

Review Paper

# Customs Regulations and Risk Management and Town Planning Marketing on the Way to Smart Cities in the Global Economy

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## ABSTRACT

In a rapidly changing and technologically developed world, the adaptation of customs provisions in the direction of smart cities is becoming more and more relevant. European cities are leading the way in implementing innovations that are transforming traditional approaches to customs management and town marketing. The purpose of the article is to analyze the smartization strategies of cities in Europe, focusing on the integration of customs directives and risk management in this process by studying their impact on the global economy. The article provides a detailed overview of official reports on the processes of intellectualization of modern cities, reveals current trends and the development of the latest technologies used in European smart cities. The results show that the effective management of customs standards significantly contributes to the optimization of city operations, increasing transparency and attracting investment. The importance of such an approach is reinforced by the analysis of town planning marketing, which includes the creation of a city brand and the promotion of innovative projects. The conclusions of the work indicate the need for further research in this area and the development of comprehensive strategies that would take into account both the technological and socio-economic aspects of the smartization of cities through the strengthening of urban infrastructure. The resulting data can serve as a basis for the formation of effective development policies and strategies that can accelerate the integration of cities into the global economy, contributing to the creation of sustainable and innovative urban environments through customs procedures and the management of challenges to legislation.

## HIGHLIGHTS

- ① The integration of customs regulations with smartization is crucial for the efficient movement of goods, economic development, and global cooperation, necessitating the use of innovative technologies to optimize customs processes and enhance transparency.
- ① The synergy between town planning marketing and balanced customs management is key to the development of smart cities, fostering sustainable urban ecosystems that meet the needs of modern society, while careful consideration of cybersecurity risks is essential for successful integration into the global economy.

**Keywords:** Customs rules, customs risks, town planning marketing, global economy, smartization of cities, international trade, electronic management

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Due to the strengthening of global economic and political challenges, the importance of the integration of customs requirements and the reduction of destructive risks for the urban infrastructure, investment in the development of smartization is of particular importance. Customs management is becoming a key tool in ensuring the efficient movement of goods and services, while contributing to the economic development of cities and strengthening cooperation between world regions. The introduction of innovative technologies opens up new opportunities for optimizing customs processes, increasing the transparency of their procedures and minimizing bureaucratic aspects. Increasing trade liberalization in European countries facilitates trade and logistics, promotes the integration of cities into the global economy. Town planning marketing is an integral part of the development of innovative urban infrastructure, the principles of which are focused on creating an attractive image of the city and attracting investments. Using advanced marketing strategies and technologies to promote cities is a tool to involve the corporate sector in the life of the city. Such integration plays a crucial role in creating smart urban ecosystems that meet the needs of modern society and the global economy. However, existing processes require a deep understanding and management of the potential risks associated with the digitalization and integration of international trade. Balanced management of customs declarations and risks will shape the cities of the future by strengthening the functioning of commodity markets to be sustainable and integrated into the global economy. The transformation of cities in the direction of smartization is closely related to risk management. European cities are leading the way in implementing innovative solutions for the intellectualization of urban infrastructure, using advanced technologies to optimize urban management, transport and energy. German cities are actively implementing strategies to integrate customs processes using digital technologies, which helps to reduce bureaucracy and increase the transparency of cross-border transactions. City marketing is aimed at attracting investments and developing tourism, emphasizing their uniqueness and innovative potential. Given the growing role of Europe in the global economy, the initiatives have a significant impact at the local and global

level. However, such processes require careful consideration of cybersecurity and data protection risks. A balanced combination of innovations in the field of customs management and town marketing will be the key to the development of cities that will be intelligent and independent, able to effectively integrate into the global economy, ensuring a prosperous future for their residents.

## Literature Review

The issue of managing customs rules and risks, the formation of effective urban marketing on the way to the smartization of cities in the world economy is a complex issue due to increased globalization and technological progress. In a study Hong (2019) analyzes how the integration of customs regulations and risks into city management systems can contribute to the efficiency of international trade and ensure greater security of global supply chains. The author Bashynska (2023) emphasizes the importance of the application of digital technologies and the importance of e-government for the optimization of customs procedures and risk management, which allows cities to become more flexible and adaptive in responding to external challenges. In his study Filyppova (2019) considers the formation of town marketing contributes to the development of modern cities, especially through the creation of a city brand and the promotion of innovative infrastructure projects. The scientist Mendes (2022) points to the importance of interaction between local authorities, business and the public for the formation of effective town planning marketing strategies that take into account the needs and expectations of all interested parties. According to Liu (2023) demonstrates that the integration of sustainable development in town marketing and management of customs regulations can contribute to the creation of sustainable and attractive cities that provide a balance between economic development and environmental responsibility. The management of customs rules and risks and town marketing on the way to smart cities is highlighted in the article Tarasenko (2022), which indicates the need to integrate innovative technologies to optimize customs procedures. This approach contributes to increasing the transparency and efficiency of customs risk management. Critically important, according to Polin (2023), is the formation of the

necessary stimulation of the economic development of cities through technological development. The author Sushchenko (2023) emphasizes the importance of developing intelligent customs systems that are able to adapt to rapidly changing global conditions, pointing to the importance of data processing efficiency. In the field of town planning marketing, research Xiang (2023) highlights effective city branding strategies that influence its development and investment attraction. According to Karyy (2021), the uniqueness of the city brand lies in the ability to integrate cultural, historical and modern technological aspects, creating an attractive and innovative environment for residents and investors. According to a study Shahbazitabar (2020), a key success factor is the interaction between city authorities and the private sector, as it facilitates the development and implementation of integrated approaches to town planning marketing. The hypothesis Dykan (2021) is to accelerate the development of international customs agreements and improve trade between cities. A study Kwilinski (2022) analyzes the ways in which international customs policies can facilitate or hinder the integration of cities into the global economy. The author Megits (2022) emphasizes the need to develop a flexible customs regulatory framework that takes into account the peculiarities of European law. A study Alswedani (2022) examines the impact of digital technologies on customs infrastructure and customs risk management, highlighting the importance of integrating cyber security into customs systems to ensure the security and stability of global supply chains. Digitalization of cities, as noted by Sushchenko (2023), has a long-term role in the smartization and development of modern urban environments. In his study Prodanova (2019) analyzes the impact of digital technologies on the management of urban processes through the integration of technological systems for the management of customs rules and risks. The author Saienko (2023) points out that digitalization allows cities to manage resources more effectively, optimize city services and improve the quality of life of residents. A study Navío-Marco (2020) focuses on the impact of digitalization on town planning marketing, pointing to new opportunities to promote cities through digital platforms and social media, opportunities to engage citizens and stakeholders through digital communication

channels. The scientist Katib (2022) emphasizes the role of digitalization in the creation of integrated customs systems that allow for more efficient management of customs procedures, while ensuring a high level of security and transparency in European countries. Thus, digitalization is a key factor in the smartization of cities, opening new perspectives for the integration of customs regulations and risk management in the global economy.

## Research Goals

The purpose of the article's research is to analyze the role of customs rules and risk management and town planning marketing in the process of smarting cities within the framework of the global economy. The main issue is focused on the study of effective management of customs regulations and the occurrence of relevant risks. The research is aimed at assessing the potential factors for the development of intelligent urban environments, which is important for the integration of cities into the global economic space. To achieve the goal, a comprehensive approach is used, which includes a review of scientific literature, analysis of strategies of European cities, study of modern trends in digitalization and town planning marketing. One of the key areas of research is to identify how the latest technologies and digital innovations can improve the management of customs regulations and risks, while ensuring the harmonious development of smart cities. The ultimate goal is to develop comprehensive recommendations for improving city smartization strategies, taking into account the unique challenges and needs of the modern environment.

## MATERIALS AND METHODS

In order to thoroughly analyze the impact of customs regulations and risk management on the process of smarting cities in the processes of transformation of the global economy, a comprehensive study was conducted that included a number of methods and approaches. The sources for the analysis were academic works, reports of governmental and international organizations, analytical materials from leading research institutes, as well as official data on modern strategies for the development of «smart cities» in European countries. Special attention was paid to the research

of innovative technologies, including e-government, automation of urban processes, which have the potential to revolutionize customs procedures and risk management methods. The methodological approach provided for the analysis of the impact of the latest technologies and a strategic approach on the dynamics of the development of the infrastructure of customs authorities and town planning marketing, as the basis of a means of promoting the idea of smartization. A significant role in the study was played by the strategies of European countries that successfully integrate customs regulations and risk management in the development strategy of town planning. The strategies of the Baltic countries, their approaches to digitalization and the integration of the latest technologies in city management were analyzed. Such a comprehensive approach made it possible to assess how different models of customs rules and risk management affect the efficiency, security and transparency of city operations. Prospects for promoting strategies for the promotion of cities in terms of global competitiveness are determined by the search method. A key aspect of the analysis was to explore how technological innovation and digital solutions can act as catalysts for effective customs regulations and risk management in cities. The methods of analysis included the assessment of development scenarios and the use of information systems for the collection, processing and analysis of official data, scientific publications, which made it possible to effectively identify trends, understand current challenges and identify possible directions for optimizing the management of customs rules and risks in the direction of town planning marketing. Special attention was paid to the strategies of European countries aimed at creating integrated, flexible and sustainable urban systems that are able to adapt to the constantly changing conditions of the global economy. Therefore, the integrated approach made it possible to assess the state of affairs in the selected topic and determine strategic directions for the further development of cities to ensure their smartization and integration into the world economy.

## RESULTS

Customs integration is one of the priority directions in the development of Smart City of the European

Union countries. In an era of globalization and rapid technological progress, customs authorities play a crucial role in ensuring the efficient movement of goods and services. The current trends are particularly relevant for cities seeking to become Smart Cities. The integration of customs rules and procedures with the latest technologies significantly simplifies and speeds up customs operations, the result of which is the increase in the efficiency of logistics chains and contributes to economic development. The use of innovations for data analysis and automation of processes significantly reduces the time for customs clearance, reduces the risk of smuggling and simplifies the length of bureaucratic processes. Optimal management of customs rules and risks is an integral part of the Smart City development strategy, which includes the introduction of advanced technologies, the development of flexible rules that can adapt to the constantly changing conditions of the global market. The implementation of the development of customs algorithms based on the analysis of big data allows to determine and minimize the risks associated with international trade, in particular, with the illegal movement of goods. It is important to implement the electronic declaration system, which ensures fast and transparent registration of goods, thereby reducing administrative barriers and contributing to a closer integration of the city's economy into the world market through trade liberalization.

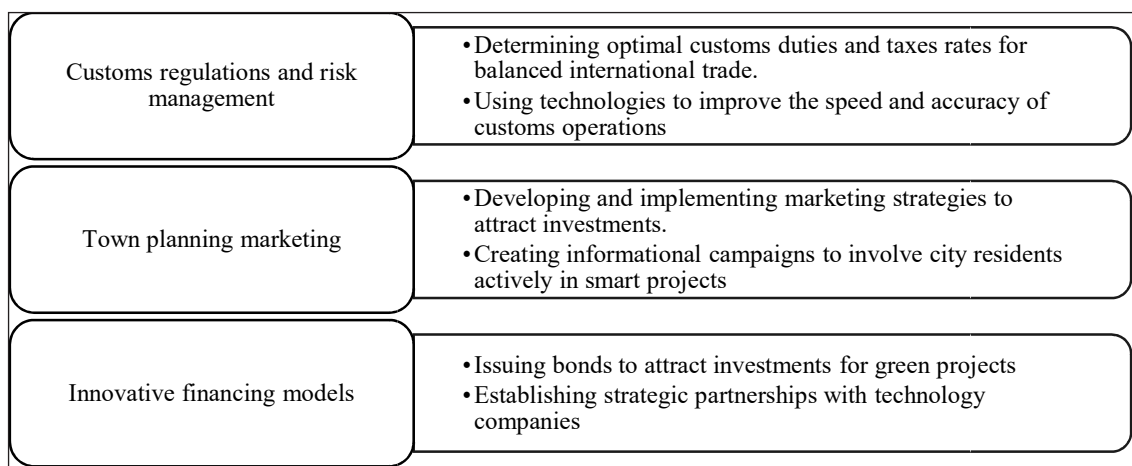
In parallel with managing customs regulations and risks, town planning marketing plays a key role in the process of transforming cities into Smart Cities. Marketing strategies focusing on promoting the city as an attractive place for business and investment are important for attracting international partners and investors. This approach encourages the creation of a favorable investment climate, the development of infrastructure projects supporting logistics and trade, as well as an emphasis on innovative development and digital integration. Marketing initiatives contribute to creating a positive image of the city on the world stage, increasing its attractiveness to foreign investors looking for new opportunities in smart cities. Despite the significant advantages, the process of integrating customs processes into the Smart City concept faces a number of challenges, which includes the need to ensure a high level of cyber

security. The use of digital technologies increases the risk of cyber-attacks, so there is a need for coordination between different governmental and non-governmental entities to ensure synergies between customs, technology and urban initiatives. European countries work together to ensure the flexibility of customs legislation, which will allow rapid adaptation to changes in technology on the global market. Development prospects consist in the creation of integrated systems, which are described in more detail in Fig. 1.

Town planning marketing is a complex and multifaceted discipline, which in 2024 requires a comprehensive approach to the development and implementation of marketing strategies from European countries. The main direction of operation is focused on creating and maintaining the image of the city, promoting it as an attractive place for life, work, investment and tourism. The purpose of town marketing is to attract investors, businesses, tourists and residents, which requires a detailed analysis of the needs of these target audiences and the development of appropriate communication strategies. An important component of success is understanding the unique features of the city, its history, culture, economic and social conditions, which allows creating a unique value proposition. The city's brand should reflect its essence, highlight its unique features and differences from other cities. An effective brand of European cities helps to create an emotional connection with the target audience and contributes to the formation of a positive image.

Brand development involves identifying the key messages the city wants to convey to its audience and using various marketing channels to promote them. The introduction of modern digital technologies and social media to attract a wider audience opens up new opportunities for European countries. According to the OECD, the principles of modern town planning marketing are cooperation with local communities and stakeholders in Southeast Asia. Interaction with local residents, businesses, educational institutions and public organizations allows for the development and implementation of strategies that take into account the interests and needs of all participants in urban life. Involvement of citizens in the planning and marketing process ensures openness and transparency of processes.

The success of town planning marketing partly depends on constant adaptation to the changing conditions of customs control and customs risk management. The world is constantly changing, so cities must be ready to quickly adapt to new trends, technological innovations and changes in the global economy due to the effects of Covid-19. Most modern European cities require constant monitoring and evaluation of the effectiveness of marketing strategies and readiness to make necessary adjustments to customs procedures. This approach allows cities to remain competitive and attractive to the product markets of the USA, Asia and other countries. Energy and economic sustainability is a key factor in the attractiveness of the city for modern investors and residents,



Source: Developed by the author.

Fig. 1: Customs integration in the development of Smart City

who are increasingly aware of the importance of environmental and social issues. Cities that demonstrate a commitment to sustainable practices are more effective in attracting investment and maintaining a high quality of life for their residents. Details of the main programs implemented by the governments of developed European countries are given in Table 1.

The analysis of programs in Table 1 shows that European countries are actively implementing «smart city» development programs using innovative approaches and strategies. Austria focuses on research and development of new technologies, which is a continuation of previous programs in the field of construction and energy, which emphasizes the importance of scientific research and innovation in the development of urban environments, indicating the priority of technological development. Denmark, is implementing a number of initiatives aimed at different sectors, including a strategy for the development of smart grids, digitization in public administration and the use of data in key

government programs. The country’s multifaceted approach to developing smart cities is reinforced by the integration of technology into various aspects of urban life, from energy management to digital services. It is reflected in a number of Baltic countries, as Estonia, focusing on creating an innovative environment in cities through the Smart City Cluster, demonstrates the importance of cooperation between business, citizens, government structures and research institutes. The country’s experience reflects a growing trend to create partner networks for the development of innovative solutions that ensure the competitiveness and sustainability of cities. Germany, implementing the «City of the Future» program with funding of 150 million euros, focuses on involving local residents, scientists, local governments and utilities in the development of ideas and solutions for cities. In the conditions of war in Ukraine, the importance of an inclusive approach is emphasized, where the active participation of the community plays a key role in shaping the future urban space and effective management of customs risks.

**Table 1:** Smartization strategies of cities in European countries

Country	Smart city program	Details
Austria	Research and Technology (RTD) program called “City of Tomorrow” launched by the Austrian Federal Ministry of Transport, Innovation and Technology (BMVIT).	“City of Tomorrow” is based on the previous RTD programs including “Building of Tomorrow” and “Energy Systems of Tomorrow” It is focusing on the research and development of new technologies, technological systems as well as urban services for future cities.
Denmark	A number of different sector-based initiatives such as the energy Smart Grid Strategy (the Danish Ministry of Energy, Utilities, and Climate), digitization in the public digitization strategy (the Danish Agency for Digitisation) and data in the Basic Data Program (a number of ministries).	Invest in Denmark under the Ministry of Foreign Affairs conducted a research with Arup and CEDI on smart cities linking to national prosperity. It highlighted five requirements (municipal capability, investment certainty, skills and research, public acceptance and digital literacy, and sharing of data).
Estonia	Estonian Smart City Cluster – Smart City Lab co-financed from 2015-2018 by the European Regional Development Fund (ERDF) via the Enterprise Estonia	The Cluster is designed to create an innovative environment in cities which will boost the competitive ability of companies by bringing together businesses, citizens, public authorities, R&D institutes and structures that support innovation
Finland	The Six City Strategy (6Aika) launched in 2014-2023 is an open innovation platform of the six largest cities in Finland (Helsinki, Espoo, Vantaa, Tampere, Oulu and Turku) where stakeholders can share smart solutions.	The Platform is managed by the Ministry of Economic Affairs and Employment, and companies can freely experiment with their innovative solutions in the six cities.
Germany	“City of the Future”, a funding program of EUR 150 million operated by the German Ministry of Education and Research (BMBF)	The “City of the Future” funding is given out for a range of projects that bring local residents, researchers, local government, and municipal utilities together to work out ideas and solutions for cities.

Source: Compiled based on OECD.

European cities are actively transforming, introducing the Smart City concept, which includes the integration of customs rules in the direction of city-wide development. The existing transformation reflects the course towards the introduction of innovative technologies and the creation of an effective infrastructure. However, a new approach to the management of customs processes is required from the government, which will ensure a harmonious combination of town marketing, technological development and economic security. The integration of customs regulations into the development system of «smart cities» contributes to the improvement of customs administration, but ensures the support of sustainable development, investment attractiveness and technological potential of cities. Optimal management of customs risks within the programs provides a safe and transparent environment for international trade, stimulating economic growth and the development of smart urban environments. Thus, the synergy between town planning marketing and the management of customs rules and risks plays a decisive role in the process of smartizing cities, opening new horizons for their sustainable development and integration into the world economy.

## DISCUSSION

The problem of managing customs requirements arose due to the strengthening of the smartization of cities, which turns out to be very relevant in the conditions of the global economy. The findings of the study are confirmed in the work Pérez (2022), which analyzes how the integration of digital technologies can increase the efficiency of customs procedures. According to Yigitcanlar (2023), the use of e-government significantly optimizes customs operations, contributing to faster circulation of goods. Such conclusions coincide with those considered in the study, which emphasizes the importance of technology for modern cities. However, a study Castellano (2020) points to potential challenges associated with the integration of digital innovations into customs systems, in particular the need to ensure a high level of cyber security.

The issue of town planning development marketing was revealed in a study Elgueta-Ruiz (2022), which confirms the importance of creating a strong city

brand to attract investment and develop innovation. This hypothesis is highlighted by the results Kotaro (2021), where attention is focused on the role of marketing strategies in shaping the image of the city. Conducting research on the strategy of smarting cities indicates the strengthening of e-governance, because Treiblmaier (2020) and Olshanska (2011) notes that town marketing must take into account economic, social and environmental aspects. These conclusions complement the observations made in the study about the need to integrate sustainable development into city strategies. The scientist Xiang (2023) emphasizes the role of technological innovation in the intellectualization of modern cities, which is reflected in our recommendations on the openness of technological markets and the improvement of their functioning.

Particularly interesting is a study Cruz (2022) that points to the need for a balance between innovation and traditional approaches in customs administration through optimal structuring. This approach coincides with our own findings on the importance of flexibility in customs rules and procedures. The scientist Alzahrani (2022) emphasizes the importance of interaction between various stakeholders for the successful implementation of the smartization of cities, which corresponds to the recommendations of the cooperation of the private and public sectors. However, Monteiro (2022) warns about the possible risks of implementing digital technologies without proper planning and strategic management. In view of this, the further needs of the research topic reflect the need for a careful approach to digitalization and strategic planning in cities. It is important that the discussion in the literature confirms the hypothesis about the relationship between the management of customs rules and smartization of cities, which indicates the relevance and high necessity of research in this direction.

## CONCLUSION

Thus, the management of customs regulations, the implementation of effective risk management to ensure the functioning of town planning marketing on the path of smarting cities in the world economy, it was found that digitalization and innovation play a key role in the transformation of urban environments. The integration of customs rules and risks into the management system of public

governance contributes to the optimization of customs procedures, increases the transparency and efficiency of customs risk management. Global technological projects have a significant impact on the economic growth and development of cities, contributing to the creation of intelligent infrastructures and improving the quality of life of residents. At the same time, town planning marketing plays an important role in creating a city brand and promoting innovative projects that attract investment and improve the global competitiveness of cities based on cooperative experience.

Prospects for further development in the field of integration of customs procedures in the technological development of cities promise to be promising and innovative. An increased focus on digitization, the use of e-government technologies, is expected to lead to even greater automation and efficiency in city management. European countries are opening up new opportunities for integrating customs services into the everyday life of residents, while ensuring a high level of security and compliance with global standards. The consequence of technological processes will be the development of intelligent cities and the strengthening of the flow of direct investment, stimulating economic growth and improving the quality of life, making cities more attractive for infrastructure conglomerates.

Based on the analysis, it is worth recommending several directions for further development. It is most important to strengthen cooperation between government bodies, the private sector and the scientific community for the development and implementation of innovative solutions in the field of customs regulation and city management. The focus should be on developing flexible customs rules that can quickly adapt to changes in the global economy and technological progress. It is critical to integrate the principles of sustainable development into town planning marketing, emphasizing the importance of environmental responsibility and social involvement. Taking the necessary measures will increase the attractiveness of the city for investors and ensure a sustainable and balanced future for urban communities in the face of geopolitical challenges.

## REFERENCES

- Abdi, H. and Shahbazitabar, M. 2020. Smart city: A review on concepts, definitions, standards, experiments, and challenges. *Journal of Energy Management and Technology (JEMT)*, **4**(1).
- Alahmari, N., Alswedani, S., Alzahrani, A., Katib, I., Albeshri, A. and Mehmood, R. 2022. Musawah: A Data-Driven AI Approach and Tool to Co-Create Healthcare Services with a Case Study on Cancer Disease in Saudi Arabia. *Sustainability* (Switzerland), **14**(6).
- Alswedani, S., Mehmood, R. and Katib, I. 2022. Sustainable Participatory Governance: Data-Driven Discovery of Parameters for Planning Online and In-Class Education in Saudi Arabia During COVID-19. *Frontiers in Sustainable Cities*, **4**. <https://doi.org/10.3389/frsc.2022.871171>
- Bashynska, I., Mukhamejanuly, S., Malynovska, Y., Bortnikova, M., Saiensus, M. and Malynovskyy, Y. 2023. Assessing the Outcomes of Digital Transformation Smartization Projects in Industrial Enterprises: A Model for Enabling Sustainability. *Sustainability*, **15**: 14075.
- Bashynska, I., Kovalova, O., Malovichko, O. and Shirobokova, O. 2020. Risk Management of Innovative Socially Significant Projects (On the Example of Urban Passenger Transport). *International Journal of Advanced Research in Engineering and Technology*, **11**(4): 294-305.
- Blanck, M. and Ribeiro, J.L.D. 2021. Smart cities financing system: An empirical modeling from the European context. *Cities*, **116**.
- Cambra-Fierro, J.J. and Pérez, L. 2022. (Re)thinking smart in rural contexts: A multi-country study. *Growth and Change*, **53**(2): 868–889.
- Dykan, V., Pakhareno, O., Saienko, V., Skomorovskyi, A. and Neskuba, T. 2021. Evaluating the efficiency of the synergistic effect in the business network. *Journal of Eastern European and Central Asian Research*, **8**(1): 51-61.
- Filyppova, S., Bashynska, I., Kholod, B., Prodanova, L., Ivanchenkova, L. and Ivanchenkov, V. 2019. Risk management through systematization: Risk Management Culture, *International Journal of Recent Technology and Engineering*, **8**(3): 6047-6052.
- Hong, K.P. 2019. A human-centric smartization strategy for urban regeneration new-deal projects in Korea. *Journal of Advanced Research in Dynamical and Control Systems*, **11**(7 Special Issue): 1270–1278.
- Karyy, O., Kulyniak, I., Struchok, N., Halkiv, L. and Ohinok, S. 2021. Evaluation of the Tourist Attractiveness of Ukraine's Regions in the Conditions of Uncertainty Using Game Theory. *Proceedings of the 11th International Conference on Advanced Computer Information Technologies, ACIT*, 351-355. <https://doi.org/10.1109/ACIT52158.2021.9548360>
- Kharchuk, T., Tarasenko, I., Chip, L., Sakun, L., Bebko, S., Palchuk, O., ... Ishchejkin, T. 2022. Modeling the concept of managing changes of the smart economy and financial stability of entrepreneurship under martial law. *Journal of Hygienic Engineering and Design*, **40**: 239–249.

- Khelladi, I., Castellano, S. and Kalisz, D. 2020. The smartization of metropolitan cities: the case of Paris. *International Entrepreneurship and Management Journal*, **16**(4): 1301–1325.
- Kotaro, N., Hideyuki, S. and Dejan, K. 2021. A proposal for a common framework for smart tourism cities with regional revitalization. *Smart Tourism*, **2**(1).
- Kwilinski, A., Dalevska, N. and Dementyev, V.V. 2022. Metatheoretical Issues of the Evolution of the International Political Economy. *J. Risk Financial Manag.*, **15**(3): 124.
- Liu, G. 2023. Landscape Architecture Design and Implementation Based on Intelligent Monitoring Sensing Network. *Journal of Sensors*. <https://doi.org/10.1155/2023/9188907>
- Megits, N., Aliyev, S., Pustovhar, S., Bielialov, T. and Prokopenko, O. 2022. The “Five-Helix” Model as an effective way to develop business in Industry 4.0 of selected countries. *Journal of Eastern European and Central Asian Research*, **9**(2): 357-368.
- Mendes, C.F.P., Elgueta-Ruiz, Á., Monteiro, L. and Cruz, G. 2022. Building a Smart City from the Periphery to the Center: Application of Technological Solutions for Intelligent Integration of Peripheral Neighborhoods. *Advances in Science, Technology and Innovation*, 3–15. Springer Nature. [https://doi.org/10.1007/978-3-030-98423-6\\_1](https://doi.org/10.1007/978-3-030-98423-6_1)
- Navío-Marco, J., Rodrigo-Moya, B. and Gerli, P. 2020. The rising importance of the “Smart territory” concept: definition and implications. *Land Use Policy*, **99**.
- OECD, 2019. Enhancing the contribution of digitalisation to the smart cities of the future. <https://www.oecd.org/cfe/regionaldevelopment/Smart-Cities-FINAL.pdf>
- Olshanska, O.V. 2011. Scientific grounds for determining the essence of a region as an economic and administrative entity. *Actual Problems of Economics*, **116**(2): 100–108.
- Polin, K., Yigitcanlar, T., Limb, M. and Washington, T. 2023. The Making of Smart Campuses: A Review and Conceptual Framework. *Buildings*. MDPI. <https://doi.org/10.3390/buildings13040891>
- Shemyakina, T.Y., Astafieva, O.E. and Gorelova, O.A. 2021. Scenarios of smart cities creation as a trend of sustainable development. *Lecture Notes in Networks and Systems*, **155**: 3–10. Springer Science and Business Media Deutschland GmbH. [https://doi.org/10.1007/978-3-030-59126-7\\_1](https://doi.org/10.1007/978-3-030-59126-7_1)
- Sushchenko, R., Zapara, Y., Saienko, V., Kostiusenko, V., Lytvynenko, L. and Pron, S. 2023. Urban transport, logistics, and tourism: review of a cutting-edge socially-oriented approach to industrial development. *Acta Sci. Pol. Administratio Locorum*, **22**(1): 101-111.
- Tislenko, M.I. 2022. Ratings as a way of assessing the effectiveness of smart city policies. *RUDN Journal of Economics*, **30**(2): 242–252.
- Treiblmaier, H., Rejeb, A. and Strebinger, A. 2020. Blockchain as a driver for smart city development: Application fields and a comprehensive research agenda. *Smart Cities*, **3**(3): 853–872.
- UNINETS, I. 2022. The development of smart cities in Ukraine in the context of global trends. Herald of Khmelnytskyi National University. *Economic Sciences*, **308**(4): 223–228.
- Xiang, K. and Koo, S. 2023. A Study on the Tfcend of Purpose-built Mobility in the Mobility as a Service System. Focusing on the Usage Distribution. *Transactions of the Korean Society of Automotive Engineers*, **31**(6): 431–438.