THE RELATIONSHIP BETWEEN THE KNOWLEDGE ECONOMY AND MARKETING: A BIBLIOMETRIC ANALYSIS

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ABSTRACT

Knowledge is a commodity of the knowledge economy, produced, disseminated and consumed in this environment. It should be noted that the main enablers, the political system and society, and the main consumers, the economy and society, are highlighted. Moreover, various marketing tools can be applied to promote a knowledge-based economy and ensure lifelong learning. The selection of marketing solutions is contingent upon the degree to which society is prepared to transition to a knowledge-based economy. Thus, a need exists to investigate the relationship between the knowledge economy and marketing. The aim of this research is: by applying the bibliometric analysis method, to analyse the relationship between the knowledge economy and marketing. The analysis conducted revealed that the knowledge economy is a relevant scientific field. Topic trend analysis revealed a shift in studies. From 2016 to date, the emphasis has been on decision-making, manufacturing, sustainability and sustainable development. The focus of studies has shifted from the United States and the European Union to China. This suggests future research directions, such as research into the application of the knowledge economy in different settings and different sectors, and research into the relationship between the knowledge economy and sustainability issues.

KEY WORDS: *knowledge economy*, *marketing*, *bibliometric analysis.*

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Introduction

Businesses, organisations, and society as a whole, are realising the value that comes from investing in human capital, innovation, research and development. With the rapid advance of new industries, the globalisation of closely linked governments, security concerns and progressive economic reforms, it can be argued that people and knowledge have become indispensable for any kind of society's growth or sustainability. The development of the knowledge-based economy as a contemporary, advanced, inclusive, competitive and sustainable economy is greatly influenced by the roles played by both state and non-state actors (Tudzarovska-Gjorgjievska, 2014). Moreover, the implementation of various artificial intelligence tools and changes in technology raise the need to ensure life-long learning possibilities.

The knowledge economy has been first described as 'an economy built directly on the creation, dissemination, and application of knowledge and information' (OECD, 1996, 7). The rise in high-tech industries, labour skills and associated productivity in national economies all reflect this. It is interesting to note that researchers still frequently use this definition. The foundation of such an economy, according to Mazur and Malkowski (2021), is 'the application of human knowledge to all industrial processes', with a focus on the

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observable and quantifiable aspects of the knowledge economy process. It should be highlighted that this description does not fully include all the components that make up the knowledge economy.

Tudzarovska-Gjorgjievska (2014) emphasises that political and social openness is an essential condition for a successful transition to a knowledge economy. Mazur and Malkowski (2021, 157) add that technological and organisational progress depends on changes in a country's socio-economic policies and public attitudes. However, while agreeing with the researchers' statements, it should be added that the knowledge economy is not a spontaneous process, but rather an artificial phenomenon that requires the consistent contribution of the participants to sustain it (a view shared by: Atkočiūnienė et al., 2006, 61; Melnikas, 2015, 95). Thus, in the researchers' insights, it can be observed that knowledge is a commodity of the knowledge economy, which is produced, disseminated and consumed in this environment. It should be noted that the key enablers are highlighted, the political system and society, and the main consumers are highlighted, business and the same society (a similar view is expressed by Wierzbicka, 2018, 126).

The selection of marketing solutions is contingent upon the degree to which society is prepared to transition to a knowledge-based economy. First, information regarding the importance of knowledge needs to be spread, providing an answer to the query 'What is it?' At a higher level, the selection of instruments responds to the query 'Who needs it?' and reflects the necessity of implementing the knowledge economy. The last step would be to deal with specific recommendations, and appreciating their worth necessitates a responsible, educated and mature public that can respond to the questions 'What to do?' and 'How to do it?'

As early as 1999, the World Bank proposed a concept of the knowledge economy in a publication entitled Knowledge Assessment Methodology, stating that it consists of four main pillars: the economic environment and institutional regime; education and human resources; the innovation system; and information and communication technologies (ICTs) (Guita Martínez et al., 2021, 333; World Bank, 2007, 23; Al-Busaidi, 2014, 15). The conditions for a knowledge-based development process would include an effective institutional regime that promotes the creation, dissemination and use of knowledge, an educated and skilled workforce, an effective innovation system, and a modern information infrastructure. The diffusion of these tools is a major focus of the policies adopted by countries. It should be noted that a knowledge-based economy also requires the use of marketing tools to attract the interest of different stakeholders. It should be noted that academic literature treats the components, drivers, tools and marketing elements of the knowledge economy separately.

The research question can therefore be formulated as follows: What is the relationship between the knowledge economy and marketing?

Research object: articles on the knowledge economy and marketing.

Research aim: to analyse scientific trends in the relationship between the knowledge economy and marketing, and propose future research directions.

Research methods: bibliometric analysis.

1. Methodology of the research

The bibliometric analysis method was applied to analyse the scientific literature on the relationship between the knowledge economy and marketing. This methodology allows for the analysis of a broader sample of scientific papers, and avoids biases related to the sample selection process.

Bibliographic data for the analysis of the knowledge economy and marketing were extracted from the Scopus database, which is often used for this type of research. The research concerned all scientific studies that contained the words knowledge economy and marketing keywords (including possibilities of different endings of the words: marketer, marketing, market, and so on). The initial research phase yielded a sample of 5,829 sources, duplicates were removed, and the final sample consisted of 5,757 articles. Inclusion criteria: articles written in English. Time frame: 2015 to 2024. Exclusion criteria: white papers, proceedings, conference papers, and articles written in other languages. The Bibliometrix package of R (Aria, Cuccurullo, 2017) and VOSviewer (Van Eck et al., 2010) were used to analyse the bibliometric data. These tools were used to analyse the performance of the knowledge economy and marketing in academia, and to suggest future research directions.

2. Performance analysis on the relationship between the knowledge economy and marketing

Bibliometrics R Package (bibliometrix 4.0.0 software, biblioshiny app, a web-interface for bibliometrix) was used to conduct a performance analysis. The sample consists of 5,757 articles, written by 12,300 authors, and published in 2,104 sources, with a 9.63% annual growth rate, and 25.57 average citations per article. Average of articles: 8.45 years. A total of 1,669 articles were single-authored. Co-authors per article: 2.42. A total of 24.65% of articles had international co-authorship. The authors used 14,740 key words.

The recent development in literature on the knowledge economy and marketing topics is presented in Fig. 1. As can be seen, the first studies on this topic emerged in 1957, while the number of publications increased rapidly from 2010. In 2023, 583 articles on the topic were published. When analysing the data on average citations per article, it can be seen that this measure has been decreasing in recent years.

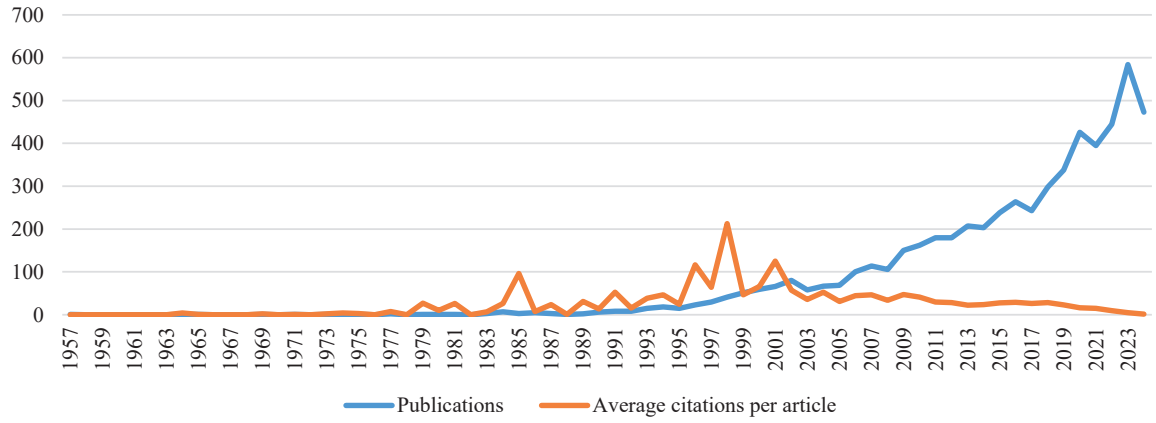

Figure 1. Publication and average citation patterns

Table 1 lists the ten countries with the highest count of published and cited studies. Publications and citation counting is a commonly used method to measure the impact of research on the scientific community; it allows for an assessment of the most productive countries, and identifies publishing trends. The country with the highest number of published papers is the USA, with 1,398 publications, followed by the United Kingdom (1,069), China (830), India (485), and Australia (422). A different ranking order of countries can be observed when analysing data on citations. The country with the highest number of citations is the USA, with 22,203 citations, followed by the United Kingdom (15,023), China (7033), Australia (5,335), and Germany (4,951). The country with the highest number of average paper citations is Israel, with 62.70 average paper citations, followed by Congo (47.00), the USA (45.60), Uganda (41.30), and Hong Kong (41.20).

Fig. 2 shows clusters of collaborative networks. In the first cluster (green), scientists from Germany, Italy, Portugal, Colombia, Belgium, Mexico, Slovenia, Greece, France, Denmark, Canada, Brazil, and other countries are led by scientists from the USA and the UK. Another strong cluster (purple) is made up of scientists from China, New Zealand, Korea, Singapore, Hong Kong, India, South Africa, Ghana, Nigeria and Bangladesh. Scientists from Jordan, Egypt, the United Arab Emirates, Saudi Arabia, Malaysia and Indonesia also collaborate (the red cluster).

Table 1. The most cited and productive countries by total publications and total citations

Country	Total Publications	Total Citations
USA	1398	22203
United Kingdom	1069	15023
China	830	7033
India	485	3417
Australia	422	5335
Italy	343	2996
Germany	327	4951
Canada	276	3769
Spain	270	1791
Malaysia	256	1628

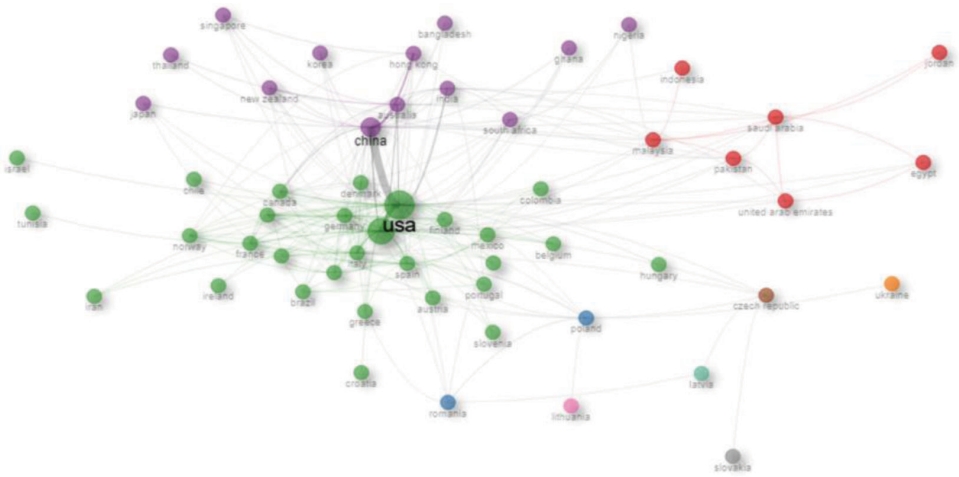

Figure 2. Collaboration networks

Another relevant metric for analysing the most influential countries is to examine the countries of the corresponding authors, as it shows common collaborations between countries. In multiple-country publications, the United Kingdom, with 159 publications, is the leading country by corresponding author, followed by China (120 publications), the USA (117), Italy (48), and Germany (45). In single-country studies, the leading country by corresponding author is the USA, with 370 publications, followed by the United Kingdom (329 publications), China (208), India (193), and Australia (120). Scientists from Peru, Kuwait, Bolivia, Congo, Cuba, Lebanon, the Maldives, Myanmar, San Marino, Senegal, Trinidad and Tobago, Venezuela and Yemen were only involved in multiple-country publications.

The most cited and productive journals in the field of the knowledge economy and marketing are analysed in Table 2. The most cited source is the Journal of Cleaner Production, with 3,177 citations. The most prolific sources on this topic include Sustainability (152 publications), the Journal of the Knowledge Economy (67), and the International Journal of Emerging Markets (55). The results show that attention to the knowledge economy and marketing comes not only from business and management journals but also from sustainability and industry journals, emphasising a multidisciplinary approach to the topic.

Table 2. The most cited and productive journals

Source	Total Publications	Total Citations
Sustainability	152	2839
Journal of the Knowledge Economy	67	1141
International Journal of Emerging Markets	55	1001
Journal of Cleaner Production	54	3177
Technological Forecasting and Social Change	53	1781
International Business Review	35	3103
Journal of Business Research	30	1487
European Planning Studies	28	706
Management Decision	25	696
Journal of Business and Industrial Marketing	24	511

Table 3 lists the most cited studies in the sample. Counting citations to publications is also a commonly used method to measure the influence of research in a particular field. The ten most cited studies have been identified. From this analysis, it can be seen that the most cited article on the subject, with 196,59 total citations per year, is by M. E. Porter (1998), entitled 'Clusters and the new economics of competition', which emphasises that anything that can be efficiently sourced from a distance through global markets and corpo-

Table 3. The most cited studies

Title	Authors	Source	Year	Total citations
Clusters and the new economics of competition	Porter, M. E.	Harvard Business Review	1998	5308
Knowledge and Organization: A Social-Practice Perspective	Brown, J. S., Duguid, P.	Organization Science	2001	2299
Capturing value from knowledge assets: The new economy, markets for know-how, and intangible assets	Teece, D. J.	California Management Review	1998	1822
Knowledge Networks as Channels and Conduits: The Effects of Spillovers in the Boston Biotechnology Community	Owen-Smith, J., Powell, W. W.	Organization Science	2004	1564
The determinants of national innovative capacity	Furman, J. L., Porter, M. E., Stern, S.	Research Policy	2002	1426
Regional innovation systems, clusters, and the knowledge economy	Cooke, P.	Industrial and Corporate Change	2001	1306
The eclectic paradigm as an envelope for economic and business theories of MNE activity	Dunning, J. H.	International Business Review	2000	1101
Market, Hierarchy, and Trust: The Knowledge Economy and the Future of Capitalism	Adler, P. S.	Organization Science	2001	1070
A review of innovation research in tourism	Hjalager, A. M.	Tourism Management	2010	1007
Increasing returns and the new world of business	Arthur, W. B.	Harvard Business Review	1996	816

rate networks is available to any company and is essentially nullified as source of competitive advantage. The second most cited paper, with 95,79 total citations per year, is by Brown and Duguid (2001), who argue that the concept of knowledge in organisational studies is often contradictory and partial, and suggest that the community of practice is a unifying unit of analysis for understanding knowledge in companies, where practice creates epistemic differences between communities and the company's advantage lying in dynamically coordinating knowledge despite these differences. The third most cited paper, with 67.48 total citations per year, is by D. J. Teece (1998), in which abstracts of various research papers on management, innovation and knowledge management were collected. The topics covered include marketing, logistics, intellectual capital and organisational performance. The fourth most cited paper, with 74.48 total citations per year, is by Owen-Smith and Powell (2004), who express the importance of knowledge networks, geographical proximity and institutional support for innovation and regional development, and highlight the role of brokerage, social capital and absorptive capacity in facilitating knowledge exchange and innovation. The fifth most cited paper, with 62.00 total citations per year, is by Furman et al. (2002), in which the authors introduce the concept of national innovative capacity to integrate previous perspectives on the sources of differences in innovation intensity and R&D productivity across countries, and provide an empirical framework to distinguish between alternative sources of these differences.

Fig. 3 shows a thematic map of sample papers. As can be seen from this graph, innovation is a core element associated with the knowledge economy. Other core elements, such as emerging markets, knowledge transfer, entrepreneurship, sustainability and globalisation, should also be emphasised.

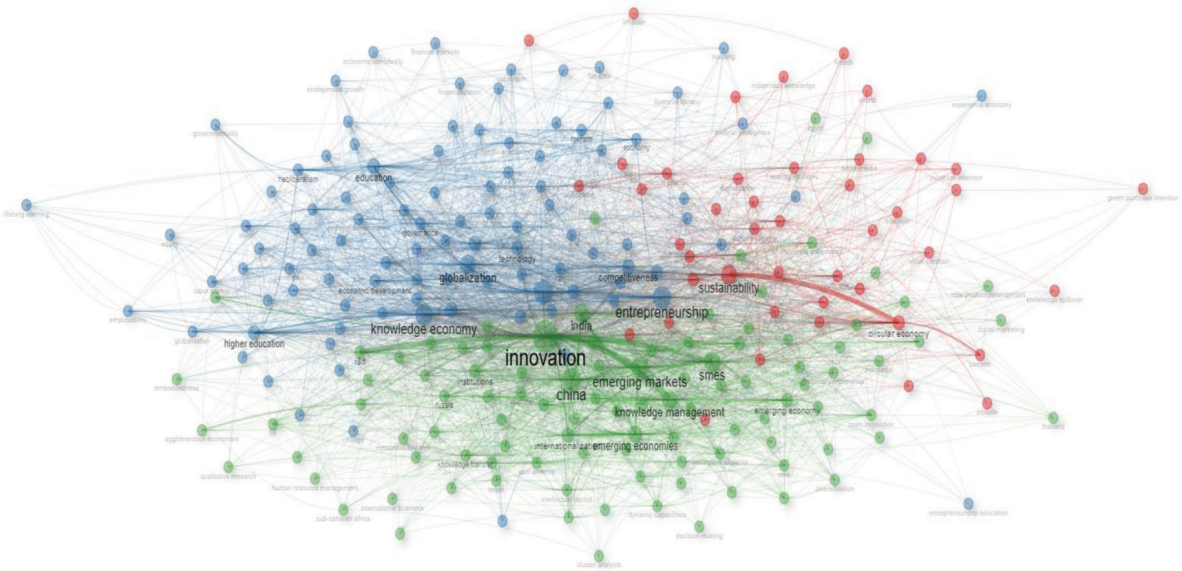

Figure 3. A thematic map

Fig. 4 shows the thematic evolution of the research field. In the period 1957 to 2020, articles analysing marketing, innovation and knowledge were published most in sample papers. In recent years (from 2021 to 2024), the innovation field has been divided into a few streams: articles analysing innovation in China, innovation in different fields, and innovation in the rural economy). Marketing has evolved into the field of commerce.

Most authors (91.2%) contributed to the research field with only one article, indicating limited participation in scientific production. A much smaller proportion of authors (6.5%) published two articles. The proportions decrease as the number of published articles increases. Table 4 shows the most important authors in the field of research.

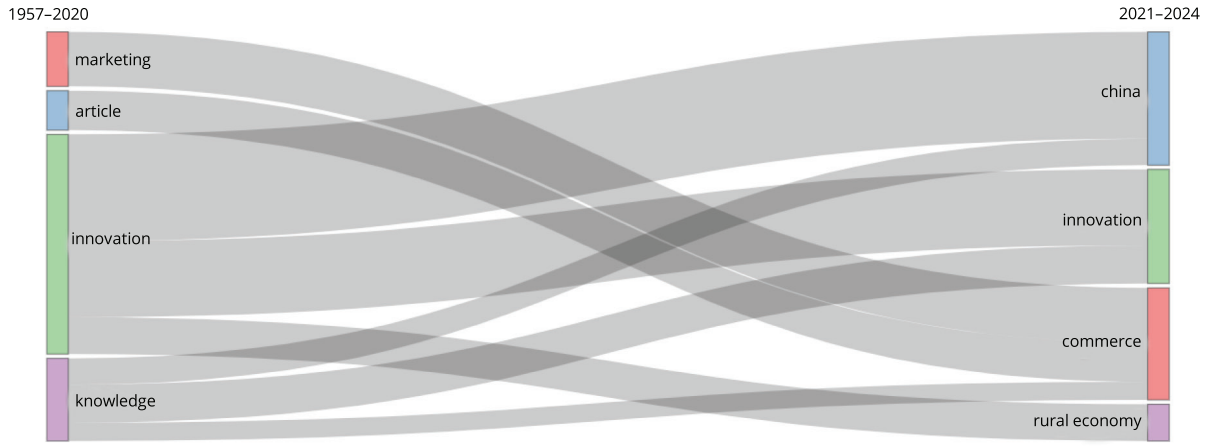

Figure 4. Thematic evolution

Table 4. The most cited and most productive authors

Author	Total Publications	Total Citations
Liu, Y.	18	1048
Li, Y.	15	1036
Zhang, X.	14	196
Le, T. T.	13	170
Wang, J.	13	421
Zhang, Y.	12	133
Antonelli, C.	11	261
Li, J.	11	308
Cooke, P.	9	1735
Khan, Z.	9	249

As can be seen from Table 4, the most productive author is Yajun Liu (18 publications) followed by Yan Li (15), but the most influential authors are Philip Cooke and Yajun Liu, with a total of 1,735 and 1,048 citations respectively.

3. Network analysis on the relationship between the knowledge economy and marketing

VOSviewer version 1.6.20 software and the Bibliometrix R package were used to conduct a network analysis. Using these tools, it was possible to map the trend topics and the keywords of documents using co-occurring data.

To investigate the relationship between the knowledge economy and marketing, the co-occurrence of keywords was analysed (see Figs. 5 and 6). The analysis showed that there are differences between the keywords chosen by the authors and the keywords used in a broader context (titles, abstracts and authors' chosen keywords). In analysing keywords, it was also found that the most often recurring keywords are innovation (248; 4% of keywords used), knowledge (218; 4%), China (170; 3%), labour market (158; 3%), and commerce (149; 3%). Meanwhile, authors more often chose the following keywords: innovation (293; 2% of keywords used), knowledge economy (167; 1%), China (158; 1%), emerging markets (134; 1%), and

knowledge (120; 1%). The results of the analysis show that innovation is crucial for the realisation of the knowledge economy, and is linked to economic development, sustainability, marketing, knowledge management, and even the circular economy.

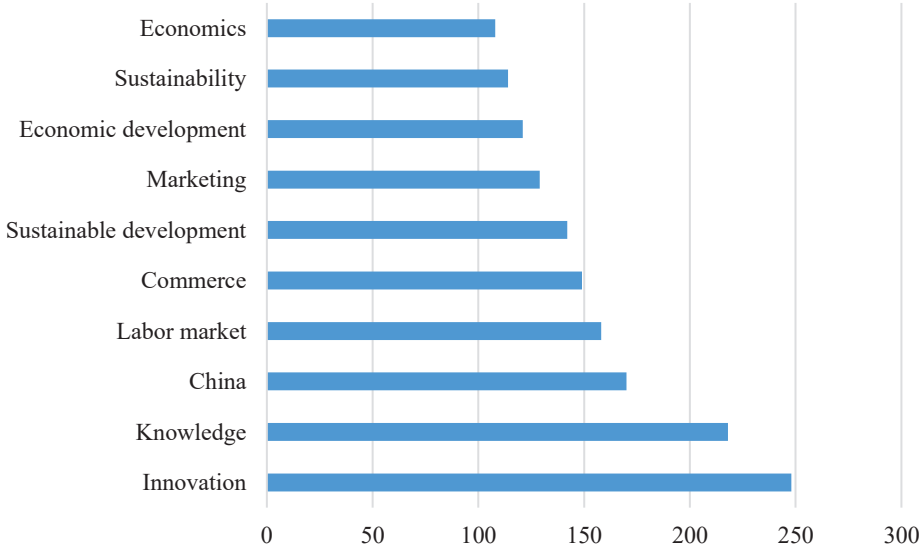

Figure 5. Keyword plus

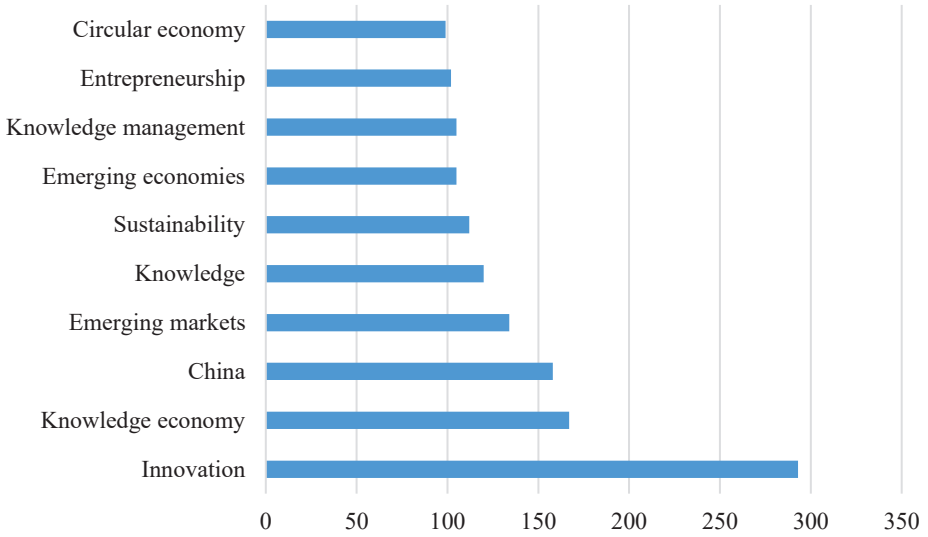

Figure 6. Authors' keywords

The co-occurrence analysis of keywords identified four clusters of the knowledge economy and related topics (see Table 5). The clusters were not of the same size, as there was a difference between the number of occurrences of keywords and the strength of the links between the keywords. The results of the cluster analysis are also presented in Fig. 7 through a network diagram, which helped to identify four search clusters, each consisting of numerous keywords connected by multiple lines.

Table 5. Analysis of keywords

Cluster 1 (red) Political environment influence			Cluster 2 (green) Economic and management issues			Cluster 3 (Blue) Labor market demand			Cluster 4 (Yellow) International aspects		
Keywords	OC	LS	Keywords	OC	LS	Keywords	OC	LS	Keywords	OC	LS
Africa	52	114	Article	50	183	Agglomeration	52	181	Economic growth	144	437
Business	60	181	China	265	609	Asia	62	233	Foreign direct investment	71	168
Capitalism	42	97	Circular economy	107	206	Economic development	146	482	Industrial performance	44	185
Climate change	61	144	Commerce	145	424	Education	94	182	Information technology	59	144
Competitiveness	117	342	Competition	81	220	Employment	120	382	Innovation	453	1147
Consumption behaviour	48	121	Corporate governance	42	23	Eurasia	78	329	International trade	59	165
Covid-19	46	60	Corporate social responsibility	48	86	Europe	106	346	Learning	72	206
Developing world	80	325	Decision making	63	172	European Union	76	209	Manufacturing	85	296
Development	50	102	Developing countries	78	250	Financial market	47	110	Multinational enterprise	43	132
Economic conditions	41	121	Digital economy	42	46	Germany	52	146	Productivity	49	135
Economy	43	63	Economic and social effect	43	166	Global economy	47	161	Research and development	60	234
Empirical analysis	54	224	Economics	121	310	Globalization	168	448	Service sector	45	154
Entrepreneur	75	261	Emerging economies	124	182	Higher education	115	171	Spillover effect	55	227
Entrepreneurship	99	171	Emerging economy	57	47	Human capital	101	280	Technological change	42	148
Environmental economics	47	192	Emerging markets	141	191	Investment	87	236	Technological development	59	248
Ghana	41	52	Human	45	118	Knowledge	312	812	Technology transfer	62	178

Cluster 1 (red) Political environment influence			Cluster 2 (green) Economic and management issues			Cluster 3 (Blue) Labor market demand			Cluster 4 (Yellow) International aspects		
Governance	40	66	India	119	237	Knowledge economy	212	438			
Governance approach	55	188	Intellectual capital	45	51	Labor market	176	498			
Green economy	59	190	Internationalisation	63	93	Labour market	47	61			
Market conditions	72	227	Investment	47	164	Market transition	40	121			
Neoliberalism	65	118	Knowledge based systems	48	161	Regional development	52	175			
Policy making	41	121	Knowledge management	153	283	Regional economy	68	222			
Political economy	116	210	Knowledge transfer	46	71	Skilled labor	42	140			
Rural economy	61	121	Management	42	91	United Kingdom	70	197			
Sharing economy	51	71	Marketing	174	383	United states	101	333			
South Africa	60	113	Performance	45	90	Urban economy	78	226			
Strategic approach	60	240	SMEs	82	127						
Sustainability	190	494	Supply chain management	45	105						
Theoretical study	55	149	Sustainable development	173	515						
Tourism	51	105	Technology	47	132						

OC – Occurrences, LS – Link Strength.

The four clusters identified after the co-occurrence analysis indicate words occurring most frequently together in the sample studies and are described as follows:

- Cluster 1 (marked as red in Fig. 7): studies include consumer behaviour, economic conditions, political economy of business, sustainability to create knowledge and innovation.
- Cluster 2 (green): studies analysing links between knowledge management and marketing, commerce, decision-making, competition, and the circular economy.
- Cluster 3 (blue): studies analysing the impact of the labour market, education, and skilled labour on economic growth.
- Cluster 4 (yellow): studies analysing the relationship between innovation and knowledge for economic development, technological change, technology transfer and development, and spillovers in different regions from Europe to Eurasia. These studies also examine the impact of research and development, learning, international trade, and foreign direct investment on knowledge creation.

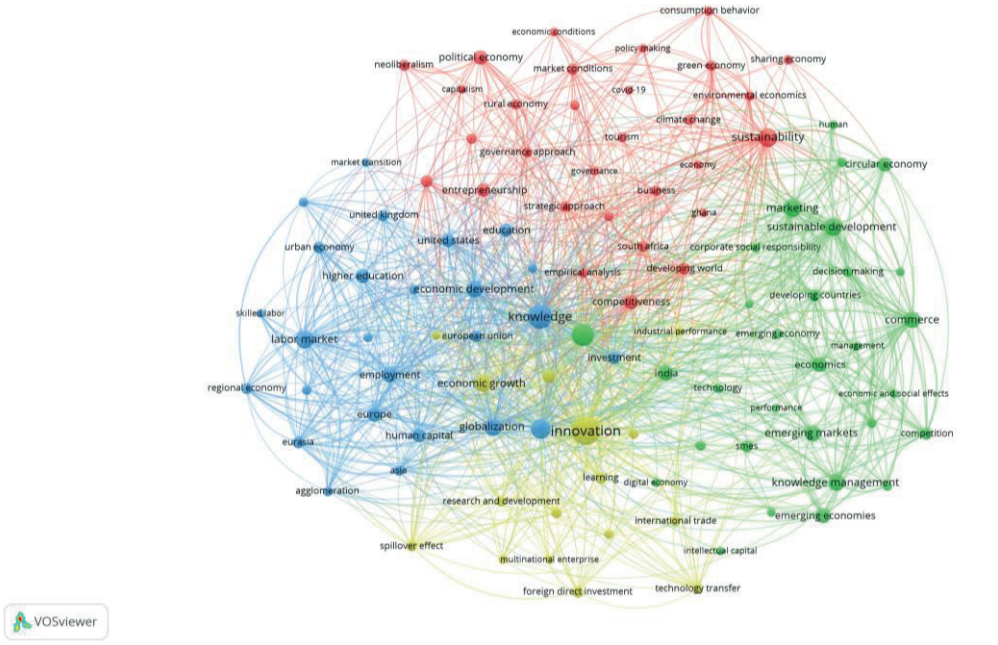

Figure 7. Co-occurrence keyword network

A density analysis was carried out to better understand the central topic developed in the knowledge economy and marketing scientific field. This type of analysis does not consider interconnections between keywords, but rather highlights the main topics related to the scientific line. As can be seen from Fig. 8, research on knowledge, the knowledge economy and innovation are central themes in the sample. Marketing, sustainability, sustainable development, commerce and knowledge management are also of particular importance.

The knowledge economy is related to many elements, so it is relevant to identify future research trends. A topic trend analysis was performed using the Bibliometrix package of R. Fig. 9 shows the evolution of the topics. The bubbles represent the median years in which different keywords were most used, and the lines represent the duration of use of these keywords.

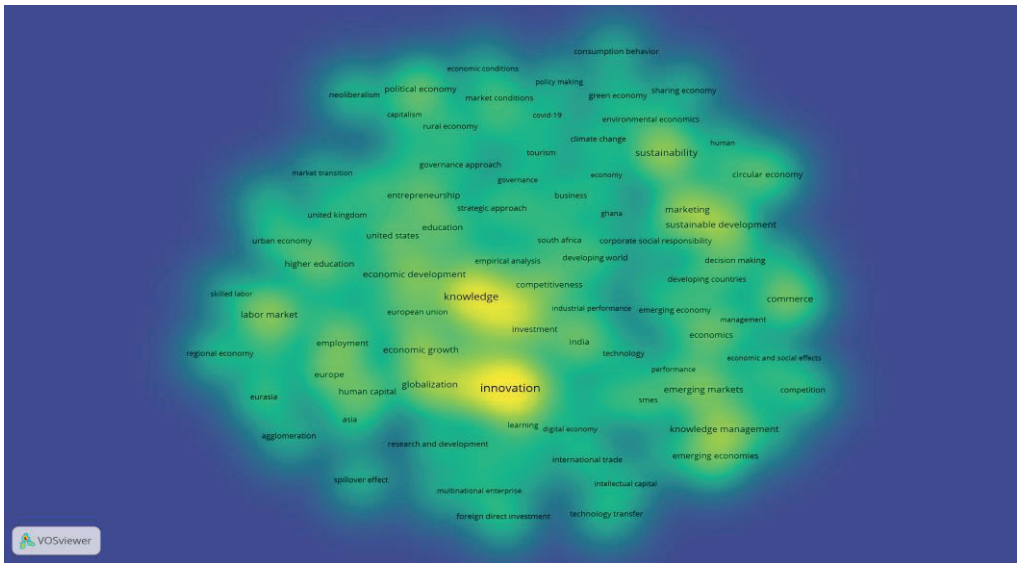

Figure 8. Density analysis of keywords co-occurrence

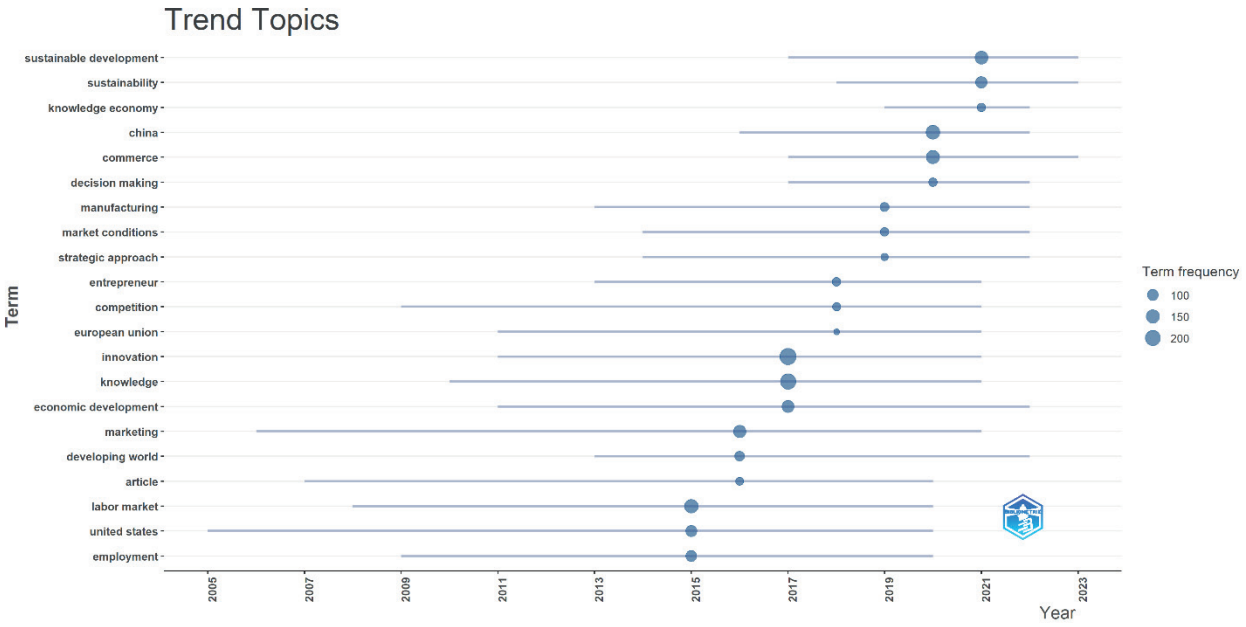

Figure 9. Topic trend analysis: word minimum frequency = 50; number of words per year = 3.

The analysis revealed that the most common words in the initial phase, starting in 2015, were labour market, employment, marketing and article. This trend shows that the knowledge economy has been analysed from the demand side of the labour market. From 2016 to date, the emphasis has been on decision-making, manufacturing, sustainability and sustainable development. The focus of studies has shifted from the United States and the European Union to China.

Conclusions

The bibliometric analysis carried out on the relationship between the knowledge economy and marketing shows that the interest of academics in this topic is increasing as the number of publications grows rapidly. The sample for the bibliometric analysis was retrieved from the Scopus database and contained 5,757 peer-reviewed articles written in English. The countries with the highest number of publications and citations are the USA, the UK and China. International cooperation is identified. The most cited and productive journals in the field of the knowledge economy and marketing are the Journal of Cleaner Production, Sustainability and the Journal of the Knowledge Economy. This trend shows a multidisciplinary approach to the topic.

In the sample papers, innovation is a core element associated with the knowledge economy led by emerging economies, knowledge transfer, entrepreneurship, sustainability and globalisation. The most frequent keywords in the keyword plus list were innovation, knowledge, China, labour market and trade. Meanwhile, authors more often chose the following keywords: innovation, knowledge economy, China, emerging markets and knowledge. The co-occurrence analysis of keywords identified four clusters of knowledge economy and related topics: the influence of the political environment, economic and management issues, labour market demand, and international aspects. These clusters consist of a large number of keywords connected by different link strengths and have different measures of co-occurrence. The density analysis shows that research on knowledge, the knowledge economy and innovation are central themes in the sample. Marketing, sustainability, sustainable development, trade and knowledge management are also of particular importance.

Topic trend analysis revealed a shift in studies. From 2016 to date, the emphasis has been on decision-making, manufacturing, sustainability and sustainable development. The focus of studies has shifted from the United States and the European Union to China. This suggests future research directions, such as research on the application of the knowledge economy in different environmental settings and different sectors, and research on the relationship between the knowledge economy and sustainability issues.

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ŽINIŲ EKONOMIKOS IR RINKODAROS TARPUSAVIO RYŠYS: BIBLIOMETRINĖ ANALIZĖ

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Santrauka

Įmonės, organizacijos ir visuomenės vis dažniau įžvelgia vertę, kuri susijusi su inovacijomis, moksliniais tyrimais, eksperimentine plėtra ir investicijomis į žmogiškąjį kapitalą. Galima teigti, kad žmonės ir žinios tapo pagrindine bet kokio visuomenės augimo ar tvarumo, sparčių novatoriškų pramonės šakų, pažangių ekonominių transformacijų, saugumo problemų ir artimų, viena nuo kitos priklausomų valstybių globalizacijos akivaizdoje sąlyga. Šiame kontekste tiek vyriausybinių, tiek nevyriausybinių dalyvių vaidmuo daro didelį poveikį žiniomis pagrįstos ekonomikos platformos, kaip modernios, pažangios, įtraukios, konkurencingos ir tvarios ekonomikos, plėtrai (Tudzarovska-Gjorgjievska, 2014).

Tarptautinė ekonominio bendradarbiavimo ir plėtros organizacija (EBPO) dar 1996 metais žinių ekonomiką apibrėžė kaip, „ekonomiką, tiesiogiai grįstą žinių ir informacijos gamyba, platinimu ir naudojimu“ (EBPO, 1996, 7). Tai matoma šalių ekonomikose augant investicijoms į aukštąsias technologijas, aukštųjų technologijų pramonės šakoms, darbo jėgos kvalifikacijai ir su tuo susijusiam našumui. Pastebėtina, kad šis apibrėžimas mokslininkų vis dar dažnai cituojamas. R. Mazur'o ir A. Malkowski'o (2021) teigimu, tokios ekonomikos pagrindas – „žmogaus sukurtų žinių taikymas visuose gamybos procesuose“, akcentuojant žinių ekonomikos proceso akivaizdžią ir pamatuojamą dalį. Reikia pastebėti, kad šis apibrėžimas didelės dalies žinių ekonomikos raiškos jos elementų atžvilgiu neapima.

E. Tudzarovska-Gjorgjievska (2014) akcentuoja, kad politinis ir visuomeninis atvirumas yra esminė sėkmingos transformacijos žinių ekonomikos link sąlyga. R. Mazur'as ir A. Malkowski's (2021, 157) papildo, kad technologinė ir organizacinė pažanga priklauso nuo šalies socialinės-ekonominės politikos ir visuomenės mąstymo pokyčių. Visgi sutinkant su mokslininkų teiginiais reikėtų pažymėti, kad žinių ekonomika nėra savaiminis procesas, ji artimesnė dirbtiniam reiškiniui, kuriam palaikyti būtinas nuoseklus dalyvių indėlis (minčiai antrina Atkočiūnienė ir kt., 2006, 61; Melnikas, 2015, 95). Taigi mokslininkų įžvalgose galima pastebėti, kad žinios yra žinių ekonomikos prekė, kuri šioje aplinkoje gaminama, platinama ir vartojama. Atkreiptinas dėmesys į tai, kad išryškinami pagrindiniai įgalintojai – politinė sistema ir visuomenė, bei pagrindiniai vartotojai – verslas ir ta pati visuomenė (panašią mintį išsakė Wierzbicka, 2018, 126).

Nuo visuomenės pasirengimo pereiti prie žiniomis pagrįstos ekonomikos priklauso rinkodaros sprendimų atranka. Pradinis lygmuo – apsiribojama informacijos apie žinių vertybes sklaida, atsakant į klausimą, kas tai? Kitas lygmuo – parenkamos žinių ekonomikos įgyvendinimo poreikį atskleidžiančios priemonės, atsakant į klausimą, kam to reikia? Paskutinis etapas apimtų konkrečių pasiūlymų sprendinius, tad siekiant suvokti jų vertę būtina brandi, pasirengusi ir informuota visuomenė, atsakant į klausimą, kaip tai padaryti arba ko imtis?

Dar 1999 metais Pasaulio Bankas leidinyje „Žinių vertinimo metodika" (angl. *Knowledge Assessment Methodology*) pasiūlė žinių ekonomikos koncepciją, kuri paremta keturiais pagrindiniais ramsčiais: ekonominė aplinka ir institucinis režimas; švietimas ir žmogiškieji ištekliai; inovacijų sistema bei informacinės ir komunikacinės technologijos (IKT) (Guaita Martínez ir kt., 2021, 333; Word Bank, 2007, 23; Al-Busaidi, 2014, 15). Žiniomis pagrįsto vystymosi proceso sąlygos apimtų: efektyvų institucinį režimą, skatinantį kurti, skleisti ir naudoti žinias; išsilavinusią ir kvalifikuotą darbo jėgą; efektyvią inovacijų sistemą; modernią informacinę infrastruktūrą. Valstybės, numatydamos įvairias politikos priemones, daug dėmesio skiria jų sklaidai. Būtina pažymėti, kad siekiant žiniomis pagrįstos ekonomikos būtina pasitelkti rinkodaros priemones skatinant įvairių suinteresuotųjų grupių įsitraukimą. Pažymėtina, kad mokslinėje literatūroje žinių ekonomikos komponentai, veiksniai, priemonės ir rinkodaros elementai nagrinėjami atskirai. Tad mokslinę problemą galima taip formuluoti: koks žinių ekonomikos ir rinkodaros tarpusavio ryšys.

Tyrimo objektas – moksliniai straipsniai žinių ekonomikos ir rinkodaros sąsajų tematika.

Tyrimo tikslas: išanalizuoti mokslines tendencijas, kurios susijusios su žinių ekonomikos ir rinkodaros sąsajomis, pasiūlyti ateities tyrimų krypčių.

Tyrimo metodai: bibliometrinė analizė. Jos imtis gauta iš *Scopus* duomenų bazės, ją sudarė 5757 recenzuoti straipsniai anglų kalba.

Atlikta žinių ekonomikos ir rinkodaros sąsajų bibliometrinė analizė atskleidė, kad mokslininkų susidomėjimas šia tema didėja, nes sparčiai auga publikacijų skaičius. Pagrindinės šalys, kuriose publikacijų ir citavimų skaičius yra didžiausias, yra JAV, Jungtinė Karalystė ir Kinija. Pastebimos tarptautinio bendradarbiavimo intensyvėjimo tendencijos. Daugiausiai cituojami ir produktyviausi žinių ekonomikos ir rinkodaros sąsajų tyrinėjimo žurnalai yra „Švaresnės gamybos žurnalas" (*Journal of Cleaner Production*), „Tvarumas" (*Sustainability*) ir „Žinių ekonomikos žurnalas" (*Journal of the Knowledge Economy*). Ši tendencija atskleidžia temos daugiadisciplinišKumą.

Analizuojant straipsnių rinkinį, sugeneruotą *Scopus* duomenų bazėje, pasitelkus *žinių ekonomikos* ir *rinkodaros* raktažodžius, nustatyta, kad inovacijos yra pagrindinis su žinių ekonomika susijęs elementas, pastebimas dėmesys ir besivystančioms ekonomikoms, žinių perdavimui, verslumo skatinimui, tvarumo ir globalizacijos temoms. Dažniausiai pasitaikantys raktažodžiai: *inovacijos*, *žinios*, *Kinija*, *darbo rinka* ir *prekyba*. Atlikus raktažodžių bendradarbiavimo tinklų analizę, nustatyti keturi žinių ekonomikos ir susijusių temų klasteriai: politinės aplinkos poveikis, ekonomikos ir vadybos klausimai, darbo rinkos paklausa, tarptautiniai aspektai. Šiuos klasterius sudaro nemažai raktažodžių, kurių sąsajų stiprumas skirtingas, skiriasi ir jų bendro pasikartojimo rodikliai. Tankio analizė atskleidė, kad žinios, žinių ekonomika ir inovacijos yra pagrindinės temos straipsnių imtyje. Kitos svarbios temos – rinkodara, tvarumas, darnus vystymasis, prekyba ir žinių valdymas.

Atlikta temų tendencijų analizė atskleidė tyrimų temų pokytį. Nuo 2016 m. iki šiol daugiausia dėmesio skiriama sprendimų priėmimui, gamybai, tvarumui ir darniam vystymuisi. Dėmesio centre atsidūrė ne Jungtinės Amerikos Valstijos ir Europos Sąjunga, o Kinija. Tai būsimos mokslinių tyrimų kryptys, pavyzdžiui, žinių ekonomikos taikymo skirtingose aplinkose ir skirtinguose sektoriuose, žinių ekonomikos ir tvarumo klausimų santykio tyrimai.

PAGRINDINIAI ŽODŽIAI: *žinių ekonomika, rinkodara, bibliometrinė analizė.*

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