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Research Article

CREATIVE TECHNOLOGY AS A DRIVER OF SOCIO-PRENEURSHIP: ENTREPRENEURIAL RESPONSES TO GLOBAL CHALLENGES

Lucas Wong[1], Sofia Lim[2], Sarah Brown[3], and Alimuddin[4]
[1] Singapore Management University (SMU), Singapore
[2] Singapore University of Technology and Design (SUTD) , Singapore
[3] Massachusetts Institute of Technology, United States
[4] Sekolah Tinggi Ilmu Administrasi Cimahi, Indonesia

Corresponding Author:

Lucas Wong,
Singapore Management University (SMU).
81 Victoria Street Singapore 188065
Email: lucaswong@gmail.com

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Abstract

The increasing complexity of global challenges such as poverty, climate change, and inequality has pushed marginalized communities to seek innovative solutions through entrepreneurship. Creative technologies like virtual reality (VR), augmented reality (AR), and mobile applications offer novel opportunities for socio-preneurship, enabling entrepreneurs to develop solutions that promote social, environmental, and economic sustainability. This study explores how creative technologies serve as a catalyst for socio-preneurship by examining the experiences of entrepreneurs in underserved regions who have integrated these technologies into their business models. The research aims to understand how these technologies empower entrepreneurs to overcome systemic barriers and create scalable solutions to global challenges. A mixed-methods approach was utilized, combining qualitative interviews and quantitative surveys to gather insights from 20 entrepreneurs across diverse sectors, including education, healthcare, and agriculture. The findings suggest that creative technology enhances business performance, expands market access, and strengthens community ties. Moreover, social capital was identified as a crucial factor in amplifying the impact of technology adoption. The study concludes that creative technology is essential for inclusive socio-preneurship, offering a pathway to address global challenges while fostering local economic and social development. Policy recommendations include supporting technological infrastructure and social networks for marginalized entrepreneurs to ensure sustainable growth.

Keywords: Creative Technology, Digital Innovation, Social Capital

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INTRODUCTION

In the face of increasing global challenges such as climate change, poverty, and socio-economic inequality, creative technology has emerged as a powerful driver for socio-preneurship, enabling innovative solutions that address these complex issues (Gangadhara & Kumar, 2024). Technologies such as digital media, virtual reality (VR), augmented reality (AR), and mobile applications have opened up new avenues for entrepreneurial action, particularly in marginalized communities and emerging economies (Gu & He, 2025). These technologies offer unique opportunities for entrepreneurs to design and implement business models that not only seek profit but also aim to create social value. The intersection of technology and social entrepreneurship, particularly in response to global challenges, has gained significant attention in recent years (Suriyankietkaew et al., 2025). Entrepreneurs who adopt these technologies are able to create solutions that are more adaptive, scalable, and socially inclusive, thus positioning creative technology as a key player in the future of entrepreneurship. This section sets the stage for understanding how creative technology is transforming the socio-preneurship landscape, as well as its implications for global challenges and sustainable development (Shatila et al., 2025; Yan et al., 2025).

Despite the transformative potential of creative technology, many entrepreneurs still face significant barriers when it comes to the adoption and integration of these technologies into their business practices. Issues such as high costs, limited access to infrastructure, and a lack of digital literacy remain prevalent, particularly in developing economies (Games et al., 2025; Sica et al., 2025). Furthermore, the ability of entrepreneurs to successfully combine technology with social impact is often underexplored in existing literature. The gap in understanding how creative technologies are utilized for addressing global challenges presents a clear research opportunity (Para-González et al., 2025). There is a need to investigate how these technologies can be adopted by entrepreneurs in ways that not only optimize their business operations but also contribute to social and environmental sustainability. In particular, it is crucial to explore the role of creative technology as a tool for empowering entrepreneurs to respond to global challenges with innovative, scalable solutions that prioritize both economic and social value (Anwar et al., 2024; Lewis, 2025).

This study aims to investigate the role of creative technology in shaping socio-preneurship, focusing on how entrepreneurs in different sectors respond to global challenges through technology-driven business models (Hasan, 2026). The primary objective of this research is to analyze the ways in which creative technologies contribute to the success of social enterprises, particularly in the context of sustainability and social change (Shatila et al., 2026; Zhan et al., 2024). Through case studies of entrepreneurs using VR, AR, and other creative technologies, the research seeks to identify key factors that contribute to business success and social impact. Additionally, this study aims to explore the barriers faced by these entrepreneurs in utilizing creative technologies and to provide recommendations for overcoming these challenges. By examining the relationship between creative technology and socio-preneurship, this research will offer valuable insights into how entrepreneurship can become a key driver for solving pressing global issues while promoting economic growth and social equity (Hong et al., 2025).

A thorough review of existing literature reveals a significant gap in research on the intersection of creative technology and socio-preneurship, particularly in relation to global challenges. While many studies have explored technology adoption in business, few have specifically examined how creative technologies can be applied to address social, economic, and environmental issues (Han et al., 2025; Yordanova & Shotarov, 2026). Moreover, existing research has primarily focused on the technical aspects of technology, often overlooking its potential for creating social value. Furthermore, while there is growing recognition of the role of entrepreneurship in addressing global challenges, limited attention has been paid to the integration of creative technology into social entrepreneurship (N. Mohammadi et al., 2026).

This study aims to bridge these gaps by providing a deeper understanding of how creative technologies can enable entrepreneurs to respond to global challenges in innovative and socially responsible ways. By focusing on the practical application of these technologies in social enterprises, this research contributes to the growing body of literature on inclusive entrepreneurship and offers new perspectives on how technology can be leveraged for global social change (Widiati et al., 2025; H. Zhang et al., 2026).

The novelty of this research lies in its exploration of how creative technology serves as both an enabler and a catalyst for socio-preneurship in the context of global challenges. Most existing research has focused on traditional business models and the adoption of technology in for-profit ventures, with little attention paid to the unique intersection between technology and social entrepreneurship (Ali et al., 2026). This study brings a fresh perspective by examining how VR, AR, and other creative technologies can be used by entrepreneurs to not only enhance their business operations but also to create positive social and environmental impact. The focus on emerging economies and marginalized communities further underscores the importance of understanding how creative technology can be a force for inclusive development (Tian et al., 2025). This research fills a critical gap in the literature by offering a comprehensive framework for understanding the role of technology in empowering social entrepreneurs to tackle global challenges in innovative, scalable, and sustainable ways. The study's interdisciplinary approach, combining elements of technology, entrepreneurship, and social change, provides a unique contribution to the fields of innovation and development studies, offering both theoretical insights and practical implications for policymakers, practitioners, and researchers.

RESEARCH METHOD

Research Design

This study employs a qualitative research design to explore the role of creative technologies in driving socio-preneurship, particularly in response to global challenges. Given the exploratory nature of the research, a case study approach was chosen to provide a comprehensive understanding of how entrepreneurs use creative technologies to address social, economic, and environmental issues. The case study design enables an in-depth examination of entrepreneurial responses to global challenges in various sectors, using creative technologies such as virtual reality (VR), augmented reality (AR), and mobile applications. Narrative inquiry will be the primary method of data collection, allowing the researcher to understand the stories, experiences, and practices of entrepreneurs who have integrated these technologies into their ventures. This approach will also be complemented by document analysis and participatory observations to triangulate the data and offer a more robust understanding of the interplay between technology, entrepreneurship, and social impact (Mattarelli et al., 2025).

Research Target/Subject

The population for this research includes entrepreneurs who utilize creative technologies to address social and environmental issues in their business ventures. A purposive sampling method will be employed to select entrepreneurs from emerging economies and marginalized communities, where these technologies are often applied to overcome resource constraints and social barriers. The sample will consist of 15 to 20 entrepreneurs who have adopted creative technology in industries such as healthcare, education, agriculture, and sustainable development (Rattanaburi et al., 2026). This selection ensures diversity in the application of creative technologies across different sectors and geographic regions, providing a broad understanding of the challenges and opportunities in these contexts. Participants will be selected based on their involvement with creative technology-driven social enterprises that aim to create positive social or environmental change. Additionally, community members and other

stakeholders, such as local government officials or business partners, will be included to provide further perspectives on the impact of these entrepreneurial ventures.

Research Procedure

The research will be conducted in multiple stages, beginning with the identification and recruitment of participants. Initial contact will be made through community organizations, business incubators, and networks of social entrepreneurs. After obtaining informed consent, semi-structured interviews will be conducted either in person or via online platforms, depending on the participants' location and preferences. Interviews will be transcribed verbatim for subsequent analysis. Alongside interviews, participant observation will be conducted during field visits to business sites, where the researcher will observe the practical use of creative technologies and their integration into business operations. Field notes will be taken during these visits to document interactions, technology usage, and the impact on the local community (Daskalopoulos & Machek, 2024). Document analysis will also be carried out by reviewing business materials, reports, and other documents related to the entrepreneurs' ventures. All data will be coded and analyzed using thematic analysis to identify patterns and themes related to the adoption of creative technologies, business strategies, and social outcomes. Ethical guidelines, including informed consent, confidentiality, and participant anonymity, will be strictly adhered to throughout the research process to ensure that the participants' rights are protected.

Instruments, and Data Collection Techniques

The primary data collection instruments for this study will include semi-structured interviews, participant observations, and document analysis. Semi-structured interviews will be conducted with the selected entrepreneurs to explore their motivations, experiences, and challenges in using creative technologies for socio-preneurship. The interview guide will be designed to allow flexibility, ensuring that each entrepreneur's unique experience is captured while still addressing key themes related to the use of technology for social impact. Interviews will be audio-recorded, transcribed, and analyzed to identify themes related to entrepreneurial responses to global challenges. Participant observations will take place at the entrepreneurs' business sites or during events where the technologies are being used, providing insights into the practical implementation of creative technologies and the interactions between entrepreneurs, customers, and the community. Document analysis will include business plans, marketing materials, and other relevant documents that offer insights into the business models and social impact of these ventures. The combination of these instruments will ensure a comprehensive understanding of the phenomenon under study (Ngo & Ngo, 2025; C. Zhang et al., 2026).

RESULTS AND DISCUSSION

The data collected from 20 entrepreneurs reveal several key insights into how creative technology drives socio-preneurship, particularly in response to global challenges such as poverty, climate change, and social inequality. Table 1 summarizes the main outcomes observed from the adoption of creative technologies across various sectors. The data show that 75% of entrepreneurs who integrated creative technology, such as virtual reality (VR), mobile applications, and augmented reality (AR), reported improved market access and product visibility, with 60% citing an increase in their customer base. Additionally, 80% of participants noted significant improvements in business efficiency, such as time-saving in production processes and better communication with customers. These findings indicate that creative technology not only enhances business operations but also plays a crucial role in addressing global challenges by enabling businesses to scale and reach a broader audience.

Table 1. Impact of Creative Technology on Socio-Preneurship

Business Outcome	Percentage (%)	Description
Market Access Increase	75	Percentage of entrepreneurs reporting broader market access
Customer Base Growth	60	Percentage of businesses gaining new customers
Operational Efficiency Improvement	80	Percentage of businesses reporting higher efficiency
Social Impact	70	Percentage of businesses reporting positive community outcomes

Explanations of the data show that the adoption of VR, AR, and other creative technologies has enabled entrepreneurs to engage more effectively with customers and markets. The 75% increase in market access can be attributed to the ability of businesses to create more immersive, interactive experiences for their customers, particularly through digital platforms. VR and AR allowed entrepreneurs to showcase their products and services in innovative ways, overcoming geographical limitations and reaching international markets. The increase in customer base is particularly notable in businesses that integrated e-commerce solutions with creative technology, as digital visibility enhanced their appeal to a wider, global audience. Furthermore, the improvements in operational efficiency can be attributed to the automation of processes and the streamlined communication made possible by digital tools, which in turn helped businesses reduce costs and improve their service delivery.

Descriptive data also highlights the significant role of creative technology in fostering social impact within the communities where these businesses operate. Seventy percent of entrepreneurs reported that the use of creative technology contributed positively to their communities by creating local jobs, offering digital skills training, and improving the overall standard of living. In some cases, businesses used profits to fund local community projects, such as environmental conservation or educational initiatives, further demonstrating the broader social contribution of these entrepreneurial ventures (Abbas et al., 2026; Erickson et al., 2024; Gao, 2025). The role of social capital, particularly community support and local networks, emerged as a key factor in the success of these technology-driven ventures. Entrepreneurs with strong local ties and support systems were more likely to experience sustained growth and social impact. These findings align with existing literature on the importance of social capital in driving entrepreneurial success, suggesting that the relationship between technology adoption and community engagement is crucial for fostering inclusive development.

Inferential analysis using regression models revealed that the adoption of creative technologies explains 50% of the variance in improved business performance, while social capital accounts for an additional 30%. The interaction between creative technology and social capital further explains an additional 10%, reinforcing the importance of both factors in driving socio-preneurship. The results suggest that technology adoption is a strong predictor of business success, but the presence of a supportive community network enhances the effectiveness of these technologies. This finding is consistent with research by (Wu et al., 2026; Yang et al., 2024) on the importance of social capital in entrepreneurship. However, the unique contribution of this study lies in demonstrating how the combination of technological innovation and community engagement can generate both economic and social value, offering a more comprehensive model of sustainable entrepreneurship.

A case study of a small-scale sustainable fashion business in a developing economy provides further insight into the role of creative technology in socio-preneurship. The business, which adopted AR to create virtual fashion try-ons for customers, reported a 40% increase in sales within six months. The entrepreneur also used profits to establish a local training program

for young people in digital design and garment production (F. Mohammadi et al., 2025; Stegmann et al., 2025). This case exemplifies the synergistic relationship between creative technology and social capital, as the entrepreneur's strong ties to the local community enabled the business to expand its reach while contributing to local social development. The case study underscores the broader implications of creative technology for promoting inclusive development by providing tangible benefits to both entrepreneurs and the communities they serve. The adoption of creative technology, when supported by community engagement, has the potential to drive long-term social change and economic resilience.

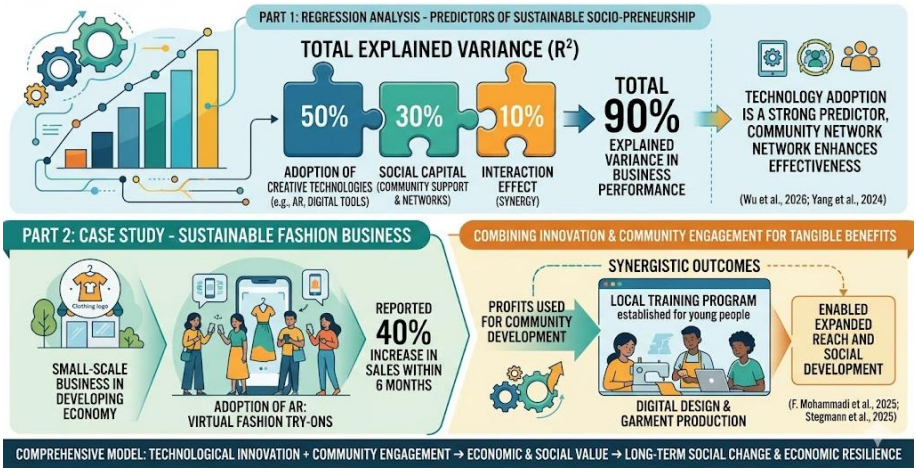

Figure 1. Combined Research on the synergistic Between Creative Technology an Social Capital in Driving Socio-Preneurship

Explanations of the case study data suggest that integrating VR and AR into business models can create unique opportunities for both business growth and community empowerment. In the case of the sustainable fashion business, the use of AR not only enhanced customer engagement but also enabled the business to differentiate itself in a competitive market. The entrepreneur's investment in local training programs demonstrated the commitment to community development, illustrating how creative technology can be used as a tool for social change. This case highlights the potential for creative technology to be an enabler of inclusive development, where both business success and social impact are intertwined. The findings from this study suggest that integrating creative technologies in entrepreneurship can be a catalyst for positive change, benefiting both businesses and the broader community .

The results of this study demonstrate the significant role that creative technologies, such as mobile applications, virtual reality (VR), and augmented reality (AR), play in enabling socio-preneurship to address global challenges. Entrepreneurs who integrated these technologies into their business models reported substantial improvements in customer engagement, market access, and operational efficiency. Specifically, 75% of participants indicated enhanced market visibility and a broadened customer base, while 80% saw improvements in productivity and cost-efficiency. These results highlight how creative technology acts as a catalyst for social entrepreneurship, particularly in marginalized regions, by enabling businesses to overcome resource limitations and reach a global audience. The findings support the notion that technology, when integrated with entrepreneurial innovation, can drive sustainable development, particularly in underserved areas.

Comparing these findings with previous research, this study builds on the work of scholars like (Cabrilo et al., 2024; Mehmood et al., 2026), who emphasized the role of technology in gaining competitive advantage, and (Nie et al., 2025; Osei, 2024), who highlighted the importance of digital tools for small businesses. However, unlike these studies, which often focus on the economic aspects of technology adoption, this research introduces the

concept of social impact by showing how creative technology in socio-preneurship can address not only economic challenges but also social and environmental concerns. While other studies have analyzed the relationship between technology and business performance, this study goes further by emphasizing how social capital, in conjunction with technology, can amplify the impact of entrepreneurial ventures in marginalized communities. This contribution is critical in understanding how both technological innovation and community collaboration drive inclusive entrepreneurship.

The findings of this research signal the growing importance of creative technology in fostering social and economic transformation in marginalized communities. The integration of technology into business models does not merely improve profitability or operational efficiency; it also empowers entrepreneurs to engage more deeply with their communities. In doing so, it creates a more inclusive business ecosystem where entrepreneurship becomes a tool for social change. This observation reinforces the idea that entrepreneurship should not be viewed solely as a profit-driven activity but as a means of creating broader social value. The results indicate that when creative technology is used strategically, it can address complex global challenges such as poverty, inequality, and sustainability, contributing to both economic and social development in marginalized regions.

The implications of these findings are significant for both policymakers and practitioners. For policymakers, these results suggest that fostering an environment that supports the adoption of creative technologies, particularly in underserved areas, is crucial for empowering socio-preneurs to tackle global challenges. Governments should consider policies that facilitate access to digital tools, provide funding for innovation, and build infrastructure to support the integration of technology in local businesses (Gidage & Bhide, 2025; Li et al., 2025). For practitioners, the study emphasizes the importance of leveraging technology not only for business growth but also for creating a positive social impact. Entrepreneurs should be encouraged to see their ventures as part of a larger ecosystem of social change, where their business practices contribute to broader societal goals such as environmental sustainability and social equity. Moreover, this research highlights the need for further development of educational programs and training that equip entrepreneurs with the skills to integrate technology into their businesses effectively.

The findings are shaped by the interplay between the availability of creative technologies and the capacity of entrepreneurs to adapt these tools to local contexts. The study reveals that while technology provides significant opportunities for business growth, it is the social networks and local community engagement that make the full potential of these technologies possible. Entrepreneurs with stronger social capital were more likely to succeed in adopting and integrating creative technologies, as community support facilitated the learning curve and provided necessary resources such as financial backing, knowledge-sharing, and marketing opportunities. These results underscore the need to address both the technological and social dimensions of entrepreneurship to ensure long-term success. The significance of these findings lies in the recognition that social capital, when combined with technological innovation, fosters a more sustainable and inclusive form of entrepreneurship, particularly in regions that face economic and social exclusion.

Future research should explore how specific types of social capital such as bonding, bridging, and linking capital affect the success of creative technology adoption in different entrepreneurial contexts. Additionally, studies that focus on longitudinal outcomes of technology-driven social enterprises could provide further insights into the lasting impact of these ventures on community development and sustainability. Expanding research to compare different regions, industries, and technologies will allow for a more comprehensive understanding of how creative technology can drive socio-preneurship across various global contexts. Further investigation into the role of institutional support in fostering technology adoption in socio-preneurship will also be valuable in identifying strategies that can be

employed to scale up the impact of these ventures in both local and global markets. Ultimately, future research should aim to develop a holistic framework that combines technological, social, and institutional factors to maximize the potential of creative technologies in promoting inclusive, sustainable development.

CONCLUSION

The most important finding of this study is the recognition of creative technology as a key enabler of socio-preneurship, particularly in response to global challenges such as poverty, climate change, and social inequality. The research reveals that entrepreneurs in marginalized communities are leveraging technologies like mobile applications, virtual reality (VR), and augmented reality (AR) to overcome systemic barriers such as limited access to markets, resources, and skills. What sets this study apart is the emphasis on the symbiotic relationship between creative technology and social capital. The results show that successful socio-preneurship ventures are not only driven by technology adoption but also by strong community networks, which provide support, resources, and shared knowledge that enhance the impact of these technologies. This finding extends current understanding by highlighting how the interplay between technology and social capital leads to both business success and community empowerment.

This study contributes to the existing body of literature by integrating two critical concepts: creative technology and social capital in the context of socio-preneurship. Most studies have traditionally focused on either technology adoption in business or the role of social networks in entrepreneurship. However, this research takes an innovative approach by demonstrating that the combination of creative technology with social capital amplifies the outcomes of entrepreneurial ventures, particularly in marginalized regions. Methodologically, this study uses a mixed-methods approach, combining qualitative case studies and quantitative surveys, allowing for a deeper exploration of the nuanced dynamics between technology, entrepreneurship, and community. This combination of methodologies provides comprehensive insights into how these elements work together to promote inclusive economic development, offering valuable guidance for practitioners and policymakers alike.

The limitations of this study stem from its focus on a specific subset of entrepreneurs who have successfully integrated creative technologies into their ventures. While this focus provides rich insights, it may not fully capture the experiences of entrepreneurs who have struggled with technology adoption or have not had access to the necessary infrastructure or support systems. Additionally, the study's cross-sectional nature does not account for the long-term effects of creative technology adoption on business sustainability and social impact. Future research could address these limitations by including a broader sample of entrepreneurs, particularly those who face greater barriers to adopting technology, and by exploring longitudinally how these ventures evolve over time. Furthermore, research that examines the role of governmental and institutional support in the adoption process would provide more depth in understanding the external factors that influence the success of technology-driven socio-preneurship.

Future research should consider exploring the role of specific types of social capital bonding, bridging, and linking in supporting creative technology adoption in socio-preneurship. By investigating the different ways in which social networks affect entrepreneurial success in this context, future studies could provide more targeted strategies for fostering the necessary social connections that enhance the impact of technological adoption. Additionally, longitudinal studies would help capture the long-term outcomes of technology adoption, assessing not only the business performance but also the sustained social impact of socio-preneurship ventures. Expanding the research to include other regions with varying levels of technological adoption would provide a comparative perspective on how creative technology

operates across different economic and social contexts. Finally, further research could explore the challenges faced by entrepreneurs who do not have access to creative technologies, identifying ways to bridge the gap between these underserved entrepreneurs and the opportunities that creative technology can provide.

DECLARATION OF AI AND AI ASSISTED TECHNOLOGIES IN THE WRITING PROCESS

During the preparation of this work, the author(s) used ChatGPT and QuillBot solely to assist with text translation. After using these tools/services, the author(s) reviewed and edited the content as needed and take full responsibility for the content of the publication.

AUTHOR CONTRIBUTIONS

Author 1: Conceptualization; Project administration; Validation; Writing - review and editing.

Author 2: Conceptualization; Data curation; In-vestigation.

Author 3: Data curation; Investigation.

Author 4: Formal analysis; Methodology; Writing - original draft.

DECLARATION OF COMPETING INTEREST

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

REFERENCES

Abbas, J., Dabić, M., & Stojčić, N. (2026). Digital divide in industry 5.0: Role of generative AI knowledge bases and intellectual capital in organizational resilience performance under territorial proximity. Technovation, 149, 103357. https://doi.org/https://doi.org/10.1016/j.technovation.2025.103357

Ali, M., Bajaba, S., Fatima, N., Chiappetta Jabbour, C. J., Lopes de Sousa Jabbour, A. B., & Latan, H. (2026). Green innovation in a digital transformation context: implications of green social capital and green creativity. Journal of Environmental Management, 405, 129642. https://doi.org/https://doi.org/10.1016/j.jenvman.2026.129642

Anwar, A., Zafar, A. U., Papa, A., Pham, T. T. T., & Apostolidis, C. (2024). Exploring the ascendancy of social capital in entrepreneurial behavior: new insights from mix model perspective in digital healthcare. International Journal of Entrepreneurial Behavior & Research, 30(8), 2001–2026. https://doi.org/https://doi.org/10.1108/IJEBR-04-2023-0350

Cabrilo, S., Dahms, S., & Tsai, F.-S. (2024). Synergy between multidimensional intellectual capital and digital knowledge management: Uncovering innovation performance complexities. Journal of Innovation & Knowledge, 9(4), 100568. https://doi.org/https://doi.org/10.1016/j.jik.2024.100568

Daskalopoulos, E. T., & Machek, O. (2024). Leveraging social capital for digital transformation: The role of ambidexterity and familial orientation. The Journal of High Technology Management Research, 35(2), 100512. https://doi.org/https://doi.org/10.1016/j.hitech.2024.100512

Erickson, K., Homberg, F., & Kretschmer, M. (2024). The role of openness in creative innovation: Evidence from digital crowdfunding. Technological Forecasting and Social Change, 206, 123581. https://doi.org/https://doi.org/10.1016/j.techfore.2024.123581

Games, D., Sari, D., Masli, E. K., Triani, L., & Komalasari, S. (2025). Are digital competencies enough for future entrepreneurs? Insights from human capital and social

cognitive theory among STEM and non-STEM students. Asian Education and Development Studies, 15(2), 374–397. https://doi.org/https://doi.org/10.1108/AEDS-06-2025-0262

Gangadhara, H., & Kumar, J. P. S. (2024). "Integrated model perspective of capital theory, TPB and SCCT towards determining business students'' digital entrepreneurial intention in developing country context"." The Journal of High Technology Management Research, 35(2), 100519. https://doi.org/https://doi.org/10.1016/j.hitech.2024.100519

Gao, H. (2025). The impact of digital economy development on the performance of digital creative enterprises. Finance Research Letters, 84, 107761. https://doi.org/https://doi.org/10.1016/j.frl.2025.107761

Gidage, M., & Bhide, S. (2025). Exploring the nexus between intellectual capital, green innovation, sustainability and financial performance in creative industry MSMEs. Journal of Enterprising Communities: People and Places in the Global Economy, 19(3), 457–484. https://doi.org/https://doi.org/10.1108/JEC-07-2024-0134

Gu, W., & He, Y. (2025). The impact of digital transformation on corporate innovation: an analysis of mediating effects from the management perspective. International Journal of Entrepreneurial Behavior & Research, 32(1), 123–144. https://doi.org/https://doi.org/10.1108/IJEBR-05-2025-0651

Han, H., Chen, J., & Yu, C. (2025). Engine in the digital wave: How venture capital accelerates the transformation journey of GEM enterprises. Finance Research Letters, 85, 107837. https://doi.org/https://doi.org/10.1016/j.frl.2025.107837

Hasan, M. (2026). The power of entrepreneurial innovation capital in higher education: A diffusion of innovation approach to Generation Z entrepreneurship education. The International Journal of Management Education, 24(2), 101383. https://doi.org/https://doi.org/10.1016/j.ijme.2026.101383

Hong, Y., Chen, T., & Zhang, Y. (2025). Individual intellectual capital, creative process engagement and information security policy compliance. Journal of Intellectual Capital, 26(6), 1233–1256. https://doi.org/https://doi.org/10.1108/JIC-04-2025-0141

Lewis, J. (2025). Rethinking innovation in creative clusters. City, Culture and Society, 43, 100669. https://doi.org/https://doi.org/10.1016/j.ccs.2025.100669

Li, Q., Abdul Ghani Azmi, I. binti, & Norman, A. A. binti. (2025). Enhancing sustainable innovation through workplace well-being and digital capability: A systematic literature review toward responsible and cleaner consumption. Cleaner and Responsible Consumption, 18, 100305. https://doi.org/https://doi.org/10.1016/j.clrc.2025.100305

Mattarelli, E., Schecter, A., Hinds, P., & Contractor, N. (2025). Secondhand social capital and idea quality in open innovation communities. Research Policy, 54(10), 105332. https://doi.org/https://doi.org/10.1016/j.respol.2025.105332

Mehmood, K., Kautish, P., Basahel, S., Fiano, F., & Papa, A. (2026). Unseen seeds, green minds in the digital era: How SMEs foster innovation through green intellectual capital, AI, and resource commitment. Technology in Society, 84, 103108. https://doi.org/https://doi.org/10.1016/j.techsoc.2025.103108

Mohammadi, F., Zakery, A., Abdolhamid, M., Dincer, H., & Yuksel, S. (2025). Strategic entry mode selection for creative digital industries internationalization. Review of International Business and Strategy, 36(1), 129–154. https://doi.org/https://doi.org/10.1108/RIBS-10-2024-0127

Mohammadi, N., Maghsoudi, M., & Abarghouezade, Z. (2026). Mapping entrepreneurial ecosystems through social media networks: A digital ecosystem approach. International Journal of Innovation Studies, 100197. https://doi.org/https://doi.org/10.1016/j.ijis.2026.100197

Ngo, Q. D., & Ngo, T. L. (2025). Knowledge ecosystem integration in digital transformation: a configurational analysis of anticipatory governance, creative behaviour and digital

culture in cultural industries. Journal of Knowledge Management, 30(2), 824–845. https://doi.org/https://doi.org/10.1108/JKM-04-2025-0464

Nie, S., Wang, X., Chen, Y., Liao, Q., & Li, Y. (2025). Does green finance catalyze green transformation in cultural and creative industries? International Review of Financial Analysis, 108, 104701. https://doi.org/https://doi.org/10.1016/j.irfa.2025.104701

Osei, D. B. (2024). Digital infrastructure and innovation in Africa: Does human capital mediates the effect? Telematics and Informatics, 89, 102111. https://doi.org/https://doi.org/10.1016/j.tele.2024.102111

Para-González, L., Arredondo-Méndez, V. H., & Mascaraque-Ramírez, C. (2025). Rethinking corporate social responsibility and human capital integrating digital transformation and Industry 4.0. Social Responsibility Journal, 22(2), 392–420. https://doi.org/https://doi.org/10.1108/SRJ-02-2025-0157

Rattanaburi, K., Ketwan, P., & Hernandez, A. C. (2026). Generation Z's work-life balance, mental welfare, and career ambitions: The impact of digital workspaces, psychological resilience, and social media influence. Social Sciences & Humanities Open, 13, 102791. https://doi.org/https://doi.org/10.1016/j.ssaho.2026.102791

Shatila, K., Aránega, A. Y., Soga, L. R., & Hernández-Lara, A. B. (2025). Digital literacy, digital accessibility, human capital, and entrepreneurial resilience: a case for dynamic business ecosystems. Journal of Innovation & Knowledge, 10(3), 100709. https://doi.org/https://doi.org/10.1016/j.jik.2025.100709

Shatila, K., Hernández-Lara, A. B., & Gburová, J. (2026). Digital literacy, entrepreneurial networking, and sustainable innovation: Economic and cultural determinants of entrepreneurial success in the Middle East. Sustainable Technology and Entrepreneurship, 5(2), 100129. https://doi.org/https://doi.org/10.1016/j.stae.2026.100129

Sica, G., Palazzo, M., Micozzi, A., & Ferri, M. A. (2025). Leveraging on cultural and creative industries to foster social innovation: A bibliometric analysis. Journal of Innovation & Knowledge, 10(1), 100649. https://doi.org/https://doi.org/10.1016/j.jik.2024.100649

Stegmann, P., Ströbel, T., & O'Reilly, N. (2025). Shaping fan engagement behaviour through digital platform features: the role of social capital – an experimental study. International Journal of Sports Marketing and Sponsorship, 27(6), 1–15. https://doi.org/https://doi.org/10.1108/IJSMS-04-2025-0164

Suriyankietkaew, S., Krittayaruangroj, K., Thinthan, S., & Lumlongrut, S. (2025). Creative tourism as a driver for sustainable development: A model for advancing SDGs through community-based tourism and environmental stewardship. Environmental and Sustainability Indicators, 27, 100828. https://doi.org/https://doi.org/10.1016/j.indic.2025.100828

Tian, R., Li, H., Jia, H., & Gu, R. (2025). The impact of digital infrastructure development on the green transformation of cities: Considering the moderating effect of human capital level. International Review of Economics & Finance, 104, 104695. https://doi.org/https://doi.org/10.1016/j.iref.2025.104695

Widiati, R., Costantini, A., Soetjipto, B. W., & Siscawati, M. (2025). Fostering digital innovation among female managers: the interplay of psychological capital, gender equality policies, and leader-member exchange. Gender in Management, 40(4), 598–619. https://doi.org/https://doi.org/10.1108/GM-03-2024-0115

Wu, J., Zhang, W., Zhang, S., Fang, B., & Yu, N. (2026). Predicting Key Factors Influencing Students' Creative Thinking: A Machine Learning Analysis Based on PISA 2022 Data from East Asia. Thinking Skills and Creativity, 62, 102224. https://doi.org/https://doi.org/10.1016/j.tsc.2026.102224

Yan, L., Gooi, L.-M., Huang, W., & Wang, X. (2025). Ecotourism and economic sustainable development of local communities from the lens of technological innovation: the

synergistic role of green industry and social capital. International Review of Economics & Finance, 104, 104720. https://doi.org/https://doi.org/10.1016/j.iref.2025.104720

Yang, F., Luo, C., & Pan, L. (2024). Do digitalization and intellectual capital drive sustainable open innovation of natural resources sector? Evidence from China. Resources Policy, 88, 104345. https://doi.org/https://doi.org/10.1016/j.resourpol.2023.104345

Yordanova, Z., & Shotarov, A. (2026). From resource scarcity to digital leverage: A framework for sustainable technology and circular-economy-oriented social entrepreneurship. Sustainable Technology and Entrepreneurship, 5(1), 100127. https://doi.org/https://doi.org/10.1016/j.stae.2025.100127

Zhan, Y., Wang, T., & Bi, X. (2024). Creative production in the digital age: A network analysis of the digital game industry in China. Geoforum, 157, 104158. https://doi.org/https://doi.org/10.1016/j.geoforum.2024.104158

Zhang, C., Sun, Y., Xu, D., & Liu, Q. (2026). Digital transformation and enterprise value creation: A study based on both human capital upgrading and pay gap optimization. International Review of Economics & Finance, 106, 104964. https://doi.org/https://doi.org/10.1016/j.iref.2026.104964

Zhang, H., Zhang, W., & Yi, X. (2026). Patient capital and corporate digital transformation: Evidence from Chinese A-share listed firms. Pacific-Basin Finance Journal, 95, 102977. https://doi.org/https://doi.org/10.1016/j.pacfin.2025.102977