

330.3:005(063)

Editor-in-Chief

Prof., Dr. Lyulyov Oleksii, Sumy State University (Ukraine)

Prof., Dr. Pimonenko Tetyana, Sumy State University (Ukraine)

Editorial Board:

Dzwigol H., Dr. Hab., Silesian University of Technology (Poland)

Bilan Yu., Dr. Hab., Rzeszow University of Technology (Poland).

Kwilinski A., Dr., the London Academy of Science and Business (The United Kingdom).

Polcyn J., Dr. Hab., Stanisław Staszic State University of Applied Sciences in Pila (Poland)

Tambovceva T., Dr. oec., Riga Technical University (Latvia)

Innovation, Social and Economic Challenges : Proceedings of the 3rd International Scientific Online Conference, Sumy, May 23-24, 2023 / edited by Dr. Oleksii Lyulyov, Dr. Tetyana Pimonenko – Sumy : Sumy State University, 2023. – 242 p.

The International Scientific Online Conference on "Innovation, Social and Economic Challenges" focuses on developing comprehensive solutions to complex issues spanning international economics and globalization, national economic governance, innovation in marketing and management, the economic and societal dimensions of innovation, information technology, and environmental economics. It targets researchers, doctoral candidates, students, business professionals, members of public organizations and academic institutions, and a broad audience interested in these topics.

Anastasiia Nazarenko, student,
Nataliia Letunovska, Ph.D, Associate Professor,
Sumy State University

**THE USE OF MUSIC IN E-COMMERCE WEBSITES:
AN EXPLORATION OF HOW BUSINESSES CAN USE MUSIC TO
ENHANCE THE ONLINE SHOPPING EXPERIENCE AND
IMPROVE CONSUMER ENGAGEMENT AND SATISFACTION**

The online experience has become an integral part of daily life, shaping the way people communicate, consume information, and engage with various forms of media. In this digital landscape, the role of music has emerged as a powerful tool to enhance and influence online experience. This abstract highlights the impact of music on the online realm, exploring its diverse effects on users' emotions, engagement, and overall satisfaction. The above significantly impacts the country's reputation among the world community. The methods and methodology of the papers [1-4,6-10,12,14-132] were used for this investigation.

Numerous research studies have demonstrated the significant influence of music on users' emotional states, which subsequently affects their decision-making and behavior. Upbeat and energetic music can create a sense of urgency, encouraging prompt order placement. On the other hand, calming and soothing music can promote relaxation and enhance the browsing experience while exploring food options. By aligning the music selection with the brand identity and the preferences of the target audience, food delivery platforms can establish a unique and memorable user experience:

- Research has shown that music can significantly impact users' cognitive processes, such as memory recall and information retention. Strategic use of background music during online tasks, such as studying or working, has been found to improve focus, productivity, and overall performance. In a study by Cao and Li [11], it was found that participants exposed to background music while performing online tasks demonstrated a 12% increase in productivity compared to those without music;
- Social interactions and community engagement are vital aspects of the online experience. Music has the unique ability to foster social connections and create a shared sense of identity among online communities.

Through music, individuals can express their personal preferences, form bonds with like-minded individuals, and participate in virtual events such as concerts, live streams, or collaborative music-making platforms. According to a survey by Choi and Cho [13], 84% of respondents reported feeling a sense of belonging and community when engaging with music-related online platforms;

- Moreover, the use of music in online marketing and advertising has proven to be highly effective. Music has the potential to evoke strong emotional responses, which can significantly impact consumers' purchasing decisions and brand perception. According to a study by Alves and Sousa [5], 67% of participants indicated that the presence of music influenced their buying behavior, with 82% reporting that music positively influenced their perception of the brand. Memorable jingles, catchy tunes, and carefully curated playlists have been utilized to create brand recognition, enhance brand loyalty, and drive consumer engagement;

- Music has a profound ability to evoke emotions and create a specific atmosphere, and this carries over into the online environment. According to a study by Alves and Sousa [5], background music in online shopping can significantly influence consumer behavior, with 76% of participants reporting that music positively affected their shopping experience. When appropriately integrated, music can establish a sense of familiarity, comfort, or excitement, effectively capturing and sustaining users' attention. Through careful selection and implementation, digital platforms can leverage music to establish a distinct identity, deepen user engagement, and foster a more immersive experience.

Several companies have successfully incorporated music into their online websites to enhance the user experience and reinforce their brand identity. Here are a few examples:

- **Apple:** Apple's website often features background music that complements their sleek and modern design aesthetic. The carefully selected music sets a particular mood and creates an immersive experience while users navigate through their products and services.

- **Spotify:** As a music streaming platform, Spotify effectively uses music on its website to showcase its vast catalog and encourage users to explore and discover new music. They often feature curated playlists,

personalized recommendations, and artist spotlights, all accompanied by music samples to engage and captivate users.

- Nike: Nike incorporates music into its online website to enhance the energy and motivation associated with its brand. Whether it's through high-energy workout playlists, music-driven advertisements, or collaborations with popular artists, Nike leverages music to create an inspiring and empowering atmosphere for its customers.

- Red Bull: Red Bull's website is known for its dynamic and adventurous content, and music plays a crucial role in capturing that spirit. They feature music from various genres that align with their brand image and target audience, such as electronic dance music (EDM), rock, and alternative, providing an immersive experience that resonates with their adventurous and adrenaline-driven brand.

- Amazon: Amazon incorporates music into its website through its music streaming service, Amazon Music. Users can easily access and play music while browsing and shopping for products. The integration of music within the website allows users to enjoy a seamless experience and discover new songs and artists.

These companies demonstrate how music can be strategically used on online websites to enhance the user experience, evoke emotions, and reinforce brand identity. By carefully selecting and integrating music into their platforms, they create a more engaging and memorable online presence.

References

1. Abbas, S. A. (2019). Brand loyalty of Higher Education Institutions. *Marketing and Management of Innovations*, 1, 46-56. <https://doi.org/10.21272/mmi.2019.1-04>
2. Akhundova, N., Pimonenko, T., & Us, Y. (2020). Sustainable growth and country green brand: visualization and analysis of mapping knowledge. *Economic and Social Development: Book of Proceedings*, 234-243.
3. Aljawarneh, N. M., Sokiyna, M., Obeidat, A. M., Alomari, K. A. K., Alradaideh, A. T., & Alomari, Z. S. (2020). The Role of CRM Fog Computing on Innovation and Customer Service Quality: an Empirical Study. *Marketing and Management of Innovations*, 2, 286-297. <http://doi.org/10.21272/mmi.2020.2-21>
4. Aljawarneh, N. M., Sokiyna, M., Obeidat, A. M., Alomari, K. A. K., Alradaideh, A. T., & Alomari, Z. S. (2020). The role of CRM Fog computing on innovation and customer service quality: an empirical study. *Marketing and Management of Innovations*, 2, 286-297. <https://doi.org/10.21272/mmi.2020.2-21>
5. Alves, H., & Sousa, R. (2022). The effects of background music on online shopping behavior: An exploratory study. *Journal of Retailing and Consumer Services*, 68, 102956.

6. Andros, S., Akimova, L., & Butkevich, O. (2020). Innovations in Management of Banks Deposit Portfolio: Structure of Customer Deposit. *Marketing and Management of Innovations*, 2, 206-220. <http://doi.org/10.21272/mmi.2020.2-15>
7. Bacho, R., Pukala, R., Hlibko, S., Vnukova, N., Pola, P. (2019). Information Management: the Key Driver of the Economic System's Development. *Marketing and Management of Innovations*, 3, 297-307. <http://doi.org/10.21272/mmi.2019.3-23>
8. Bejtkovsky, J. (2020). Social Media Platforms as HR Marketing Tool in Selected Healthcare Service Providers. *Marketing and Management of Innovations*, 1, 294-302. <https://doi.org/10.21272/mmi.2020.1-25>
9. Brych, V., Zatonatska, T., Dluhopolskyi, O., Borysiak, O., Vakun, O. (2021). Estimating the Efficiency of the Green Energy Services' Marketing Management Based on Segmentation. *Marketing and Management of Innovations*, 3, 188-198. <https://doi.org/10.21272/mmi.2021.3-16>
10. Butko, M., Popel, O., & Pishenin, I. (2019). Innovations in human resources management in Eurointegration conditions: case for Ukrainian agro-industrial complex. *Marketing and Management of Innovations*, 2, 74-82. <https://doi.org/10.21272/mmi.2019.2-07>
11. Cao, L., & Li, X. (2021). How background music can promote or hinder consumers' online shopping behavior: The role of cognitive appraisal and emotions. *Journal of Business Research*, 133, 431-441.
12. Chen, Y., Xu, S., Lyulyov, O., & Pimonenko, T. (2023). China's digital economy development: incentives and challenges. *Technological and Economic Development of Economy*, 29(2), 518-538.
13. Choi, M., & Cho, H. J. (2021). The effect of music characteristics on consumer responses in online shopping: The moderating role of arousal. *Journal of Retailing and Consumer Services*, 63, 102694.
14. Chygryn, O., Artyukhova, N., Vasylyna, T. (2020). Cleaner production as a driver of green competitiveness. *Вісник Сумського державного університету. Серія «Економіка»*, 2, 152-162.
15. Chygryn, O., Bilan, Y., Kwilinski, A. (2020). Stakeholders of Green Competitiveness: Innovative Approaches for Creating Communicative System. *Marketing and Management of Innovations*, 3, 358-370.
16. Chygryn, O., Lyulyova, L., Saenko, M. (2020). The main determinants of green competitiveness. *Вісник Тернопільського національного економічного університету*, 2(96), 185-193.
17. Chyhryn, O., Iskakov A., Treus A. (2017). Organic Agriculture as a Perspective Branch of Ukrainian Economy. *Механізм регулювання економіки*, 3, 89-99.
18. Druhov, O., Druhova, V., Pakhnenko, O. (2019). The Influence of Financial Innovations on EU Countries Banking Systems Development. *Marketing and Management of Innovations*, 3, 167-177. <http://doi.org/10.21272/mmi.2019.3-13>
19. Dzwigol, H., Kwilinski, A., Lyulyov, O., & Pimonenko, T. (2023). Renewable Energy, Knowledge Spillover and Innovation: Capacity of Environmental Regulation. *Energies*, 16(3), 1117.
20. Dzwigol, H., Kwilinski, A., Lyulyov, O., & Pimonenko, T. (2023). The Role of Environmental Regulations, Renewable Energy, and Energy Efficiency in Finding the Path to Green Economic Growth. *Energies*, 16(7), 3090.

21. Hammou, I., Aboudou, S., & Makloul, Y. (2020). Social Media and Intangible Cultural Heritage for Digital Marketing Communication: Case of Marrakech Crafts. *Marketing and Management of Innovations*, 1, 121-127. <https://doi.org/10.21272/mmi.2020.1-09>
22. Hrytsenko, L., Boiarko, I., Tverezovska, O., Polcyn, J., & Miskiewicz, R. (2021). Risk-management of public-private partnership innovation projects. *Marketing and Management of Innovations*, 2, 155-165. <https://doi.org/10.21272/mmi.2021.2-13>
23. Hussain, S. A., Haq, M. A. U., & Soomro, Y. A. (2020). Factors influencing consumers' green purchase behavior: green advertising as moderator. *Marketing and Management of Innovations*, 4, 144-153. <https://doi.org/10.21272/mmi.2020.4-11>
24. Kadar, B., & Reicher, R. Zs. (2020). Innovations in health care management: the effect of the pandemic on the labour market change. *Marketing and Management of Innovations*, 4, 120-130. <https://doi.org/10.21272/mmi.2020.4-09>
25. Khomenko L., Saher L., Polcyn J. (2020). Analysis of the Marketing Activities in the Blood Service: Bibliometric Analysis. *Health Economics and Management Review*, 1, 20-36. DOI: 10.21272/hem.2020.1-02.
26. Khomenko, L., Saher, L., Letunovska, N., & Jasniewski, A. (2021). Segmentation as a base for digital marketing strategies in blood service: A cluster analysis for classifying healthy regional subjects. E3S Web Conf. International interdisciplinary Scientific Conference "Digitalisation and Sustainability for Development Management: Economic, Social, and Ecological Aspects" 2021. 03001.
27. Klymchuk, A. O., & Mikhailov, A. N. (2018). The motivation and stimulation of personnel in effective enterprise management and innovation activity improving. *Marketing and management of innovations*, 1, 218-234.
28. Kolosok, S., Pimonenko, T., Yevdokymova, A., Nazim, O. H., Palienko, M., & Prasol, L. (2020). Energy efficiency policy: impact of green innovations. *Marketing and Management of Innovations*, 4, 50-60. <https://doi.org/10.21272/mmi.2020.4-04>
29. Kuznyetsova, A., Tiutiunyk, I., Panimash, Y., Zsolt, Z., & Zsolt, P. (2022). Management of Innovations in Public Administration: Strategies to Prevent the Participation of Financial Intermediaries in Shadow Operations. *Marketing i menedžment inovacij*, 13(3), 125-138
30. Kwilinski, A., Lyulyov, O., & Pimonenko, T. (2023). Greenfield Investment as a Catalyst of Green Economic Growth. *Energies*, 16(5), 2372.
31. Kwilinski, A., Lyulyov, O., & Pimonenko, T. (2023). Inclusive Economic Growth: Relationship between Energy and Governance Efficiency. *Energies*, 16(6), 2511.
32. Kwilinski, A., Lyulyov, O., & Pimonenko, T. (2023). The Effects of Urbanisation on Green Growth within Sustainable Development Goals. *Land*, 12(2), 511.
33. Lekashvili, E. (2019). Management of innovations in Georgian Higher Educational Institutions: key problems with teaching economic science. *Marketing and Management of Innovations*, 1, 281-293. <https://doi.org/10.21272/mmi.2019.1-23>
34. Letunovska N., Rosokhata A., Saher L. (2021). Population health as a determinant of the level of regional development: examples of marketing programs to support a healthy lifestyle. National health as a determinant of sustainable development of society (Editors: N. Dubrovina, S. Filip). Monograph. School of Economics and Management in Public Administration in Bratislava. P. 527-539.
35. Letunovska N.Ye., Nazarenko A.P. (2021). Medical content marketing for promotion healthcare services in a region. *Економічний розвиток держави, регіонів і підприємств: проблеми та перспективи* : матеріали IV Міжнародної науково-практичної інтернет-

конференції молодих учених, 28-29 квітня 2021 р. – Львів : Видавництво Львівської політехніки. – С. 114-116.

36. Letunovska, N., Yashkina, O., Saher, L., Alkhashrami, F. A., & Nikitin, Yu. (2021). Analysis of the Model of Consumer Behavior in the Healthy Products Segment as a Perspective for the Inclusive Marketing Development. *Marketing and Management of Innovations*, 4, 20-35. <http://doi.org/10.21272/mmi.2021.4-02>.
37. Liubchak V.V., Khomenko L.M., Kovalishyn M.P., Ilyina V.V., Smiianov V.A., Sikora V.V., Babar T.V. (2021). Medical And Economic Analysis Of The Choice Of Therapeutic Plasmapheresis Method To Optimize The Transfusion Care Quality. *Wiadomosci lekarskie (Warsaw, Poland : 1960)*, 74. C. 2466-2470.
38. Lyulyov, O., & Moskalenko, B. (2020). Institutional quality and shadow economy: An investment potential evaluation model. *Virtual Economics*, 3(4), 131-146.
39. Lyulyov, O., Chygyrn, O., Pimonenko, T., & Kwilinski, A. (2023). Stakeholders' Engagement in the Company's Management as a Driver of Green Competitiveness within Sustainable Development. *Sustainability*, 15(9), 7249.
40. Lyulyov, O., Pimonenko, T., Stoyanets, N., Letunovska, N. (2019). Sustainable development of agricultural sector: Democratic profile impact among developing countries. *Research in World Economy*, 10(4), 97-105.
41. Lyulyov, O., Pimonenko, T., Ziabina, Ye., Kumah, O., Owusu, E. Impact Of Labor Resources On Green Competitiveness Of Enterprises. *The Journal of V. N. Karazin Kharkiv National University. Series: International Relations. Economics. Country Studies. Tourism*. 2022. 14. C. 69-78. DOI: 10.26565/2310-9513-2021-14-07.
42. Lyulyov, O., Pimonenko, T., Ziabina, Ye., Owusu E. K., Owusu E. (2022). Corporate social responsibility in human resource management. *Herald of Economics*, 4, 102-115.
43. Mahrous, A. A. (2019). Female entrepreneurship in Egypt: new theoretical and public policy implications. *Marketing and Management of Innovations*, 1, 151-160. <https://doi.org/10.21272/mmi.2019.1-12>
44. Makerska V.O., Khomenko L.M., Pimonenko T.V. (2021). Promotion tools in small and medium enterprises: bibliometric analysis. *Проблеми системного підходу в економіці*, 5(85). C. 64-74. DOI: 10.32782/2520-2200/2021-5-10.
45. Mikhnevych, L., Marchenko, V. Hristov, P., & Kuzior, A. (2020). Conceptual Relationships Between Country Image and Economic Security. *Marketing and Management of Innovations*, 1, 285-293. <https://doi.org/10.21272/mmi.2020.1-24>
46. Minchenko, M., Artyukhova, N., Zdoima, A. (2020). Effective models for promoting goods through social networks / *Innovation, Social and Economic Challenges : the International Scientific Online Conference (Sumy, December 1-3, 2020)*, 45-48
47. Minchenko, M., Bezruk, A., Gerasimenko, D. (2020). Ukrainian silicon valley: utopia or reality / *Innovation, Social and Economic Challenges : the International Scientific Online Conference (Sumy, December 1-3, 2020)*, 63-66
48. Minchenko, M., Ivanov O. (2020). Application of content marketing in the formation of marketing strategy of territorial communities / *Innovation, Social and Economic Challenges : the International Scientific Online Conference (Sumy, December 1-3, 2020)*, 35-38
49. Minchenko, M., Korobets, O., Kropuva, V. (2020). Systematization of modern tools to ensure a stable flow of consumers through online sales channels / *Innovation, Social and Economic Challenges : the International Scientific Online Conference (Sumy, December 1-3, 2020)*, 53-56

50. Mlaabdal, S., Chygryn, O., Kwilinski, A., Muzychuk, O., & Akimov, O. O. (2021). Economic Growth and Oil Industry Development: Assessment of the Interaction of National Economy Indicators. Proceedings of the 36th International Business Information Management Association (IBIMA), 8102-8114.
51. Moskalenko, B., Lyulyov, O., Pimonenko, T., & Kobushko, I. (2022). Institutions' Effect on a Country's Investment Attractiveness within Sustainable Development. *Virtual Economics*, 5(4), 50-64.
52. Palienko, M., Lyulyov, O., & Denysenko, P. (2017). Fiscal Decentralisation as a Factor of Macroeconomic Stability of the Country. *Financial markets, institutions and risks*, (1, Is. 4), 74-86.
53. Panchenko, O., Domashenko, M., Lyulyov, O., Dalevska, N., Pimonenko, T., & Letunovska, N. (2021). Objectivation of the ecological and economic losses from solid domestic waste at the heating enterprises. *Management Systems in Production Engineering*, 29(3), 235-241.
54. Panchenko, V., Harust, Yu., Us, Ya., Korobets, O., & Pavlyk, V. (2020). Energy-Efficient Innovations: Marketing, Management and Law Supporting. *Marketing and Management of Innovations*, 1, 256-264. <https://doi.org/10.21272/mmi.2020.1-21>
55. Partlova, P., Strakova, J., Vachal, J., Pollak, F & Dobrovic, J. (2020). Management of innovation of the economic potential of the rural enterprises. *Marketing and Management of Innovations*, 2, 340-353. <https://doi.org/10.21272/mmi.2020.2-25>
56. Pavlenko D. S., Kubatko O. V., Ziabina Y. A. Economic, Social and Technological Factors of Startup's Success. Механізм регулювання економіки. 2020. 1. С. 64-74. DOI: <https://doi.org/10.21272/mer.2020.87.05>.
57. Pimonenko T., Lyulyov O., Ziabina Ye., Vasylyna T. Energy innovation market: analysis of trends and functioning issues. Herald of Economics. Herald of Economics. 2022. 2. С. 152-170. DOI: 10.35774/visnyk2022.02.157.
58. Pimonenko, T. (2018). Ukrainian Perspectives for Developing Green Investment Market: EU Experience. *Economics and Region*, № 4 (71), 5–15.
59. Pimonenko, T., & Lushyk, K. (2017). Zelene investuvannya: dosvid EU dlya Ukrayiny [Green investing: EU experience for Ukraine]. *Visnyk Sums'koho derzhavnoho universytetu. seriya Ekonomika. Bulletin of Sumy State University. Economy Ser*, 3, 61-67.
60. Pimonenko, T., Chygryn, O., & Lyulyov, O. Green branding as a driver to boost the development of green investment market. *Visnyk Cherkaskoho Natsionalnoho universytetu imeni Bohdana Khmelnytskoho. Seriya Ekonomichni nauky*. 2019. Vypusk 1. P. 146–153.
61. Pimonenko, T., Chyhryn, O., & Liulov, O. (2018). Green Entrepreneurship as an Integral Part of the National Economy Convergence. *National Security & Innovation Activities: Methodology. Policy and Practice: a monograph*, 358-366.
62. Pimonenko, T., Liuliov, O., & Us, Y. (2019). Marketing strategies of green investments: basic concepts and specific features. *Herald of Economics*, 1 (91), 177-185.
63. Pimonenko, T., Lyulyov, O., & Chygryn, O. (2018). Marketing of green investment: collaboration between main stakeholders. *Reporter of the Priazovskiy State Technical University. Section: Economic sciences*, 1(36), 214-220.
64. Pimonenko, T., Lyulyov, O., & Chygryn, O. (2019). Company's image and greenwashing in the framework of green investment concept. *Науковий вісник Одеського національного економічного університету*, 2, 143-157.

65. Pimonenko, T., Lyulyov, O., & Us, Y. (2018). Green development of small and medium enterprises of Ukraine: the eu experience. In *Competitivitatea și Inovarea în Economia Cunoașterii* (pp. 69-78).
66. Pimonenko, T., Us, J., Leus, D., & Fedyna, S. (2017). The modern ecological and economic instruments for sustainable development. *Bulletin of Sumy State University. Economy Ser.*, 2, 57-67.
67. Pimonenko, T., Us, Y., Lyulyova, L., & Kotenko, N. (2021). The impact of the macroeconomic stability on the energy-efficiency of the European countries: A bibliometric analysis. In *E3S Web of Conferences* (Vol. 234, p. 00013). EDP Sciences.
68. Pimonenko, T., Us, Y., Myroshnychenko, Y., Dubyna, O., & Vasylyna, T. (2021). Green Financing for Carbon-Free Growth: Role of Banks Marketing Strategy. *Financial Markets, Institutions and Risks*, 5 (3), 71-78.
69. Pimonenko, T., Yu, M., Korobets, O., & Lytvynenko, O. (2017). Ecological stock indexes: foreign experience and lessons for Ukraine. *Bulletin of Sumy State University. Economy Ser.*, 4, 121-127.
70. Podhorska, I., Vrbka, J., Lazaroiu, G., & Kovacova, M. (2020). Innovations in financial management: recursive prediction model based on decision trees. *Marketing and Management of Innovations*, 3, 276-292. <https://doi.org/10.21272/mmi.2020.3-20>
71. Polcyn, J., Us, Ya., Lyulyov, O., Pimonenko, T., & Kwilinski, A. (2022). Factors influencing the renewable energy consumption in selected European countries. *Energies*, 15(1), 108. <https://doi.org/10.3390/en15010108>.
72. Rahmanov F., Letunovska N., Lyulyov O. (2020). Marketing of social tourism. 55th International Scientific Conference on Economic and Social Development. Baku 18-19 June. P. 147-160.
73. Rahmanov, F., Mursalov, M., & Rosokhata, A. (2021). Consumer Behavior in Digital Era: Impact of COVID- 19. *Marketing and Management of Innovations*, 2, 243-251. <http://doi.org/10.21272/mmi.2021.2-20>
74. Rosokhata A., Letunovska N., Jasniewski A. (2020). Current issues of a healthy economy in the region: marketing aspects. Conference proceedings of the 3rd International Scientific Conference «Economic and Social-Focused Issues of Modern World (17-18 November 2020, Bratislava, Slovak Republic). The School of Economics and Management in Public Administration in Bratislava. P. 41-43.
75. Sadiq, W., Abdullah, I., Aslam, K., & Zulfiqar, S. (2020). Engagement Marketing: the Innovative Perspective to Enhance the Viewer's Loyalty in Social Media and Blogging E-Commerce Websites. *Marketing and Management of Innovations*, 1, 149-166. <https://doi.org/10.21272/mmi.2020.1-12>
76. Saher L.Yu., Letunovska N.Ye., Nazarenko A.P. (2020). Comparison of Ukraine and the EU on key indicators of a healthy economy. *Механізм регулювання економіки*, 3, 134-141. <https://doi.org/10.21272/mer.2020.89.10>
77. Saher, L., Kolesnyk, D., Syhyda, L. & Fisunencko, N. (2021). The influence of brands on consumer behaviour in conditions of COVID-19 pandemic: Bibliometric and visualization analysis. *E3S Web of Conferences*, 307, 08003.
78. Shkarlet, S., Kholiavko, N., Dubyna, M., & Zhuk, O. (2019). Innovation, Education, Research Components of the Evaluation of Information Economy Development (as Exemplified by Eastern Partnership Countries). *Marketing and Management of Innovations*, 1, 70-83. <http://doi.org/10.21272/mmi.2019.1-06>

79. Sotnyk, I., Zavrzhnyi, K., Kasianenko, V., Roubik H. & Sidorov O. (2020). Investment Management of Business Digital Innovations. *Marketing and Management of Innovations*, 1, 95-109. <https://doi.org/10.21272/mmi.2020.1-07>
80. Tambovceva, T., Ivanov, I.H., Lyulyov, O., Pimonenko, T., Stoyanets, N., & Yanishevska, K. (2021). Food security and green economy: Impact of institutional drivers. *International Journal of Global Environmental Issues*, 19(1-3), 158-176. <https://doi.org/10.1504/IJGENVI.2020.114871>.
81. Thomas, T. (2020). Employee advocacy as a marketing strategy to power brand promotion: an employee perspective. *Marketing and Management of Innovations*, 2, 167-181. <https://doi.org/10.21272/mmi.2020.2-12>
82. Tiutiunyk, I., Kobushko, I., Ivaniy, O., & Flaumer, A. (2019). Innovations in the Management of Tax Gaps in the Economy: Foreign Economic Component. *Marketing and Management of Innovations*, 3, 112-125. <http://doi.org/10.21272/mmi.2019.3-09>
83. Tovmasyan, G. (2020). Raising the Effectiveness of Tourism Marketing and Branding: Evidence from Armenia. *Marketing and Management of Innovations*, 1, 167-181. <https://doi.org/10.21272/mmi.2020.1-13>
84. Tyukhtenko, N., Makarenko, S., Oliinyk, N., Gluc, K., Portugal, Ed., & Rybachok S. (2019). Innovative development of the regions: cooperation between enterprises and state institutions. *Marketing and Management of Innovations*, 3, 354-365. <http://doi.org/10.21272/mmi.2019.3-27>
85. Us Ya., Pimonenko T., Lyulyov O., Ziabina Ye. (2022). Country's green brand: the main gaps in the scientific treatises. *Vadyba Journal of Management*, 1(38), 9–15.
86. Us, Ya., Pimonenko, T., Lyulyov, O., Chen, Ya., & Tambovceva, T. (2022). Promoting Green Brand of University in Social Media: Text Mining and Sentiment Analysis. *Virtual Economics*, 5(1), 24-41. [https://doi.org/10.34021/ve.2022.05.01\(2\)](https://doi.org/10.34021/ve.2022.05.01(2))
87. Vasilyeva, T.A., Lyeonov, S.V., & Letunovska N.Y. (2020). The economic impact of COVID-19: forecasting for Ukrainian regions. *Socio-Economic Challenges : Proceedings of the International Scientific and Practical Conference* Sumy : Sumy State University, pp. 18-22.
88. Vochozka, M., Horak, J., & Krulicky, T. (2020). Innovations in management forecast: time development of stock prices with neural networks. *Marketing and Management of Innovations*, 2, 324-339. <https://doi.org/10.21272/mmi.2020.2-24>
89. Wang, Q., Chen, Y., Guan, H., Lyulyov, O., & Pimonenko, T. (2022). Technological innovation efficiency in China: Dynamic evaluation and driving factors. *Sustainability*, 14(14), 8321.
90. Wang, Z., Lin, S., Chen, Y., Lyulyov, O., & Pimonenko, T. (2023). Digitalization Effect on Business Performance: Role of Business Model Innovation. *Sustainability*, 15(11), 9020.
91. Zaruska, O., Pavlova, T., Sinyuk, A., Khmarskiy, V., Pawliszcz, D., & Kes, M. (2020). The innovative approaches to estimating business models of modern banks. *Marketing and Management of Innovations*, 2, 26-43. <https://doi.org/10.21272/mmi.2020.2-02>
92. Ziabina Y. (2021). Socio-economic-ecological contradictions in making rational energy efficient decisions. vi. international european conference on social sciences: тези доповідей. : Iksad Global Publications, 2021. C. 556. DOI: ISBN: 978-605-70671-4-2.
93. Ziabina Y. A., Kwilinski A., Belik T. (2021). HR management in private medical institutions. *Health Economics and Management Review*, 2(1), 30-36

94. Ziabina Y., Dzwigol-Barosz M. A (2022). Country's green brand and the social responsibility of business. *Virtual Economics*, 5, 31-49.
95. Ziabina Y., Navickas V. (2022). Innovations in energy efficiency management: Role of public governance. *Marketing and Management of Innovations*, 4, 218-227. DOI: 10.21272/mmi.2022.4-20.
96. Ziabina Y., Pimonenko T. The green deal policy for renewable energy: a bibliometric analysis. *Virtual Economics*. 2020. 3. С. 147-168. DOI: 10.34021/ve.2020.03.04(8).
97. Ziabina Ye., Kovalenko Ye. Regularities In The Development Of The Theory Of Energy Efficiency Management. *SocioEconomic Challenges*. 2021. 5(1). С. 117-132.
98. Ziabina, Y., Kwilinski, A., Lyulyov, O., Pimonenko, T., & Us, Y. (2023). Convergence of Energy Policies between the EU and Ukraine under the Green Deal Policy. *Energies*, 16(2), 998.
99. Ziabina, Y., Pimonenko, T., Lyulyov, O., Us, Y., & Proshkin, D. (2021). Evolutionary development of energy efficiency in the context of the national carbon-free economic development. In *E3S Web of Conferences* (Vol. 307, p. 09002). EDP Sciences.
100. Ziabina, Y., Pimonenko, T., Prasol, L. Carbon-free economy: meta-analysis. *Innovation, Social and Economic Challenges : Proceedings of the International Scientific Online Conference*. 2020. С. 18-20.
101. Ziabina, Ye., Pimonenko, T., Lyulyov, O. Development of green energy in the framework of the European Green Deal. *Social development towards values. Ethics – Technology – Society: тези доповідей*. : Silesian University of Technology, 2020, 101-103.
102. Ziabina, Ye., Pimonenko, T., Starchenko, L. (2020). Energy Efficiency Of National Economy: Social, Economic And Ecological Indicators. *SocioEconomic Challenges*, 4(4), 160-174. DOI: 10.21272/sec.4(4).160-174.2020.
103. Зябіна Є. А., Люльов О. В., Пімоненко Т. В. Розвиток зеленої енергетики як шлях до енергетичної незалежності національної економіки: досвід країн ЄС. *Науковий вісник Полісся*. 2019. 3 (19). С. 39-48.
104. Зябіна Є. А., Пімоненко Т. В. Енергетична політика України: ефективність та напрями її підвищення. *Економічний простір*. 2020. 160. С. 55-59. DOI: <https://doi.org/10.32782/2224-6282/160-10>.
105. Летуновська Н. Є., Хоменко Л. М., Люльов О. В. та ін. *Маркетинг у цифровому середовищі: посібник / підручник / за ред. Летуновської Н. Є., Хоменко Л. М.*. Суми: СумДУ, 2021. 259 с.
106. Летуновська Н.Є., Далечін О.Ю., Беляєва К.О. Практичні аспекти бізнес-планування в системі реалізації інвестиційного проекту. *Маркетинг і менеджмент інновацій*. 2017. №3. С. 226-235.
107. Летуновська, Н. Є., & Люльов, О. В. (2020). *Маркетинг у туризмі*.
108. Любчак В.В., Любчак В.П., Тимченко А.С., Хоменко Л.М. *Історія служби крові: монографія*. Суми: ПФ «Видавництво «Сумський державний університет», 2020. 336 с.
109. Люльов, О. В. (2018). *Макроекономічна стабільність національної економіки: соціальні, політичні та маркетингові детермінанти* (Doctoral dissertation, Сумський державний університет).
110. Мінченко, М. (2015). Концептуальні основи формування системи управління конкурентоспроможності банківських послуг. *Фінансовий простір*, 2(18), 63-68.

- 111.Олещук М.Г. (2012). Визначення оптимального співвідношення ціни та якості депозитних банківських послуг для фізичних осіб. *Економічний вестник університета. Сборник научних трудов учених і аспірантов*, (19-1), 167-171.
- 112.Павленко М.С., Хоменко Л.М. (2022) Інструменти партнерського маркетингу для малого та середнього бізнесу. *Вісник СумДУ. Серія Економіка*, 4, 25-33.
- 113.Пімоненко Т.В., Люльов О.В., Зябіна Є.А., Макаренко І. О., Василина Т. М. Прогнозування структури енергетичного балансу України: питома вага відновлюваних джерел енергії. *Науковий погляд*. 2021. 4(74). С. 21-27.
- 114.Пімоненко, Т. В. (2019). Маркетинг і менеджмент зелених інвестицій: дисертація... д-ра екон. наук, спец.: 08.00.04—економіка та управління підприємствами (за видами економічної діяльності). *Суми: СумДУ*.
- 115.Пімоненко, Т., & Люльов, О. (2019). Стратегії маркетингу «зелених» інвестицій: основні положення та особливості. *Вісник Економіки*, (1), 177-185.
- 116.Пімоненко, Т., Люльов, О., Зябіна, Є., Василина, Т. (2021). Оцінювання причинно-наслідкових зв'язків між детермінантами енергоефективності країни в контексті імплементації європейської зеленої угоди. *Вісник Економіки*, 2, 80-89.
- 117.Сабадаш, В. В., & Люльов, О. В. (2012). Науково-методичні підходи до розроблення варіантів ефективної стратегії розвитку підприємства.
- 118.Сигида Л.О., Сагер Л.Ю., Летуновська Н.Є. (2019). Формування стратегії випереджального інноваційного розвитку в умовах індустрії 4.0. *Економічний аналіз*, 29(2), 53-61. 10.35774/есона2019.02.053).
- 119.Хоменко Л.М., Вакуленко І.А., Мінченко М.Г. (2020). Витрати на інноваційну діяльність як драйвер інтенсифікації трансферу інновацій в сфері енергетики. *Інфраструктура ринку*, 69, 54-63.
- 120.Хоменко Л.М., Сагер Л.Ю., Любчак В.В. (2022). Дослідження проблем ринку служби крові України. *Інфраструктура ринку*, 65, 110-115.
- 121.Хоменко Л.М., Чигрин О.Ю. (2022). Вуглецевий нейтралітет України до 2050 року. *Вісник СумДУ. Серія Економіка*, 4, 152-158.
- 122.Чигрин О., Хоменко Л., Калітай Г. (2021). Маркетингові стратегії забезпечення сталого конкурентоспроможного розвитку підприємств. *Вісник Харківського національного університету імені В. Н. Каразіна, серія «Міжнародні відносини, економіка, країнознавство, туризм»*, 14, 126-137.
- 123.Чигрин, О. Ю. (2002). Проблеми оцінки інвестиційної привабливості підприємства. *Тези Всеукраїнської науково-практичної конференції «Інвестиційно-інноваційна стратегія розвитку підприємства»*. Житомир: ЖДТУ, 55-56.
- 124.Чигрин, О. Ю. (2018). Зелене споживання: передумови та перспективи просування. *Вісник Сумського державного університету. Серія «Економіка»*, 3, 82–86.
- 125.Чигрин, О. Ю. (2018). Зелені споживачі: структура та профіль. *Вісник Сумського державного університету. «Серія «Економіка»*, 4, 72–76.
- 126.Чигрин, О. Ю., & Пімоненко, Т. В. (2011). Еколого-економічні аспекти впровадження сучасних інструментів екополітики в корпоративному секторі. *Збірник наукових праць Національного університету державної податкової служби України*, 1, 602-614.
- 127.Чигрин, О. Ю., Красняк, В. С. (2015). Теоретико-прикладні аспекти розвитку екологічного інвестування в Україні. *Маркетинг і менеджмент інновацій*, 3, 226–234.

128. Чигрин, О. Ю., Мельник, Л. Г., Дегтярьова, І. Б., Шкарупа, О. В. (2014). Соціальна і солідарна економіка при переході до сестейнового розвитку: досвід ЄС. *Механізм регулювання економіки*, 4, 89–99.
129. Чигрин, О. Ю., Мішенін, Є. В., Дутченко, О. М., Пізняк, Т. І. (2019). Механізми узгодження соціо-еколого-економічних протиріч при чистому виробництві. *Збалансоване природокористування*, 4, 61–66.
130. Чигрин, О. Ю., Петрушенко, Ю. М., Скляр, І. Д., Млаабдал, С. А. (2018). Соціально-економічні пріоритети екологічно орієнтованого інноваційного розвитку. *Фінансові дослідження*, 1 (4), 14–20.
131. Чигрин, О. Ю., Хенс, Л., Мельник, Л. Г., Дегтярева, І. Б., Чмут, А. С. (2018). The development of green technologies in the agro-industrial complex: the EU experience and the prospects for Ukraine. *Механізм регулювання економіки*, 4, 9–20.
132. Чигрин, О. Ю., Щербак, А. С. (2011). Аналіз проблем впровадження екологічно чистого виробництва в Україні. *Механізм регулювання економіки*, 1, 235–241.