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THE IN-DEPTH ANALYSIS OF BUSINESS RESEARCH FIELD: ASSESSMENT OF THE CURRENT STATE AND FURTHER DIRECTIONS

This article examines in-depth business research field in Kazakhstan and globally based on the top 10 keywords identified based on the Scopus database. The article reveals current state of the research and further directions, compares Kazakhstan science development in this field with the global research. Using the scientometrics methodology to assess published articles in the field, this paper provides in-depth analysis of the research context, purpose, methods and implications of research. The results demonstrated the difference in the topics that are researched by Kazakhstan scientists and other researchers, highlight the focus on local research that exists in Kazakhstan, provide the details on the difference in methodology that is used in research papers published in Kazakhstan and globally. These results highlight the stage of economic development research in the country and provide an agenda for further research in this field that serves the purpose of strengthening business and economic growth in the country.

Keywords: *publication activity, development of science, economic development, economic disciplines, scientometrics, business, management.*

Кілт сөздер: *жарияланым белсенділігі, ғылымның дамуы, экономикалық даму, экономикалық пәндер, ғылымметрия, бизнес, менеджмент.*

Ключевые слова: *публикационная активность, развитие науки, экономическое развитие, экономические дисциплины, наукометрия, бизнес, менеджмент.*

Introduction. The development of country's economy is in the core of its economic sustainability. This brings a lot of challenges associated with the country's ability to attract investments, create an environment that is favorable for business development. Moreover, the science development is considered as an integral part in country's economic development. Therefore, the development of Kazakhstan science has been under a focus in the last decade. Various targeted programs that were introduced to support the development of the science have been aimed to increase the number of publications. This trend has been sustained in over 10 years and all subject areas have demonstrated the grown. However, the quality and trends of specific subject areas are critical to the country's economy. Especially, business and management as it directly links to the quality of business processes in the country, its economic impact and implications on business, specifically following government's policy of economic diversification. This paper studies publications in Business, Management, Accounting (BMA) subject area from the Scopus database on a global level and in Kazakhstan. Using scientometrics methodology this paper provides insights on quality and direction of research in BMA subject area to draw conclusions for further development of this field in Kazakhstan and its impact on country's business development.

Literature review. The development of business and management as a separate field in the research is critical for country's ability to manage processes that are linked to economic development as it applies to the various areas of country's economy. The analysis of a country's economy and science development is interconnected. Therefore, in-depth analysis of literature published is required in order to identify what are the research areas exist in the literature that might be helpful in understanding the current and future trends of business, management as a separate discipline.

Mapping of available knowledge in a particular field is essential to understand the direction of the field development to understand available areas for future research (Mustak et al. 2021). Kulanov et al. (2020) highlight the importance of business development for country's economic success and favorable conditions are comprehensive and require investment, and certain government policies. The role government policies has been studied to identify its effect on business and entrepreneurship in Kazakhstan (Seitzhanov et al. 2020).

The scientometrics literature on science development has several directions of research that includes co-word analysis, analysis of networks, co-authorship analysis as well as in-depth literature review focusing on the contribution to a specific research field. Researchers from various fields have applied scientometrics principles to study particular research areas.

Smagulov et al. (2018) assessed publication activity of authors who are indexed in the Scopus database. The assessment gives overall trends in publications, citations across various research areas and also focusing on social sciences. The analysis demonstrate the increase in the number of publications. Mussaeva et al.(2021) provided detailed breakdown of the economic contribution and relationship between economic indicators and science development in Kazakhstan.

Massaro et al. (2015) have applied structured literature review methodology to study knowledge management as a field of research. This study has provided detailed understanding of the literature in this area, its limitations and potential growth opportunities. Serenko (2021) has conducted structured literature review analysis to investigate in-depth analysis of knowledge management discipline. The analysis revealed that knowledge management as a discipline has reached a certain stage of its maturity and development. The study by Li et al. (2022) have applied scientometrics approaches towards detailed understanding of an air quality and artificial intelligence as a separate scientific field. The literature suggests various approaches and highlights the role of science in economic development.

The main part. Using the methodology adapted from Serenko (2013), we analyzed the current state of research in business, management, and accounting based on data from the Scopus database. This analysis covered papers published both globally and in Kazakhstan (see Table 1 for details). We applied a structured literature review approach, focusing on global and Kazakhstan BMA research. Our process involved collecting, coding, and interpreting research papers published in the Scopus database. To capture both global and local research trends, we systematically gathered and categorized articles by keywords relevant to BMA studies and organized them by primary research themes. The top cited papers studied in this paper categorized by top 10 keyword in the field, provided us with in-depth analysis.

A key component of this methodology is the development of a coding framework that allows for the categorization of each publication. Publications were coded based on several parameters, including the the context in which examined studies were conducted, purpose, research methods employed, and the depth of practical implications.

Table 1.

Outline of the research approach

| Steps | Actions and Results |
|--------------------------------|--|
| 1. Data collection | Action: a) in Scopus, source journal articles and reviews with author affiliations as “Kazakhstan”, “Business, Management and Accounting” field published during 1991-2022, in English; b) in VOS viewer, keywords identified; c) based on b) top cited Kazakhstan and Global papers were selected. Results: a) Papers published were downloaded; b) keywords were selected: Innovation, Sustainable Development, Entrepreneurship, Competitiveness, Management, Agriculture, Tourism, Investment, Education, Technology; c) papers were downloaded for further analysis. |
| 2. In-depth analysis of papers | Action: a) Analyze the context in which examined studies were conducted (general, geographic, topic); b) Identify the purpose of the examined studies (analysis of economic indicators, analysis of the potential of certain field/business, analysis of a country’s economic potential); c) Identify the method used in examined studies (descriptive statistical analysis, statistical modeling, case study, research synthesis, computer vision algorithms, survey, simulation, expert panel); |

| | |
|--|---|
| | <p>d) Implications of examined studies (none, some, extensive).</p> <p>Results: a) The analysis of the context identified; b) The purpose identified; c) The method identified; d) The implication identified.</p> |
|--|---|

**Compiled by the authors*

The analysis of global (GB) and Kazakhstan (KZ) research in BMA, based on the structured methodology applied in this study, reveals distinct trends and differences in focus, methodology, and topical interest between the two contexts. The analysis of data from the Scopus database and subsequent categorization of the studies allowed for a comprehensive comparison of the volume, type, and themes covered in both global and Kazakh research. In particular, the data highlights disparities in the concentration of research on general topics versus geographic-specific studies, the fields of focus, and the methodological approaches employed.

Globally, BMA research predominantly emphasizes topic-specific studies, with 91 studies (90%) focusing on particular research streams or sub-domains within the discipline (refer to Table 2). These studies aim to provide conclusions specific to the areas of interest, independent of any geographic region. In contrast, only 9 studies (9%) are categorized under geographic-specific research, where conclusions are tied to particular countries or regions, showing that there is relatively little focus on localized analysis at the global level. Furthermore, general BMA research, which generalizes conclusions across the entire domain of the discipline, represents just 1% of the global studies, indicating that global research places minimal emphasis on all-encompassing, broad theories.

In Kazakhstan, the situation is different, with a much greater emphasis on geographic-specific research, accounting for 57 studies (70%). This highlights the country's focus on addressing national and regional challenges. Meanwhile, topic-specific studies make up 30% (24 studies), showing that Kazakhstan still has an interest in specific economic streams, though to a lesser extent. There is no general, broad-spectrum research in Kazakhstan's dataset, further emphasizing the country's focus on localized, practical economic and business issues.

Table 2.

The context in which the examined studies were conducted

| | Type | # papers | % |
|----|------------|----------|-----|
| GB | Topic | 91 | 90% |
| | Geographic | 9 | 9% |
| | General | 1 | 1% |
| KZ | Geographic | 57 | 70% |
| | Topic | 24 | 30% |

**Compiled by the authors*

The emphasis on analyzing the potential of specific sectors is a dominant theme in both global and Kazakh BMA research (refer to Table 3). Globally, 96 studies (95%) are dedicated to analyzing the potential of various economic fields, reflecting a forward-looking approach aimed at identifying growth sectors and anticipating economic trends. Similarly, Kazakh research shows a significant focus on sectoral potential, with 68 studies (84%) addressing this theme, highlighting a shared interest in sector-specific opportunities within the national context. However, the two diverge when it comes to national economic potential. Globally, only 2 studies (2%) explore the economic potential of specific countries, while in Kazakhstan, 12 studies (15%) are devoted to this area, suggesting that Kazakh research is more concerned with understanding the country's unique economic opportunities and challenges. Additionally, analysis of economic indicators remains a relatively minor focus in both contexts, accounting for just 3 studies (3%) globally and 1 study (1%) in Kazakhstan, further emphasizing the prevailing interest in future sectoral potential over the evaluation of existing economic metrics.

Table 3.

The purpose of the examined economics studies

| | Type | # papers | % |
|----|--|----------|-----|
| GB | Analysis of the potential of the certain field | 96 | 95% |
| | Analysis of the economic indicator | 3 | 3% |
| | Analysis of a country's economic potential | 2 | 2% |
| KZ | Analysis of the potential of the certain field | 68 | 84% |
| | Analysis of a country's economic potential | 12 | 15% |
| | Analysis of the economic indicator | 1 | 1% |

*Compiled by the authors

Global economic research tends to favor synthesizing existing literature, as shown by the 33 studies using this method (Table 4). This indicates that global scholars often compile findings from multiple sources to draw broad conclusions. Additionally, surveys and statistical modeling are widely used, appearing in 14 and 20 studies, respectively. Though less common, complex methods like bibliometric and mathematical modeling are also employed but in fewer cases, reflecting a selective approach to more advanced techniques. In Kazakhstan, surveys and statistical modeling likely play a central role as well, but the smaller scale of research may limit the use of advanced methods like bibliometric or mathematical modeling. Instead, Kazakh researchers may lean more toward traditional methods, such as descriptive analysis, which are easier to apply given the region's resource and data limitations.

Table 4.

Methods used in examined studies

| | Type | # papers | % |
|----|--|----------|-----|
| GB | Research synthesis | 33 | 33% |
| | Statistical modeling | 20 | 20% |
| | Survey | 14 | 14% |
| | Case study | 8 | 8% |
| | Bibliometric | 7 | 7% |
| | Survey, Statistical modeling | 8 | 8% |
| | Interview | 2 | 2% |
| | Case study, Interview | 1 | 1% |
| | Survey, Interview, Statistical modeling | 2 | 1% |
| | Delphi | 1 | 1% |
| | Survey, Interviews | 1 | 1% |
| | Research synthesis, Statistical modeling | 1 | 1% |
| | Descriptive statistics | 1 | 1% |
| | Descriptive statistics, Statistical modeling | 1 | 1% |
| KZ | Statistical modeling | 12 | 15% |
| | Descriptive statistics | 19 | 23% |
| | Research synthesis | 10 | 12% |
| | Survey | 11 | 14% |
| | Case study | 8 | 10% |
| | Descriptive statistics, Statistical modeling | 9 | 11% |
| | Simulation | 3 | 4% |

| | | | |
|--|--|---|----|
| | Interview | 1 | 1% |
| | Descriptive statistics, Case study, Statistical modeling | 1 | 1% |
| | Case study, Statistical modeling | 1 | 1% |
| | Computer vision algorithm | 1 | 1% |
| | Case study, Descriptive statistics | 1 | 1% |
| | Interview, Survey | 1 | 1% |
| | Bibliometric | 1 | 1% |
| | Descriptive statistics, Survey | 1 | 1% |
| | Research synthesis, Descriptive statistics | 1 | 1% |

**Compiled by the authors*

Based on Table 5 findings, in global research, the majority of studies (98%) offer some implications for stakeholders, though these tend to be brief and not fully developed, lacking actionable recommendations. Only a small portion (2%) of global studies presents extensive and comprehensive implications that are practical and easy to follow. In contrast, Kazakhstan research offers slightly fewer actionable insights. While 99% of Kazakh studies provide some level of implications, they are often limited to general suggestions without in-depth recommendations. Only 1% of Kazakh research offers no implications at all, which indicates a general effort to connect research to practical applications. None of the implications are extensive in Kazakhstan.

Table 5.

The quality of implications

| | Type | #papers | % |
|----|-----------|---------|-----|
| GB | Some | 98 | 98% |
| | Extensive | 2 | 2% |
| KZ | None | 1 | 1% |
| | Some | 80 | 99% |

**Compiled by the authors*

Overall, while global research focuses heavily on forward-looking studies of specific economic sectors, Kazakh research emphasizes both sectoral potential and national economic issues, reflecting a more localized and balanced approach.

Conclusion. The results of this study, reveal that Kazakhstan papers are less cited, has its own research agenda that is different to the papers that are published globally. High level of localization in the studied papers indicate the focus of research community in Kazakhstan to contribute the country’s economic development through research as well as localization of the interests. The used methodologies reveal access to the data and research focus of scientists, indicating the notion of research and its contribution to the global knowledge domain. The analysis reveals that methodology used in papers published in Kazakhstan rely more on traditional descriptive analysis. The quality and scope of research implication is different that suggests that research is more localized and focused on Kazakhstan rather than has extensive implications and broader scope to contribute to global knowledge development in the BMA field. Further research might reveal specific research networks that contribute to the globalization of BMA research in Kazakhstan. This would expand the knowledge of Kazakhstan science development and BMA research with the current notions and challenges that are directly linked to the country’s economic development and its ability to shift from natural resources dependency.

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REFERENCES

1. Mustak M., Salminen J., Plé L., & Wirtz J. Artificial intelligence in marketing: topic modeling, scientometric analysis, and research agenda // *Journal of Business Research*. – 2021. – Vol. 124. – P. 389–404. – URL: <https://doi.org/10.1016/j.jbusres.2020.10.044>.
2. Kulanov A., Tamenova S., Amenova K., Karshalova A., & Tussupova L. Investment climate and its influence on the development of entrepreneurship: practice of the Republic of Kazakhstan // *Entrepreneurship and Sustainability Issues*. – 2020. – Vol. 8(2). – P. 421–437. – URL: [https://doi.org/10.9770/jesi.2020.8.2\(25\)](https://doi.org/10.9770/jesi.2020.8.2(25)).
3. Seitzhanov S., Kurmanov N., Petrova M., Aliyev U., & Aidargaliyeva N. Stimulation of entrepreneurs' innovative activity: evidence from Kazakhstan // *Entrepreneurship and Sustainability Issues*. – 2020. – Vol. 7(4). – P. 2615–2629. – URL: [https://doi.org/10.9770/jesi.2020.7.4\(4\)](https://doi.org/10.9770/jesi.2020.7.4(4)).
4. Massaro M., Dumay J., & Garlatti A. Public sector knowledge management: a structured literature review // *Journal of Knowledge Management*. – 2015. – Vol. 19(3). – P. 530–558. – URL: <https://doi.org/10.1108/JKM-11-2014-0466>.
5. Serenko A. A structured literature review of scientometric research of the knowledge management discipline: a 2021 update // *Journal of Knowledge Management*. – 2015. – Vol. 8. – P. 1889–1925. – URL: <https://doi.org/10.1108/JKM-09-2020-0730>.
6. Li Y., Guo J., Sun S., Li J., Wang S., & Zhang C. Air quality forecasting with artificial intelligence techniques: a scientometric and content analysis // *Environmental Modelling & Software*. – 2022. – p. 149. – URL: <https://doi.org/10.1016/j.envsoft.2022.105329>.
7. Serenko A. Meta-analysis of scientometric research of knowledge management: discovering the identity of the discipline // *Journal of Knowledge Management*. – 2013. – Vol. 17(5). – P. 773–812. – URL: <https://doi.org/10.1108/JKM-05-2013-0166>.
8. Mussayeva D.M., Alibekova G.Zh., Medeni T., & Dabylova M.I. Analysis of Potential, Structure, Dynamics of Development of Kazakhstan's Science // *Economics: the Strategy and Practice*. – 2021. – Vol. 16(3). – P. 81–93.
9. Smagulov K.E., Makanova A.U., & Burshukova G.A. Analysis of scientometric indicators of Kazakhstani authors' publication activity in journals, included in the Scopus database // *The Journal of Economic Research & Business Administration*. – 2018. – Vol. 1(123). – P. 234–241.

REFERENCES

1. Mustak M., Salminen J., Plé L., & Wirtz J. Artificial intelligence in marketing: topic modeling, scientometric analysis, and research agenda // *Journal of Business Research*. – 2021. – Vol. 124. – P. 389–404. – URL: <https://doi.org/10.1016/j.jbusres.2020.10.044>.
2. Kulanov A., Tamenova S., Amenova K., Karshalova A., & Tussupova L. Investment climate and its influence on the development of entrepreneurship: practice of the Republic of Kazakhstan // *Entrepreneurship and Sustainability Issues*. – 2020. – Vol. 8(2). – P. 421–437. – URL: [https://doi.org/10.9770/jesi.2020.8.2\(25\)](https://doi.org/10.9770/jesi.2020.8.2(25)).
3. Seitzhanov S., Kurmanov N., Petrova M., Aliyev U., & Aidargaliyeva N. Stimulation of entrepreneurs' innovative activity: evidence from Kazakhstan // *Entrepreneurship and Sustainability Issues*. – 2020. – Vol. 7(4). – P. 2615–2629. – URL: [https://doi.org/10.9770/jesi.2020.7.4\(4\)](https://doi.org/10.9770/jesi.2020.7.4(4)).
4. Massaro M., Dumay J., & Garlatti A. Public sector knowledge management: a structured literature review // *Journal of Knowledge Management*. – 2015. – Vol. 19(3). – P. 530–558. – URL: <https://doi.org/10.1108/JKM-11-2014-0466>.
5. Serenko A. A structured literature review of scientometric research of the knowledge management discipline: a 2021 update // *Journal of Knowledge Management*. – 2015. – Vol. 8. – P. 1889–1925. – URL: <https://doi.org/10.1108/JKM-09-2020-0730>.
6. Li Y., Guo J., Sun S., Li J., Wang S., & Zhang C. Air quality forecasting with artificial intelligence techniques: a scientometric and content analysis // *Environmental Modelling & Software*. – 2022. – p. 149. – URL: <https://doi.org/10.1016/j.envsoft.2022.105329>.
7. Serenko A. Meta-analysis of scientometric research of knowledge management: discovering the identity of the discipline // *Journal of Knowledge Management*. – 2013. – Vol. 17(5). – P. 773–812. – URL: <https://doi.org/10.1108/JKM-05-2013-0166>.

<https://doi.org/10.1108/JKM-05-2013-0166>.

8. Mussayeva D.M., Alibekova G.Zh., Medeni T., & Dabylova M.I. Analysis of Potential, Structure, Dynamics of Development of Kazakhstan's Science // Economics: the Strategy and Practice. – 2021. – Vol. 16(3). – P. 81–93.

9. Smagulov K.E., Mkanova A.U., & Burshukova G.A. Analysis of scientometric indicators of Kazakhstani authors' publication activity in journals, included in the Scopus database // The Journal of Economic Research & Business Administration. – 2018. – Vol. 1(123). – P. 234–241.

Амирбекова Д.К., Ли Е.А.

БИЗНЕСТІ ЗЕРТТЕУ САЛАСЫН ТЕРЕҢ ТАЛДАУЫ: ҚАЗІРГІ ЖАҒДАЙДЫ ЖӘНЕ ОДАН ӘРІ БАҒЫТТАРДЫ БАҒАЛАУ

Аңдатпа

Бұл мақалада Scopus дерекқоры негізінде анықталған 10 кілт сөздерінің негізінде Қазақстандағы және бүкіл әлемдегі бизнесті зерттеудің тереңдетілген саласы қарастырылады. Мақалада осы саладағы Қазақстандық ғылымның дамуы жаһандық зерттеулермен салыстыра отырып зерттеудің қазіргі жағдайы мен алдағы уақыттағы бағыттары талданады. Осы салада жарияланған мақалалардың зерттеу контекстіне, оның мақсаттарына, әдістеріне және қолданылуына терең талдау жасау үшін ғылымметрия әдістемесін пайдаланылды. Нәтижелер Қазақстандық ғалымдар мен басқа да зерттеушілер зерттейтін тақырыптардың айырмашылығын көрсетті, Қазақстанда бар жергілікті зерттеулерге баса назар аударды, Қазақстанда және бүкіл әлемде жарияланған ғылыми еңбектерде қолданылатын әдістемедегі айырмашылық туралы егжей-тегжейлі мәлімет берді. Бұл нәтижелер елдегі экономикалық даму саласындағы зерттеулердің кезеңін көрсетеді және елдегі бизнес пен экономикалық өсуді нығайту мақсатына қызмет ететін осы саладағы алдағы зерттеулерге бағыт береді.

Амирбекова Д.К., Ли Е.А.

УГЛУБЛЕННЫЙ АНАЛИЗ ОБЛАСТИ БИЗНЕС ИССЛЕДОВАНИЙ: ОЦЕНКА ТЕКУЩЕГО СОСТОЯНИЯ И ДАЛЬНЕЙШИХ НАПРАВЛЕНИЙ

Аннотация

В данной статье подробно рассматривается область бизнес-исследований в Казахстане и во всем мире на основе 10 ключевых слов, определенных на основе базы данных Scopus. В статье раскрывается текущее состояние исследований и дальнейшие направления, сравнивается развитие казахстанской науки в этой области с мировыми исследованиями. Используя методологию наукометрии для оценки опубликованных статей в данной области, в данной статье представлен углубленный анализ контекста исследования, его целей, методов и применения. Результаты продемонстрировали разницу в темах, которые исследуют казахстанские ученые и другие исследователи, подчеркнули акцент на местных исследованиях, существующих в Казахстане, подробно выявили различия в методологии, которая используется в научных статьях, опубликованных в Казахстане и во всем мире. Эти результаты отражают стадию исследований в области экономического развития в стране и определяют направленность дальнейших исследований в этой области, которые служат цели укрепления бизнеса и экономического роста в стране.

