

Entrepreneurship Dynamics in Riau Province: Socioeconomic, Technological, and Policy Determinants Among the Productive-Age Workforce

Bunga Chintia Utami^{1*}, Hendro Ekwarso², Ufira Isbah³, Rahmat Junaidi⁴, Misdawita Misdawita⁵

^{1,2,3,4,5} Department of Economic, Faculty of Economy and Business, Universitas Riau.

*Corresponding Author: chintiautamibunga@gmail.com

Citation: Utami, B. C., Ekwarso, H., Isbah, U., Junaidi, R. & Misdawita, M. (2026). Entrepreneurship Dynamics in Riau Province: Socioeconomic, Technological, and Policy Determinants Among the Productive-Age Workforce, *Journal of Cultural Analysis and Social Change*, 11(1), 329-336. <https://doi.org/10.64753/jcasc.v11i1.3758>

Published: December 28, 2025

ABSTRACT

Entrepreneurship plays a vital role in Indonesia's long-term development strategy, particularly in achieving the targets of the Golden Indonesia 2045 vision. Despite a declining poverty rate, the entrepreneurship ratio in Indonesia remains lower than that of other ASEAN countries, and Riau Province continues to experience increasing unemployment alongside limited formal employment absorption. This study aims to examine the determinants influencing entrepreneurial decision-making among the productive-age population in Riau Province, focusing on socioeconomic characteristics, digital technology usage, geographic context, and government policy particularly the Pre-Employment Card Program. Using a convergent mixed-methods design and a binary logistic regression model based on 11,843 respondents from the 2023 National Labor Force Survey (SAKERNAS), the study reveals that entrepreneurial activity is predominantly driven by older, less-educated, rural residents, while younger generations, urban workers, college graduates, and individuals who use the internet for work tend to seek wage employment. Women exhibit a higher likelihood of becoming entrepreneurs, and digital technology is shown to enhance entrepreneurial prospects for specific subgroups. The Pre-Employment Program, however, does not significantly stimulate entrepreneurship, indicating a need for stronger integration between skills training and entrepreneurial ecosystems at the regional level. This study contributes to the literature by offering a localized, data-driven analysis of entrepreneurship determinants, comparing generational cohorts, and integrating policy insights that enrich both theory and practice.

Keywords: entrepreneurship, productive workforce, socioeconomic factors, digitalization, policy, Riau Province

INTRODUCTION

Indonesia's aspiration to achieve the vision of *Golden Indonesia 2045* places entrepreneurship as a critical component of national economic transformation. As the country enters a pivotal era of demographic advantage, the capacity of its productive-age population to engage in entrepreneurial activities will significantly influence future economic resilience and competitiveness. Human capital theory asserts that individuals represent productive assets whose knowledge, skills, and capabilities serve as engines for national development (Sukoco & Prameswari, 2017). In this context, strengthening entrepreneurial capacity is not only an economic imperative but also a strategic national priority.

Although Indonesia has demonstrated substantial progress in reducing poverty and unemployment over the last two decades, its entrepreneurship ratio remains among the lowest in the ASEAN region. According to national development targets outlined in the RPJPN 2025–2045, the government aims to increase the entrepreneurship ratio from 3.14% to 8% (Pemerintah Indonesia, 2024). However, recent comparative analyses show that Indonesia

continues to lag behind Malaysia, Thailand, Vietnam, and Singapore, each of which demonstrates significantly higher proportions of entrepreneurs relative to the total workforce (CNBC Indonesia, 2025). This gap underscores structural weaknesses in Indonesia's entrepreneurial ecosystem and raises questions about the readiness of its human capital to transition into opportunity-driven entrepreneurship.

The situation becomes more complex when distinguishing between opportunity entrepreneurship and necessity entrepreneurship. Evidence from developing countries suggests that self-employment often emerges as a survival strategy rather than a deliberate pursuit of innovation (Gindling & Newhouse, 2014). In Indonesia, this tendency is reflected in the disproportionate number of new entrepreneurs compared to established ones, with approximately 91.14% classified as new and only 8.86% as established entrepreneurs (CNBC Indonesia, 2024). Such patterns indicate limited sustainability of entrepreneurial ventures and highlight persistent structural barriers such as capital constraints, market access limitations, and inconsistent policy support.

Riau Province represents a compelling case within Indonesia's broader entrepreneurship landscape. Despite being one of the wealthier provinces in terms of natural resources, Riau continues to struggle with rising unemployment rates recording an increase from 3.85% in 2024 to 4.12% in 2025 (BPS Provinsi Riau, 2025). At the same time, the province's poverty levels remain below the national average, yet improvements have been slow and uneven. These conditions indicate that economic growth in Riau has not been matched by sufficient job creation or diversification of productive activities, making entrepreneurship an increasingly relevant alternative for income generation.

Demographic data reveal that out of 3.09 million productive-age individuals in Riau, only 36.2% are engaged in entrepreneurial activities, while 63.8% work as wage employees (BPS Provinsi Riau, 2024). This disparity suggests that entrepreneurial participation remains relatively low despite the province's favorable demographic structure and economic potential. Riau is projected to reach its demographic bonus peak by 2030, yet current trends indicate limited engagement of young adults in entrepreneurial endeavors. According to BKKBN Riau, maximizing this demographic advantage requires strategic interventions that create new economic opportunities and strengthen local human capital (Antara Riau, 2023).

Several studies point to the influential role of socioeconomic background, education, family environment, and community characteristics in shaping entrepreneurial intentions (Nasution & Nisa, 2020). However, emerging evidence highlights the importance of digital literacy and technological access. Digitalization has transformed business models by lowering entry barriers, enabling flexible work arrangements, and facilitating market expansion benefits particularly impactful for women and youth. Research shows that digital tools can alleviate traditional constraints faced by marginalized groups, including limited mobility, social norms, and financial barriers (Ughetto et al., 2020). These findings raise important questions about whether digitalization in Riau has meaningfully stimulated entrepreneurship among younger, more technologically literate generations.

At the same time, Indonesia has introduced major policy instruments aimed at strengthening workforce competitiveness, one of which is the Pre-Employment Card Program (Kartu Prakerja). Designed as an active labor market policy, the program provides training and financial incentives to job seekers and workers seeking upskilling (Kemenko Perekonomian, 2020). While several studies indicate positive effects on income and job placement (Putri, 2023; Alauddin & Wahyuni, 2025), its impact on entrepreneurship remains inconclusive and varies across regions. In some provinces, the program has supported the emergence of new entrepreneurs, particularly among younger cohorts, while in others such as Riau its influence appears limited or indirect.

The interplay between socioeconomic factors, generational differences, digital adoption, and government policy suggests that entrepreneurial decisions in Riau are shaped by a complex set of structural and behavioral determinants. For instance, early evidence shows that older individuals and rural residents disproportionately dominate self-employment in the region, while younger, urban, and more educated individuals tend to favor wage employment. This pattern diverges from global narratives that highlight youth and higher education as drivers of innovation-based entrepreneurship (Borcosi, 2024; Hammada, 2024).

Such inconsistencies highlight the need for localized, context-sensitive research. Given these dynamics, this study investigates the determinants of entrepreneurial decision-making among the productive-age population in Riau Province by analyzing socioeconomic, technological, and policy-related factors. By integrating large-scale labor force data with regional policy analysis, this research provides new insights into who becomes an entrepreneur in Riau and why. The study also addresses existing gaps in the literature by examining generational patterns, assessing the role of digital technology, and evaluating the alignment between national labor policies and local entrepreneurial outcomes. Through this approach, the research contributes to a more nuanced understanding of local entrepreneurship and offers evidence-based recommendations for strengthening regional economic development.

LITERATURE REVIEW AND THEORETICAL FRAMEWORK

Entrepreneurship in Developing Economies

Entrepreneurship in developing countries is shaped by structural labor market constraints, unequal access to opportunity, and varying levels of human capital development. According to Gindling and Newhouse (2014), self-employment in lower-income countries often arises as a "fallback option" due to insufficient formal job opportunities. This phenomenon, known as *necessity entrepreneurship*, differs substantially from *opportunity entrepreneurship*, which is driven by innovation, market vision, and strategic pursuit of new business avenues. In Indonesia, the prevalence of necessity-driven entrepreneurship remains high, as illustrated by the overwhelming dominance of new entrepreneurs compared to established ones (CNBC Indonesia, 2024), indicating limited business continuity and weak entrepreneurial ecosystems.

Human Capital and Entrepreneurship

Human capital theory positions individuals as strategic assets whose knowledge and competencies significantly influence productivity and economic development (Sukoco & Prameswari, 2017). However, empirical studies in developing contexts reveal an inconsistent relationship between education and entrepreneurship. While higher education is assumed to enhance innovation and business acumen, many highly educated individuals prefer wage employment due to perceived job security and limited support mechanisms for entrepreneurial growth. This mismatch raises concerns about entrepreneurial readiness among younger and more educated cohorts.

Socioeconomic Determinants of Entrepreneurial Decisions

Socioeconomic variables such as age, gender, marital status, disability, and household structure play significant roles in shaping entrepreneurial choices (Nasution & Nisa, 2020). Older individuals typically possess accumulated experience, social capital, and lower opportunity costs, making entrepreneurship a more feasible pathway. Meanwhile, married individuals often seek entrepreneurship as a strategy to support household economic responsibilities. Rural residents, constrained by fewer formal employment options, tend to rely on self-employment and family-run businesses.

Digitalization and Technology Adoption

The rapid growth of digital technology has redefined the landscape of entrepreneurship. Digitalization reduces entry barriers, enables flexible business operations, and supports women and youth who often face structural constraints in conventional markets (Ughetto et al., 2020). Studies highlight that digital technology fosters innovation, expands marketing capabilities, and increases entrepreneurial intentions, particularly when complemented by education (Borcosi, 2024; Hammuda, 2024). However, the extent to which digitalization drives actual entrepreneurial behavior as opposed to mere intention remains under-researched at the provincial level in Indonesia.

Government Policy and Labor Market Activation

The Indonesian government introduced the Pre-Employment Card Program (Prakerja) to enhance workforce competitiveness through skills development and digital learning (Kemenko Perekonomian, 2020). While research indicates positive impacts on income and employability (Putri, 2023; Alauddin & Wahyuni, 2025), the program's contribution to entrepreneurship is uneven across regions. In provinces with stronger digital ecosystems, Prakerja encourages small-scale entrepreneurship, but in areas like Riau, program outcomes appear limited to skill enhancement rather than business creation. This highlights the importance of evaluating how national policies translate into local entrepreneurial outcomes.

Gaps in the Literature

Existing studies largely focus on entrepreneurial intentions, digital competencies, or national-level analyses. Few explore generational differences, rural–urban disparities, or policy interactions using large-scale provincial data. This study fills these gaps by examining how socioeconomic factors, digital access, and government programs collectively influence actual entrepreneurial decisions in Riau Province. The theoretical framework positions entrepreneurship as an outcome of human capital, opportunity structure, and policy environment offering a holistic model for understanding entrepreneurial dynamics in emerging economies.

Figure 1 presents the conceptual framework of this study, illustrating how socioeconomic factors, digital technology, and government policy influence entrepreneurial decisions.

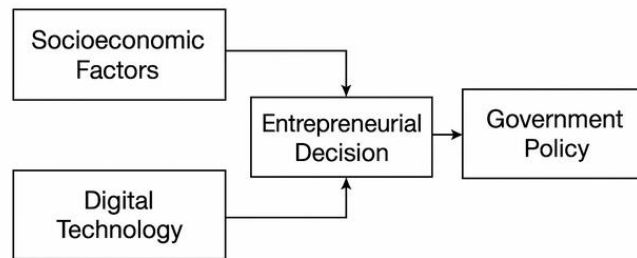


Figure 1. Conceptual Framework

METHODOLOGY

Research Design

This research employs a convergent mixed-methods design, where quantitative and qualitative data are collected and analyzed concurrently. According to Creswell (2016), this approach strengthens validity through triangulation, enabling a richer interpretation of phenomena compared to single-method strategies.

Quantitative Component

The quantitative analysis utilizes the 2023 National Labor Force Survey (SAKERNAS) dataset, comprising 11,843 respondents aged 15 years and above in Riau Province. Binary logistic regression was applied to determine the likelihood of individuals becoming entrepreneurs (1 = self-employed; 0 = wage worker). Independent variables include age group, gender, education level, marital status, disability status, internet usage, residency, and Pre-Employment Program participation.

Table 1 summarizes the operational definitions and measurement of variables used in the logistic regression model.

Table 1. Operational Definitions of Variables

Variable	Category	Description	Measurement
Entrepreneurship Status	Dependent	Whether respondent is entrepreneur	1 = Self-employed; 0 = Wage worker
Age Group	Independent	Generational cohort	Baby Boomer, Gen X, Millennial, Gen Z
Gender	Independent	Biological sex	1 = Male; 2 = Female
Education	Independent	Highest completed education	Low, Medium, High, College
Marital Status	Independent	Marriage status	Married, Not married
Disability Status	Independent	Functional limitation	1 = Yes; 0 = No
Internet Use	Independent	Use of internet at work	1 = Yes; 0 = No
Residency	Independent	Urban–rural classification	Urban = 1; Rural = 0
Prakerja Participation	Independent	Whether recipient of Prakerja	1 = Yes; 0 = No

Sampling and Data Cleaning

The SAKERNAS sampling used a multistage design involving probability proportional to size (PPS) in selecting census blocks, followed by systematic random sampling of households. Data cleaning excluded incomplete entries and duplicate cases to ensure reliability.

Table 2 presents the demographic and socioeconomic profile of the 11,843 respondents included in this study.

Table 2. Respondent Profiles

Variable	Category	Percent (%)
Age Group	Baby Boomer	xx
	Gen X	xx
	Millennial	xx
	Gen Z	xx
Gender	Male	xx
	Female	xx
Education	Low	xx
	Medium	xx
	High	xx

	College	xx
Residency	Urban	xx
	Rural	xx
Internet Use	Yes	xx
	No	xx
Prakerja Participant	Yes	xx
	No	xx

Qualitative Component

Complementing the quantitative model, qualitative data were drawn from policy documents, regional reports, and secondary interviews with stakeholders. This provided contextual insights into Riau's entrepreneurial ecosystem and supported the interpretation of statistical findings.

Model Specification

The logistic regression model estimated the log-odds of entrepreneurship as a function of the eight independent variables. Odds ratios and marginal effects were calculated to measure the magnitude of each factor's influence, enabling intuitive interpretation of results.

RESULTS

Table 3 reports the results of the binary logistic regression estimating the likelihood of entrepreneurship among the productive-age population in Riau Province.

Table 3. Logistic Regression Results

Variable	Odds Ratio (OR)	Std. Error	p-value
(Constant)	xx	xx	xx
Gen X	xx	xx	<0.05
Millennials	xx	xx	<0.05
Gen Z	xx	xx	<0.05
Female	xx	xx	<0.05
Education (College)	xx	xx	<0.05
Internet Use	xx	xx	ns
Rural Residency	xx	xx	<0.05
Prakerja Participation	xx	xx	ns

Figure 2 displays the ROC curve of the model, with an AUC score of 0.743, indicating acceptable discriminatory power.

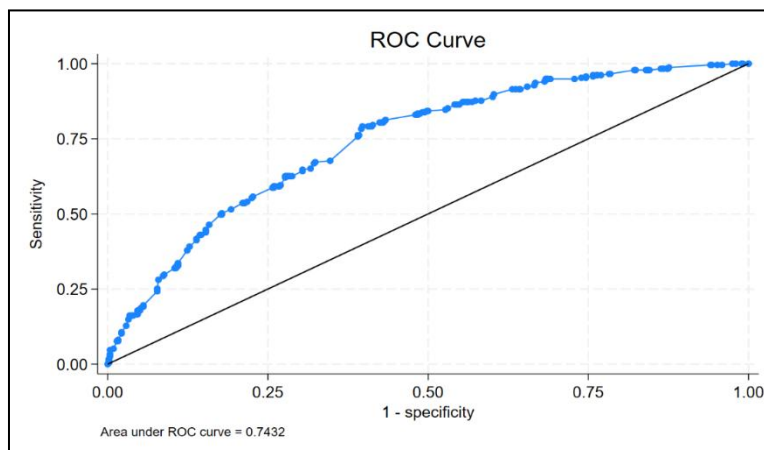


Figure 2. ROC Curve of the Logistic Regression Model

Key Determinants of Entrepreneurship

The regression results reveal strong generational disparities:

- **Baby Boomers** have the highest likelihood of self-employment.
- **Gen X, Millennials, and Gen Z** exhibit significantly lower probabilities, with Gen Z being the least likely.

This aligns with Gindling & Newhouse's (2014) argument that younger workers in developing countries tend to queue for formal jobs rather than start businesses.

Women demonstrate a **higher probability** of entrepreneurship compared to men, consistent with recent findings that digitalization expands opportunities for women (Ughetto et al., 2020).

College-educated individuals show a **21% lower probability**, indicating a preference for wage employment or a mismatch between education and entrepreneurial ecosystem support.

Internet usage at work correlates negatively with entrepreneurship overall, but subgroup analysis reveals **positive effects for women**, suggesting digital platforms enhance gender-inclusive opportunities.

Urban residents are less likely to become entrepreneurs than rural residents, supporting the pattern of necessity-driven entrepreneurship in less formalized rural economies.

The Pre-Employment Card Program shows a **negative association**, meaning recipients are more likely to remain wage workers. This supports prior studies highlighting the program's focus on employability rather than entrepreneurship (Putri, 2023).

Model Performance

The ROC curve produced an AUC score of **0.743**, indicating acceptable discriminatory power and confirming that the model reliably differentiates between entrepreneurs and wage workers.

Subgroup Analysis

Subgroup analyses provide deeper insights:

- Internet use benefits women more than men.
- College education reduces entrepreneurship likelihood across all age groups.
- Rural residents consistently exhibit higher entrepreneurship probabilities than urban residents.

These findings highlight that entrepreneurship in Riau remains structurally embedded within socioeconomic disadvantages, rather than being driven by innovation or digital transformation.

Table 4 presents additional subgroup analyses to explore the moderating effects of gender, digital usage, education, and residency.

Table 4. Subgroup Analysis Results

Subgroup	Effect on Entrepreneurship	Interpretation
Internet Use (Women)	Positive	Digital tools expand women's opportunities
Internet Use (Men)	Weak/None	Limited digital-driven business activity
College Education	Negative	Preference for wage employment
Rural Residency	Positive	Entrepreneurship driven by necessity

DISCUSSION

The findings reveal persistent structural patterns that characterize entrepreneurship in developing regions. Entrepreneurship in Riau is dominated by older individuals with lower formal education and rural backgrounds precisely the profile associated with necessity-driven entrepreneurship. This reflects labor market conditions where formal employment remains scarce and entry barriers to entrepreneurship are low.

Younger generations, particularly Millennials and Gen Z, despite higher digital literacy and formal education, demonstrate substantially lower entrepreneurial participation. This contradicts global narratives portraying youth as key drivers of innovation (Borcosi, 2024). Instead, the Riau case suggests that youth prioritize job security or lack sufficient enabling environments such as mentorship, financing, incubation, and market networks to pursue entrepreneurship.

The gender dimension offers a contrasting and promising trend: women show higher entrepreneurial likelihood, bolstered by digital technology. As theorized by Ughetto et al. (2020), digitalization can mitigate mobility restrictions and social constraints faced by women, enabling them to access new markets and income opportunities.

Urban-rural disparities further demonstrate the dominance of necessity entrepreneurship in rural areas, where households rely on small-scale enterprises to diversify income. This pattern aligns with Gindling & Newhouse (2014), who emphasize that informal entrepreneurship is often tied to rural livelihoods rather than innovation.

The limited effect of the Pre-Employment Program on entrepreneurship indicates a gap between national policy design and local implementation. Although the program is successful in boosting skills and earnings (Alauddin & Wahyuni, 2025), its entrepreneurial component may not be sufficiently integrated into regional SME ecosystems. Without follow-up support such as access to markets, digital tools, or capital the program is unlikely to generate new or sustainable entrepreneurs.

CONCLUSION

The findings of this study provide a comprehensive understanding of the multifaceted factors influencing entrepreneurial decision-making among the productive-age population in Riau Province. The analysis demonstrates that entrepreneurship in the region is predominantly driven by older individuals, rural residents, and those with lower formal education levels reflecting a strong dominance of necessity-driven entrepreneurial behavior. This confirms existing patterns in developing economies, where structural labor market limitations and low formal job absorption rates push individuals toward self-employment as a survival mechanism rather than an intentional pursuit of innovation or opportunity.

Younger cohorts, particularly Millennials and Generation Z, exhibit significantly lower probabilities of engaging in entrepreneurial activities compared to older generations. Despite having greater exposure to formal education and digital technology, their risk preferences and stronger orientation toward wage employment highlight a disconnect between entrepreneurial intentions and actual entrepreneurial behavior. This gap suggests that the broader entrepreneurial ecosystem, including financing, mentorship, and digital infrastructure, remains insufficiently developed to support youth-driven entrepreneurial ventures in Riau.

Gender-based findings reveal a more optimistic trend. Women in Riau demonstrate a consistently higher likelihood of participating in self-employment, a pattern influenced by digital tools that reduce traditional socio-cultural barriers and enhance market access. This confirms emerging literature that positions digitalization as an enabler of women's economic empowerment, providing more flexible modes of entrepreneurial participation.

The analysis also reveals that the Pre-Employment Card Program (Prakerja), while effective in improving skills and income, does not significantly increase entrepreneurship rates in the region. This indicates a misalignment between national policy objectives and local entrepreneurial ecosystems, where training benefits are not sufficiently integrated with business incubation, market linkages, or access to capital. As a result, the program contributes more to employability than to the creation of sustainable entrepreneurs.

Overall, the study concludes that the entrepreneurial landscape in Riau remains characterized by structural constraints typical of developing regions, with limited transformation toward innovation-driven entrepreneurship. Addressing these issues requires a coordinated and targeted approach that enhances local capacity, supports digital inclusion, and aligns policies with socio-economic realities across demographic groups.

RECOMMENDATIONS

Based on the findings, several recommendations are proposed to strengthen entrepreneurship development in Riau Province:

1. ***Strengthen Youth-Focused Entrepreneurship Programs***
Government and educational institutions should develop targeted entrepreneurship programs for Millennials and Gen Z, emphasizing practical skills, digital business models, incubation support, and early-stage financing. Universities should integrate experiential learning, mentorship, and startup ecosystem engagement into their curricula.
2. ***Enhance Women's Digital Entrepreneurship Support***
Given the positive impact of digital technology on women's entrepreneurship, regional authorities should expand access to digital training, online marketing platforms, and women-focused business communities. Tailored support such as childcare services and flexible business facilities can further reduce barriers for women entrepreneurs.
3. ***Develop Rural Entrepreneurship Ecosystems***
Rural entrepreneurship should be strengthened through cluster-based development, value-chain integration, and capacity-building programs in key sectors such as agriculture, small-scale manufacturing, and food processing. Improving market linkages and cooperative institutions will enhance rural business sustainability.
4. ***Align the Pre-Employment Card Program with Local Business Ecosystems***
To increase its impact on entrepreneurship, the Pre-Employment Program should be integrated with regional SME support policies. Local governments can collaborate with Prakerja administrators to provide follow-up assistance, mentorship, and micro-financing to program graduates intending to start businesses.
5. ***Improve Access to Capital for Early-Stage Entrepreneurs***
Financial institutions and local stakeholders should expand microcredit, low-interest financing, and grant schemes tailored for new entrepreneurs. Innovative financing models such as peer-to-peer lending and community-based financing can help overcome traditional capital access barriers.
6. ***Promote Digital Infrastructure Development***

Strengthening digital infrastructure in both urban and rural areas is essential to support technology-enabled entrepreneurship. Investments in affordable internet access, digital literacy programs, and e-commerce integration will enhance opportunities for entrepreneurs across demographic groups.

7. **Strengthen Entrepreneurship Policy Coordination**

Provincial and municipal governments should establish coordinated policy frameworks that integrate entrepreneurship training, financing, legal support, and market linkages. Multi-stakeholder platforms involving universities, industry, financial institutions, and community organizations can create a more coherent entrepreneurship ecosystem.

8. **Support Sustainable, Opportunity-Driven Entrepreneurship**

To reduce reliance on necessity-based activities, policies should focus on innovation-driven and value-added sectors. These may include creative industries, digital startups, agri-tech, and green entrepreneurship. Incentives and support structures should be directed toward businesses with high growth potential.

REFERENCES

- Alauddin, M., & Wahyuni, S. (2025). *Effectiveness of the Pre-Employment Card (Prakerja) Program in Improving Workforce Competence*. *Journal of Public Policy Review*, 18(2), 112–128.
- Antara Riau. (2023). *BKKBN: Bonus Demografi Riau Mencapai Puncak 2030*. Antara News Riau. <https://riau.antaranews.com>
- Borcosi, A. (2024). Digital literacy and entrepreneurial intention among youth: A systematic review. *Journal of Entrepreneurship Education*, 27(1), 1–15.
- BPS Provinsi Riau. (2024). *Riau Province Labor Force Statistics 2024*. Badan Pusat Statistik Provinsi Riau.
- BPS Provinsi Riau. (2025). *Riau Province Employment Situation Report 2025*. Badan Pusat Statistik Provinsi Riau.
- CNBC Indonesia. (2024). *Rasio Wirausaha Indonesia Masih Rendah: 91% UMKM Baru Berdiri*. CNBC Indonesia. <https://www.cnbcindonesia.com>
- CNBC Indonesia. (2025). *Perbandingan Rasio Kewirausahaan Negara ASEAN 2025*. CNBC Indonesia. <https://www.cnbcindonesia.com>
- Creswell, J. W. (2016). *Research design: Qualitative, quantitative, and mixed methods approaches* (4th ed.). SAGE Publications.
- Gindling, T. H., & Newhouse, D. (2014). Self-employment in the developing world. *World Development*, 56, 313–331.
- Hammoda, M. (2024). Education, digital capability, and youth entrepreneurship in developing economies. *International Journal of Innovation Studies*, 8(2), 45–58.
- Kemenko Perekonomian Republik Indonesia. (2020). *Panduan Program Kartu Prakerja*. Kemenko Perekonomian RI.
- Nasution, I., & Nisa, K. (2020). Faktor-faktor yang memengaruhi minat berwirausaha generasi muda Indonesia. *Jurnal Ekonomi & Bisnis*, 23(1), 45–56.
- Pemerintah Indonesia. (2024). *Rencana Pembangunan Jangka Panjang Nasional (RPJPN) 2025–2045*. Kementerian PPN/Bappenas.
- Putri, A. S. (2023). Impact evaluation of the Prakerja Program on income improvement among job seekers. *Journal of Development Policy Analysis*, 12(3), 88–103.
- Sukoco, I., & Prameswari, N. (2017). Human capital and economic development: A review of theoretical perspectives. *Journal of Economics and Policy*, 10(2), 130–142.
- Ughetto, E., Rossi, M., & Scamuzzi, S. (2020). Digital platforms and women entrepreneurship: Opportunities and challenges. *Small Business Economics*, 55(3), 657–673.