Signifikan: Jurnal Ilmu Ekonomi
Volume 13(2), 2024: 259 - 272
P-ISSN: 2087-2046; E-ISSN: 2476-9223
https://doi.org/10.15408/sjie.v13i2.38046

Technology Transfer of Rural Entrepreneurship Digitization to Regional Economic Growth

P. Eko Prasetyo
Faculty of Economics and Business, Universitas Negeri Semarang, Indonesia
E-mail: pekoprasetyo@mail.unnes.ac.id
*Corresponding author

JEL Classification:
O14
O47
P25

Received: 14 March 2024

Revised: 29 September 2024

Accepted: 15 November 2024

Available online: December 2024

ABSTRACT

Research Originality*:* The digital technology transfer in rural entrepreneurship is a knowledge-based solidarity socio-economic (SSE) innovation that drives regional economic growth and reduces inequality.

Research Objectives: This study aims to analyze the role of digitalization technology transfer in entrepreneurship on regional economic growth, inequality mitigation, and other related resource factors.

Research Methods: The study approach model used a mixed methods design through exploratory and explanatory stages. The data were analyzed quantitatively descriptively with the standard multiple regression tool. The operational variables were measured using the Gini ratio index.

Empirical Results: The results showed that digitalization technology transfer encourages regional economic growth. However, the positive role created has not reduced the negative impact and inequality. This inequality could be mitigated by the innovation of the community's social solidarity economic system (SSE). There are indications of the potential of local community wisdom to strengthen informal institutions in society.

Implications: Utilizing the community's potential and the SSE model could provide added value for the community's welfare.

Keywords:
digitization technology transfer; rural entrepreneurship; regional economic growth; inequality.

Prasetyo, P. E. (2024). Technology Transfer of Rural Entrepreneurship Digitization to Regional Economic Growth. *Signifikan: Jurnal Ilmu Ekonomi*, *13*(2), 259 – 272. https://doi.org/10.15408/sjie.v13i2.38046

INTRODUCTION

Technology transfer or transformation of entrepreneurship digitalization is increasingly important in changing local traditional techniques. It has become a priority scale for regional and global development policies (World Bank, 2022; Tokar et al., 2022). Digital technology makes industrial boundaries easily penetrable (Szalavetz, 2022). Although technology transfer to digitize rural entrepreneurship creates new job opportunities and drives economic growth, it also creates inequality (Ferrari et al., 2022). Digital transformation impacts social inequality and economic competitiveness. Empirical research found a negative impact on the use of social media (such as Instagram) on all determinants of the psychological well-being of young people in Korea (Song, 2023). Therefore, incentive policies are needed to increase community capacity. The digitization technology revolution has created fear and uncertainty due to threats to unemployment and inequality (Yusuf, 2021). Subsequently, previous studies recommended examining policy tools that stabilize the economy during uncertainty.

The inequality problem has increased in various countries, including the European Union. It has not been overcome by conservative and social-democratic economic traditions (Wildowicz-Szumarska, 2022). Previous studies found empirical and theoretical evidence that country-specificity causes inequality (Kot & Paradowski, 2022). In Asia-Pacific, digital and technology divides have increased diversity of inequality because each country has different technology investments and policy support (Akhtar, 2018). Market-led growth alone cannot provide a community with a more prosperous and sustainable future (Akhtar, 2018). Therefore, inefficient markets and an increase in leisure time increase inequality (Boppart, 2021). Although contemporary digital technology has been fascinating, inequality continues to increase (Qureshi, 2021). Economic inequality affects individual decisions to engage in entrepreneurial activities (Xie et al., 2022).

This study aimed to explain various opportunities and challenges and avoid the risk trap of uncertainty through social innovation. In rural areas, social innovation is not about regime changes. It is about developing different social innovations in pluralism to benefit the community (Slee & Polman, 2021). The current digitization revolution is unavoidable and should be faced wisely. When family business actors do not follow the digitization process, they become incompetent and lose their competitive position (Turuk, 2019). Therefore, this problem should be analyzed because it provides new challenges for institutional policy authorities and independent innovation for other rural family entrepreneurship.

This study builds on previous literature that used an exploratory sequential and qualitative descriptive mixed methods design (Prasetyo & Setyadharma, 2022). The previous qualitative descriptive analysis explored and identified key determinants in digitizing rural entrepreneurship technology. Furthermore, the qualitative phase was used in this study to build the quantitative phase. A systematic literature review approach is needed to strengthen the analysis and increase the data validity and reliability. Previous research only explained the relationship between digitalization and economic growth. The

http://journal.uinjkt.ac.id/index.php/signifikan
https://doi.org/10.15408/sjie.v13i2.38046

novelty of this manuscript not only explains the importance of digitalization in driving regional economic growth and causes inequality in rural areas.

The first part of this manuscript explains the urgency of digitization technology transfer because of its potential unwanted, invisible, and unknown impacts. The impacts become apparent only after the digital technology is examined and implemented (Pansera et al., 2019). This argument is getting stronger and more interesting because the significant regional entrepreneurship gap should be considered an important problem for regional policy (Rogalska, 2018). The second part explained the need for new institutional studies on various determinants regarding entrepreneurship digitization, technology transfer, and increasing productivity in encouraging economic growth (Zhang et al., 2022; Purohit & Purohit, 2021). Furthermore, the discussion results, conclusions, and recommendations were presented in the last section.

Human capital has become the most competitive and unique resource in developing a modern digital regional economy (Prasetyo, 2020). It plays an important role in this digitalization technology transformation (Zaborovskaia et al., 2020). Digital technology transfer has encouraged entrepreneurship and contributed to new business economic opportunities by creating new markets and reducing barriers for new entrants (World Bank, 2022). ICT training should shift toward critical social and cultural practices that encourage community participation in cultural life and official institutions to close the digital human capital gap. It turned out that prosperity is strongly impacted by the population's education (Simovicova & Urbancikova, 2022; Paul, 2022).

Entrepreneurship digital technology transfer in rural areas increases regional development's economic growth and innovation potential (Branauskas & Raisiene, 2022). Digital transformation has profound policy implications for entrepreneurial innovation (Mukesh, 2022). Rapid technological advances and increased digitalization technology in rural areas have facilitated the development of modern agricultural processes (Purohit & Purohit, 2021). However, digital entrepreneurial economic activity development depends on using digital technology by individuals, communities, and governments (Turuk, 2019). This condition necessitates future studies in various interdisciplinary fields to better understand the digital entrepreneurship domain and encourage the achievement of the SDGs.

Established economists such as Adam Smith and Schum-peter have emphasized that human capital and institutional factors are the two most important determinants of economic growth (Prasetyo & Kistanti, 2020). The role of human capital and institutions drives entrepreneurial competitiveness, quality, and sustainable economic growth. Other studies found that human and social capital, institutional quality, and entrepreneurship drive economic growth and sustainable competitiveness (Mthanti & Ojah, 2018). Therefore, human capital and institutional factors measure established traditional entrepreneurial technology in promoting economic growth and sustainable competitiveness (Prasetyo et al., 2021). The industrial revolution and the increasingly widespread digitization of technology transfer have caused a decline in human capital accumulation, institutions, inequality, and fear (Qureshi, 2021).

The economy built through digitization technology transfer has provided a new impetus for sustainable economic development, inequality, and fear (Branauskas & Raisiene, 2022). The digital transition process has demonstrated an enormous capacity to develop and implement sustainable solutions. According to previous studies, digital technology transfer in rural areas could have positive and negative impacts (Morris et al., 2022). The positive impact could still be maximized to reduce the negative impact (Ferrari et al., 2022).

In institutional theory, social capital strongly impacts the relationship between institutions and entrepreneurship. The theory shows that informal and formal institutions are important in reducing moral hazards in reward-based crowdfunding (Lin & Pursiainen, 2022). Formal institutions could build informal institutions when regulatory changes strengthen entrepreneurs and reduce social capital (Lin & Pursiainen, 2022). Since formal institutions are often ineffective, informal institutions could be an adequate substitute for economic transactions in low-income communities (Prasetyo et al., 2022; Danquah & Sen, 2022). The informal institutions cover community norms such as religious, social, cultural, economic, political, and security that control individual behavior in socioeconomic transactions. Furthermore, transformational and social capital and resilience are relevant informal institutions for leadership (Urbano et al., 2021).

This study examined how digitization technology transfer in rural entrepreneurship could drive regional economic growth while increasing inequality. The urgency of this study is how to mitigate the resulting negative impacts. The topic question was the effect of entrepreneurial digitization technology transfer on human and institutional factors and traditional technology in rural areas. Nambisan et al. (2019) recommended that future study themes should explain the implications. Therefore, this study could serve as important information and policy implications for mitigating the negative impacts and driving regional economic growth.

This study aimed to complement the socioeconomic innovation theory of capitalism from Schumpeter and Karl Mark. The theory of the capitalist socioeconomic system has more monetary dimensions through the corporate social responsibility model. Moreover, the model of capitalist society's social and economic evolution system is a competitive social innovation process between large companies (Yay & Yay, 2022). The slight difference between the two lies only in the value theory and analysis of social class. However, the capitalist system model cannot reduce inequality in a humanistic and just manner. This study implies that new theoretical models based on social innovation, such as the SSE system model, are needed to mitigate the negative impacts of digitization technology and global climate change.

Explicitly, this article uses a new approach of SSE as a novelty of a more humanistic innovation approach in overcoming the gap. This SSE approach tends to combine economic and social approaches. As a social intra-entrepreneurship innovation, the previous theory has a good concept regarding the scope of human business (Carvalho, 2022). The penalty is because capitalism is more materialistic in the socioeconomic system model. The SSE system model formed from community social awareness is more humanistic and oriented

http://journal.uinjkt.ac.id/index.php/signifikan
https://doi.org/10.15408/sjie.v13i2.38046

toward balancing socioeconomic life for the common good. It is more gender-just, more feasible, and sustainable. The model aims to achieve shared socioeconomic welfare in society in a humanistic, decent, and more just manner. In line with previous studies, the SSE system model could be a new solution to mitigate inequality and encourage the achievement of the SDGs (Joel & Nel, 2021).

METHODS

This study used a two-stage mixed methods design approach. The early stages were more exploratory sequential mixed methods design (Prasetyo & Setyadharma, 2022) using qualitative and quantitative empirical data sources. An exploratory sequential mixed methods design was used to explore, integrate, and synergize data sources. It helped examine absorption problems in the digitalization technology transfer in dynamic and complex rural areas (Fetters & Tajima, 2022). The data used in this qualitative analysis were collected using a sample survey of 57 respondents comprising family entrepreneurship actors (Prasetyo & Setyadharma, 2022).

Furthermore, this information source was used to reinforce quantitative analysis in the second stage. A representative sample of 125 respondents was taken by simple random sampling. Appropriate to the exploratory design, qualitative data were used as purposive and snowball sampling techniques for further exploration. However, this exploratory design focused on core variables of rural entrepreneurship digitization and inequality.

$$IGx = 1 - \sum_{i=1}^{n} f_i \ (Y_i - Y_{i-1})$$

Table 1. Diagnostic Variables in Research

Variable	Operational Description
Regional Economic Growth (GRE)	GRE is the level ratio of the output growth and productivity of individuals and families on society's total productivity and output growth
Human Capital (HC)	HC is the ratio of education, solidarity, attitude, ability, aspiration, and individual and family entrepreneurial spirit compared to the total community.
Local Institutions (LI)	This LI regards technology transfer and social innovation. LI is the ratio of the complex capture capabilities of formal and informal institutions to the community business environment that applies technology transfer and innovation to develop new products and markets.
Local Traditional Technology (LTT)	LTT is a non-computerized local traditional way or work culture. It is the ecosystem ratio of the governance activities, capital, culture, support services, infrastructure, talent, basic services, and other creativity inherent in individuals and families without using the internet tools in their entrepreneurial business activities.
Entrepreneurial Digitization Technology (EDT)	EDT is the ratio of entrepreneurial business activities based on computer technology and internet networks to the level of readiness; digital infrastructure, digital platforms, digital enable, and digital safeguards.

Source: abstracted by researcher

The second stage used a descriptive and quantitative explanatory design approach. However, quantitative descriptive methods were used with standard multiple correlation regression models appropriate to the main problems and objectives. The operational definition of variables followed the limitations of Giones and Brem (2017).

Table 1 shows the operational definitions of variables. All quantitative variables in Table 1 were measured using the general formulation of the Gini index ratio. The minimum and maximum ratio index values are 0.00 and 1.00, respectively. Therefore, the IGx symbol is the ratio index value of the variables measured.

The entrepreneurial technology variable is a well-established basic concept in the academic world (Giones & Brem, 2017). Giones and Brem (2017) distinguished local and digital technology entrepreneurship from digital entrepreneurship or economy. Digital entrepreneurial technology is the most important element of the transition to a digital economy. It is a crucial factor driving the acceleration of regional development (Prasetyo et al., 2022). In contrast, entrepreneurship digitization means applying digital technology transfer. The role and function of technology transfer in rural entrepreneurship is a conceptualization between digital and local entrepreneurship technology (Giones & Brem, 2017). According to Schumpeter's theory, digital entrepreneurship technology is the transfer of digital technology or digital transformation. It results from the evolution of socioeconomic entrepreneurial innovation (Prasetyo et al., 2022). Furthermore, the purpose of quantitative analysis was explained using multiple linear correlation regression models as a standard form of OLS as follows:

$$REG_x = \alpha_0 + \alpha_1.HC_x + \alpha_2.LI_x + \alpha_3.ELT_x + \varepsilon_1 \quad (1)$$

$$REG_x = \beta_0 + \beta_1.HC_x + \beta_2.LI_x + \beta_3.EDT_x + \varepsilon_2 \quad (2)$$

$$REG_x = \pi_0 + \pi_1.HC_x + \pi_2.LI_x + \pi_3.ELT_x + \pi_3.EDT_x + \varepsilon_3 \quad (3)$$

The model 1 equation shows the contribution of human capital (HC), related local institutions (LI), and local entrepreneurial technology (ELT) to regional economic growth (REG). Equation model 2 describes a new model of digital technology transfer. It shows the contribution of human capital (HC), local institutions (LI), and entrepreneurial digitalization technology (EDT) to regional economic growth (REG). Model 3 is a complete combination model showing the contribution of human capital, local institutions, local entrepreneurial technology, and digitalization technology to regional economic growth. In this study, the technology dimension of local entrepreneurship is the traditional entrepreneurship technology. Regional economic growth was measured as a proxy for the output growth of the sample entrepreneurs.

RESULTS AND DISCUSSION

This study aimed to explain the importance of socioeconomic policies and human capital in supporting economic digitalization amid the Industrial Revolution and mitigate the resulting negative impacts. Human capital quality is fundamental to developing a contemporary and sustainable global society. It is the key feature of the measurement

http://journal.uinjkt.ac.id/index.php/signifikan
https://doi.org/10.15408/sjie.v13i2.38046

dimension of human resources in society's socioeconomic development. Human capital quality helps derive other main factors that trigger positive and negative changes. Furthermore, the important role of digital human capital in the socioeconomic system in the digitization era could reveal other important potentials.

Digitization technology in rural areas changes institutions by encouraging entrepreneurship and regional economic growth. At the beginning of digitalization technology entering the village, institutional changes encouraged new entrepreneurial opportunities and regional economic growth. Digital technology changes develop faster than institutional responses. Therefore, institutional capacity cannot respond to the pressures of these changes in assisting the community's economic transactions and mitigating regional inequalities. This study used limited data to explain institutional strategies in responding to these changes, ensuring their role is less effective in economic transactions. It only obtained limited information when formal institutions felt comfortable and lazy following the fast and dynamic changes. Therefore, the less effective role of formal institutions is replaced by informal institutions. This phenomenon may be similar to a cocoon-based institutional flexibility strategy and the temporary role of cocoon institutions (Wu et al., 2021).

The results in Table 2 show that the role of human capital in models 1, 2, and 3 provides the first positive and most considerable significant value of standardized coefficients. This result means that human capital is the first and most significant contribution to encouraging regional economic growth with traditional or digital technology transfer. Although the role is slightly smaller than institutional factors in model 2, there is no significant difference between the two factors. Furthermore, the role of formal institutions decreases in model 3, the most important model in this study. It means that the role of formal institutions is not effective. Previous studies suggested that informal institutions could substitute the often absent and less effective formal institutions in the economic transactions of low-income communities (Danquah & Sen, 2022). Therefore, the GESI's role in community economic transactions through social and financial culture and other local potentials is the primary social innovation embryo of informal institutions as a substitute for formal institutions.

The increasing role of institutions in model 2 is only temporary. In model 3, the role of institutional factor contribution decreases. The role of human capital contribution is positive, significant, and extensive. The increasing role of these institutional factors was temporary and driven more by the response to political and institutional compliance to government policies given during the COVID-19 pandemic. Previous qualitative studies found a sense of comfort and institutional reluctance to adapt to digital technology's dynamic and fast development (Prasetyo & Setyadharma, 2022). They are more comfortable with things that happened before than following the dynamic digitization revolution that changes quickly. However, analyzing a community's economic evolution is impossible without including organizational, institutional, and social change (Yay & Yay, 2022).

Table 2. Results on the Role of Technology Digitization Transfer on Regional Economic Growth

	Model	Unstandardized Coefficients		Standardized Coefficients	t-stat	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	.004	.040		.105	.917		
	HC	.476	.077	.461	6.161	.000	.462	2.162
	ELT	.263	.074	.283	3.538	.001	.405	2.468
	LI	.241	.124	.189	1.944	.054	.274	3.652
2	(Constant)	.056	.038		1.486	.140		
	HC	.463	.079	.449	5.859	.000	.461	2.168
	EDT	.144	.054	.167	2.639	.009	.677	1.477
	LI	.651	.109	.511	5.964	.000	.368	2.716
3	(Constant)	.006	.037		.153	.878		
	HC	.461	.073	.447	6.328	.000	.461	2.168
	LI	.346	.119	.271	2.893	.005	.261	3.830
	ELT	.345	.073	.372	4.742	.000	.374	2.674
	EDT	.212	.052	.247	4.069	.000	.625	1.601

Dependent Variable: regional economic growth (REG).

Source: processed by the researcher

In Table 2, the results in model 1 could be considered standard and generally accepted (Prasetyo & Kristanti, 2020; Prasetyo et al., 2021, 2022). This study focused more on models 2 and 3. In model 2, the role of digital technology transfer in rural areas is positive. This result means that digital technology transfer could significantly encourage regional economic growth proxied by the output growth of the sample entrepreneurship actors. However, the role of digitization technology transfer is the smallest compared to human capital, institutions, and traditional technology. The small contributing factor is theoretically reasonable as digital technology enters society.

The quantitative study strengthens the previous finding that digital technology transfer could increase job opportunities in rural areas and encourage regional economic growth. However, it has only increased family productivity without improving total community productivity in its entrepreneurial efforts. This condition implies that the subsequent impact would increase income inequality in the sample rural areas. Although the positive impact of digital technology could still be increased, it cannot reduce the negative impact. Therefore, the results contradict the previous studies that state that the positive impact of digitization could reduce the negative impact (Ferrari et al., 2022). The main results of this research further emphasize the need for collective awareness integrated with institutional systems and community entrepreneurship to encourage economic growth and mitigate inequality.

The decreasing role of formal institutions causes the community's socioeconomic inequality. However, this inequality has created a collective and positive awareness for individuals and community groups to participate in making decisions and forming new informal institutions. This study supports the logical statement that economic inequality

http://journal.uinjkt.ac.id/index.php/signifikan
https://doi.org/10.15408/sjie.v13i2.38046

affects individual decisions in entrepreneurial activities (Xie et al., 2022). Furthermore, the finding is supported by model 3, where the contribution of digital technology factors is the smallest. The role of institutional factors is also weakening compared to the previous contribution in model 2.

The role of social capital is weaker in families that benefit from absorbing digitization technology. The family's increasing productivity and weakening social capital reduce total average productivity and increase income inequality. These phenomena lead to new social innovation embryos supporting the community's lives. The results support previous studies that the weak family social capital causes the loss of another family's entrepreneurial wealth (de Groot et al., 2022). The qualitative inductive analysis found that family social capital was built by adopting digitization technology. It was built on the monetary dimension of managing family businesses, making them socially object to sharing. However, a social finance culture has emerged as a positive driver and a solution to living together in the community's economic transactions.

This study also captured positive indications of social innovation from the role of gender equity and social inclusion (GESI). It is challenging to conduct studies on social finance in the future. GESI plays a positive social-financial role in strengthening the local community's social capital. The indications of social innovation are seen in the behavioral pattern of economic entrepreneurship transactions and are less reflected in conventional entrepreneurship. However, the results cannot explain the actual pattern of GESI behavior in shaping social finance to manage and maintain SSE relationships. This study captured the framework for the positive role of GESI in SSE in the community. It could be the phenomenon of social innovation from the framework considered to explain the effect of entrepreneurial theory on emancipatory practice or emancipated social imagination (Laine & Kibler, 2022). Therefore, the results strengthen the relationship between the flexibility of the external cooperation model and innovation in SMEs, including institutional change (Wu et al., 2021).

This study has increasingly interesting empirical and theoretical implications from the community's socioeconomic theory perspective. First, the emergence of the SSE system has not benefited from digital technology transfer in their business. The community is willing to collaborate to utilize the local potential for mutual prosperity. The quantitative interpretation in model 3 shows that regional economic growth is driven more by local than digitization technology. The SSE system model is emerging because it is based on community awareness to help each other. Therefore, it differs from the capitalist socioeconomic theory driven by large companies and corporations' corporate social responsibility (CSR) role and focuses on the monetary dimension. Although digital technology related to CSR could lead to responsible digitization (Cardinali & Giovanni, 2022), cultural behavior differences cause its role to remain suboptimal. Therefore, the results support Çera et al. (2022) that the demographic role of CSR in Slovakia and the Czech Republic is different and could be explained through cultural disparities.

The second implication is the potential optimization of the community's local wisdom to maintain capital with a social and financial dimension. The results explain the

emergence of SSE without being realized. However, the community feels the same fate to survive the COVID and global climate change impact and its inability to absorb the new digitization technology. The respondents stated that digital technology was important. However, their capabilities could not match the speed of digitization technology. The respondents are not well-versed in digital technology that could be appropriately utilized to optimize their businesses. Most use digital technology only for children's games and do not understand its benefits in managing their business. However, this occurs in rural and urban areas, though this study did not examine the differences between these regions. The results support Ciolek (2022) that science is important for urban areas, but social capital is the primary key for rural areas.

CONCLUSION

Digitization technology transfer encourages regional economic growth in rural areas and increases family entrepreneurship productivity. Transferring digitalization technology to rural areas strengthens human capital, improves local entrepreneurial technology, and creates flexibility for community institutions. However, this technology has not increased the community's total productivity. The positive impact has not reduced the negative impacts caused but has increased inequality.

The role of institutions increased when digitization technology entered the countryside, but the role of human capital remained dominant. Later, formal institutions became less effective and were replaced by informal institutions. This condition was based on the potential of local wisdom and social capital through human capital digitalization as the SSE system model. Furthermore, the SSE system model is driven by integrating the potential local wisdom and social capital. Human capital digitization could mitigate inequality and drive competitiveness and sustainable regional economic growth.

This study captured the potential role of local wisdom, especially the emergence of GESI behavior patterns and social capital financial culture in forming informal institutions. The role is increasingly visible, especially in social entrepreneurship. However, the study used limited representative data to examine this problem, which requires further exploration by future studies. The results could add to the understanding of the implications of institutional policy. Theoretical contributions are also expected to add knowledge and complement the understanding of new institutional theories and entrepreneurship. It is recommended that future research examine integrated collective awareness and collaborate with community institutional systems and social entrepreneurship to mitigate better the inequalities that occur.

ACKNOWLEDGMENTS

I would like to thank the Faculty of Economics and Business, Universitas Negeri Semarang, Indonesia, for all the support and facilities.

http://journal.uinjkt.ac.id/index.php/signifikan
https://doi.org/10.15408/sjie.v13i2.38046

REFERENCES

Akhtar, S. (2018). *Technology and Inequalities*. In. Akhtar, S (Ed). *Inequality in Asia and the Pasific in the era of the 2030 Agenda for Sustainable Development*. Bangkok: United Nations ESCAP.

Anjani, I. R., & Prasetyo, P. E. (2024). Beta and Sigma Convergence Analysis of Inclusive Economic Growth on National and Regional Economic Growth in Indonesia. *International Journal of Multidisciplinary: Applied Business and Education Research*, *5*(5), 1858-1871. https://doi.org/10.11594/ijmaber.05.05.29.

Boppart, T., & Ngai, L. R. (2021). Rising Inequality and Trends in Leisure. *Journal of of Economic Growth, 26*(1), 153–185. https://doi.org/10.1007/s10887-021-09189-8.

Branauskas, G., & Raisiene, A. G. (2022). Transition to Digital Entrepreneurship with a Quest of Sustainability: Development of a New Conceptual Framework. *Sustainability*, *14*(3), 1104. https://doi.org/10.3390/su14031104.

Cardinali, P. G., & Giovanni, P. D. (2022). Responsible Digitalization Through Digital Technologies and Green Practices. *CSRl and Environmental Management, 29*(4), 984-995. https://doi.org/10.1002/csr.2249.

Carvalho, J. M. S. (2022). Modelling (Social) Intra Entrepreneurship Process. *Emerging Science Journal, 6*(1), 14-36. https://doi.org/10.28991/ESJ-2022-06-01-02.

Çera, G., Khan, K. A., Bláhová, A., & Belas, J. Jr. (2022). Do Owner-Manager Demographics in SMEs Matter for Corporate Social Responsibility? *Equilibrium: Quarterly Journal of Economics and Economic Policy, 17*(2), 511–531. https://doi.org/10.24136/eq.2022.018.

Ciołek, D., Golejewska, A., & Yaghi, A. Z. A. (2022). Innovation Drivers in Regions. Does Urbanization Matter. Growth and Change. *Growth and Change, 53*(4), 1933-1960. https://doi.org/10.1111/grow.12632.

Danquah, M., & Sen, K. (2022). Informal Institutions, Transaction Risk, and Firm Productivity in Myanmar. *Small Business Economics, 58*(1), 1721–1737. https://doi.org/10.1007/s11187-020-00441-w.

de Groot, M. B. T., Mihalache, O. R., & Elfring, T. (2022). Toward a Theory of Family Social Capital in Wealthy Transgenerational Enterprise Families. *Entrepreneurship Theory and Practice, 46*(1), 159–192. https://doi.org/10.1177/10422587211033569.

Ferrari, A., Bacco, M, Gaber, K., Jedlitschka, A., Hess, S. & Brunori, G. (2022). Drivers, Barriers and Impacts of Digitalization in Rural Areas from the Viewpoint of Experts. *Information & Software Technology, 145*, 106816. https://doi.org/10.1016/j.infsof.2021.106816.

Fetters, M. D., & Tajima, C. (2022). Joint Displays of Integrated Data Collection in Mixed Methods Research. *International Journal of Qualitative Methods, 21*(2), 1-13. https://doi.org/10.1177/16094069221104564.

Giones, F., & Brem, A. (2017). Digital Technology Entrepreneurship: A Definition and Re-search Agenda. *Technology Innovation Management Review, 7*(5), 44-51.

Joel, C., & Nel-Sanders, D. (2021). The Relationship between Sustainable Development, Social Justice and Social Innovation. *Administratio Publica, 29*(1), 1-23.

Kot, S. M., & Paradowski, P. R. (2022). The Atlas of Inequality Aversion: Theory and Empirical Evidence on 55 Countries from the Luxembourg Income Study Database. *Equilibrium*: *Quarterly Journal of Economics and Economic Policy, 17*(2), 261–316.

Laine, L., & Kibler, E. (2022). The Social Imaginary of Emancipation in Entrepreneurship. *Entrepreneurship Theory and Practice, 46*(2), 393–420.

Lin, T-C., & Pursiainen, V. (2022). Regional Social Capital and Moral Hazard in Crowdfunding. *Journal of Business Venturing, 37*(1), 106224.

Morris, J., Morris, W., & Bowen, R. (2022). Implications of the Digital Divide on Rural SME Resilience. *Journal of Rural Studies, 89*(1), 369-377.

Mukesh, H. V. (2022). Digital Transformation Taking Centre Stage: How Is Digital Transformation Reshaping Entrepreneurial Innovation? *The Journal of Entrepreneurship, 31*(2), 364–401.

Nambisan, S., Wright, M., & Feldman, M. (2019). The Digital Transformation of Innovation and Entrepreneurship: Progress, Challenges and Key Themes. *Research Policy*, *48*(8), 103773. https://doi.org/10.1016/j.respol.2019.03.018.

Paul, P. K. (2022). Digital Education: The Aspects and Growth in Socio-Economic Development Towards Sophisticated Education 4.0 Practice. *Economic Affairs, 67*(5), 971-980.

Prasetyo, P. E., & Setyadharma, A. (2022). Digitalization Technology for Sustainable Rural Entrepreneurship and Inequality. *Journal of Human Resources and Sustainability Studies, 10*(3), 418-437.

Prasetyo, P. E., Setyadharma, A., & Kirtanti, N. R. (2022). The Role of Institutional Potential and Social Entrepreneurship as the Main Drivers of Business Opportunity and Competitiveness. *Uncertain Supply Chain Management, 10*(1),101–108.

Prasetyo, P. E., Setyadharma, A., & Kirtanti, N.R. (2021). Integration and Collaboration of Determinants of Entrepreneurial Competitiveness. *Uncertain Supply Chain Management, 9*(3), 585-594.

Prasetyo, P.E., & Kistanti, N.R. (2020). Human Capital, Institutional Economics and Entrepreneurship as a Driver for Quality & Sustainable Economic Growth, *Entrepreneurship and Sustainability Issues*, *7*(4), 2575-2589.

Prasetyo, P.E. (2020). Human Capital as the Main Determinant of Regional Economic Growth. *International Journal of Advanced Science and Technology, 29*(3), 6261- 6267.

Purohit S, P. (2021). Digitization in Indian Agriculture: Evolution from Simple to Smart Farming. *Indian Journal of Economic & Development, 9*(1), 1-6.

http://journal.uinjkt.ac.id/index.php/signifikan
https://doi.org/10.15408/sjie.v13i2.38046

Qureshi, Z. (2021). Technology, Growth, and Inequality: Changing Dynamics in the Digital Era. *Working paper No. 152. Global Economy and Development Brookings Institution.*

Rogalska, E. (2018). Multiple-Criteria Analysis of Regional Entrepreneurship Conditions in Poland. *Equilibrium: Quarterly Journal of Economics and Economic Policy, 13*(4), 707–723.

Simovicova, S., Urbancikova, N. (2022). The Impact of Social, Economic and Gender Inequality on Prosperity in the European Union Countries. *Quality Innovation Prosperty, 26*(3), 66-87.

Slee, B., & Polman, N. (2021). An Exploration of Potential Growth Pathways of Social Innovations in Rural Europe. *Innovation*: *The European Journal of Social Science Research, 34*(2), 251-271.

Song, I. (2023). Does Instagram Have More Negative Impact on Psychological Well-Being? The Case of Korean College Students. *Asian Journal for Public Opinion Res*earch, *11*(1), 4-30. http://doi.org/10.15206/ajpor.2023.11.1.4.

Szalavetz, A. (2022). The Digitalization of Manufacturing and Blurring Industry Boundaries. *CIRP Journal of Manufacturing Science & Technology, 37* (5), 332–343.

Tokar, M., Shybirina, S., & Iryna K. (2022). Digital Aspects of the Ukrainian Digitalization. *Economic Affairs, 67*(4), 755-764.

Turuk, M. (2019). Digital Strategy. *International Journal of Contemporary Business and Entrepreneurship. 1*(1), 62–76.

Urbano, D., Felix, C., & Aparicio, S. (2021). Informal Institutions and Leadership Behavior in a Developing Country: A Comparison between Rural and Urban Areas. *Journal of Business Research, 132*(8), 544-556.

Wildowicz-Szumarska, A. (2022). Is Redistributive Policy of EU Welfare State Effective in Tackling Income Inequality? A Panel Data Analysis. *Equilibrium*: *Quarterly Journal of Economics and Economic Policy, 17*(1), 81–101.

Wu, Y., Eesley C. E., & Yang, D. (2021). Entrepreneurial Strategies During Institutional Changes: Evidence from China's Economic Transition. *Strategic Entrepreneurship Journal, 16*(1),185-206.

Xie. X., Li, L., Zhou, G. (2022). Economic Inequality and Entrepreneurship: Micro Evidence from China. *Strategic Entrepreneurship Journal, 16*(8), 1-15.

Yay, T., & Yay, G.G. (2022). Joseph A. Schumpeter and Schumpeterian Paradigm on the Dynamics of Capitalism: Entrepreneur, Innovation, Growth, and Trade. *Panoeconomicus, 69*(4), 579-607.

Yusuf, S., (2021). Digital Technology and Inequality: The Impact on Arab Countries. *Working Paper No. 1486. The Economic Research Forum.*

Zaborovskaia, O., Nadezhina, O., & Avduevskaya, E. (2020). The Impact of Digitalization on the Formation of Human Capital at the Regional Level. *Journal of Open Innovation: Technologiy, Market, and Complexity, 6*(4), 184. https://doi.org/10.3390/joitmc6040184.

Zhang, L., Ma, X., Ock, Y.S., & Qing, L (2022). Research on Regional Differences and Influencing Factors of Chinese Industrial Green Technology Innovation Efficiency. *Land, 11*(1), 122. https://doi.org/10.3390/land11010122.

http://journal.uinjkt.ac.id/index.php/signifikan
https://doi.org/10.15408/sjie.v13i2.38046