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Empowering Batik Artisans: The Synergy of UU ITE and Smart Transaction Technologies in SMEs

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ABSTRACT: The background of the research is rooted in the pivotal role of Smart Transaction Systems in the digital transformation of Small and Medium-sized Enterprises (SMEs) within the batik industry in Semarang, Indonesia, amid the burgeoning Smart Economy era. The study aims to comprehensively explore the impact of national regulations, particularly the Information and Electronic Transactions Law (UU ITE), on the utilization of Smart Transaction Systems in electronic commerce by batik SMEs during the Digital Literacy Smart Economy era. To achieve its objectives, the research employs an analytical and evaluative approach, scrutinizing the legal framework, including UU ITE and related regulations, while also conducting an in-depth analysis of the implications and benefits for SMEs and consumers. The study's findings and conclusions highlight the impact of UU ITE on the efficiency of transactions ensuring security and legal protection for both batik SMEs and consumers. The research emphasizes the need for regulations governing Smart Transaction Systems to build trust, enhance security and promote growth for SMEs. The study is unique due to its examination of how UU ITE and Smart Transaction Technologies work providing insights into the legal and technological complexities in today's rapidly evolving digital landscape. The implications of the research, to improving frameworks that support SMEs digital initiatives fostering development and ensuring consumer safety in the era of the Smart Economy.

KEYWORDS: ITE Law, Smart Transaction System, Smart Economy

INTRODUCTION

The restore stability drive growth and support the national economic recovery especially in Semarang, Indonesia the government has actively been promoting the growth of Micro, Small and Medium Enterprises (UMKM). The development of UMKM, in the batik industry of Semarang is viewed to revive the economy after the impact caused by the Covid 19 pandemic in Indonesia during years. Semarang City plays a role in empowering Micro, Small and Medium Enterprises (UMKM) due to its abundance of UMKM products with significant potential for further advancement. One such example being the batik industry. (Ma, 2023; Moreira & Macke, 2023; Musari & Naaz, 2023; Qonita & Giyarsih, 2023; Singh & Uppaluri, 2023; Tamás & Dóra, 2023; Zolotova et al., 2023).

The medium sized enterprises (UMKM), in the batik industry have a role in Semarang economy making a significant contribution to income generation and employment opportunities. These UMKM businesses are being. Encouraged with the aim of enabling them to compete in the market and boost productivity in Indonesia particularly in Semarang. The rapid progress of technology has had an impact on the evolution of payment systems, in transactions. (Hepziba Gnanamalar & Ebenesar Anna Bagyam, 2023; Ionescu et al., 2023; Jasińska et al., 2023; Kalenyuk et al., 2023; Khamseh et al., 2023; Kostyk et al., 2023; Lopez-Carreiro et al., 2023).

The Smart Economy concept entails the development of an economic governance system capable of addressing challenges and adapting to changes, ultimately creating an ecosystem that supports economic activities aligned with the region's leading economic sectors (Bodrov et al., 2023; Chawviang et al., 2023; Chen & Chan, 2023; Dash, 2023; He et al., 2023; Heebkhoksung et al., 2023). One of the key components of a Smart Economy is the implementation of smart payment systems, including online transactions using the Smart Transaction System. As technology advances, the demand for payment methods that offer speed, accuracy, and security in every transaction has grown among Indonesian citizens, particularly in Semarang

Table 1. Development of Assets and Turnover of Batik UMKM from 2010 to 2021

No	DESCRIPTION	UMKM (UMK)	LABOR	ASSETS	OMSET
1.	2010 (December 31)	485	579	IDR 15.879.654.320	IDR 85.678.921.347
2.	2011 (December 31)	498	625	IDR 17.541.329.087	IDR 88.238.760.956
3.	2012 (December 31)	577	681	IDR 19.356.778.030	IDR 93.991.306.111
4.	2013 (December 31)	801	1909	IDR 18.080.070.001	IDR 90.000.051.003
5.	2014 (December 31)	878	2001	IDR 28.585.730.000	IDR 100.071.000.200
6.	2015 (December 31)	996	2063	IDR 29.478.620.000	IDR 101.168.020.600
7.	2016 (December 31)	5902	10573	IDR 166.474.632.778	IDR 532.164.691.348
8.	2017 (December 31)	11064	19361	IDR 321.062.363.584	IDR 1.025.227.440.746
9.	2018 (December 31)	14893	25719	IDR 482.862.577.446	IDR 1.435.111.276.173
10.	2019 (December 31)	17567	30357	IDR 664.233.343.346	IDR 1.760.465.984.566
11.	2020 (December 31)	17313	30070	IDR 660.320.229.846	IDR 1.746.756.225.366
12.	2021 (December 31)	12242	31532	IDR 603.728.554.247	IDR 1.007.490.976.380

Source of data: Semarang City Cooperative & Micro Enterprise Office, IUMK Data

From table 1, the evident that the turnover of Batik UMKM in Semarang has remained relatively stable, even in the face of the Covid-19 pandemic. One contributing factor to stability is the continued production and transactions conducted through online platforms, specifically the Smart Transaction System.In the past, many Indonesians, including those in Semarang, primarily conducted transactions using physical cash. However, they have now become familiar with and have embraced digital payments as an alternative means of conducting financial transactions, commonly referred to as electronic money (e-money). The rapid technological advancements in payment systems have shifted the role of physical currency (currency) to non-cash payments, which are safer, more efficient, and cost-effective. Non-cash payments are typically made using methods such as cards (electronic money cards), checks, promissory notes, debit notes, or electronic funds (both card-based and server-based), and Indonesian Standard Quick Response Codes (QRIS) (Abdelrahman et al., 2023; AlAli et al., 2023; Alam, 2023; Aldegheishem, 2023; Bańka et al., 2023; Xenou et al., 2022; Yu et al., 2022).At least 9.4 million UMKM have adopted digitalization in their businesses (Tosida, Herdiyeni, et al., 2022; Tosida, Permana Solihin, et al., 2022; Verbivska et al., 2022; Vinod Kumar, 2022a, 2022b). Digitalization is a breakthrough that UMKM can leverage to remain competitive in both domestic and international markets. The use of Smart Transaction Systems for buying and selling has become a trend among Indonesian consumers. The application of digitalization and information technology, including fintech, simplifies transactions for society and UMKM entrepreneurs (Martins et al., 2022; Micozzi & Yigitcanlar, 2022; Popova & Popovs, 2022; Rahoveanu et al., 2022; Samarakkody et al., 2022; Sharifi & Alidadi, 2022). Many UMKM entrepreneurs have adopted electronic payments due to consumer demand. The high adoption rate of cashless payments among the public encourages business owners to implement such payment methods in their operations. Failing to do so could result in falling behind and facing the risk of closure. Additionally, businesses can attract more customers without the need for extensive promotional efforts, reduce operational costs, and have the opportunity to earn higher revenues (Lata et al., 2022; Lesjak & Pšenica, 2022; W. Liu, Liang, et al., 2022; W. Liu, Long, et al., 2022; Z. Liu, 2022; Markey-Towler, 2022).

The legal framework governing electronic transactions in Indonesia is primarily defined by the Information and Electronic Transactions Law (UU ITE). However, the Civil Code (KUH Perdata) still does not fully accommodate the requirements for a valid electronic agreement, relying instead on the provisions of Article 1320 of the Civil Code. Means that any online buying and selling transaction that meets the requirements of Article 1320 can bind the parties involved.To address these legal gaps, Indonesia enacted Law Number 11 of 2008 concerning Information and Electronic Transactions, as amended by Law Number 19 of 2016 concerning Amendments to Law Number 11 of 2008 concerning Information and Electronic Transactions (hereinafter referred to as the ITE Law). Furthermore, the elements of electronic agreements are also accommodated in Article 48 (3) of Indonesia Government Regulation Number 82 of 2012 on the Implementation of Electronic Systems and Transactions, which was later replaced by Indonesia Government Regulation Number 71 of 2019 on the Implementation of Electronic Systems and Transactions (PP PSTE) (Pemerintah Negara Republik Indonesia, 2012, 2019).The presence of the ITE Law has implications in two aspects. Firstly, it legitimizes electronic transactions and documents within the framework of contract law and the law of evidence to ensure legal certainty. Secondly, it classifies unlawful acts and violations related to information technology abuse and imposes criminal sanctions, thus providing legal protection to both parties. In practice, although the government has formulated policies and regulations related to electronic transactions, there are still issues that leave consumers in a vulnerable position, such as cases of breach of contract.

Based on the above description, it is evident that there are still many challenges in electronic buying and selling transactions using the Smart Transaction System that remain unresolved within the legal framework of Indonesia. Therefore, the research aims to examine the influence of national law, specifically the ITE Law, on the security and increased sales of batik UMKM in Semarang, particularly when using the Smart Transaction System. The research questions raised in the study are as follows:

1. What is the significance of the influence of national law, specifically the ITE Law, on the use of the Smart Transaction System by batik UMKM in Semarang during electronic buying and selling transactions in the Digital Literacy Era of the Smart Economy?
2. How does the influence of national law, specifically the ITE Law, impact the convenience of using the Smart Transaction System for batik UMKM in Semarang during electronic buying and selling transactions in the Digital Literacy Era of the Smart Economy?
3. What is the impact of national law, specifically the ITE Law, on the security of transactions using the Smart Transaction System for batik UMKM in Semarang during electronic buying and selling transactions in the Digital Literacy Era of the Smart Economy?
4. How does the influence of national law, specifically the ITE Law, contribute to the increased production and performance of batik UMKM in Semarang when using the Smart Transaction System during electronic buying and selling transactions in the Digital Literacy Era of the Smart Economy?
5. What is the impact of national law, specifically the ITE Law, on increasing income through the use of the Smart Transaction System for batik UMKM in Semarang during electronic buying and selling transactions in the Digital Literacy Era of the Smart Economy?The current research addresses critical issues related to the adoption of digital payment systems in UMKM, particularly in the batik industry, within the context of the Smart Economy. While there is existing literature on the adoption of technology in UMKM, there is a notable research gap in understanding the specific influence of national law, such as the ITE Law, on the security, convenience, and performance of UMKM, as well as its impact on economic growth in a digital economy.The research aims to fill the gap by providing insights into the role of legal protection and regulatory frameworks, specifically the ITE Law, in shaping the digital landscape for UMKM in the batik industry in Semarang. Understanding the influence is crucial in harnessing the potential of digital transactions to empower UMKM, boost economic growth, and enhance the resilience of the local economy, especially in the post-pandemic era.The research contributes to academic knowledge but will also have practical implications for policymakers, UMKM entrepreneurs, and the broader society. It will shed light on the importance of legal frameworks in fostering a conducive environment for digital transactions and promoting economic development through UMKM empowerment.

METHODS

The research adopts a qualitative research design with an exploratory approach. Qualitative research is utilized to gain a deeper understanding of the influence of national law, specifically the ITE Law, on the security, convenience, and performance of UMKM in the batik industry, as well as its impact on economic growth in the context of the Smart Economy (Azari & Rashed-Ali, 2021; Bryant, 2017; Chiu, 2016; Dresch et al., 2015; Figueroa, 2016; Munck et al., 2014; Niaz & Rivas, 2016).The data collection process involved conducting interviews with key stakeholders. These interviews included UMKM entrepreneurs from the batik industry legal experts, government officials and representatives from industry associations. The purpose of these interviews was to gain insights into how UMKM in Semarang has been practically impacted by the use of Smart Transaction Systems and the implementation of the ITE Law.Additionally a thorough literature review was conducted to gather data. The review encompassed journals, government reports, legal documents and other relevant publications that focused on UMKM, digital transactions and the ITE Law. The aim was to establish a background and theoretical framework for the research.To ensure a range of perspectives a purposive sampling method was employed for selecting UMKM participants in the batik industry in Semarang who actively engage in transactions using the Smart Transaction System.The collected interview data was transcribed verbatim to maintain accuracy and preserve its content. Thematic analysis techniques were then applied to identify patterns and themes, within data. Through coding and identification of recurring patterns key findings were determined. Ethical considerations were paramount in conducting the research. Informed consent was obtained from all participants before conducting interviews. Confidentiality and anonymity were assured, and the data collected were used solely for research purposes.Data Validation. To ensure the validity of the findings, member checking was performed, where participants were given the opportunity to review the research findings and provide feedback to confirm their accuracy and alignment with their experiences.

Data Synthesis and Interpretation. The collected data, both from interviews and the literature review, were synthesized and interpreted to address the research objectives. The findings were organized thematically, linking the influence of the ITE Law to the security, convenience, and performance of UMKM in the batik industry and its impact on economic growth.It is important to acknowledge the limitations of the research. The qualitative nature of the study may limit the generalizability of the findings. The study focused on the batik industry in Semarang and may not fully represent all UMKM sectors in Indonesia. Additionally, external factors beyond the scope of the research may also influence the outcomes of UMKM.The research contributes to a better understanding of the practical implications of the ITE Law on UMKM, particularly in the context of digital transactions within the

Smart Economy. The discoveries can provide insights for policymakers, medium sized business owners and individuals involved in promoting an environment that facilitates digital transactions. The turn will contribute to development and the empowerment of medium sized businesses.

RESULT AND DISCUSSION

1. Urgency of the Influence of National Law/UU ITE on the Use of Smart Transaction System in Batik SMEs in Semarang in Electronic Transactions in the Digital Literacy Era of the Smart Economy

In the context of the Smart Economy, which plays a role, in Smart Cities it is important to have a functioning Smart Transaction System. The system ensures that transactions are conducted efficiently and securely, benefiting consumers by increasing their income and transaction security. However as we engage in transactions concerns about data protection and privacy naturally arise. It is imperative to pass the Personal Data Protection Bill to strengthen existing regulations on data protection and provide citizens with optimal legal certainty. The current legislation pertaining to privacy and data protection like the ITE Law has limitations as it is focused on sectors than being comprehensive. The restricts its ability to effectively safeguard data. Research findings indicate that consumers in the Digital Literacy era often find themselves in positions when engaging in transactions. Legal issues can arise, such as accounts that can automatically drain buyers' funds. While the current ITE Law adequately addresses these issues updates are needed to address the rising trend of cybercrimes and ensure protection, for both SMEs and consumers (Batmetan & Kainde, 2022; Chawviang & Kiattisin, 2022; Dash, 2022; Deng et al., 2022; Gao & Li, 2022; Govada et al., 2022; Kaluarachchi, 2022).

The Smart Economy, which aims to enhance efficiency and technology, in areas the Smart Transaction System plays a role. It facilitates secure and efficient transactions for both consumers and small and medium enterprises (SMEs) which are vital for the growth of the digital economy. However with the increasing prevalence of transactions concerns regarding data privacy and security have emerged. The urgency to pass the Personal Data Protection Bill stems from the fact that Indonesia's current legal framework lacks provisions to safeguard data in the digital realm. The both consumers and small businesses puts risk of experiencing data breaches and falling victim to cybercrimes. (Alidadi & Sharifi, 2022; Attaran et al., 2022; Suprayitna et al., 2021; Tsoutsa et al., 2021; Vinod Kumar et al., 2021; Wolniak & Jonek-Kowalska, 2021; Yeung, 2021).

2. Influence of National Law/UU ITE on Comfort in Using the Smart Transaction System in Batik SMEs in Semarang in Electronic Transactions in the Digital Literacy Era of the Smart Economy

The Smart Transaction System prioritizes the safety and legal protection of consumers and SMEs in the batik industry, in Semarang. It is crucial to ensure their security during transactions and provide them with experience. Research shows that the combination of the Consumer Protection Act of 1999 and the ITE Law offers certainty to consumers who engage in transactions. These laws do not support growth in Indonesia but also act as a preventive measure against cybercrimes creating a favorable environment for online transactions. By implementing the Smart Transaction System we emphasize the importance of protecting consumers and SMEs, those involved in the batik industry in Semarang. When consumers and SMEs have confidence in the electronic transaction framework, they are more likely to engage in business activities. The Consumer Protection Act of 1999 along with the ITE Law ensures that consumers are well protected when conducting transactions. The strong legal foundation builds trust within the marketplace drives growth and encourages increased participation, in transactions. (Nicolas et al., 2021; Ninčević Pašalić et al., 2021; Parra-Domínguez et al., 2021; Purnomo et al., 2021; Rodríguez Bolívar, 2021; Hsu, Wu, et al., 2021; Krishnan & Ganesan, 2021; Lim et al., 2021; F. Liu et al., 2021; W. Liu et al., 2021).

3. Influence of National Law/UU ITE on Transaction Security Using the Smart Transaction System in Batik SMEs in Semarang in Electronic Transactions in the Digital Literacy Era of the Smart Economy

The ITE Law holds importance in Indonesia as it governs information and electronic transactions ensuring the safety and security of these transactions. It criminalizes activities that pose a threat to the integrity and security of transactions such as manipulating data engaging in cyberbullying and spreading hate speech. Additionally the law recognizes the validity of evidence in court proceedings. Moreover according to the ITE Law an electronic transaction occurs when a sender sends an offer through a means of communication, and it is accepted by the receiver. The provision contributes to transaction security by ensuring that such transactions are legally binding and protected by law. Alongside regulations the ITE Law helps prevent crimes and provides a secure environment for both small to medium enterprises (especially those in the Semarang batik industry) and consumers to carry out online transactions using the Smart Transaction System. The ITE Law plays a role in enhancing transaction security. It addresses forms of cybercrimes like data manipulation and cyberbullying that can harm both consumers and SMEs alike. Moreover recognizing evidence as valid in court ensures that transactions conducted through means are legally binding and can be upheld in case of disputes. The legal framework creates an environment where businesses (including SMEs, in the batik industry) as

consumers can confidently engage in transactions. (Abu-Rayash & Dincer, 2021; Alqahtani et al., 2021; Andronie et al., 2021; Bjørner, 2021; Hsu, Qiao, et al., 2021; Vinod Kumar, 2020; Smékalová & Kučera, 2020; Stübinger & Schneider, 2020; Tomal, 2020).

4. Influence of National Law/UU ITE on Increasing Production and Performance of Batik SMEs in Semarang Using the Smart Transaction System in Electronic Transactions in the Digital Literacy Era of the Smart Economy

The growth of medium enterprises (SMEs), in Indonesia has been hampered by the lack of legal safeguards. The limited access to resources and technology faced by SMEs is often seen as a disadvantage than a consequence of support and empowerment. By implementing the ITE Law we can foster the growth of SMEs. Establish a competitive landscape for businesses including those in the batik industry in Semarang. Providing protection is vital for businesses particularly considering the challenges posed by liberalization. With the security offered by the ITE Law, SMEs those in the batik industry in Semarang will be able to boost their sales through transactions. Consequently will enhance production levels and overall performance. SMEs encounter challenges due to resources and technological constraints that can hinder their ability to compete with enterprises without sufficient legal protection. However with measures outlined in the ITE Law put into effect we can level the playing field, for SMEs' growth and success. When operating within an environment supported by law SMEs have chances of increasing sales volume which leads to production levels and overall performance. (Sharafutdinov et al., 2020; Smékalová & Kučera, 2020; Stübinger & Schneider, 2020; Tomal, 2020; Kézai et al., 2020; Lima, 2020; Mohammadian et al., 2020; Moradi, 2020).

5. Influence of National Law/UU ITE on Increasing Income Using the Smart Transaction System in Batik SMEs in Semarang in Electronic Transactions in the Digital Literacy Era of the Smart Economy

The rise of technology and the internet traditional forms of commerce are slowly becoming outdated. Consumers now prefer the convenience of transactions, through computers or smartphones connected to the web. The Smart Transaction System offers a solution by enabling transactions. However there is always a concern about data breaches when it comes to transactions. That's where the ITE Law comes into play ensuring security and legal certainty for individuals by recognizing evidence as criminalizing malicious activities online. The implementation of the law promotes growth in the economy, especially benefiting medium sized enterprises (SMEs) in industries like Semarang batik. It guarantees convenient transactions for these businesses. The shift from commerce to transactions is driven by consumers' demand for convenience and efficiency which the Smart Transaction System fulfills by providing a streamlined approach. Nevertheless ensuring protection against data breaches remains a concern in today's age. Thankfully the ITE Law addresses concern by acknowledging evidence and punishing those engaged in activities online. By establishing such a framework individuals and SMEs can engage in transactions, with confidence and trust. As a result SMEs operating within Semarang batik industry can witness increased sales and production levels ultimately leading to income prospects. (Lima, 2020; Kézai et al., 2020; Garcia & Goundar, 2020; de Pablos, 2020; Aigbavboa et al., 2020; Badri, 2020; Bloom, 2020; Das, 2020; de Pablos, 2020).The research is unique because it explores the intersection of UU ITE, Smart Transaction Systems, and the batik industry, in Semarang. It emphasizes the importance of providing protection and support for medium sized enterprises (SMEs) in today's digital era. The study highlights how technology can contribute to growth, enhance security and promote development. By combining UU ITE with Smart Transaction Systems the research sheds light on how these advancements can empower SMEs in Semarang batik industry. It also provides insights into the implications of these technologies and legal frameworks. Ultimately the research benefits policymakers, entrepreneurs, and stakeholders, by creating an environment for transactions that fosters economic growth while empowering SMEs in Indonesia.

CONCLUSION

In conclusion the introduction of Smart Transaction Systems holds significance in promoting the growth of Medium Enterprises (SMEs), in the batik industry in Semarang, Indonesia. The study findings indicate that the existing legal framework, including laws like the ITE Law and PSTE Regulation is well prepared to handle regulations concerning matter. For example under Article 27 Paragraph 3 of the ITE Law there are provisions for protection against distribution or transmission of derogatory content through Electronic Information and/or Electronic Documents. Those found guilty could face imprisonment for up to four years or a fine of IDR 750,000,000. It is also important to recognize that incorporating Smart Transaction Systems into sales transactions is crucial due to their systems and verification processes managed by all parties involved. However there remains a need for regulations governing the use of Smart Transaction Systems in sales processes. The requirement arises from the growing popularity of cashless transactions each year. It emphasizes how crucial it is to provide certainty and security for both SMEs in Semarang batik industry and consumers/buyers involved in sales transactions. The goal is to improve production processes and thereby enhance transactions, income levels and overall transaction security, for those utilizing the Smart Transaction System.

For policymakers and those in charge it would be an idea to keep improving and revising the laws to tackle the new challenges and opportunities that arise in the digital economy. Taking an approach, will create an environment that encourages medium sized businesses to adopt Smart Transaction Systems, which will contribute to Indonesia's economic growth over time. It's also

important to run awareness campaigns and educational programs so that SMEs and consumers are well informed about the advantages and protections offered by these frameworks. To build trust and encourage people to make use of these technologies.

REFERENCES

1) Abdelrahman, Y., Hajek, P., & Lubica, H. (2023). Research trends in the application of big data in smart cities—A literature review. *Canadian Journal of Administrative Sciences*, *40*(3), 254–269. Scopus. https://doi.org/10.1002/cjas.1734
2) Abu-Rayash, A., & Dincer, I. (2021). Development of integrated sustainability performance indicators for better management of smart cities. *Sustainable Cities and Society*, *67*. Scopus. https://doi.org/10.1016/j.scs.2020.102704
3) Aigbavboa, C. O., Oke, A. E., Aghimien, D. O., & Akinradewo, O. I. (2020). Improving resilience of cities through smart city drivers. *Construction Economics and Building*, *20*(2), 45–64. Scopus. https://doi.org/10.5130/AJCEB.v20i2.6647
4) AlAli, D., Manivannan, N., & Xu, Y. (2023). A Framework for Effective Design Thinking Based Smart Cities Projects in Qatar. *Smart Cities*, *6*(1), 531–562. Scopus. https://doi.org/10.3390/smartcities6010025
5) Alam, M. H. (2023). Role of the governance and good governance to build a smart economic and smart city-A case study of Bangladesh. In *Technol. And Talent. Strateg. For Sustain. Smart Cities: Digit. Futur.* (pp. 103–115). Emerald Publishing; Scopus. https://doi.org/10.1108/978-1-83753-022-920231005
6) Aldegheishem, A. (2023). Assessing the Progress of Smart Cities in Saudi Arabia. *Smart Cities*, *6*(4), 1958–1972. Scopus. https://doi.org/10.3390/smartcities6040091
7) Alidadi, M., & Sharifi, A. (2022). The extent of inclusion of smart city indicators in existing urban sustainability assessment tools. In *Urban Climate Adaptation and Mitig.* (pp. 175–198). Elsevier; Scopus. https://doi.org/10.1016/B978-0-323-85552-5.00014-2
8) Alqahtani, F. K., El Qasaby, A. R., & Abotaleb, I. S. (2021). Urban development and sustainable utilization: Challenges and solutions. *Sustainability (Switzerland)*, *13*(14). Scopus. https://doi.org/10.3390/su13147902
9) Andronie, M., Lăzăroiu, G., Iatagan, M., Hurloiu, I., & Dijmărescu, I. (2021). Sustainable cyber-physical production systems in big data-driven smart urban economy: A systematic literature review. *Sustainability (Switzerland)*, *13*(2), 1–15. Scopus. https://doi.org/10.3390/su13020751
10) Attaran, H., Kheibari, N., & Bahrepour, D. (2022). Toward integrated smart city: A new model for implementation and design challenges. *GeoJournal*, *87*, 511–526. Scopus. https://doi.org/10.1007/s10708-021-10560-w
11) Azari, R., & Rashed-Ali, H. (Eds.). (2021). *Research Methods in Building Science and Technology*. Springer International Publishing. https://doi.org/10.1007/978-3-030-73692-7
12) Badri, M. (2020). Adoption of Online Shopping Apps Innovation on Digital Natives Generation. *Int. Conf. ICT for Smart Soc.: AIoT Smart Society, ICISS - Proceeding*. 7th International Conference on ICT for Smart Society: AIoT for Smart Society, ICISS 2020 - Proceeding. Scopus. https://doi.org/10.1109/ICISS50791.2020.9307605
13) Bańka, M., Salwin, M., Tylżanowski, R., Miciuła, I., Sychowicz, M., Chmiel, N., & Kopytowski, A. (2023). Start-Up Accelerators and Their Impact on Entrepreneurship and Social Responsibility of the Manager. *Sustainability (Switzerland)*, *15*(11). Scopus. https://doi.org/10.3390/su15118892
14) Batmetan, J. R., & Kainde, Q. C. (2022). Understanding Smart City Strategy In Developing Countries' Cities. *Theoretical and Empirical Researches in Urban Management*, *17*(3), 71–88. Scopus. https://www.scopus.com/inward/record.uri?eid=2-s2.0-85135555745&partnerID=40&md5=99df5ea0e9db863a98cb2abbec139b83
15) Bjørner, T. (2021). The advantages of and barriers to being smart in a smart city: The perceptions of project managers within a smart city cluster project in Greater Copenhagen. *Cities*, *114*. Scopus. https://doi.org/10.1016/j.cities.2021.103187
16) Bloom, P. (2020). Identity, Institutions and Governance in an AI World: Transhuman Relations. In *Identity, Institutions and Gov. In an AI World: Transhuman Relations* (p. 268). Springer International Publishing; Scopus. https://doi.org/10.1007/978-3-030-36181-5
17) Bodrov, V., Zrybnieva, I., Sazonova, S., Sydoruk, I., & Orlenko, O. (2023). Strengthening The Relationship Between Digitalization And The National Smart Economy Model For Implementation Of The Strategy Of Innovative Development. *Financial and Credit Activity: Problems of Theory and Practice*, *3*(50), 308–319. Scopus. https://doi.org/10.55643/fcaptp.3.50.2023.4084
18) Bryant, A. (2017). Grounded theory and grounded theorizing: Pragmatism in research practice. In *Grounded Theory and Grounded Theorizing: Pragmatism in Research Practice*. Oxford University Press. https://doi.org/10.1093/acprof:oso/9780199922604.001.0001

19) Chawviang, A., & Kiattisin, S. (2022). Sustainable Development: Smart Co-Operative Management Framework. *Sustainability (Switzerland)*, *14*(6). Scopus. https://doi.org/10.3390/su14063641
20) Chawviang, A., Kiattisin, S., Thirasakthana, M., & Mayakul, T. (2023). A Smart Co-Operative Management Framework Based on an EA Concept for Sustainable Development. *Sustainability (Switzerland)*, *15*(9). Scopus. https://doi.org/10.3390/su15097328
21) Chen, Z., & Chan, I. C. C. (2023). Smart cities and quality of life: A quantitative analysis of citizens' support for smart city development. *Information Technology and People*, *36*(1), 263–285. Scopus. https://doi.org/10.1108/ITP-07-2021-0577
22) Chiu, M.-H. (Ed.). (2016). *Science Education Research and Practices in Taiwan: Challenges and Opportunities*. Springer. https://doi.org/10.1007/978-981-287-472-6
23) Das, D. K. (2020). Perspectives of smart cities in South Africa through applied systems analysis approach: A case of bloemfontein. *Construction Economics and Building*, *20*(2), 65–88. Scopus. https://doi.org/10.5130/AJCEB.v20i2.6657
24) Dash, A. (2022). Modeling the moderating effect of technology anxiety on the relationship between smart city–built environment and the quality of life of citizens. *Journal of Facilities Management*. Scopus. https://doi.org/10.1108/JFM-06-2022-0061
25) Dash, A. (2023). Does citizens' participation moderate the relationship between the built environment and their quality of life in Indian smart cities? *Transforming Government: People, Process and Policy*, *17*(4), 673–687. Scopus. https://doi.org/10.1108/TG-06-2023-0084
26) de Pablos, P. O. (2020). Intellectual capital in the digital economy. In *Intellect. Cap. In the Digit. Econ.* (p. 302). Taylor and Francis; Scopus. https://doi.org/10.4324/9780429285882
27) Deng, T., Qiao, L., Yao, X., Chen, S., & Tang, X. (2022). A Profit Framework Model for Digital Platforms Based on Value Sharing and Resource Complementarity. *Sustainability (Switzerland)*, *14*(19). Scopus. https://doi.org/10.3390/su141911954
28) Dresch, A., Lacerda, D. P., & Antunes, Jr., J. A. V. (2015). Design science research: A method for science and technology advancement. In *Design Science Research: A Method for Science and Technology Advancement*. Springer International Publishing. https://doi.org/10.1007/978-3-319-07374-3
29) Figueroa, A. (2016). Rules for scientific research in economics: The Alpha-Beta method. In *Rules for Scientific Research in Economics: The Alpha-Beta Method*. Springer International Publishing. https://doi.org/10.1007/978-3-319-30542-4
30) Gao, Y., & Li, Z. (2022). Smart City Development Index. *IEEE Int. Conf. Univers. Village, UV*. 6th IEEE International Conference on Universal Village, UV 2022. Scopus. https://doi.org/10.1109/UV56588.2022.10185473
31) Garcia, A., & Goundar, S. (2020). Blockchain means more than a software to democracy: Access to fundamental rights of sixth dimension. In *Blockchain Technol., Appl. And Cryptocurrencies: Curr. Pract. And Futur. Trends* (pp. 73–114). World Scientific Publishing Co. Pte. Ltd.; Scopus. https://www.scopus.com/inward/record.uri?eid=2-s2.0-85123270593&partnerID=40&md5=0155b7327976788f04cd6501a9aad945
32) Govada, S. S., Lau, H., & Kotala, S. (2022). Towards a Smart Megacity: Hong Kong and Shenzhen. In *Adv. 21st Century Human Settl.* (pp. 317–380). Springer; Scopus. https://doi.org/10.1007/978-981-16-2019-5_8
33) He, Y., Liu, W., Shi, X., & Gao, P. (2023). Teaching system transformation of logistics engineering major from the perspective of smart economy: An empirical study from China. *International Journal of Logistics Research and Applications*, *26*(9), 1217–1240. Scopus. https://doi.org/10.1080/13675567.2022.2038108
34) Heebkhoksung, K., Rattanawong, W., & Vongmanee, V. (2023). Development of Smart Sport Tourism Model Based on Smart City Integrated with Sport Tourism Principles. *Int. Conf. Bus. Ind. Res., ICBIR - Proc.*, 627–631. Scopus. https://doi.org/10.1109/ICBIR57571.2023.10147652
35) Hepziba Gnanamalar, R., & Ebenesar Anna Bagyam, J. (2023). Eco-friendly blockchain for smart cities. In *Green Blockchain Technology for Sustainable Smart Cities* (pp. 65–96). Elsevier; Scopus. https://doi.org/10.1016/B978-0-323-95407-5.00015-3
36) Hsu, W.-L., Qiao, M., Xu, H., Zhang, C., Liu, H.-L., & Shiau, Y.-C. (2021). Smart city governance evaluation in the era of internet of things: An empirical analysis of jiangsu, china. *Sustainability (Switzerland)*, *13*(24). Scopus. https://doi.org/10.3390/su132413606
37) Hsu, W.-L., Wu, X., Yu, F.-C., & Sun, K.-S. (2021). Research on Shanghai Smart City Evaluation System in the Era of 5G Internet of Things. In Meen T.-H. (Ed.), *IEEE Int. Conf. Archit., Constr., Environ. Hydraul., ICACEH* (pp. 1–4). Institute of Electrical and Electronics Engineers Inc.; Scopus. https://doi.org/10.1109/ICACEH54312.2021.9768847
38) Ionescu, R.-V., Zlati, M. L., & Antohi, V.-M. (2023). Smart cities from low cost to expensive solutions under an optimal analysis. *Financial Innovation*, *9*(1). Scopus. https://doi.org/10.1186/s40854-023-00448-8
39) Jasińska, E., Preweda, E., & Łazarz, P. (2023). Renewable Energy Sources in the Residential Property Market, Exemplified by the City of Krakow (Poland). *Sustainability (Switzerland)*, *15*(10). Scopus. https://doi.org/10.3390/su15107743

40) Kalenyuk, I., Lukyanenko, L., Tsymbal, L., Stankevics, A., & Uninets, I. (2023). THE SMART MANUFACTURING: IMPERATIVES AND TRENDS. *Financial and Credit Activity: Problems of Theory and Practice*, *5*(52), 327–340. Scopus. https://doi.org/10.55643/fcaptp.5.52.2023.4126
41) Kaluarachchi, Y. (2022). Implementing Data-Driven Smart City Applications for Future Cities. *Smart Cities*, *5*(2), 455–474. Scopus. https://doi.org/10.3390/smartcities5020025
42) Kézai, P. K., Fischer, S., & Lados, M. (2020). Smart economy and startup enterprises in the visegrád countries—A comparative analysis based on the crunchbase database. *Smart Cities*, *3*(4), 1477–1494. Scopus. https://doi.org/10.3390/smartcities3040070
43) Khamseh, A., Ghasemi, S. S., & Khamseh, A. (2023). A Model for the Success of Smart City Services with a Focus on Information and Communication Technology. *International Journal of Supply and Operations Management*, *10*(1), 76–88. Scopus. https://doi.org/10.22034/ijsom.2022.109548.2474
44) Kostyk, Y., Tiuleniev, S., Goi, V., Kovalenko, O., & Pochernina, N. (2023). The National Model of the Smart Economy for Achieving the Goals of Innovative Development. *Review of Economics and Finance*, *21*, 622–632. Scopus. https://doi.org/10.55365/1923.x2023.21.65
45) Krishnan, S., & Ganesan, L. P. (2021). Smart cities with blockchain technology: A comprehensive survey. In *Blockchain for Smart Cities* (pp. 1–15). Elsevier; Scopus. https://doi.org/10.1016/B978-0-12-824446-3.00016-8
46) Lata, S., Jasrotia, A., & Sharma, S. (2022). Sustainable Development In Tourism Destinations Through Smart Cities: A Case Of Urban Planning In Jammu City. *Enlightening Tourism*, *12*(2), 661–690. Scopus. https://doi.org/10.33776/et.v12i2.6911
47) Lesjak, B., & Pšenica, I. (2022). Perception of ICT use by residents of smart cities. *International Journal of Innovation and Learning*, *31*(4), 459–473. Scopus. https://doi.org/10.1504/IJIL.2022.123174
48) Lim, S. B., Malek, J. A., Yussoff, M. F. Y. M., & Yigitcanlar, T. (2021). Understanding and acceptance of smart city policies: Practitioners' perspectives on the malaysian smart city framework. *Sustainability (Switzerland)*, *13*(17). Scopus. https://doi.org/10.3390/su13179559
49) Lima, M. (2020). Smarter organizations: Insights from a smart city hybrid framework. *International Entrepreneurship and Management Journal*, *16*(4), 1281–1300. Scopus. https://doi.org/10.1007/s11365-020-00690-x
50) Liu, F., Shi, Y., & Chen, Z. (2021). Intelligence quotient test for smart cities in the United States. *Journal of Urban Planning and Development*, *147*(1). Scopus. https://doi.org/10.1061/(ASCE)UP.1943-5444.0000637
51) Liu, W., Liang, Y., Lim, M. K., Long, S., & Shi, X. (2022). A theoretical framework of smart supply chain innovation for going global companies: A multi-case study from China. *International Journal of Logistics Management*, *33*(3), 1090–1113. Scopus. https://doi.org/10.1108/IJLM-10-2020-0388
52) Liu, W., Liang, Y., Wei, S., & Wu, P. (2021). The organizational collaboration framework of smart logistics ecological chain: A multi-case study in China. *Industrial Management and Data Systems*, *121*(9), 2026–2047. Scopus. https://doi.org/10.1108/IMDS-02-2020-0082
53) Liu, W., Long, S., Wang, S., Tang, O., Hou, J., & Zhang, J. (2022). Effects of smart agricultural production investment announcements on shareholder value: Evidence from China. *Journal of Management Science and Engineering*, *7*(3), 387–404. Scopus. https://doi.org/10.1016/j.jmse.2021.12.007
54) Liu, Z. (2022). Introduction to Digital Economic Thoughts. In *Contr. Econ.* (pp. 3–11). Springer Science and Business Media Deutschland GmbH; Scopus. https://doi.org/10.1007/978-981-16-9020-4_1
55) Lopez-Carreiro, I., Monzon, A., & Lopez, E. (2023). MaaS Implications in the Smart City: A Multi-Stakeholder Approach. *Sustainability (Switzerland)*, *15*(14). Scopus. https://doi.org/10.3390/su151410832
56) Ma, X. (2023). Smart Agriculture and Rural Revitalization and Development Based on the Internet of Things under the Background of Big Data. *Sustainability (Switzerland)*, *15*(4). Scopus. https://doi.org/10.3390/su15043352
57) Markey-Towler, B. (2022). Blockchain And The "Smart-Ifcation" Of Governance: The last "building block" in the smart economy. In *The Routledge Handb. Of Smart Technologies: An Economic and Soc. Perspective* (pp. 522–534). Taylor and Francis; Scopus. https://doi.org/10.4324/9780429351921-30
58) Martins, J., Gonçalves, C., Silva, J., Gonçalves, R., & Branco, F. (2022). Digital Ecosystem Model for GIAHS: The Barroso Agro-Sylvo-Pastoral System. *Sustainability (Switzerland)*, *14*(16). Scopus. https://doi.org/10.3390/su141610349
59) Micozzi, N., & Yigitcanlar, T. (2022). Understanding Smart City Policy: Insights from the Strategy Documents of 52 Local Governments. *Sustainability (Switzerland)*, *14*(16). Scopus. https://doi.org/10.3390/su141610164
60) Mohammadian, H. D., Mohammadian, F. D., & Assante, D. (2020). IoT-education policies on national and international level regarding best practices in German SMEs. In Cardoso A., Alves G.R., & Restivo T. (Eds.), *IEEE Global Eng. Edu. Conf., EDUCON* (Vols. 2020-April, pp. 1848–1857). IEEE Computer Society; Scopus.

https://doi.org/10.1109/EDUCON45650.2020.9125148

61) Moradi, S. (2020). The scientometrics of literature on smart cities. *Library Hi Tech*, *38*(2), 385–398. Scopus. https://doi.org/10.1108/LHT-12-2018-0203
62) Moreira, L. F., & Macke, J. (2023). Proposal of a conceptual framework based on the triple helix of innovation for smart cities: A study in southern Brazil. *Revista de Gestao Ambiental e Sustentabilidade*, *12*(1). Scopus. https://doi.org/10.5585/2023.22796
63) Munck, R., McIlrath, L., Hall, B., & Tandon, R. (Eds.). (2014). *Higher Education and Community-Based Research*. Palgrave Macmillan US. https://doi.org/10.1057/9781137385284
64) Musari, K., & Naaz, S. (2023). How (Islamic) Smart Cities 2.0 Are Driving Inclusive Growth Opportunities and Fighting Climate Change: Evidence from Asia-9. In *Sustainable Development and the Digital Economy: Hum.-centricity, Sustainability and Resil. In Asia* (pp. 222–243). Taylor and Francis; Scopus. https://doi.org/10.4324/9781003388753-13
65) Niaz, M., & Rivas, M. (2016). *Students' Understanding of Research Methodology in the Context of Dynamics of Scientific Progress*. Springer International Publishing. https://doi.org/10.1007/978-3-319-32040-3
66) Nicolas, C., Kim, J., & Chi, S. (2021). Natural language processing-based characterization of top-down communication in smart cities for enhancing citizen alignment. *Sustainable Cities and Society*, *66*. Scopus. https://doi.org/10.1016/j.scs.2020.102674
67) Ninčević Pašalić, I., Ćukušić, M., & Jadrić, M. (2021). Smart city research advances in Southeast Europe. *International Journal of Information Management*, *58*. Scopus. https://doi.org/10.1016/j.ijinfomgt.2020.102127
68) Parra-Domínguez, J., Santos, J. H., Márquez-Sánchez, S., González-Briones, A., & De la Prieta, F. (2021). Technological developments of mobility in smart cities. An economic approach. *Smart Cities*, *4*(3), 971–978. Scopus. https://doi.org/10.3390/smartcities4030050
69) Pemerintah Negara Republik Indonesia. (2012). *Peraturan Pemerintah Nomor 82 Tahun 2012 Tentang Penyelenggaraan Sistem dan Transaksi Elektronik*. Pemerintah Negara Republik Indonesia.
70) Pemerintah Negara Republik Indonesia. (2019). *Peraturan Pemerintah Nomor 71 Tahun 2019 tentang Penyelenggaraan Sistem Transaksi Elektronik*. Pemerintah Negara Republik Indonesia.
71) Popova, Y., & Popovs, S. (2022). Impact of Smart Economy on Smart Areas and Mediation Effect of National Economy. *Sustainability (Switzerland)*, *14*(5). Scopus. https://doi.org/10.3390/su14052789
72) Purnomo, A., Dian Sano, A. V., Nindito, H., Madyatmadja, E. D., & Sianipar, C. P. M. (2021). Mapping of Smart Economy Research Themes: A Nine-Year Review. *Int. Conf. ICT for Smart Soc.: Digit. Twin Smart Soc., ICISS - Proceeding*. 8th International Conference on ICT for Smart Society: Digital Twin for Smart Society, ICISS 2021 - Proceeding. Scopus. https://doi.org/10.1109/ICISS53185.2021.9533229
73) Qonita, M., & Giyarsih, S. R. (2023). Smart city assessment using the Boyd Cohen smart city wheel in Salatiga, Indonesia. *GeoJournal*, *88*(1), 479–492. Scopus. https://doi.org/10.1007/s10708-022-10614-7
74) Rahoveanu, M. M. T., Serban, V., Zugravu, A. G., Rahoveanu, A. T., Cristea, D. S., Nechita, P., & Simionescu, C. S. (2022). Perspectives on Smart Villages from a Bibliometric Approach. *Sustainability (Switzerland)*, *14*(17). Scopus. https://doi.org/10.3390/su141710723
75) Rodríguez Bolívar, M. P. (2021). Analyzing the Influence of the Smart Dimensions on the Citizens' Quality of Life in the European Smart Cities' Context. In *Public Adm. Inf. Technol.* (Vol. 37, pp. 239–256). Springer; Scopus. https://doi.org/10.1007/978-3-030-61033-3_11
76) Samarakkody, A., Amaratunga, D., & Haigh, R. (2022). Characterising Smartness to Make Smart Cities Resilient. *Sustainability (Switzerland)*, *14*(19). Scopus. https://doi.org/10.3390/su141912716
77) Sharafutdinov, V. N., Onishchenko, E. V., & Nakonechnyi, A. I. (2020). Tourism Technology Platforms as a Tool for Supporting Competitiveness of Regional Tourism Products. *Regional Research of Russia*, *10*(1), 48–55. Scopus. https://doi.org/10.1134/S2079970520010104
78) Sharifi, A., & Alidadi, M. (2022). Assessment tools and indicators for smart city assessment. In *Urban Climate Adaptation and Mitig.* (pp. 147–173). Elsevier; Scopus. https://doi.org/10.1016/B978-0-323-85552-5.00009-9
79) Singh, T., & Uppaluri, R. V. S. (2023). Optimizing biogas production: A novel hybrid approach using anaerobic digestion calculator and machine learning techniques on Indian biogas plant. *Clean Technologies and Environmental Policy*, *25*(10), 3319–3343. Scopus. https://doi.org/10.1007/s10098-023-02584-2
80) Smékalová, L., & Kučera, F. (2020). Smart city projects in the small-sized municipalities: Contribution of the cohesion policy. *Scientific Papers of the University of Pardubice, Series D: Faculty of Economics and Administration*, *28*(2). Scopus. https://doi.org/10.46585/SP28021067

81) Stübinger, J., & Schneider, L. (2020). Understanding smart city—A data-driven literature review. *Sustainability (Switzerland)*, *12*(20), 1–23. Scopus. https://doi.org/10.3390/su12208460
82) Suprayitna, F. R., Munawaroh, L. A., Azmi, M. A., Besari, A. I., & Rachmawati, R. (2021). Challenges in Developing and Implementing Smart City in Palangka Raya. In *Adv. 21st Century Human Settl.* (pp. 333–344). Springer; Scopus. https://doi.org/10.1007/978-981-15-5608-1_26
83) Tamás, S. T., & Dóra, S. (2023). Measuring the economic and environmental sustainability of cities with county rank, 2020–2021. *Teruleti Statisztika*, *63*(1), 89–124. Scopus. https://doi.org/10.15196/TS630104
84) Tomal, M. (2020). Moving towards a smarter housing market: The example of Poland. *Sustainability (Switzerland)*, *12*(2). Scopus. https://doi.org/10.3390/su12020683
85) Tosida, E. T., Herdiyeni, Y., & Suprehatin, S. (2022). Investigating the effect of technology-based village development towards smart economy: An application of variance-based structural equation modeling. *International Journal of Data and Network Science*, *6*(3), 787–804. Scopus. https://doi.org/10.5267/j.ijdns.2022.3.002
86) Tosida, E. T., Permana Solihin, I., Delli Wihartiko, F., & Naufal, F. (2022). Application of Genetic Algorithm K-Means Clustering of Villagers Characteristics For Smart Economy. *Proc. - Int. Conf. Informatics, Multimed., Cyber Inf. Syst., ICIMCIS*, 445–450. Scopus. https://doi.org/10.1109/ICIMCIS56303.2022.10017604
87) Tsoutsa, P., Fitsilis, P., Anthopoulos, L., & Ragos, O. (2021). Nexus Services in Smart City Ecosystems. *Journal of the Knowledge Economy*, *12*(2), 431–451. Scopus. https://doi.org/10.1007/s13132-020-00635-3
88) Verbivska, L., Lutsiv, R., Dehtiarova, I., Melnyk, T., & Domin, M. (2022). Analysis Of Current Trends In The Regional Smart Economy: Challenges And Prospects For Ukraine. *Financial and Credit Activity: Problems of Theory and Practice*, *1*(42), 351–360. Scopus. https://doi.org/10.55643/fcaptp.1.42.2022.3718
89) Vinod Kumar, T. M. (2020). Smart Living for Smart Cities. In *Adv. 21st Century Human Settl.* (pp. 3–70). Springer; Scopus. https://doi.org/10.1007/978-981-15-4603-7_1
90) Vinod Kumar, T. M. (2022a). COVID-19: Containment, Life, Work and Restart: Urban and Regional Studies. In *Adv. 21st Century Human Settl.* (pp. 3–95). Springer; Scopus. https://doi.org/10.1007/978-981-19-5940-0_1
91) Vinod Kumar, T. M. (2022b). COVID-19: Containment, Life, Work and Restart Urban and Regional Studies. In *Adv. 21st Century Human Settl.* (pp. 3–93). Springer; Scopus. https://doi.org/10.1007/978-981-19-6183-0_1
92) Vinod Kumar, T. M., Sruthi Krishnan, V., Deepak Lawrence, K., Mohammed Firoz, C., & Cyriac, S. (2021). Design of Smart Global Economic Community in Kattangal. In *Adv. 21st Century Human Settl.* (pp. 337–420). Springer; Scopus. https://doi.org/10.1007/978-981-16-2023-2_7
93) Wolniak, R., & Jonek-Kowalska, I. (2021). The level of the quality of life in the city and its monitoring. *Innovation: The European Journal of Social Science Research*, *34*(3), 376–398. Scopus. https://doi.org/10.1080/13511610.2020.1828049
94) Xenou, E., Madas, M., & Ayfandopoulou, G. (2022). Developing a Smart City Logistics Assessment Framework (SCLAF): A Conceptual Tool for Identifying the Level of Smartness of a City Logistics System. *Sustainability (Switzerland)*, *14*(10). Scopus. https://doi.org/10.3390/su14106039
95) Yeung, M. (2021). A prologue on the special issue: Symposium on international business, innovation and governance: Shaping the futures of smart economy (articles 9–13). *Asian Journal of Business Ethics*, *10*(2), 355–356. Scopus. https://doi.org/10.1007/s13520-021-00134-x
96) Yu, P., Chen, D., & Ahuja, A. (2022). Smart and sustainable economy: How COVID-19 has acted as a catalyst for China's digital transformation. In *AI-Enabled Agile Internet of Things for Sustainable FinTech Ecosystems* (pp. 106–146). IGI Global; Scopus. https://doi.org/10.4018/978-1-6684-4176-3.ch006
97) Zolotova, O., Ivanova, V., Symak, D., Kudinov, O., & Slavuta, O. (2023). Economy During Martial Law: Problems And Ways To Overcome The Crisis (Ukrainian Experience). *Financial and Credit Activity: Problems of Theory and Practice*, *3*(50), 265–281. Scopus. https://doi.org/10.55643/fcaptp.3.50.2023.4076