



Cz. 5175
Pr inw. 62738

CONTENTS

Foreword	7
1. Ayesha AMJAD, Piotr KORDEL, Gabriela FERNANDES – The systematic review in the field of management sciences	9
2. Beata BARCZAK – Typology of business network models: a proposal based on a systematic literature review	37
3. Judit BILINOVICS-SIPOS, Regina Zsuzsánna REICHER – Overview of the concepts of bottleneck in the operation process	55
4. Mateusz CHŁAD – Analysis of an enterprise's supply chain management by means of the measure method	69
5. Bożena GAJDZIK, Hana ŠTVERKOVÁ – Industry 4.0 workforce: encyclopedia of the digital professions by groups of technological innovation	79
6. Piotr HETMAŃCZYK – Barriers and determinants of restructuring employment in the mining industry under the just transformation mechanism. Survey results	99
7. Małgorzata HORDYŃSKA, Marzena KUCZYŃSKA-CHAŁADA, Teresa LIS – Analysis of the implementation of changes in supply chains towards a circular economy	119
8. Ayesha IQBAL – The current epidemiological analysis and measures taken by the Republic of Poland to combat deadly infectious corona virus disease	133
9. Bartłomiej JABŁOŃSKI, Dorota KIKA – Impact of the Covid-19 pandemic on the choice of investment strategies and investors' behavior on the Warsaw Stock Exchange – 2017-2020 research findings	145
10. Zdzisław JEDYNAK – Attributes of the commercial offer of the petrol station network addressed to micro and small road transport enterprises in the Podkarpackie voivodeship	163
11. Magdalena JERZEMOWSKA, Krzysztof KRZYWDZIŃSKI – Impact of EU allowances cost on the financial results of Polish power companies	179
12. Alfreda KAMIŃSKA – The activity of business environment institutions in terms of supporting the innovativeness	203
13. Dominika KANSY – Technological conditions for Logistics 4.0 development	215
14. Marzena KRAMARZ – Logistics coordination in building the resilience of the distribution network	233
15. Mariusz KRUCZEK, Magdalena PICHLAK – Resolve model in mapping the circular economy initiatives of Silesian enterprises	249
16. Sabina KUBICIEL-ŁODZIŃSKA, Jolanta MAJ, Katarzyna WIDERA, Piotr BĘBENEK, Bogdan RUSZCZAK, Marta SOKOŁOWSKA – Escaping brain waste. Work experience and qualifications of highly skilled Ukrainians in Poland	267

2024 DCz. 200

17. Katarzyna ŁUKANISZYN-DOMASZEWSKA, Katarzyna MAZUR-WŁODARCZYK, Elżbieta KARAŚ – Chinese FDI in Poland and the Czech Republic – inflows, determinants and challenges	283
18. Zygmunt ŁUKASZCZYK, Przemysław GRANIECZNY – Management of the critical infrastructure used for the transport of fossil raw materials – a case study	301
19. Tomasz MAŁYSA – Application of the creeping trend model for forecasting of accident events in the steel industry in Poland	313
20. Patrycja MARZEC-BRAUN – Innovative potential of enterprises in the Lublin region on the example of start-up organizations	325
21. Michał MIROS – Changes in the technical condition of vehicle brakes compared to 2014 year	341
22. Urszula MOTOWIDŁAK, Tomasz MOTOWIDŁAK – Development and financing of infrastructure investments to shape sustainable and resilient mobility	349
23. Andrzej PACANA, Jacek PACANA, Martin STRAKA, Artur WOŹNY – Organization of reverse engineering using modern calculation methods in the process of reproducing a gears	371
24. Marcin PASKA, Kacper BUDNIK – Trust as a participant in the adaptation of technological changes	383
25. Mariusz POŻOGA, Dawid OLEWNICKI – The impact of the organization of the working day on production efficiency in the laboratory of plant tissue cultures ...	393
26. Ewa PRAŁAT – A new approach to purchase in domestic SMEs	407
27. Beata REFORMAT – Towards change – from classical to contemporary approaches and classification of innovation	423
28. Jędrzej SICIŃSKI – Early warning systems against bankruptcy risk and NLP: can ChatGPT predict corporate distress?	439
29. Dagmara SKURPEL, Monika WODNICKA – Reverse logistics of e-commerce as a challenge for the cep industry	457
30. Mirosław SOŁTYSIAK, Dariusz ZAJĄC – Assessment of the financial situation of rural municipalities in Poland depending on the activity of their inhabitants in the development of non-agricultural business activity	481
31. Mirosław SOŁTYSIAK, Dariusz ZAJĄC – Diversification of the financial situation of households in the eastern and western regions of Poland	499
32. Jerzy SURMA – The business dimension of Metaverse	517
33. Bartosz SYLWESTRZAK – Managing selected areas of preparation military personnel for their assigned roles in the state	531
34. Tomasz SZEWC, Karina SZYMAŃSKA – Green public procurement from the contractor's perspective	551
35. Monika SZYMURA – Implementation of EU law into the Polish consumer protection law, with particular emphasis on the Omnibus Directive	567

36. Katarzyna WALECKA-JANKOWSKA, Jagoda MRZYGŁOCKA-CHOJNACKA – Relationship between environmental innovation and sustainable outcomes – empirical evidence from Poland	577
37. Monika WAWER – Shaping sustainable development competencies through student internships	595
38. Agata WOJCIECHOWSKA – Evaluation of design maturity models for usability in the it industry	629
39. Radosław WOLNIAK – Design thinking and its use to boast innovativeness	647
40. Radosław WOLNIAK – Industry 5.0 – characteristic, main principles, advantages and disadvantages	663
41. Radosław WOLNIAK – Smart mobility in a smart city concept	679
42. Anna WÓJCIK-KARPACZ, Jarosław KARPACZ, Anna PIETRUSZKA-ORTYL – Learning orientation, firm performance and market dynamism among MSMEs: an empirical study	693
43. Joanna ZAREBSKA, Natalia HOWIS, Małgorzata BARSKA – Research on students' perception of information technology security – a new era of threats	709
44. Justyna ZIOBROWSKA-SZTUCZKA – Equity crowdfunding in 2020-2022: development opportunities and barriers in Poland	723
45. Paulina ŻMIJOWSKA – The e-commerce market in conditions of uncertainty – development perspectives. Case study	735