

The Role of the Creative Economy in Improving Local Competitiveness: Case Study of Creative Cities in Indonesia

Amrin Amri

STIE Nusantara Makassar, Indonesia

ARTICLE INFO

Article history:

Received Mar 25, 2022

Revised Apr 15, 2022

Accepted Apr 24, 2022

Keywords:

Creative Economy
Local Competitiveness
Creative City
Innovation
Indonesia

ABSTRACT

The creative economy has become one of the main drivers of economic growth in various cities in Indonesia. This study aims to analyse the role of the creative economy sector in improving local competitiveness, focusing on creative cities in Indonesia. Through a systematic literature review (SLR) approach using the PRISMA method, this article evaluates research results from various academic sources and relevant reports. The study results show that creative cities can increase local competitiveness by encouraging innovation, cross-sector collaboration, and the creation of more sustainable job opportunities. The creative economy also strengthens local cultural identity, which is a selling point in the global market. However, challenges remain, including more digital infrastructure and adequate regulatory support. This article concludes that synergy between the government, the private sector, and the creative community is urgently needed to strengthen the creative economy ecosystem. The results of this study are expected to be the foundation for policymakers and creative industry players in designing more effective strategies to increase local competitiveness.

This is an open access article under theCC BY-NClicense.



Corresponding Author:

Amrin Amri

STIE Nusantara Makassar

Jl. Nusantara No.8, Bulu Gading, Kec. Ujung Pandang, Kota Makassar, Sulawesi Selatan 90111, Indonesia

Email: arminnai69@gmail.com

1. INTRODUCTION

The creative economy has become a key sector in many countries, especially in the face of dynamic changes in the global economic scene. The sector encapsulates a wide range of industries based on creativity, innovation, and technology, including film, music, art, design, and digital technology. In today's digital era, the creative economy contributes significantly to global GDP and creates more flexible and sustainable jobs, especially among the younger generation. Countries such as the United Kingdom, South Korea, and the United States have long leveraged the sector as a driver of economic growth through the development of digital infrastructure, education, and policies that support innovation (Pacheco Pardo & Klingler-Vidra, 2019; Sawng et al., 2021; Yoon, 2019).

As a country with rich cultural diversity, Indonesia has seen rapid growth in the creative economy sector, especially in the last decade. Since the government introduced special initiatives to develop the creative economy, cities such as Bandung and Yogyakarta have become globally recognised hubs of creativity. The creative economy in Indonesia not only contributes to the increase in GDP but also provides opportunities for local innovation based on cultural heritage. Industries such as handicrafts, design, and culinary have become part of the ever-growing creative economy ecosystem. With the support of technology and cross-sector collaboration, the creative economy in

Indonesia has the potential to become one of the main pillars of future economic growth (Kurniadi et al., 2022; Sukmayadi & Masunah, 2020; Wijaya, 2019).

Indonesia has several cities that have actively developed the creative economy as the primary strategy for encouraging local economic growth. Cities such as Bandung, Yogyakarta, and Bali have stood out as creative economy hubs, where innovation in the fields of art, design, and local culture plays a vital role in driving the competitiveness of these cities at the national and international levels. These cities have built a solid creative ecosystem through collaboration between the government, creative communities, and the private sector, creating an environment conducive to the emergence of new ideas and innovative businesses (Dolezal & Novelli, 2022; Sukmayadi & Masunah, 2020; Westoby et al., 2021).

Bandung, Yogyakarta, and Bali are also globally recognised as creative cities, with Bandung even being selected as part of the UNESCO Creative Cities Network. This shows that the creative economy in these cities not only serves to drive the local economy but also strengthens their cultural identity on the international stage. This success is influenced by investments in creative infrastructure, training programs, and policy support that encourages cross-sector collaboration. With this international recognition, creative cities in Indonesia can expand their influence in the global network and attract more investment and tourists (Pickel-Chevalier et al., 2021; Suharyanto et al., 2023).

Although the creative economy's potential is immense in increasing local competitiveness, significant challenges still must be overcome. Inadequate digital infrastructure, especially in small cities, hinders the optimisation of this sector. In addition, regulations that have yet to support the creative economy's full development are also obstacles for business actors. There is a skills gap between creative actors in big cities and regions, where access to training and technology still needs to be improved. Therefore, there is a need to improve digital infrastructure and education that focuses on the creative economy to support the growth of this sector evenly (Colombari & Neirrotti, 2022; Iatrellis et al., 2021; Van Laar et al., 2019).

The government plays a crucial role in developing a sustainable creative economy ecosystem through supportive policies and regulations. In addition to providing incentives and facilities for creative industry players, the government is also responsible for creating the necessary digital infrastructure to support the sector. Strategic policies, such as providing access to capital and skills training, are needed so that the creative economy sector can grow optimally. These measures encourage innovation and ensure creative entrepreneurs can compete in the global market (Bahasoan et al., 2024; Chen et al., 2021; Gruber, 2019; Liu, 2021).

The success of the creative economy in certain cities is inseparable from cross-sector collaboration between the government, local communities, and the private sector. This synergy between various parties allows for the exchange of ideas, innovation, and investment that supports the growth of the creative ecosystem. The government acts as a facilitator, while the creative community and the private sector provide innovative solutions and the resources necessary to develop the creative industries. This collaboration not only results in job creation but also strengthens local cultural identity, which is the main attraction in the global market (Klein & Spychalska-Wojtkiewicz, 2020; Santoro et al., 2020; Unceta et al., 2021).

Case studies of creative cities in Indonesia, such as Bandung, Yogyakarta, and Bali, show that the creative economy can be a key driver in increasing local competitiveness. These cities have successfully harnessed the rich culture and local innovation as a base to develop the creative sector, which contributes to economic growth. Through supportive government policies and active collaboration between various parties, these cities have created creative ecosystems that enable the emergence of new, highly competitive industries. Their success can be a model for other cities that want to develop the creative economy sector.

This research focuses on creative cities in Indonesia to explore the role of the creative economy in improving local competitiveness. It also aims to identify the key factors influencing the success of creative economy development at the local level and how these cities harness the creative potential for economic growth. The results of this study are expected to guide policymakers in designing more

effective strategies to encourage the development of the creative economy and increase the competitiveness of cities in Indonesia at the national and international levels.

2. METHOD

This study adopts the Systematic Literature Review (SLR) approach to analyse relevant research on the role of the creative economy in improving local competitiveness. The SLR approach was chosen because it provides a clear and objective structure for screening and assessing the existing literature. Through this approach, research can collect more comprehensive data while ensuring the quality and validity of results obtained from various sources.

The PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) method is used in this study to ensure the transparency and accuracy of the literature review process. This protocol consists of steps that include the identification, screening, selection, and reporting of selected studies, which are systematically organised. By following PRISMA, every stage in the research process is well documented so that other researchers can replicate and retest the results (Ardern et al., 2022; Page et al., 2020, 2021).

The studies included in this SLR were selected based on several strict criteria, including relevance to the creative economy and increasing local competitiveness. Sources include scientific journals, industry reports, and verified research published between 2015 and 2024. These studies should show empirical and theoretical evidence that supports the relationship between the creative economy and increased competitiveness in Indonesia's creative cities.

The literature search used leading databases such as Scopus, Web of Science, and Google Scholar. Keywords used include "creative economy," "local competitiveness," "creative cities," and "innovation," which cover a wide variety of aspects related to the research topic. Each piece of literature found is then filtered by title, abstract, and complete content to ensure its suitability with the criteria of this research.

After selecting relevant studies, the next step is to analyse the data qualitatively. This analysis aims to identify general patterns, trends, and gaps in the literature related to the role of the creative economy in improving local competitiveness. This process helps build a deep understanding of how the creative economy sector contributes to the economic growth of creative cities in Indonesia.

3. RESULT AND DISCUSSION

Creative Cities in Indonesia

In recent years, creative cities in Indonesia have become integral to national economic growth. Bandung, Yogyakarta, and Bali have significantly developed their creative economy sectors. This growth is marked by the emergence of various creative industries based on art, design, and technology that support the development of local products and innovations (Suharyanto et al., 2023; Sukmayadi & Masunah, 2020).

The population involved in this study includes diverse creative industry players, ranging from traditional artisans to digital designers. Each creative industry sector has unique characteristics that contribute to local economic development. In addition, small and medium enterprises (MSMEs) also play an essential role in the growth of the creative sector in these cities, especially in creating jobs and innovation (Mediastika et al., 2023; Westoby et al., 2021).

The success of creative cities in Indonesia in increasing local competitiveness is inseparable from their role as innovation centres. With a focus on creative production based on local culture, these cities can produce products with high-added value in the national and international markets. The thriving creative economy also strengthens each city's cultural identity, a global market selling point (Ekomadjo et al., 2023; Harris Purnama, 2022).

Creative actors in these cities, both individual and collective, contribute directly to improving cities' competitiveness by creating innovative products and services. The presence of dynamic creative actors allows these cities to compete not only at the local level but also in the international market, as they can create products that are culturally based but globally oriented (Pickel-Chevalier et al., 2021; Pramana et al., 2022).

Technology is the primary driver in the development of creative cities in Indonesia. Digital technology, such as e-commerce platforms and social media, allows creative actors to reach a broader market and improve creative products' production and marketing efficiency, which ultimately contributes to increased local competitiveness (Ishiguro, 2022).

Local communities also play a significant role in supporting the development of creative ecosystems in creative cities. This support is reflected in the collaboration between local governments, the community, and creative industry players in creating joint initiatives. Strong communities allow for creating an environment that supports creativity and maintains the sustainability of creative economic growth in these cities.

Seeing Indonesia's creative population's great potential, there is still room for further development. Existing creative cities can be a model for other cities in Indonesia to develop their creative economy sectors. With proper policy support and sustainable infrastructure development, the creative economy's potential in other cities can be developed to strengthen national competitiveness.

Creative Economy Development Policies and Programs

The Indonesian government has played an essential role in encouraging the growth of the creative economy sector through various policies and programs. One of the key policies is the development of the Creative Economy Agency (Bekraf), which aims to coordinate efforts to develop this sector at the national level. Bekraf acts as a facilitator to support creatives with access to markets, training, and financing (A. Triggs Jiao Wang, 2019; R. Lita Meuthia Meuthia, 2020).

The intervention carried out by the government also includes the development of physical and digital infrastructure. Developing creative spaces, such as co-working spaces, art galleries, and technology centres, gives creatives the necessary facilities to grow their businesses. In addition, increasing internet access in various regions helps accelerate the digitalisation of the creative sector, allowing creative businesses to utilise digital platforms to sell their products (Nandiwardhana et al., 2022; Ridwan Maksum et al., 2020).

To encourage the growth of the creative economy sector, the government has introduced various fiscal incentives, including tax exemptions for small and medium-sized enterprises in the creative sector. In addition, grant programs and microloans are also provided to assist creative actors in starting and developing their businesses. This policy helps create a more friendly business climate for creative actors, especially MSMEs (Anas et al., 2022; Wiryawan & Otchia, 2022).

Government-supported training programs have become essential in strengthening creative actors' capacity. These programs cover technical skills, such as design and production, and business skills, such as management and marketing. This training helps creatives become more competitive globally and create innovations relevant to evolving market trends (Darwis et al., 2023; Gunawan & Cahayani, 2021).

The government also collaborates with the private sector and international institutions to support the development of the creative economy. This collaboration includes co-funding, exhibitions, and acceleration programs for creative actors. International cooperation, such as with UNESCO and other organisations, also helps strengthen Indonesia's position in the global creative economy scene.

Evaluation of the effectiveness of policies that have been implemented is essential to ensure the sustainability of creative economy growth. The government continues to make policy adjustments based on feedback from creative actors and global market trends. This allows for policies that are more responsive and relevant to the evolving needs of the creative sector (Arifin et al., 2020; Setyowati, 2021).

The results of this intervention have proven to be significant in increasing local competitiveness in creative cities. Cities that actively implement government support policies and programs show faster economic growth than cities that do not have similar policies. These initiatives allow creative actors to compete more effectively in the global market, strengthening their position in the local and international economy.

Creative Cities vs. Non-Creative Cities

A creative city actively develops the creative economy sector as one of its main economic development strategies. On the other hand, non-creative cities still need to or are still minimally utilising the creative economy's potential for growth. Creative cities tend to have more organised ecosystems to support innovation, cross-sector collaboration, and the development of local creative industries, while non-creative cities rely more on traditional or manufacturing sectors (Gallagher & Ehlman, 2019; Gerlitz & Prause, 2021).

Creative cities stand out regarding product and service innovations based on local culture and modern technology. For example, cities such as Bandung and Yogyakarta have become centres of innovation with various creative products, ranging from art, design, and fashion to digital technology. These innovations allow creative cities to compete in the global market and offer different products than non-creative cities, focusing on standard commodities or traditional industries (Cunningham & McCutcheon, 2023; Faraone, 2022).

The creative economy sector in creative cities tends to create more flexible and diverse jobs than in non-creative cities. Small and medium enterprises (MSMEs) in the creative sector employ individuals from various backgrounds, ranging from artists and designers to technology experts. In contrast, non-creative cities offer more jobs in the traditional manufacturing or service sectors, which tend to be more varied and innovative-oriented (Camboim et al., 2019; Jordan et al., 2023).

Creative cities also show a more significant increase in people's income than non-creative cities. The high added value of the creative products produced often influences income in creative cities. For example, unique fashion, handicraft, or technology products have high selling power in the global market. In contrast, non-creative cities that still rely on standard products or commodities tend to have lower profit margins, which impacts people's incomes (Klein & Spsychalska-Wojtkiewicz, 2020; Yao et al., 2021).

Creative cities can increase local competitiveness because their creative economy sector produces products and attracts investment and tourists. Unique creative products attract local and international consumers, while non-creative cities still rely on the appeal of traditional industries that tend to be less competitive in the global market. Therefore, creative cities often excel in terms of economic growth and competitiveness compared to non-creative cities (Jo et al., 2021; Liang & Wang, 2020).

Creative cities are generally more successful in utilising local cultural identity as a selling point in the creative industry. Managing cultural identity through creative products significantly adds value to local and global markets. On the other hand, non-creative cities usually need more focus on utilising local culture for economic products, so their cultural identity is less known or optimised as an economic resource (Escalona-Orcao et al., 2020; Jiang & Zheng, 2021).

The comparison between creative and non-creative cities shows that developing the creative economy sector improves local competitiveness and strengthens the city's economy. Non-creative cities can learn from the success of creative cities in innovation, cross-sector collaboration, and the use of cultural identities to improve local products. With the right strategy, non-creative cities can adopt creative approaches to drive more sustainable economic growth.

Increasing Local Competitiveness and Local Economy

One of the most visible results of developing the creative economy in creative cities is the increase in local competitiveness. With innovation and cross-sector collaboration, creative cities can create products and services with high selling power in the global market. These creative products attract local consumers and increase the city's visibility on the international stage (Na et al., 2019; Santoro et al., 2020).

The development of the creative economy sector directly impacts the growth of the creative industry. Thanks to support from the government, the private sector, and local communities, the industry is increasing in creative cities. This growth not only creates new jobs but also increases the export value of creative products, which in turn contributes to the growth of the local economy (Chakraborty et al., 2019; Kaya et al., 2020).

Another outcome of creative economy interventions is increased domestic and international investment. Creative cities attract the attention of investors because of the great potential possessed by the creative industry. Innovative and globally oriented-creative products attract investment for further development, such as funding creative startups, building creative infrastructure, and developing technologies that support the industry (El-Ferik & Al-Naser, 2021; Hou et al., 2022).

The creative economy has proven to be one of the most compelling sectors in creating jobs, especially among the younger generation. Creative cities offer a more varied range of jobs, from production to marketing and technology. With government and private sector support, these cities can create dynamic and attractive job ecosystems for young people interested in the creative sector (Chan & Cho, 2022; Zhang et al., 2020).

One of the positive results of developing the creative economy is the active involvement of local communities in the creative production process. Creative actors often collaborate with local

communities to create unique and culture-based products. This collaboration not only improves product quality but also provides a direct economic impact on local communities, such as increased income and welfare (Bucea-Manea-Țoniș et al., 2021; Guerrero & Hansen, 2021).

Creative cities have also succeeded in strengthening local cultural identity through the creative products produced. Cultural identity is essential in increasing local competitiveness because culture-based products have added value, making competing with ordinary commodity products difficult. Creative cities that have succeeded in utilising this cultural identity can create products that sell well in the local market and are also in demand in the international market (Jimenez-Jimenez et al., 2019; X. Li, 2020).

The results of creative economy interventions in creative cities show a significant increase in local competitiveness. With the support of innovation, investment, and cross-sector collaboration, these cities can create a more dynamic and sustainable economic ecosystem. The experience of these creative cities can be an example for other cities that want to improve their local competitiveness through the development of the creative economy sector (Klein & Spychalska-Wojtkiewicz, 2020; Rauter et al., 2019; Statsenko & Corral de Zubielqui 2020).

Challenges Faced

One of the main challenges creative cities face is the need for adequate digital infrastructure. Although the creative economy sector relies heavily on digital technology, not all cities have equal access to this technology. Inadequate infrastructure, such as slow or unstable internet connections, hinders creatives from marketing their products globally and participating in the digital economy (Chou et al., 2024; L. Li et al., 2022).

In addition to infrastructure problems, access to advanced technology still needs to be improved for many creative actors in small cities. Technologies such as design software, e-commerce platforms, and modern production tools are often tricky for creatives in underdeveloped cities. The inability to access these technologies limits their innovation and competitiveness in an increasingly competitive market (Cavalcante et al., 2021; Wang et al., 2021).

Regulations that have yet to fully support the creative industry's growth are also a significant obstacle. Many creative cities need help obtaining business licenses, intellectual property rights, or fiscal incentives that can support the development of their industries. Complex and inflexible regulations hinder the growth of creative businesses, especially for small and medium enterprises (MSMEs) (Janssen et al., 2019; Kong et al., 2019).

Another challenge faced is the skills gap among creative actors. Many creatives, especially in small cities, still need to gain the skills to compete in the global market. Technical skills such as digital design, online marketing, and business management still need to be revised, limiting the growth potential of the creative industry in some cities (A. U. Rahman et al., 2022; Sanchez-Arias et al., 2023).

Creative cities that still need to be fully independent in the creative economy often depend on other traditional sectors, such as manufacturing or tourism. This dependence reduces the creative economy's flexibility in the face of global challenges, such as technological changes or market fluctuations. Cities that are too dependent on one sector often have difficulty maintaining sustainable growth (Alcaide Muñoz & Rodríguez Bolívar, 2021; Balfaqih & Alharbi, 2022).

The next challenge is the need for cross-sector collaboration in some creative cities. While collaboration between government, communities, and the private sector is essential in developing the creative economy, not all cities have collaborative solid ecosystems. This lack of collaboration limits innovation and synergies that should drive the growth of the creative sector more quickly and effectively (Ahad et al., 2020; M. A. Rahman et al., 2019).

More extraordinary efforts are needed to develop digital infrastructure, improve access to technology, and improve regulations supporting the creative industry's growth. Skills training programs and cross-sectoral collaboration must also be improved to address skills gaps and dependencies in other sectors. By addressing these challenges, creative cities can reach their full potential in enhancing local competitiveness and contributing to national economic growth (Ogbodo et al., 2022; Shi et al., 2023).

4. CONCLUSION

The main conclusion of this study is that the creative economy has proven to be one of the critical sectors in driving increased local competitiveness in Indonesia's creative cities. With a focus on innovation and cross-sector collaboration, cities such as Bandung, Yogyakarta, and Bali can harness the creative potential to create high-value products and services, contributing to local economic growth and strengthening their position in the global market. The great potential of the creative economy sector allows creative cities to become centres of significant innovation and growth. Innovations in the creative economy sector significantly influence local competitiveness, mainly because creative products are often based on local cultural identity. Creative cities that successfully use their cultural identity can create unique and different products that are difficult for non-creative cities or competitors from abroad to imitate. These culture-based products are a significant attraction in the local and international markets, thus providing a competitive advantage for these cities. The creative economy sector has also been proven to create more diverse and flexible jobs than traditional sectors. Job opportunities in this sector are open to individuals directly involved in creative production and those in supporting industries, such as marketing and technology. In addition, the creative economy significantly contributes to increasing people's income, especially by creating value-added products that are marketed globally. Despite the creative economy's great potential, significant challenges must be overcome. Uneven digital infrastructure, limited access to technology, unsupportive regulations, and skills gaps among creative actors are the main obstacles to the development of this sector. Creative cities that need more infrastructure and supportive policies are having difficulty reaching their full potential, slowing down the growth rate of the creative sector. The success of creative cities in increasing local competitiveness is inseparable from the role of cross-sector collaboration between the government, local communities, and the private sector. This collaboration creates an ecosystem that supports innovation and sustainable development of the creative sector. Government support in the form of more flexible regulations, the development of digital infrastructure, and skills training programs are urgently needed to overcome existing challenges and encourage future creative economy growth. Based on the findings of this study, a more comprehensive strategy is needed to support the development of the creative economy in Indonesia. Governments must continue encouraging investment in digital infrastructure and providing more comprehensive access to technology for creative actors, especially in small cities. In addition, training programs that focus on creative and business skills should be expanded to address skills gaps. Cross-sector collaboration must also be strengthened to create an ecosystem that supports the sustainable growth of the creative industry so that the creative economy can continue to contribute to increasing local competitiveness and national economic growth.

REFERENCES

- A. Triggs Jiao Wang, F. K. (2019). Risks, Resilience, and Reforms: Indonesia's Financial System in 2019. *Bulletin of Indonesian Economic Studies*, 55, 1–27. <https://doi.org/10.1080/00074918.2019.1592644>
- Ahad, M. A., Paiva, S., Tripathi, G., & Feroz, N. (2020). Enabling technologies and sustainable smart cities. *Sustainable Cities and Society*, 61, 102301. <https://doi.org/10.1016/j.scs.2020.102301>
- Alcaide Muñoz, L., & Rodríguez Bolívar, M. P. (2021). Different Levels of Smart and Sustainable Cities Construction Using e-Participation Tools in European and Central Asian Countries. *Sustainability*, 13(6), 3561. <https://doi.org/10.3390/su13063561>
- Anas, T., Hill, H., Narjoko, D., & Putra, C. T. (2022). The Indonesian Economy in Turbulent Times. *Bulletin of Indonesian Economic Studies*, 58(3), 241–271. <https://doi.org/10.1080/00074918.2022.2133344>
- Ardern, C. L., Büttner, F., Andrade, R., Weir, A., Ashe, M. C., Holden, S., Impellizzeri, F. M., Delahunt, E., Dijkstra, H. P., Mathieson, S., Rathleff, M. S., Reurink, G., Sherrington, C., Stamatakis, E., Vicenzino, B., Whittaker, J. L., Wright, A. A., Clarke, M., Moher, D., ... Winters, M. (2022). Implementing the 27 PRISMA 2020 Statement items for systematic reviews in the sport and exercise medicine, musculoskeletal rehabilitation and sports science fields: the PERSiST (implementing Prisma in Exercise, Rehabilitation, Sport medicine and SporTs sc. *British Journal of Sports Medicine*, 56(4), 175–195. <https://doi.org/10.1136/bjsports-2021-103987>
- Arifin, B., Wicaksono, E., Tenrini, R. H., Wardhana, I. W., Setiawan, H., Damayanty, S. A., Solikin, A., Suhendra, M., Saputra, A. H., Ariutama, G. A., Djuned, P., Rahman, A. B., & Handoko, R.

- (2020). Village fund, village-owned enterprises, and employment: Evidence from Indonesia. *Journal of Rural Studies*, 79, 382–394. <https://doi.org/10.1016/j.jrurstud.2020.08.052>
- Bahasoan, A. N., Anwar, A. I., Lekas, M. N. J., & Asryad, R. (2024). Otonomi Daerah dan Pertumbuhan Ekonomi di Indonesia: Literature Review. *Ekonomis: Journal of Economics and Business*, 8(1), 43. <https://doi.org/10.33087/ekonomis.v8i1.1119>
- Balfaqih, M., & Alharbi, S. A. (2022). Associated Information and Communication Technologies Challenges of Smart City Development. *Sustainability*, 14(23), 16240. <https://doi.org/10.3390/su142316240>
- Bucea-Manea-Țoniș, R., Šević, A., Ilić, M. P., Bucea-Manea-Țoniș, R., Popović Šević, N., & Mihoreanu, L. (2021). Untapped Aspects of Innovation and Competition within a European Resilient Circular Economy. A Dual Comparative Study. *Sustainability*, 13(15), 8290. <https://doi.org/10.3390/su13158290>
- Camboim, G. F., Zawislak, P. A., & Pufal, N. A. (2019). Driving elements to make cities smarter: Evidence from European projects. *Technological Forecasting and Social Change*, 142, 154–167. <https://doi.org/10.1016/j.techfore.2018.09.014>
- Cavalcante, A. M., Marquezzini, M. V., Mendes, L., & Moreno, C. S. (2021). 5G for Remote Areas: Challenges, Opportunities and Business Modeling for Brazil. *IEEE Access*, 9, 10829–10843. <https://doi.org/10.1109/ACCESS.2021.3050742>
- Chakraborty, T., Chauhan, S. S., & Ouhimmou, M. (2019). Cost-sharing mechanism for product quality improvement in a supply chain under competition. *International Journal of Production Economics*, 208, 566–587. <https://doi.org/10.1016/j.ijpe.2018.12.015>
- Chan, H. M. H., & Cho, V. W. S. (2022). An Empirical Study: The Impact of Collaborative Communications on New Product Creativity That Contributes to New Product Performance. *Sustainability*, 14(8), 4626. <https://doi.org/10.3390/su14084626>
- Chen, C.-L., Lin, Y.-C., Chen, W.-H., Chao, C.-F., & Pandia, H. (2021). Role of Government to Enhance Digital Transformation in Small Service Business. *Sustainability*, 13(3), 1028. <https://doi.org/10.3390/su13031028>
- Chou, M.-H., Erkkilä, T., & Mölsä, J. (2024). Crafting innovation hubs: Future cities and global challenges. *The British Journal of Politics and International Relations*, 26(3), 694–717. <https://doi.org/10.1177/13691481231191921>
- Colombari, R., & Neirotti, P. (2022). Closing the middle-skills gap widened by digitalisation: how technical universities can contribute through Challenge-Based Learning. *Studies in Higher Education*, 47(8), 1585–1600. <https://doi.org/10.1080/03075079.2021.1946029>
- Cunningham, S., & McCutcheon, M. (2023). Rearticulating the creative industries-STEM relationship: the case of innovation precincts in South Australia. *Creative Industries Journal*, 16(1), 22–41. <https://doi.org/10.1080/17510694.2021.1959087>
- Darwis, V., Rachmawati, R. R., Muslim, C., Chanifah, Sembiring, A., Ilham, N., Mufidah, L., Suhartini, S. H., Basuki, R. S., Rina, Y., Suharyon, Nurdin, M., Dahya, Damanik, M., & Dewi, D. O. (2023). Transformation of financial institutions grants from the government to inclusive financial institutions in Indonesia. *PLOS ONE*, 18(6), e0286482. <https://doi.org/10.1371/journal.pone.0286482>
- Dolezal, C., & Novelli, M. (2022). Power in community-based tourism: empowerment and partnership in Bali. *Journal of Sustainable Tourism*, 30(10), 2352–2370. <https://doi.org/10.1080/09669582.2020.1838527>
- Ekomadyo, A. S., Wijaya, N., Vardhani, V. J., Maulana, A. T., Suhendar, H., & Susanto, V. (2023). FIELD OF CREATIVE CULTURE: A STUDY OF CREATIVE MOVEMENT AND INNOVATION OF TERRACOTTA CULTURE IN JATIWANGI, INDONESIA. *Creativity Studies*, 16(1), 355–370. <https://doi.org/10.3846/cs.2023.15333>
- El-Ferik, S., & Al-Naser, M. (2021). University-Industry Collaboration: A Promising Trilateral Co-Innovation Approach. *IEEE Access*, 9, 112761–112769. <https://doi.org/10.1109/ACCESS.2021.3104096>
- Escalona-Orcao, A., Barrado-Timón, D. A., Escolano-Utrilla, S., Sánchez-Valverde, B., Navarro-Pérez, M., Pinillos-García, M., & Sáez-Pérez, L. A. (2020). Cultural and Creative Ecosystems in Medium-Sized Cities: Evolution in Times of Economic Crisis and Pandemic. *Sustainability*, 13(1), 49. <https://doi.org/10.3390/su13010049>
- Faraone, C. (2022). Territorial Challenges for Cultural and Creative Industries' Contribution to Sustainable Innovation: Evidence from the Interreg Ita-Slo Project DIVA. *Sustainability*,

- 14(18), 11271. <https://doi.org/10.3390/su141811271>
- Gallagher, B. K., & Ehlman, M. P. (2019). Arts at the Intersection: Cross-Sector Collaboration and Creative Placemaking in Rapid City, SD. *Public Performance & Management Review*, 42(6), 1333–1350. <https://doi.org/10.1080/15309576.2019.1601113>
- Gerlitz, L., & Prause, G. K. (2021). Cultural and Creative Industries as Innovation and Sustainable Transition Brokers in the Baltic Sea Region: A Strong Tribute to Sustainable Macro-Regional Development. *Sustainability*, 13(17), 9742. <https://doi.org/10.3390/su13179742>
- Gruber, H. (2019). Proposals for a digital industrial policy for Europe. *Telecommunications Policy*, 43(2), 116–127. <https://doi.org/10.1016/j.telpol.2018.06.003>
- Guerrero, J. E., & Hansen, E. (2021). Company-level cross-sector collaborations in transition to the bioeconomy: A multi-case study. *Forest Policy and Economics*, 123, 102355. <https://doi.org/10.1016/j.forpol.2020.102355>
- Gunawan, A. S., & Cahayani, A. (2021). Do Demographic Variables Make a Difference in Entrepreneurial Leadership Style? *International Journal of Asian Business and Information Management*, 13(2), 1–6. <https://doi.org/10.4018/IJABIM.20220701.0a10>
- Harris Purnama, S. I. K. K. B. B. (2022). Small and Medium Enterprises Business Model in Indonesia. *Journal of Economics and Business*, 5(3). <https://doi.org/10.31014/aior.1992.05.03.444>
- Hou, P., Pun, H., & Li, B. (2022). To Collaborate or Not: Product Upgrading Strategy in a Competitive Duopoly Market. *IEEE Transactions on Systems, Man, and Cybernetics: Systems*, 52(5), 3210–3223. <https://doi.org/10.1109/TSMC.2021.3061817>
- Iatrellis, O., Panagiotakopoulos, T., Gerogiannis, V. C., Fitsilis, P., & Kameas, A. (2021). Cloud computing and semantic web technologies for ubiquitous management of smart cities-related competencies. *Education and Information Technologies*, 26(2), 2143–2164. <https://doi.org/10.1007/s10639-020-10351-9>
- Ishiguro, M. A. (2022). Dance as Cultural Practice vs. Religious Piety: Acehese Dance in Banda Aceh and Yogyakarta. *Dance Research Journal*, 54(3), 68–90. <https://doi.org/10.1017/S0149767722000274>
- Janssen, M., Luthra, S., Mangla, S., Rana, N. P., & Dwivedi, Y. K. (2019). Challenges for adopting and implementing IoT in smart cities. *Internet Research*, 29(6), 1589–1616. <https://doi.org/10.1108/INTR-06-2018-0252>
- Jiang, Y., & Zheng, W. (2021). Coupling mechanism of green building industry innovation ecosystem based on blockchain smart city. *Journal of Cleaner Production*, 307, 126766. <https://doi.org/10.1016/j.jclepro.2021.126766>
- Jimenez-Jimenez, D., Martínez-Costa, M., & Sanchez Rodriguez, C. (2019). The mediating role of supply chain collaboration on the relationship between information technology and innovation. *Journal of Knowledge Management*, 23(3), 548–567. <https://doi.org/10.1108/JKM-01-2018-0019>
- Jo, S.-S., Han, H., Leem, Y., & Lee, S.-H. (2021). Sustainable Smart Cities and Industrial Ecosystem: Structural and Relational Changes of the Smart City Industries in Korea. *Sustainability*, 13(17), 9917. <https://doi.org/10.3390/su13179917>
- Jordan, J., Dasgupta, R. K., & Hitchen, G. (2023). Mapping innovation in India's creative industries: an ecosystem framework. *Cultural Trends*, 32(4), 416–428. <https://doi.org/10.1080/09548963.2023.2217416>
- Kaya, B., Abubakar, A. M., Behraves, E., Yildiz, H., & Mert, I. S. (2020). Antecedents of innovative performance: Findings from PLS-SEM and fuzzy sets (fsQCA). *Journal of Business Research*, 114, 278–289. <https://doi.org/10.1016/j.jbusres.2020.04.016>
- Klein, M., & Szychalska-Wojtkiewicz, M. (2020). Cross-Sector Partnerships for Innovation and Growth: Can Creative Industries Support Traditional Sector Innovations? *Sustainability*, 12(23), 10122. <https://doi.org/10.3390/su122310122>
- Kong, X., Liu, X., Jedari, B., Li, M., Wan, L., & Xia, F. (2019). Mobile Crowdsourcing in Smart Cities: Technologies, Applications, and Future Challenges. *IEEE Internet of Things Journal*, 6(5), 8095–8113. <https://doi.org/10.1109/JIOT.2019.2921879>
- Kurniadi, K., Ibrahim, S., Badruzzaman, B., & Purnama, H. (2022). Small and Medium Enterprises Business Model in Indonesia. *Journal of Economics and Business*, 5(3). <https://doi.org/10.31014/aior.1992.05.03.444>
- Li, L., Hsu, C., Mao, J., & Zhang, W. (2022). Contextualising digital innovation in today's China: Local practices and global contributions. *Information Systems Journal*, 32(3), 623–629.

- <https://doi.org/10.1111/isj.12379>
- Li, X. (2020). Cultural creative economy and urban competitiveness: How one matters to the other. *Journal of Urban Affairs*, 42(8), 1164–1179. <https://doi.org/10.1080/07352166.2020.1727293>
- Liang, S., & Wang, Q. (2020). Cultural and Creative Industries and Urban (Re)Development in China. *Journal of Planning Literature*, 35(1), 54–70. <https://doi.org/10.1177/0885412219898290>
- Liu, Z. (2021). The Impact of Government Policy on Macro Dynamic Innovation of the Creative Industries: Studies of the UK's and China's Animation Sectors. *Journal of Open Innovation: Technology, Market, and Complexity*, 7(3), 168. <https://doi.org/10.3390/joitmc7030168>
- Mediastika, C. E., Sudarsono, A. S., Utami, S. S., Ariyanto, Y., Setiawan, T., & Yanti, R. J. (2023). The puzzling sound mark of a cultural and tourism city: The case of Yogyakarta. *The Journal of the Acoustical Society of America*, 154(4_supplement), A230–A230. <https://doi.org/10.1121/10.0023371>
- Na, Y. K., Kang, S., & Jeong, H. Y. (2019). The Effect of Market Orientation on Performance of Sharing Economy Business: Focusing on Marketing Innovation and Sustainable Competitive Advantage. *Sustainability*, 11(3), 729. <https://doi.org/10.3390/su11030729>
- Nandiwardhana, A. P., Cudjoe, D., & Permana, D. (2022). A sustainable development assessment of Indonesia's state banks financing the industrial and non-industrial sector. *Journal of Sustainable Finance & Investment*, 12(3), 894–911. <https://doi.org/10.1080/20430795.2020.1809964>
- Ogbodo, E. U., Abu-Mahfouz, A. M., & Kurien, A. M. (2022). A Survey on 5G and LPWAN-IoT for Improved Smart Cities and Remote Area Applications: From the Aspect of Architecture and Security. *Sensors*, 22(16), 6313. <https://doi.org/10.3390/s22166313>
- Pacheco Pardo, R., & Klingler-Vidra, R. (2019). The Entrepreneurial Developmental State: What is the Perceived Impact of South Korea's Creative Economy Action Plan on Entrepreneurial Activity? *Asian Studies Review*, 43(2), 313–331. <https://doi.org/10.1080/10357823.2019.1589418>
- Page, M. J., McKenzie, J. E., Bossuyt, P. M., Boutron, I., Hoffmann, T. C., Mulrow, C. D., Shamseer, L., Tetzlaff, J. M., Akl, E. A., Brennan, S. E., Chou, R., Glanville, J., Grimshaw, J. M., Hróbjartsson, A., Lalu, M. M., Li, T., Loder, E. W., Mayo-Wilson, E., McDonald, S., ... Moher, D. (2021). The PRISMA 2020 statement: an updated guideline for reporting systematic reviews. *BMJ*, 372, n71. <https://doi.org/10.1136/bmj.n71>
- Page, M. J., McKenzie, J. E., Bossuyt, P. M., Boutron, I., Hoffmann, T., Mulrow, C. D., Shamseer, L., & Moher, D. (2020). Mapping of reporting guidance for systematic reviews and meta-analyses generated a comprehensive item bank for future reporting guidelines. *Journal of Clinical Epidemiology*, 118, 60–68. <https://doi.org/10.1016/j.jclinepi.2019.11.010>
- Pickel-Chevalier, S., Bendesa, I. K. G., & Darma Putra, I. N. (2021). The integrated touristic villages: an Indonesian model of sustainable tourism? *Tourism Geographies*, 23(3), 623–647. <https://doi.org/10.1080/14616688.2019.1600006>
- Pramana, S., Paramartha, D. Y., Ermawan, G. Y., Deli, N. F., & Srimulyani, W. (2022). Impact of COVID-19 pandemic on tourism in Indonesia. *Current Issues in Tourism*, 25(15), 2422–2442. <https://doi.org/10.1080/13683500.2021.1968803>
- R. Lita Meuthia Meuthia, R. F. F. (2020). Enhancing small and medium enterprises performance through innovation in Indonesia. *Journal of Hospitality and Tourism Technology*, 11, 155–176. <https://doi.org/10.1108/jhtt-11-2017-0124>
- Rahman, A. U., Fourati, F., Ngo, K.-H., Jindal, A., & Alouini, M.-S. (2022). Network Graph Generation Through Adaptive Clustering and Infection Dynamics: A Step Toward Global Connectivity. *IEEE Communications Letters*, 26(4), 783–787. <https://doi.org/10.1109/LCOMM.2022.3146606>
- Rahman, M. A., Rashid, M. M., Hossain, M. S., Hassanain, E., Alhamid, M. F., & Guizani, M. (2019). Blockchain and IoT-Based Cognitive Edge Framework for Sharing Economy Services in a Smart City. *IEEE Access*, 7, 18611–18621. <https://doi.org/10.1109/ACCESS.2019.2896065>
- Rauter, R., Globocnik, D., Perl-Vorbach, E., & Baumgartner, R. J. (2019). Open innovation and its effects on economic and sustainability innovation performance. *Journal of Innovation & Knowledge*, 4(4), 226–233. <https://doi.org/10.1016/j.jik.2018.03.004>
- Ridwan Maksum, I., Yayuk Sri Rahayu, A., & Kusumawardhani, D. (2020). A Social Enterprise Approach to Empowering Micro, Small and Medium Enterprises (SMEs) in Indonesia. *Journal of Open Innovation: Technology, Market, and Complexity*, 6(3), 50.

- <https://doi.org/10.3390/joitmc6030050>
- Sanchez-Arias, R., Jaimes, L. G., Taj, S., & Habib, M. S. (2023). Understanding the State of Broadband Connectivity: An Analysis of Speedtests and Emerging Technologies. *IEEE Access*, *11*, 101580–101603. <https://doi.org/10.1109/ACCESS.2023.3313231>
- Santoro, G., Bresciani, S., & Papa, A. (2020). Collaborative modes with Cultural and Creative Industries and innovation performance: The moderating role of heterogeneous sources of knowledge and absorptive capacity. *Technovation*, *92–93*, 102040. <https://doi.org/10.1016/j.technovation.2018.06.003>
- Sawng, Y., Kim, P., & Park, J. (2021). ICT investment and GDP growth: Causality analysis for the case of Korea. *Telecommunications Policy*, *45(7)*, 102157. <https://doi.org/10.1016/j.telpol.2021.102157>
- Setyowati, A. B. (2021). Is it mitigating inequality with emissions? Exploring energy justice and financing transitions to low carbon energy in Indonesia. *Energy Research & Social Science*, *71*, 101817. <https://doi.org/10.1016/j.erss.2020.101817>
- Shi, Y., Zhang, T., & Jiang, Y. (2023). Digital Economy, Technological Innovation and Urban Resilience. *Sustainability*, *15(12)*, 9250. <https://doi.org/10.3390/su15129250>
- Statsenko, L., & Corral de Zubielqui, G. (2020). Customer collaboration, service firms' diversification and innovation performance. *Industrial Marketing Management*, *85*, 180–196. <https://doi.org/10.1016/j.indmarman.2019.09.013>
- Suharyanto, I., van Aalst, I., van Liempt, I., & Zoomers, A. (2023). More than jedug-jedug : dynamics of discontent with tourist activity in Prawirotaman, Yogyakarta. *Tourism Geographies*, *25(1)*, 177–197. <https://doi.org/10.1080/14616688.2020.1861080>
- Sukmayadi, Y., & Masunah, J. (2020). Organising Bandung Isola Performing Arts Festival (BIPAF) As A Market of Innovative Arts in Indonesia. *Harmonia: Journal of Arts Research and Education*, *20(1)*, 47–57. <https://doi.org/10.15294/harmonia.v20i1.24380>
- Unceta, A., Barandiaran, X., & Lakidain, A. (2021). The digitalisation of Creative Industries Fostered by Collaborative Governance: Public Innovation Labs in Gipuzkoa. *Sustainability*, *13(5)*, 2568. <https://doi.org/10.3390/su13052568>
- Van Laar, E., Van Deursen, A. J. A. M., Van Dijk, J. A. G. M., & De Haan, J. (2019). Twenty-first-century digital skills for the creative industries workforce: Perspectives from industry experts. *First Monday*, *24*. <https://doi.org/10.5210/fm.v24i1.9476>
- Wang, K., Zhao, Y., Gangadhari, R. K., & Li, Z. (2021). We are analysing the Adoption Challenges of the Internet of Things (IoT) and Artificial Intelligence (AI) for Smart Cities in China. *Sustainability*, *13(19)*, 10983. <https://doi.org/10.3390/su131910983>
- Westoby, R., Gardiner, S., Carter, R. W. (Bill), & Scott, N. (2021). Sustainable livelihoods from tourism in the “10 New Balis” in Indonesia. *Asia Pacific Journal of Tourism Research*, *26(6)*, 702–716. <https://doi.org/10.1080/10941665.2021.1908386>
- Wijaya, S. (2019). Indonesian food culture mapping: a starter contribution to promote Indonesian culinary tourism. *Journal of Ethnic Foods*, *6(1)*, 9. <https://doi.org/10.1186/s42779-019-0009-3>
- Wiryawan, B. A., & Otchia, C. (2022). The legacy of the reformasi: the role of local government spending on industrial development in a decentralised Indonesia. *Journal of Economic Structures*, *11(1)*, 3. <https://doi.org/10.1186/s40008-022-00262-y>
- Yao, J., Li, H., Shang, D., & Ding, L. (2021). Evolution of the Industrial Innovation Ecosystem of Resource-Based Cities (RBCs): A Case Study of Shanxi Province, China. *Sustainability*, *13(20)*, 11350. <https://doi.org/10.3390/su132011350>
- Yoon, H. (2019). Do higher skills result in better jobs? The case of the Korean animation industry. *Geoforum*, *99*, 267–277. <https://doi.org/10.1016/j.geoforum.2018.08.013>
- Zhang, X., Duan, K., Zhao, H., Zhao, Y., Wang, X., & de Pablos, P. O. (2020). Can cooperation drive the success of suppliers in B2B crowdsourcing innovation projects? A large-scale data perspective. *Industrial Marketing Management*, *90*, 570–580. <https://doi.org/10.1016/j.indmarman.2019.09.011>