifies their contributions to job creation, the development of innovative products and services rooted in local wisdom, and the building of community social resilience. In addition, this study aims to identify the challenges faced by women entrepreneurs and to formulate policy recommendations to support their sustainability and future growth. Thus, beyond enriching the academic literature, the results of this study are expected to provide practical insights for policymakers in designing strategic initiatives to strengthen the role of women in local economic development.

2. METHODS

This study aims to analyze the role of women entrepreneurs in rebuilding the post-pandemic economy, with a focus on the former Surakarta Residency area. A qualitative approach with a case study design was employed (Njie & Asimiran, 2014). This approach was chosen based on the exploratory nature of the study, which seeks to gain an in-depth understanding of the experiences, social dynamics, and strategies employed by women entrepreneurs in addressing the economic challenges of the post-pandemic period. The case study design was deemed most appropriate as it allows for an in-depth exploration of phenomena within real-life contexts, particularly for complex and multidimensional issues such as gender-based local economic recovery (Rosyadi & Purnomo, 2012; Nsabimana & Uwimpuhwe, 2024; Amandaria et al., 2025).

The study involved 14 respondents, with two participants selected from each administrative area within the former Surakarta Residency. The distribution of respondents was intended to ensure representation of the diverse social, cultural, and economic conditions across the region, thereby providing a more comprehensive picture of the role and contributions of women entrepreneurs in post-pandemic economic recovery. The sample size was determined based on the principle of data saturation, which occurs when data collection yields recurring patterns and no longer produces new, substantive information (Guest et al., 2006).

Respondents were selected purposively based on theoretically and contextually relevant inclusion criteria (Etikan et al., 2016). The criteria included: (1) women entrepreneurs who operated businesses during or after the COVID-19 pandemic, to ensure the relevance of the experiences studied; (2) businesses that had been actively operating for at least two years, to guarantee the depth of experience for analysis; and (3) business sectors that were significantly impacted by the pandemic, such as trade, culinary services, and service industries. This selection enabled the study to explore relevant adaptation dynamics and survival strategies within these sectors.

Data collection was conducted through semi-structured interviews designed to elicit detailed insights into the experiences, challenges, and strategies adopted by women entrepreneurs in responding to the impacts of the COVID-19 pandemic (Shastri et al., 2019; Banihani, 2020). In addition to primary data, the study also utilized secondary data, including government reports, articles from national and international journals (indexed in

Scopus), and official statistical data. The secondary data supported triangulation, reinforced the main findings, tested narrative consistency, and enriched the macro-level context of the primary data interpretation (Flick, 2022). All interviews were initially conducted in Bahasa Indonesia. The authors have carefully translated the quotations in this manuscript into English to preserve the original meaning and context of the participants' responses. Before data collection, all respondents were informed about the research objectives and voluntarily agreed to participate in the interviews. Verbal informed consent was obtained from all participants. The identities of respondents were anonymized using aliases to protect confidentiality. Formal ethical approval from an Institutional Review Board (IRB) was sought under the supervision of Dean of Faculty Economics and Business, Universitas Muhammadiyah Surakarta, Indonesia. Therefore, all research activities adhered to standard ethical guidelines for qualitative research involving human participants in social sciences.

Data analysis was conducted using content analysis techniques, comprising three main stages: data reduction, data presentation, and conclusion drawing (Miles & Huberman, 1994). The data reduction stage involved sorting, simplifying, and categorizing data into key themes relevant to the research objectives, such as business adaptation strategies, product innovation, and the role of social networks. Data presentation was carried out through descriptive narratives supplemented with tables or matrices to facilitate pattern identification. Conclusions were drawn by identifying inter-theme relationships and integrating these with the secondary data. The coding process was conducted manually, beginning with open coding to identify core themes, followed by axial coding to systematically connect these themes (Strauss & Corbin, 1998; Creswell & Poth, 2016).

To ensure the validity and reliability of the findings, the researcher applied data source triangulation, conducted member checking with selected respondents, and maintained an audit trail to transparently document the analysis process. Through this approach, the study aims to provide a comprehensive and in-depth understanding of the role of women entrepreneurs in supporting post-pandemic economic recovery in the former Surakarta Residency area.

3. RESULTS AND DISCUSSIONS

3.1 Adaptation and Innovation of Women Entrepreneurs Post-Pandemic

This study reveals that women entrepreneurs in Surakarta show significant adaptability and innovation in dealing with the impact of the COVID-19 pandemic. One of the main strategies adopted is product diversification to meet changing market needs. Table 1 below includes all of the interview main points from the respondents. For example, Rina K, a souvenir craftsman in Karanganyar, noticed a change in customer preferences during the pandemic. To answer these challenges, he expanded his product variety:

"I try to diversify products. I make small crafts like tissue holders or home displays. I also started selling through social media" (Interview, January 16, 2025).

This move helps retain the existing customer base and opens up opportunities to attract new consumers through digital platforms. This finding aligns with the research of Manolova et al. (2020), which stated that women entrepreneurs managed to take advantage of new opportunities through product innovation during the pandemic. The same thing was done by another respondent, Kusumawati, who focuses on diversifying home décor-based products. She realized that the demand for versatile decorations is increasing as more people spend more time at home:

"I try to diversify products. In addition to souvenirs, I make home decorations such as wall art and keychains that are more common, so they can still be sold even if there is no event" (Interview, January 16, 2025).

This strategy helps it stay relevant amid declining demand for souvenirs for events. Diana, a confectionery entrepreneur in Laweyan, also innovated by adapting her products to the needs of the pandemic, such as clothes and home wear:

"I started looking for a new market. I try to make home clothes, like daster or pajamas. Alhamdulillah, the response is quite good" (Interview, January 16, 2025).

This step shows how adapting to specific market needs can improve business resilience. Maya, from the confectionery sector, also took advantage of a similar opportunity with a focus on the production of clothes:

"I try to focus on the production of clothes. At that time, the demand was very high. In addition, I also started selling through the marketplace to reach new customers" (Interview, January 16, 2025).

This combination of product innovation and marketing transformation helped his business survive difficult times. Meanwhile, Siti, a culinary entrepreneur in Kartasura, Sukoharjo, developed frozen food products to answer customers' needs for food with a longer shelf life:

"At that time, I tried to innovate. I started selling daily food to families who work from home. I continue to try to make frozen food products so that customers can buy a lot and store them for longer" (Interview, January 16, 2025).

This innovation allows its business to reach a broader market while providing added value for customers. In addition to product diversification, digital transformation is crucial for women entrepreneurs to maintain and expand their market reach, especially in the post-pandemic context. Rina K, for example, uses Instagram and marketplaces to market her products:

"Yes. Now I am active on Instagram and have also started selling through the marketplace. This technology helps my business" (Interview, January 16, 2025).

These findings are supported by Gao et al. (2023), who stated that adopting e-commerce and digital marketing improved the financial performance and sustainability of MSMEs during the pandemic. Maya also optimizes its e-commerce platform to reach new customers. He learned product photography skills to make his products more visually appealing:

"Definitely. I use an e-commerce platform to make sales. I also learn product photos to make it more attractive when advertised" (Interview, January 16, 2025).

This step reflects the importance of additional skills to use digital technology optimally. Yuni, another entrepreneur, also uses social media such as Instagram and Facebook for promotion, combining it with e-commerce platforms to expand market reach:

"Oh yes. I use Instagram and Facebook for promotions. I also started selling in e-commerce so that the reach is better (than without e-commerce)" (Interview, January 16, 2025).

Digital technology even allows entrepreneurs like Dian Pratiwi to reach markets outside the region and abroad:

"Very helpful. With technology, my customers are not only from Sragen but also from outside the island, even abroad" (Interview, January 16, 2025).

Digital transformation has been proven to open up wider market opportunities while increasing business competitiveness. Community and government support facilitate digital transformation and women's business development. Digital marketing training held by the MSME community and the government is one form of this support. Diana Pratiwi expressed her hope that technology training can be held more intensively:

"I hope there will be more focused training on technology so that women entrepreneurs can be more digitally literate" (Interview, January 16, 2025).

Fitri Handayani added that easily accessible capital assistance and digital marketing training are urgently needed:

"I hope there is more accessible capital assistance. In addition, training on digital marketing is also crucial for us" (Interview, January 16, 2025).

This hope reflects the importance of collaboration between the government, communities, and entrepreneurs to increase the resilience of women MSMEs post-pandemic.

Thus, flexibility, creativity, and the use of digital technology are key elements of the sustainability of women's businesses post-pandemic. These findings support the research of Damayanti et al. (2024), which highlights the importance of entrepreneurial capacity in the recovery of MSMEs. In addition, digital literacy and social collaboration have been proven to strengthen the competitiveness of female MSMEs, as explained by Waluyo et al. (2022) and Subekti et al. (2023). With the right strategy, women entrepreneurs can continue to survive and contribute significantly to the recovery of the local economy.

Table 1. Adaptation Strategies and Product Innovations by Women Entrepreneurs in the Former Surakarta Residency Area Post-Pandemic

Respondent Name & Business Sector	Adaptation & Innovation Strategies	Impacts/Opportunities Generated
Rina Kusuma (Souvenirs)	Product diversification: creating small handicrafts (tissue holders, home decorations); active on social media (Instagram, marketplaces).	Maintained customer base; attracted new consumers through digital platforms.
Rina Kurniasari (Handicrafts)	Diversified home decoration products (wall art, keychains); tailored products to meet domestic market needs.	Increased product relevance; expanded market segmentation.
Diana Pratiwi (Clothing)	Product innovation: homewear (house dresses, pajamas); targeted the household needs market.	Enhanced business resilience; penetrated new markets.
Maya Lestari (Clothing)	Focused on clothing production, transformed marketing through marketplaces, and strengthened product photography skills.	Market expansion and improved product competitiveness on e-commerce platforms.
Siti Rahmawati (Culinary, Catering)	Product innovation: frozen food to meet the demand for long-lasting meals during WFH (work from home) periods.	Increased sales volume; penetrated broader markets.
Yuni Astuti (Convection)	Promotion via Instagram & Facebook; sales through e-commerce.	Expanded market reach; strengthened digital presence.
Dian Pratiwi (Batik)	Technology optimization: market penetration to regions outside the local area and internationally.	Regional and international market expansion.
Community & government (external support)	Digital marketing training, technology training, and capital assistance.	Improved digital literacy and entrepreneurial capacity for women.

3.2 Utilization of Digital Technology

Table 2 below shows the results of interviews with women entrepreneurs in the former Surakarta area revealed that digital technology, such as social media and e-commerce platforms, plays an important role in supporting the recovery and development of MSMEs after the COVID-19 pandemic. Most informants use social media, especially Instagram and WhatsApp, to promote products and communicate directly with customers. For example, Siti

Rahmawati revealed that social media and food delivery platforms make it easier for customers to order their products:

"Definitely. I use Instagram for promotions. In addition, I have joined a food delivery platform, so it is easier for customers to order my food" (Interview, January 16, 2025).

This statement shows that social media functions not only as a promotional tool but also as a means of faster and more efficient consumer interaction. This result is in line with the research of Gao et al. (2023), which stated that digital adaptation supports business sustainability during times of crisis. The same thing was conveyed by Diana Pratiwi, who emphasized the importance of combining marketplaces and social media to expand customer reach:

"Yes, I sell through marketplaces and promotions on social media. That is quite helpful in reaching a wider range of customers" (Interview, January 16, 2025).

This statement underscores that digital technology increases the competitiveness of MSMEs by providing access to a broader market (Cueto et al., 2022). Rina Kusuma also highlighted similar benefits of social media, specifically Instagram and marketplace platforms, to reach customers from different locations:

"Definitely. I use Instagram for promotions. I also participate in the marketplace to reach a wider range of buyers" (Interview, January 16, 2025).

In line with that, Endah Susanti added that WhatsApp is a very effective means of receiving orders and promoting products:

"Yes, now I am actively using WhatsApp and Instagram. Through that, I promote products and receive customer orders" (Interview, January 16, 2025).

In addition to social media, e-commerce platforms are the leading choice for expanding market reach, even abroad. Some informants admit that digital technology helps introduce products to a broader market. For example, Rina Kusumawati explained:

"Technology makes my products known outside Karanganyar. Now there are orders from Jakarta, even abroad" (Interview, January 16, 2025).

Diana Pratiwi also said that digital technology allows for customer reach across islands and countries:

"Very helpful. With technology, my customers are not only from Sragen but also from outside the island, even abroad" (Interview, January 16, 2025).

Sri Mulyani also emphasized that digital technology not only helps product distribution but also opens up export opportunities:

"Technology is beneficial. I can sell products to various regions and have even sent them abroad" (Interview, January 16, 2025).

Despite many benefits, digital literacy is still a significant obstacle for some entrepreneurs. Rina Kurniasari, for example, revealed difficulties in implementing digital marketing strategies due to a lack of understanding of technology:

"The biggest challenge is marketing. Sometimes it is challenging to find new customers, especially if the promotion is only through word of mouth" (Interview, January 16, 2025).

This statement emphasizes the importance of digital literacy training to help MSMEs maximize the potential of digital technology in their business development (Waluyo et al., 2022). Nevertheless, training organized by the MSME community and the government has positively contributed to improving entrepreneurs' technological competence (Amalia & Melati, 2021). These findings show that the use of digital technology not only supports business sustainability but also contributes to women's economic empowerment and local economic mobilization in Surakarta. This result is consistent with the research of Gao et al. (2023), which stated that digitalization supports the sustainability of MSMEs during the crisis.

Table 2. Utilization of Digital Technology by Women Entrepreneurs and Its Impact on Business Development

Respondent Name & Business Sector	Utilization of Digital Technology	Impact/Opportunities Generated
Siti Rahmawati (Culinary, Catering)	Promotion via Instagram; utilization of food delivery platforms.	Easier ordering process for customers; more efficient direct interaction.
Diana Pratiwi (Garment/Clothing Production)	Sales are through marketplaces, and promotion is via social media.	Expanded market reach both nationally and internationally.
Rina Kusuma (Handicrafts)	Promotion on Instagram; sales through marketplaces.	Reaching customers from various locations.
Endah Susanti (Traditional Culinary)	Promotion and order processing via WhatsApp and Instagram.	More effective communication with customers and strengthening business relationships.
Rina Kusumawati (Batik & Handicrafts)	Utilization of technology for promotion and sales to regions outside the local area (Jakarta & international).	Products are becoming recognized in regional and international markets.

Table 2. (continued)

Respondent Name & Business Sector	Utilization of Digital Technology	Impact/Opportunities Generated
Sri Mulyani (Wood Processing)	Digital sales to various regions and for export.	Creating export opportunities; scaling up the business.
Rina Kurniasari (Handicrafts)	Limited to traditional promotion (word of mouth), facing challenges in digital marketing.	Market potential not yet optimized; limited acquisition of new customers.
Community & Government (External Support)	Digital literacy and digital marketing training.	Improving technological competencies among women entrepreneurs.

3.3 Contribution to the local economy

This study shows that women entrepreneurs in the former Surakarta have a significant role in empowering local communities and strengthening the microeconomy. Through the small businesses they manage, women entrepreneurs have succeeded in creating jobs for the surrounding community, especially for homemakers. This result is in line with the findings of Ge et al. (2022), who emphasized that technological innovations implemented by women entrepreneurs make an outstanding contribution to the economic empowerment of families and communities. Table 3 below shows the respondents' contributions for themselves. For example, Siti Rahmawati, a culinary business owner in Kartasura, empowers the workforce among homemakers in her neighborhood. This step provides additional income for homemakers and allows them to continue carrying out family responsibilities. In her interview, Siti stated:

"I employ women around me to help cook or pack food. So they still have income even though they are from home" (Interview, January 16, 2025).

A business model that provides work flexibility like this is in line with the findings of Sari et al. (2022), which mentioned the importance of integrating domestic responsibility and economic participation to support the sustainability of small and micro enterprises. The same thing was expressed by Diana Pratiwi, a clothing entrepreneur in Laweyan, who recruits homemakers to help with the production process. By providing flexibility to work from home, Diana balances domestic and economic responsibilities for her workers. She said:

"I recruited several homemakers around here to help with production. They can work from their respective homes, so they can still care for their families" (Interview, January 16, 2025).

Diana's story shows how women entrepreneurs integrate the value of inclusivity into their business models. This step not only benefits businesses but also strengthens the household economy of local communities. In addition to providing jobs, women entrepreneurs actively utilize local resources as raw materials to support the sustainability of their businesses. Fitri Handayani, a traditional culinary entrepreneur in Sragen, buys cassava

and bananas directly from local farmers. This step not only helps reduce production costs but also empowers the agricultural sector in the region. She explained:

"I often collaborate with local farmers to supply raw materials directly, such as cassava and bananas" (Interview, January 16, 2025).

This effort is supported by the findings of Damayanti et al. (2024), which state that a community-based approach and using local resources can strengthen the economic resilience of micro and small businesses, especially during the pandemic. Ratna Kusumawati, a cassava chip producer in Wonogiri, took a similar step. By purchasing raw materials directly from local farmers, Ratna maintains the quality of her products and strengthens the economic relationship between small business actors and farmers. He shared his experience:

"I buy raw materials directly from cassava farmers around my house. I also hire mothers to help with production" (Interview, January 16, 2025).

The contribution of women entrepreneurs is also seen in their ability to adapt to economic challenges. During the COVID-19 pandemic, Rina Kusuma, a souvenir craftsman from Karanganyar, diversified her products to survive while changing market needs. He started producing bamboo home decorations and utilizing digital technology to market his products. Rina revealed:

"I try to diversify products. I make small crafts like tissue holders or home displays. I also started selling through social media" (Interview, January 16, 2025).

This diversification effort reflects the findings of Manolova et al. (2020), who stated that diversification is one of the main strategies of women entrepreneurs in dealing with economic disruption, such as what happened during the COVID-19 pandemic. By utilizing digital platforms such as social media and marketplaces, many women entrepreneurs have succeeded in expanding their markets beyond the region, even internationally. One example is Rina Kusumawati, a batik craftsman from Sragen, who now has customers from big cities and abroad. In his interview, she said:

"Technology is invaluable. In the past, I only sold in Sragen. Now there are customers from Jakarta, Surabaya, and even abroad who order my batik" (Interview, January 16, 2025).

The role of digital technology in expanding the women's business market is also emphasized in the study by Hamdani & Amalia (2022), which shows that business digitalization is an important factor in maintaining the continuity of small businesses during economic disruption. Thus, small businesses managed by women contribute to the post-pandemic recovery of the local economy and strengthen the foundation of the microeconomy

in Surakarta. By creating jobs, empowering local communities, utilizing regional raw materials, and utilizing digital technology, women entrepreneurs are the main driving force in maintaining the community's economic sustainability.

Table 3. Contribution of Women Entrepreneurs to Strengthening the Local Economy in the Former Surakarta Residency Area

Respondent Name & Business Sector	Contribution to the Local Economy	Impacts/Opportunities Generated
Siti Rahmawati (Culinary, Kartasura)	Provides employment opportunities for local housewives (cooking & packaging).	Women's empowerment, additional household income, and flexible working arrangements.
Diana Pratiwi (Garment Industry, Laweyan)	Recruits housewives to assist with production; flexible work-from-home arrangements.	Social inclusion; balance between domestic and economic roles.
Fitri Handayani (Traditional Culinary, Sragen)	Utilizes local raw materials: cassava & bananas from local farmers.	Strengthens the local agricultural sector; reduces production costs.
Ratna Kusumawati (Cassava Processing, Wonogiri)	Direct purchase of raw materials from farmers; empowers housewives in production.	Maintains product quality; strengthens microeconomic networks between SMEs & farmers.
Rina Kusuma (Bamboo Crafts & Souvenirs, Karanganyar)	Product diversification (bamboo decorations, home crafts); digital marketing.	Business resilience amidst economic disruptions; expansion into digital markets.
Rina Kusumawati (Batik, Sragen)	Utilizes digital technology for marketing; expands market to major cities & abroad.	Enhances competitiveness; contributes to local economic recovery, and international expansion.

3.4 Challenges and Obstacles in Recovery

The study results show that women entrepreneurs in the Ex-Residency of Surakarta face several primary challenges in the post-pandemic business recovery process. Table 4 shows all the important obstacles that these women faced. One of the dominant barriers is access to capital, where many small businesses have difficulty obtaining financial support to maintain operational sustainability. This condition was experienced by Siti Rahmawati, a culinary entrepreneur, who revealed that her savings were depleted during the pandemic to support business operational costs. In the interview, she stated:

"Investment is the main challenge. Especially during the pandemic, savings are almost exhausted for operations. Not to mention the price of raw materials that continue to rise" (Interview, January 16, 2025).

This statement reflects the common situation faced by small business actors, where limited financial reserves are insufficient to deal with a decrease in income and an increase in operating costs. The same thing was conveyed by Rina Kusumawati, an entrepreneur in the craft sector, who highlighted the impact of the pandemic on her income and business sustainability. In the interview, she revealed:

"Wow, the pandemic is hard. There are almost no orders at all because usually my customers are from outside the city. There was even no income for a few months" (Interview, January 16, 2025).

She also explained that time constraints exacerbate capital constraints, especially for women entrepreneurs who have to divide their concerns between family and business:

"The biggest challenge is to find the investments. Sometimes, our income is not enough to buy raw materials. In addition, time is also an obstacle because you have to take care of your family and business simultaneously" (Interview, January 16, 2025).

This condition is in line with the findings of Babajide et al. (2022), which emphasized the importance of access to capital to support the sustainability of women's businesses, especially in the informal sector. In addition to capital problems, the increase in raw material prices is also a significant obstacle. Siti Rahmawati explained that the surge in raw material prices makes it difficult to achieve consistency in production and reduces profit margins. She stated:

"Not to mention the price of raw materials that continue to rise" (Interview, January 16, 2025).

Challenges related to raw materials were also expressed by Sri Mulyani, a wood craftsman, who highlighted the impact of seasonality on the supply of raw materials. She says:

"The main challenge is maintaining production consistency. Sometimes wood raw materials are difficult to get, especially during the rainy season" (Interview, January 16, 2025).

This statement supports the findings of Gupta & Kumar Singh (2023), who emphasized the importance of managing raw material costs as one of the keys to building small business resilience amid market dynamics. On the other hand, increasingly fierce market competition is a significant challenge for women entrepreneurs. For example, a weaving craftsman, Rina Kusuma, mentioned the difficulty of her local products competing with cheaper imported goods. In the interview, she stated:

"The main challenge is marketing, because my products are handicrafts, sometimes it is difficult to compete with cheaper imported goods" (Interview, January 16, 2025).

Fitri Handayani, a business actor in the culinary sector, added that small business actors face challenges in competing with large technology-based companies that are more established in digital marketing. She explained:

"The biggest challenge is time. Sometimes I have to work until night to fulfill orders, but on the other hand, I still have to take care of my family" (Interview, January 16, 2025).

Research by Donthu & Gustafsson (2020) corroborates that the pandemic exacerbated the gap between small and large businesses, making MSMEs more vulnerable to market pressures. The limitations of digital literacy are also obstacles for some business actors in utilizing technology for business digitalization. Rina Kurniasari, for example, emphasized the importance of digital marketing training in order to be more competitive. She stated:

"The biggest challenge is marketing. Sometimes it is complicated to find new customers, especially if the promotion is only through word of mouth" (Interview, January 16, 2025).

She added that the community of women entrepreneurs should be more active in sharing experiences and knowledge:

"I want to learn more about digital marketing so that I can promote more effectively. In addition, I hope the community of women entrepreneurs can be more active in sharing knowledge and experience" (Interview, January 16, 2025).

This statement aligns with the research of Amalia & Melati (2021), which shows that digitalization is an important element in the recovery of MSMEs during the pandemic. The research by Waluyo et al. (2022) further highlights the importance of increasing digital literacy for women entrepreneurs to compete in an increasingly competitive business world. These challenges show that women entrepreneurs have extraordinary resilience in facing crises. However, more significant support, especially in access to capital, raw material price stability, and digital literacy training, is needed to optimize their contribution to the local economy. Community support and digital marketing training are important strategies to increase the competitiveness of MSMEs. This result is in line with the advice of Cueto et al. (2022), who emphasized that digital innovation plays an important role in small businesses' economic recovery during economic disruption. These results are then

Table 4. Challenges and Obstacles Faced by Women Entrepreneurs in Post-Pandemic Business Recovery

Respondent Name & Business Sector	Type of Challenges/Obstacles	Impact on Business
Siti Rahmawati (Culinary)	Limited access to capital and rising raw material prices.	Reduced production capacity; Declining profit margins.
Rina Kusumawati (Batik & Handicrafts)	Loss of income due to decreased demand; Limited access to capital; Double burden (family and business responsibilities).	Difficulty maintaining business continuity; Limited capacity for reinvestment.
Sri Mulyani (Wood Crafts)	Uncertainty in raw material supply (seasonal).	Challenges in maintaining production consistency.
Rina Kusuma (Souvenirs)	Competition from cheaper imported products.	Decreased competitiveness of local products.
Fitri Handayani (Traditional Culinary)	Competition with large technology-based companies; Heavy workload (balancing business & family).	Limited time for business development; Market competitiveness gap in the digital economy.
Rina Kurniasari (Handicrafts)	Low digital literacy; Challenges in marketing and acquiring new customers.	Limited market expansion; Dependence on word-of-mouth promotion.
General Needs & Recommendations	Digital literacy training; Stabilization of raw material prices; Easier access to capital; Strengthening of women's entrepreneurship communities.	Enhancing business competitiveness; Improving local economic resilience.

3.5 Expectations and Support Required for Recovery

Based on interviews, most respondents revealed the importance of easier access to capital and skills training to accelerate their businesses' post-pandemic recovery process. Respondents emphasized that training relevant to market trends, such as digital marketing, is an urgent need in the face of competition. Diana Pratiwi, a clothing convention entrepreneur, highlighted the importance of digital technology-based training in reaching a broader market. She said:

"I hope there will be more technology-focused training so that women entrepreneurs can be more digitally literate" (Interview January 16, 2025).

This statement emphasizes the importance of digital literacy as a strategic step to support the sustainability of women's businesses. Research by Lamidi & Rahadhini (2021) and Hamdani & Amalia (2022) shows that digital literacy has a significant role in improving the performance of small and medium enterprises. In addition, financial literacy combined with access to technology has been proven to accelerate business recovery (Andriamahery & Qamruzzaman, 2022). Dwi Lestari, a cake ingredient shop owner, expressed his hope that

the government would support production technology training and access to low-interest capital. She says:

"I hope there will be more free training, especially on how to utilize technology for businesses. Access to low-interest capital is also beneficial" (Interview January 16, 2025).

This statement aligns with the research of Coleman et al. (2019) and Gao et al. (2023), which emphasizes the importance of technology training and financial access in improving the resilience and sustainability of women's businesses. The use of technology has been the primary solution entrepreneurs have adopted to survive during the pandemic. Fitri Handayani, a culinary entrepreneur, revealed that social media and e-commerce platforms are beneficial in expanding customer reach outside the region. She explained:

"Yes. Now I am active on Instagram and Facebook for menu promotions. I also registered on the food delivery application so that customers can order more easily" (Interview January 16, 2025).

Rina Kusumawati, a batik entrepreneur, also emphasized the importance of using marketplaces and social media as the primary strategy to increase sales. She stated:

"Definitely. I use marketplaces and social media for promotion. Now customers from outside the city order online" (Interview January 16, 2025).

These findings are supported by research by Damayanti et al. (2024) and Prayag et al. (2024), which show that digitalization and e-commerce can increase the resilience of small and medium-sized businesses in crises. The respondents also highlighted the importance of the community as a platform for collaboration and knowledge sharing. Diana Pratiwi, for example, shared that she collaborated with an embroidery business in Kauman to create more varied products. She revealed:

"There is. Sometimes I collaborate with embroidery businesses in Kauman to make more varied products" (Interview, January 16, 2025).

The same thing was conveyed by Dwi Lestari, who explained that collaboration with cake entrepreneurs in Wonogiri has helped increase their respective businesses. She said:

"Once, I collaborated with a cake entrepreneur in Wonogiri. They buy ingredients from me, and I help promote their business in my store" (Interview January 16, 2025).

This statement is supported by research by Babajide et al. (2022) and Cueto et al. (2022), which highlight the importance of social networks in the empowerment of women

entrepreneurs. Despite various efforts, challenges remain, such as time constraints due to domestic responsibilities and a lack of capital. However, family support is a significant factor that helps women entrepreneurs run their businesses. Siti Rahmawati, the owner of a catering business, emphasized the role of the family as the prominent supporter in dividing responsibilities. She said:

"The main thing is the family. In addition, I am also happy that this business can be useful for others, especially local mothers who work here" (Interview January 16, 2025).

This statement emphasizes the flexibility of women entrepreneurs as one of the important factors in supporting local economic recovery (De Simone et al., 2021). As per Table 5 below explains how these women are expecting for supportive aids for their businesses.

Table 5. Expectations and Support Needed by Women Entrepreneurs to Accelerate Business Recovery

Respondent Name & Business Sector	Expectations & Required Support	Digital Strategy Implementation & Collaboration	Social Support & Challenges
Diana Pratiwi (Clothing Convection)	Training in technology and digital marketing.	Active on e-commerce platforms and social media to expand market reach; Collaboration with embroidery entrepreneurs in Kauman.	Collaboration with embroidery entrepreneurs in Kauman.
Dwi Lestari (Baking Supplies Store)	Training in technology utilization and access to low-interest financing.	Collaboration with cake entrepreneurs in Wonogiri (selling supplies + business promotion).	Challenge: limited capital.
Fitri Handayani (Culinary/Food Business)	Utilization of social media & food delivery apps.	Active on Instagram, Facebook, and food delivery platforms.	Support from family in managing time.
Rina Kusumawati (Batik)	Optimizing promotion through online marketplaces & social media.	Increasing sales across cities.	Challenges: domestic responsibilities & access to capital.
Siti Rahmawati (Catering)	Family support as the primary foundation.	Empowering local women, socially beneficial business.	Challenges: domestic roles & time management.
Role of the Community	Collaboration and knowledge sharing among women entrepreneurs.	Building social networks and joint ventures.	Enhancing collective competitiveness.

The main finding of this research can then be found on Figure 1 below. Women entrepreneurs in the former Surakarta Residency have played an important role in helping the local economy recover after the pandemic. Many of them quickly adapted by changing their products, using online marketing, and expanding their business connections. These efforts helped them survive during difficult times and even find new opportunities. For example, they started selling frozen food, making home decorations, or using Instagram and online marketplaces to reach more customers. This flexibility shows their ability to respond to crisis conditions and continue running their businesses under pressure.

However, these women entrepreneurs still face many obstacles. The most common problems include limited capital, higher prices for raw materials, and the challenge of managing both household duties and business activities at the same time. These burdens have made it harder for women to grow their businesses. Even so, they continue to find new ideas and solutions. Many women are creating local and eco-friendly products, adjusting their offers to meet customer demand, and trying to compete in digital markets. Their creativity and determination have helped them stay relevant, even with limited resources. Beyond business, these women contribute to the community by creating jobs and helping others improve their skills. They often involve local women, especially housewives, in production and packaging activities, which allows them to earn money while staying close to their families. To support their work further, they need better access to financial help, training in digital tools, and more support from the government. They also hope for stronger business communities where they can share experiences and collaborate. These findings show that with the right support, women entrepreneurs can become key drivers of inclusive and sustainable local economic recovery.

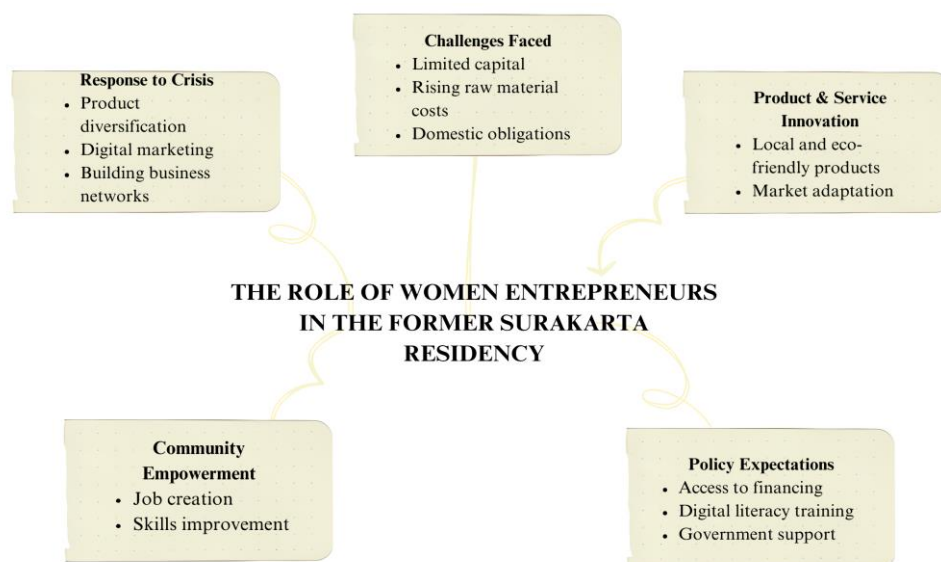


Figure 1. Summary of Research Findings (The Role of Women Entrepreneurs in the Former Surakarta Residency Area Post-Pandemic)

4. CONCLUSIONS

This study aimed to explore the strategic role of women entrepreneurs in the former Surakarta area in supporting post-pandemic economic recovery, using a qualitative approach based on case studies and content analysis. The findings indicate that women entrepreneurs in this region play a significant role in driving local economic recovery. Through adaptive strategies, product innovation, digital transformation, and the empowerment of local communities, they have delivered tangible positive impacts on the regional economy. Their contributions are reflected not only in their resilience in the face of crisis but also in job creation, the optimization of local resource utilization, and the strengthening of microeconomic structures. However, various challenges persist, including limited access to capital, rising raw material costs, and low levels of digital literacy. Government support in the form of inclusive financing policies, targeted digital literacy programs, and the strengthening of business networks has proven crucial in accelerating recovery and enhancing the resilience of women-led enterprises.

Based on these findings, strategic actions are needed to strengthen the contribution of women entrepreneurs to local economic development further. Governments and financial institutions should design and provide inclusive financing schemes with low interest rates to ensure business sustainability. In addition, enhancing digital capacity through training focused on the use of e-commerce, technology-driven marketing, and the development of platform-based business models is an urgent need to improve competitiveness. Strengthening inter-entrepreneur networks through collaborative platforms is also important to encourage knowledge exchange, innovation, and market expansion. Moreover, adopting environmentally friendly technologies and collaborating with local communities—such as partnerships with farmers or local artisans—should be optimized to create broader socio-economic impacts.

In the future, further research is needed to explore the long-term sustainability and scalability potential of women-led enterprises in post-pandemic recovery. Comparative studies across regions or sectors could provide deeper insights into the contextual factors influencing the success of women entrepreneurs. In addition, longitudinal studies are essential to examine the effects of digital transformation and policy interventions on business development over time. Research that considers intersectional aspects such as age, education level, and the differences between urban and rural areas will also enrich our understanding of the strategic role of women entrepreneurs in local economic development. With these efforts, it is hoped that women entrepreneurs will continue to serve as a driving force for future inclusive, resilient, and sustainable economic growth.

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6. REFERENCES

- Ahmetaj, B., Kruja, A. D., & Hysa, E. (2023). Women Entrepreneurship: Challenges and Perspectives of an Emerging Economy. *Administrative Sciences*, 13(4), 1-20 <https://doi.org/10.3390/admsci13040111>
- Amalia, A. D., & Melati, F. C. (2021). Analysis of MSMEs Recovery using Digital Technology in the Covid-19 Pandemic Era. *Ekulibrium: Jurnal Ilmiah Bidang Ilmu Ekonomi*, 16(2), 117-128. <https://doi.org/10.24269/ekulibrium.v16i2.2021.pp117-128>
- Amandaria, R., Darma, R., Tenriawaru, N., Fudjaja, L., Untari, & Akzar, R. (2025). Gender, empowerment, and rural sustainable development: A case study of crab business integration. *Open Agriculture*, 10(1), 1-16. <https://doi.org/10.1515/opag-2025-0416>
- Andriamahery, A., & Qamruzzaman, M. (2022). Do access to finance, technical know-how, and financial literacy offer women empowerment through women's entrepreneurial development?. *Frontiers in psychology*, 12(1), 1-16. <https://doi.org/10.3389/fpsyg.2021.776844>
- Arif, M., & Purnomo, D. (2017). Measuring spatial cluster for leading industries in surakarta with exploratory spatial data analysis (ESDA). *Jurnal Ekonomi Pembangunan: Kajian Masalah Ekonomi Dan Pembangunan*, 18(1), 64-81. <https://doi.org/10.23917/jep.v18i1.4178>
- Babajide, A. A., Obembe, D., Solomon, H., & Woldesenbet, K. (2022). Microfinance and entrepreneurship: the enabling role of social capital amongst female entrepreneurs. *International Journal of Social Economics*, 49(8), 1152-1171. <https://doi.org/10.1108/IJSE-11-2020-0745>
- Balhareth, A., AlDuhileb, M. A., Aldulaijan, F. A., & Aldossary, M. Y. (2020). Impact of COVID-19 pandemic on residency and fellowship training programs in Saudi Arabia: A nationwide cross-sectional study. *Annals of Medicine and Surgery*, 57(1), 127-132. <https://doi.org/10.1016/j.amsu.2020.07.025>
- Banihani, M. (2020). Empowering Jordanian women through entrepreneurship. *Journal of Research in Marketing and Entrepreneurship*, 22(1), 133-144. <https://doi.org/10.1108/JRME-10-2017-0047>
- Bartik, A. W., Bertrand, M., Cullen, Z., Glaeser, E. L., Luca, M., & Stanton, C. (2020). The impact of COVID-19 on small business outcomes and expectations. *Proceedings of the national academy of sciences*, 117(30), 17656-17666. <https://doi.org/10.1073/pnas.2006991117>
- Berawi, M. A. (2021). Innovative technology for post-pandemic economic recovery. *International Journal of Technology*, 12(1), 1-4. <https://doi.org/10.14716/ijtech.v12i1.4691>

- Bichkoff, H., Huerta Niño, R., Hemmerling, A., Ho, K., Huancas, C. G., Burke, A., ... & Wong, M. (2023). Recovery and Resilience in the Canal Community: Economic Impacts and Solutions During the COVID-19 Pandemic. *Journal of Racial and Ethnic Health Disparities*, 10(3), 1234-1258. <https://doi.org/10.1007/s40615-022-01310-w>
- Carracedo, P., Puertas, R., & Marti, L. (2021). Research lines on the impact of the COVID-19 pandemic on business. A text mining analysis. *Journal of Business Research*, 132(1), 586-593. <https://doi.org/10.1016/j.jbusres.2020.11.043>
- Coleman, S., Henry, C., Orser, B., Foss, L., & Welter, F. (2019). Policy support for women entrepreneurs' access to financial capital: Evidence from Canada, Germany, Ireland, Norway, and the United States. *Journal of Small Business Management*, 57(1), 296-322. <https://doi.org/10.1111/jsbm.12473>
- Cueto, L. J., Frisnedi, A. F. D., Collera, R. B., Batac, K. I. T., & Agaton, C. B. (2022). Digital innovations in MSMEs during economic disruptions: experiences and challenges of young entrepreneurs. *Administrative Sciences*, 12(1), 1-25. <https://doi.org/10.3390/admsci12010008>
- Creswell, J. W., & Poth, C. N. (2016). *Qualitative inquiry and research design: Choosing among five approaches*. Sage publications. https://www.academia.edu/download/55010759/creswell_Qualitative_Inquiry_2nd_edition.pdf
- Damayanti, T. W., Supramono, S., Kristianti, I., & Adhitya, D. (2024). Recovery Speed of Micro, Small, and Medium Enterprises (MSMEs) Following the COVID-19 Pandemic: The Influence of Entrepreneurial Capacity and Characteristics. *International Journal of Sustainable Development & Planning*, 19(3), 1121-1129. <https://doi.org/10.18280/ijstdp.190330>
- De Simone, S., Pileri, J., Rapp-Ricciardi, M., & Barbieri, B. (2021). Gender and entrepreneurship in pandemic time: what demands and what resources? An exploratory study. *Frontiers in Psychology*, 12(1), 1-11. <https://doi.org/10.3389/fpsyg.2021.668875>
- Demartoto, A., Murti, B., & Pujihartati, S. H. (2022, November). Community Participation, Motivation, and Capacity as the Principle in Collaborative Governance-Based Covid-19 Prevention and Management in Banyuanyar, Surakarta Indonesia. In *International Conference on Communication, Policy and Social Science (InCCLuSi 2022)* (pp. 363-371). Atlantis Press. https://doi.org/10.2991/978-2-494069-07-7_41
- Donthu, N., & Gustafsson, A. (2020). Effects of COVID-19 on business and research. *Journal of business research*, 117(1), 284-289. <https://doi.org/10.1016/j.jbusres.2020.06.008>
- Etikan, I., Musa, S. A., & Alkassim, R. S. (2016). Comparison of convenience sampling and purposive sampling. *American journal of theoretical and applied statistics*, 5(1), 1-4. <https://doi.org/10.11648/j.ajtas.20160501.11>

- Fadhli, M. (2022). Study of entrepreneurship orientation and self-efficacy on entrepreneurship success and moderation of environmental instability in covid 19 pandemic conditions. *Journal of Management and Islamic Finance*, 2(2), 222-239. <https://doi.org/10.22515/jmif.v2i2.5275>
- Flick, U. (2022). *An introduction to qualitative research*. SAGE Publications. <https://www.torrossa.com/en/resources/an/5409482>
- Gao, J., Siddik, A. B., Khawar Abbas, S., Hamayun, M., Masukujjaman, M., & Alam, S. S. (2023). Impact of E-commerce and digital marketing adoption on the financial and sustainability performance of MSMEs during the COVID-19 pandemic: An empirical study. *Sustainability*, 15(2), 1-21. <https://doi.org/10.3390/su15021594>
- Ge, T., Abbas, J., Ullah, R., Abbas, A., Sadiq, I., & Zhang, R. (2022). Women's entrepreneurial contribution to family income: innovative technologies promote females' entrepreneurship amid COVID-19 crisis. *Frontiers in Psychology*, 13(1), 1-10. <https://doi.org/10.3389/fpsyg.2022.828040>
- Guest, G., Bunce, A., & Johnson, L. (2006). How many interviews are enough? An experiment with data saturation and variability. *Field methods*, 18(1), 59-82. <https://doi.org/10.1177/1525822X05279903>
- Gupta, A., & Kumar Singh, R. (2023). Managing resilience of micro, small and medium enterprises (MSMEs) during COVID-19: analysis of barriers. *Benchmarking: An International Journal*, 30(6), 2062-2084. <https://doi.org/10.1108/bij-11-2021-0700>
- Hamdani, M. L., & Amalia, N. (2022). The effect of business digitalization, technology utilization, and financial literacy on the sustainability of MSMEs in Surakarta. *Review of Management Accounting and Business Studies*, 3(2), 160-167. <https://doi.org/10.38043/revenue.v3i2.4841>
- Harel, R. (2021). The impact of COVID-19 on small businesses' performance and innovation. *Global Business Review*, 1(1), 1-22. <https://doi.org/10.1177/09721509211039145>
- Henry, C., Coleman, S., Orser, B., & Foss, L. (2022). Women's entrepreneurship policy and access to financial capital in different countries: an institutional perspective. *Entrepreneurship Research Journal*, 12(3), 227-262. <https://doi.org/10.1515/erj-2022-0234>
- Katadata. (2023). *Awal 2023, Ada 7,9 Juta Pengangguran di Indonesia*. <https://databoks.katadata.co.id/datapublish/2023/05/05/awal-2023-ada-79-juta-pengangguran-di-indonesia> (diakses pada 14 Januari 2025).
- Kemenkeu. (2022). *Pandemi Covid-19 Dan Menurunnya Perekonomian Indonesia*. <https://www.djkn.kemenkeu.go.id/artikel/baca/16064/Pandemi-Covid-19-Dan-Menurunnya-Perekonomian-Indonesia.html>.

- Kimhi, S., Marciano, H., Eshel, Y., & Adini, B. (2020). Recovery from the COVID-19 pandemic: Distress and resilience. *International journal of disaster risk reduction*, 50(1), 1-8. <https://doi.org/10.1016/j.ijdrr.2020.101843>
- Kusumastuti, D., & Sari, S. M. (2023, June). Strengthening the Creative Economy of Small and Medium Industries in Supporting the Tourism Potential in Surakarta. In *International Conference on Multidisciplinary Studies (ICOMSI 2022)* (pp. 25-34). Atlantis Press. https://doi.org/10.2991/978-2-38476-072-5_4
- Lamidi, L., & Rahadhini, M. (2021). The effect of digital marketing and financial inclusion on business sustainability through Marketing Performance Culinary Msme's in Surakarta. *Journal of Economics, Finance And Management Studies*, 4(6), 716-723. <https://doi.org/10.47191/jefms/v4-i6-06>
- Manolova, T. S., Brush, C. G., Edelman, L. F., & Elam, A. (2020). Pivoting to stay the course: How women entrepreneurs take advantage of opportunities created by the COVID-19 pandemic. *International Small Business Journal*, 38(6), 481-491. <https://doi.org/10.1177/0266242620949136>
- Miles, M. B., & Huberman, A. M. (1994). *Qualitative data analysis: An expanded sourcebook*. Thousand Oaks. https://psycnet.apa.org/record/1995-97407-000?utm_medium=email&utm_source=transaction
- Mukaromah, H., Permana, C. T., & Astuti, W. (2023, May). Aiming towards creative city: how Surakarta City government applied the Sustainability-Oriented Innovation (SOI) as a strategy to empower local small and medium creative industries. In *IOP Conference Series: Earth and Environmental Science (Vol. 1186, No. 1, p. 012018)*. IOP Publishing. <https://doi.org/10.1088/1755-1315/1186/1/012018>
- Naredia, S. P., Demartoto, A., & Romadhon, A. (2023). Capacity Development of Micro, Small, and Medium Scale Enterprise Actors in Tourism Sector using Tourism Digital Literacy Approach in Surakarta Indonesia. *Proceedings Series on Social Sciences & Humanities*, 12(1), 307-310. <https://doi.org/10.30595/pssh.v12i.812>
- Njie, B., & Asimiran, S. (2014). Case study as a choice in qualitative methodology. *Journal of research & method in Education*, 4(3), 35-40. <http://dx.doi.org/10.9790/7388-04313540>
- Nouri, P. (2023). Women entrepreneurs' persistence at the time of the COVID-19 pandemic: a decision-making perspective. *Journal of Entrepreneurship in Emerging Economies*, 15(6), 1594-1611. <https://doi.org/10.1108/JEEE-03-2022-0090>
- Nsabimana, A., & Uwimpuhwe, D. (2024). Impact of gender-based violence on local economy: a case study of gasabo district. *American Journal of Gender and Development Studies*, 3(1), 19-32. <https://doi.org/10.58425/ajgds.v3i1.254>

- Pratio, G., Margono, M., Zulkarnaen, D., & Kertati, I. (2023). Kajian digitalisasi ikm dan umkm kota surakarta. *Pusat Kajian Penelitian dan Pengembangan Daerah Kota Surakarta*, 2(1), 29-42. <https://doi.org/10.58684/jbs.v2i1.24>
- Prayag, G., Chowdhury, M., & Ozanne, L. K. (2024). Dynamic, technological and marketing capabilities in MSMEs' recovery from COVID-19—the moderating role of organizational learning. *Asia Pacific Journal of Marketing and Logistics*, 36(7), 1741-1766. <https://doi.org/10.1108/apjml-08-2023-0744>
- Purwanto., & Suprihati. (2024). Analisis sistem pengawasan mui terhadap sertifikat halal pada umkm di kota surakarta. *El-Mal Jurnal Kajian Ekonomi & Bisnis Islam*, 5(11), 5172-5184. <https://doi.org/10.47467/elmal.v5i11.5132>
- Rosepti, P., & Niasari, C. (2022). Female Entrepreneurship in Leading Digitalization as a Marketing Strategy for Prosperous MSMEs and Women's Empowerment: A Case Study of Latifa Indonesia. *Muslim Business and Economic Review*, 1(2), 305-323. <https://doi.org/10.56529/mber.v1i2.72>
- Rosyadi, I., & Purnomo, D. (2012). Tingkat ketahanan pangan rumah tangga di desa tertinggal. *Jurnal Ekonomi Pembangunan: Kajian Masalah Ekonomi dan Pembangunan*, 13(2), 303-315. <https://doi.org/10.23917/jep.v13i2.176>
- Sahi, G. K., Modi, P., & Mantok, S. (2023). New product innovations in times of crisis: How did women entrepreneurs survive the COVID-19 crisis?. *Industrial Marketing Management*, 111(1), 19-29. <https://doi.org/10.1016/j.indmarman.2023.03.004>
- Sari, L. E., Sobri, K. M., Lionardo, A., & Nadjib, A. (2022). The Relationship of Micro Small and Medium Enterprises, Local Government, and the Banking Sector in the Implementation of Economic Development Policies in the Era of the Covid-19 Pandemic. *JPPUMA: Jurnal Ilmu Pemerintahan dan Sosial Politik UMA (Journal of Governance and Political Social UMA)*, 10(2), 140-148. <https://doi.org/10.31289/jppuma.v10i2.7029>
- Setkab. (2024). *Dinamika Pertumbuhan Ekonomi Indonesia 2023 dan Proyeksi Tantangan 2024*. <https://setkab.go.id/dinamika-pertumbuhan-ekonomi-indonesia-2023-dan-proyeksi-tantangan-2024/>.
- Setyowati, E. (2009). Analisis Tingkat Partisipasi Wanita dalam Angkatan Kerja di Jawa Tengah Periode Tahun 1982-2000. *Jurnal Ekonomi Pembangunan: Kajian Masalah Ekonomi dan Pembangunan*, 10(2), 215-233. <https://doi.org/10.23917/jep.v10i2.801>
- Shastri, S., Shastri, S., & Pareek, A. (2019). Motivations and challenges of women entrepreneurs: Experiences of small businesses in Jaipur city of Rajasthan. *International Journal of Sociology and Social Policy*, 39(6), 338-355. <https://doi.org/10.1108/IJSSP-09-2018-0146>
- Subekti, P., Bajari, A., Sugiana, D., & Hafiar, H. (2023). Collaboration and Social Networks in the Entrepreneurial Ecosystem: Pillars to Shape the Resilience MSME Actors in the

Post-Pandemic Era. *Journal of Law and Sustainable Development*, 11(9), 1103-1103.
<https://doi.org/10.55908/sdgs.v11i9.1103>

Sucahyo, U. S., Damayanti, T. W., & Supramono, S. (2024). Unlocking success: Nexus between entrepreneurial orientation and financial performance in culinary MSMEs. *Journal of Economics, Business, and Accountancy Ventura*, 27(1), 1-13.
<https://doi.org/10.14414/jebav.v27i1.4432>

Suminah, S., Suwanto, S., Sugihardjo, S., Anantanyu, S., & Padmaningrum, D. (2022). Determinants of micro, small, and medium-scale enterprise performers' income during the Covid-19 pandemic era. *Heliyon*, 8(7), 1-10.
<https://doi.org/10.1016/j.heliyon.2022.e09875>

Supriyono, E., Sumarta, N. H., & Narulitasari, D. (2021). Pengelolaan Keuangan Keluarga pada Ibu Rumah Tangga Pemilik Umkm Sebagai Masyarakat Terdampak Covid-19 di Kelurahan Kauman, Surakarta. *Budimas: Jurnal Pengabdian Masyarakat*, 3(1), 109-115. <http://dx.doi.org/10.29040/budimas.v3i1.1634>

Waluyo, D., Kusuma, P., & Eric., M. (2022). Improving digital literacy for aisyiyah entrepreneurs to win business competition in the pandemic period (surakarta residency study). *E-Amal Jurnal Pengabdian Kepada Masyarakat*, 2(2), 1055-1060.
<https://doi.org/10.47492/eamal.v2i2.1532>

Wang, X., Cai, L., Zhu, X., & Deng, S. (2022). Female entrepreneurs' gender roles, social capital and willingness to choose external financing. *Asian Business & Management*, 21(3), 1-10. <https://doi.org/10.1057/s41291-020-00131-1>

Wibowo, G. A. (2023). Total UMKM di Solo 11.157 Pada 2022, Terbanyak di Pasar Kliwon. <https://www.google.com/amp/s/bisnis.espos.id/total-umkm-di-solo-11-157-pada-2022-terbanyak-di-pasar-kliwon-1576632/amp> (diakses pada 14 Januari 2025).

World Bank. (2021). *Indonesia Gender Equality Program*. <https://www.worldbank.org/in/country/indonesia/brief/gender-equality-for-growth-research-and-analytical-program-in-indonesia>.

Wulandari, M. C., Putro, T. R., & Prasetyani, D. (2023). Digital Adaptation to Performance of SMEs in Surakarta City, Indonesia. *International Journal of Multicultural and Multireligious Understanding*, 10(5), 238-244.
<https://doi.org/10.18415/ijmmu.v10i5.4606>