

Bibliometric Analysis of Organizational Innovation Trends

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Abstract

In the current era, where technology is developing rapidly, and people's lifestyles are changing along with the times, organizations are required to be able to survive and develop to innovate. Innovation in organizations is implemented after the organization has conducted comprehensive research covering the internal and external conditions of the organization. By conducting research, organizations are able to find out what advantages and disadvantages they have so that innovation can be implemented optimally. Innovation means adjusting and enhancing the current services, goods, and procedures of the organization. Despite the importance of research on organizational innovation, there are few articles and scientific research that discuss this. This research strives to show the importance of innovation in organizations. It shows the development of research on organizational innovation by using a systematic approach to a literature review and science mapping analysis. Data was obtained online from the Scopus data database, and VosViewer was used to evaluate outcomes and identify patterns in relations and development. It is feasible to see the relationships between topics like people, organizational innovation, and organizations by employing this network visualization. The field of organizational innovation research has been in decline, according to this study. This research has contributed to the growth of organizational innovation research across multidisciplinary study areas.

Keywords: Development Trend, Innovation, Network Visualization, Organization, Scopus Database, VOSviewer.

Introduction

Management is essential to the process of creating strategies that support sustainable innovation in organizations (1). Organizational innovation is the process of putting new ideas into practice and embracing them as tactics for internal or external change (2). By fostering the continuous expansion and strengthening of an organization's competitive advantage, innovation within the organization guarantees its long-term existence (3). Innovation means adjusting and enhancing the company's current services, goods, and procedures (4). Management must anticipate whether innovations will be beneficial or not due to the impact of existing problems and obstacles in the organization's structure, operations, procedures, and routines (5).

There are two important periods in the development of innovation in organizations, namely the period before COVID and after COVID-19. Innovation is now essential for a business to survive and obtain a competitive advantage over its competitors (6). One of the worst problems of this century is the COVID-19 pandemic (7), which has had far-reaching effects ranging from the worst global economic downturn to a social and health

shock (8). The pandemic revealed weaknesses in the economy, human resources (9), infrastructure, and emergency preparedness, almost shattering our ability to handle it (10). This paper examined developments in organizational innovation research over five years, from 2019 to 2023.

Methodology

Innovation in organizations is an activity that cannot be avoided because it is carried out continuously and adapted to current developments (11). Organizations that possess the ability to adjust to both internal and external circumstances are those that have the potential to survive and thrive. Innovating is one strategy to adjust (12) to internal and external conditions (13). The introduction of a new or improved process (14), product, and new marketing or organizational tactics (15) in an organization is referred to as innovation (16). The Oslo Manual identified three categories of organizational innovation: novel approaches to the structure of procedures, the delegating of tasks and decision-making, and external relationships with other businesses or governmental organizations (17).

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(Received 18th December 2023; Accepted 21st April 2024; Published 30th April 2024)

Organizations that are able to innovate well and optimize their resources are considered able to survive. Innovation is carried out by conducting research first. The importance of research is not only to find out the advantages and disadvantages you have but also what opportunities can be used and exploited for innovation. Knowing the importance of innovation in organizations, it is likely that there will be more journals or articles that can be used as research and discussion material for stakeholders in the organization. However, until now, there have not been a few journals or articles discussing innovation in organizations. This research strives to show the importance of innovation in organizations and shows the development of research on organizational innovation by using a systematic approach to a literature review and science mapping analysis. A systematic approach with a literature review is used because it can support discussions regarding the importance of innovation in organizations. With a literature review and a qualitative approach, you can identify current research trends in the field of "Organizational Innovation" after relevant documents obtained through a search of the Scopus database are analyzed. While science mapping analysis is used so that the data obtained can be visualized, it will make it easier to carry out data analysis.

In this research, the data obtained was then exported to RIS format to produce a map of research developments. The RIS (file format) is a standardized tag format developed by Research Information Systems company. By using this format, the data can be exported to the VosViewer application tool. VOS is an acronym for Visualization of Similarities. By using VosViewer, we can find the similarities in the data and use it to visualize and map the data. The bibliometric map of "Organizational Innovation" is then discovered using the VOSViewer application tool, which processes and analyzes the exported data. This essay's content was compiled from previously studied and researched works of similar literature. For this paper, the data were obtained from Scopus in September 2023.

In the initial search, we identified publications related in the title, abstract, or keywords: (organization AND innovation) AND (LIMIT-TO (OA, "all")) AND (LIMIT -TO (PUBSTAGE, "final")

) AND (LIMIT -TO (PUBYEAR, 2019) OR LIMIT -TO (PUBYEAR, 2020) OR LIMIT -TO (PUBYEAR, 2021) OR LIMIT -TO (PUBYEAR, 2022) OR LIMIT-TO (PUBYEAR, 2023)) AND (LIMIT -TO (LANGUAGE, "English")) AND (LIMIT -TO (EXACTKEYWORD, "Organizational Innovation") OR LIMIT -TO (EXACTKEYWORD, "Organization")) AND (LIMIT -TO (SUBJAREA, "BUSI") OR LIMIT -TO (SUBJAREA, "ECON")) AND (LIMIT -TO (DOCTYPE, "re") OR LIMIT -TO (DOCTYPE, "ar")) AND (LIMIT -TO (SRCTYPE, "j")) so that it got 337 Articles, 8 Reviews. The selected articles are then categorized and reviewed using VosViewer (18). VosViewer was selected as the data processing software due to its advantages in data mapping and visualization (19). In contrast, Scopus was selected due to its well-recognized quality and reputation among academic institutions and research organizations (20). The VOSViewer makes it simple to view and evaluate relationships on large bibliometric maps (21).

Result and Discussion

This research evaluates the development of innovation research trends in organizations by utilizing the online database Scopus data. Journals that were published between 2019 and 2023 in the Scopus database were used in this paper as relevant sources. Data indicates an increasing trend in 2020 and a beginning of a decrease in 2021. There were 345 articles published between 2019 and 2023, with 2020 having the most articles, with 81 articles. Nevertheless, there has been little of a rise since 2021, when just 57 papers were published. This aligns with Figure 1, which illustrates a decline in the number of scientific papers produced after 2020. This decline shows how only some academics are involved in the field of organizational innovation.

This paper restricts its scope to the fields of Economics, econometrics, and Finance, along with Business, Management, and Accounting, resulting in 345 publications. Based on the subject area in Figure 2, as many as 37.8% or 292 articles were published in the subject area of Business, management, and accounting. As many as 9.3% or 85 articles were included in the Economics, econometric, and Finance subject categories. With so many subject areas related to innovation in organizations, it can be said that innovation in

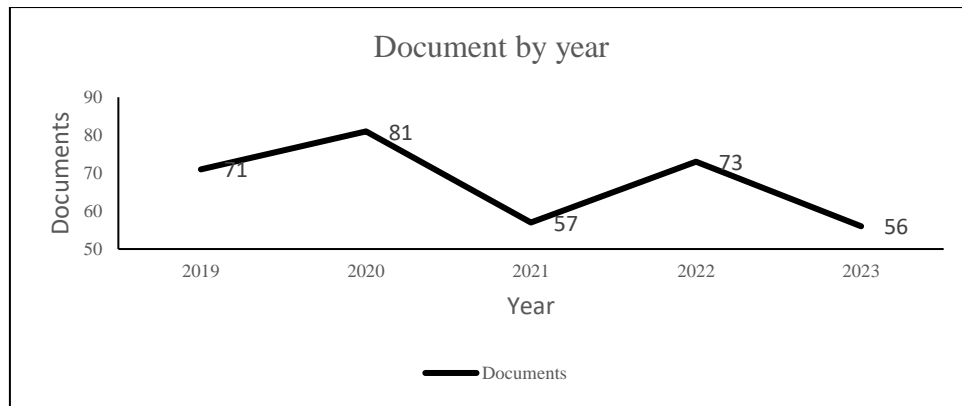


Figure 1: Publication per Year

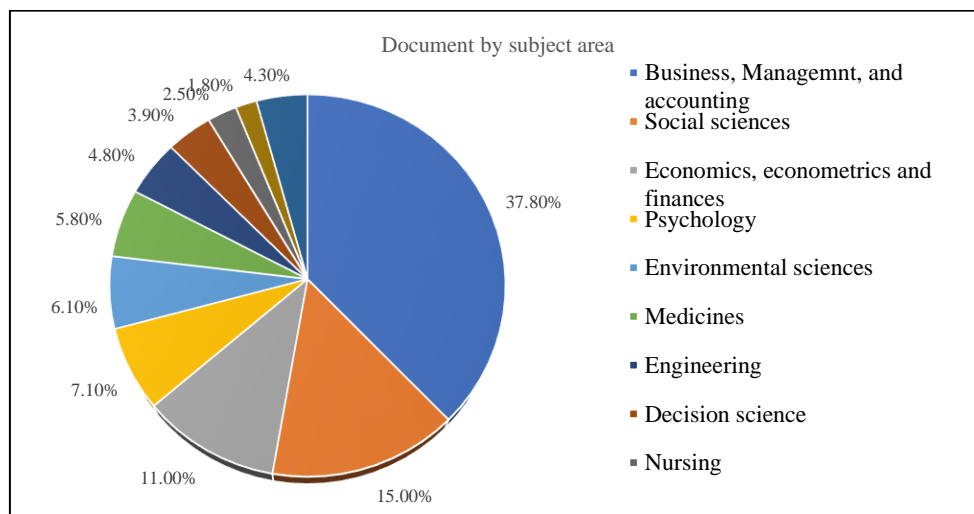


Figure 2: Document by Subject Area

organizations is important so that organizations survive and develop. These results can also be used as a basis for conducting research for organizations. They can make it easier for organizations to classify documents according to the type of organization and its objectives.

The researchers that examine organizational innovation in Figure 3 are diverse and often act as a source of information for upcoming researchers. Moline, B. has published three research papers, and the other writers have produced two research articles that can be referred to as references.

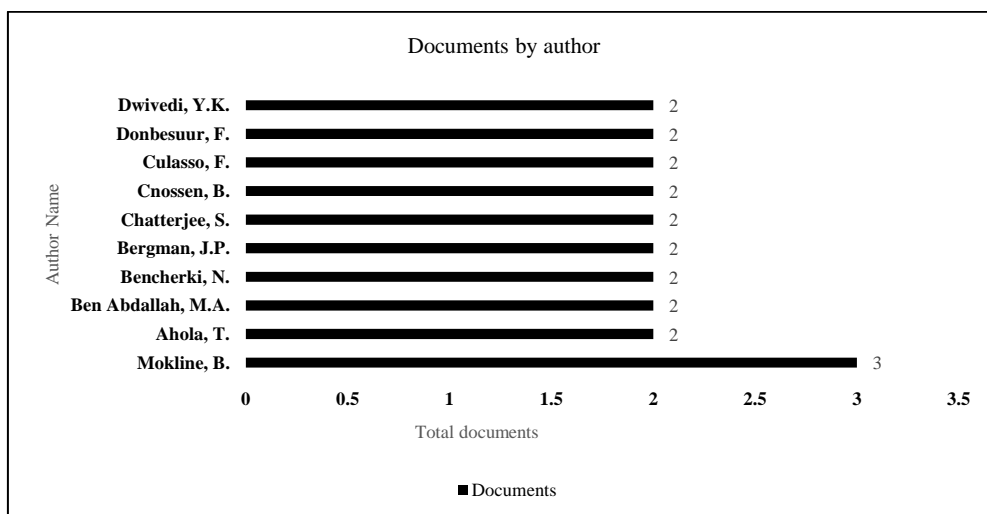


Figure 3: Documents by Author

Table 1: Frequent keywords

Cluster 1 42 items	business, change, china, circular economy, communication, competition, content analysis, corporate social responsibility, entrepreneur, entrepreneurship, environmental economics, environmental management, finance, firm performance, industrial performance, innovation, investment, learning, literature review, management practice, modeling, open innovation, organizational, organization, organizational culture, organizational innovation, organizational learning, organizational performance, performance, personnel, process innovation, product innovation, small and medium-sized enterprise, stakeholder, strategic approach, structural equation modeling, supply chain management, sustainability, sustainable development, technological forecasting, technology, transformational leaders
Cluster 2 28 items	adult, cooperation, cooperative behavior, education, England, female, gender, health care delivery, health care personnel, health service, health service research, humans, interview, interviews as a topic, leadership, major clinical study, male, national health service, organization and management, organizational case study, organizational change, organizations, primary health care, psychology, qualitative research, questionnaire, semi-structured interview, trust
Cluster 3 25 items	conceptual framework, construction, construction industry, construction projects, covid-19, creativity, design/methodology/approach, ecosystems, Europe, European Union, governance approach, human resource management, infrastructure, innovation management, institutions, inter-organizational, knowledge, knowledge management, knowledge sharing, management, project management, research and development, societies and institution, systematic review, united kingdom
Cluster 4 21 items	article, controlled study, drawing, employee, employment, ethics, human, human capital, human experiment, institutional theory, job satisfaction, manager, preception, physician, resource management, skill, Spain, theoretical study, worker, workforce, workplace
Cluster 5 12 items	decision-making, economics, funding, government, health care, motivation, program evaluation, qualitative analysis, quality improvement, total quality management, United States, work engagement

Table 1 shows the frequent keyword. There are 42 items in cluster 1, 28 items in cluster 2, 25 items in cluster 3, 21 items in cluster 4, and 12 items in cluster 5. Table 1 refers to the 5 clusters in Figure 5, which are the keywords that appear most frequently.

Based on the results obtained, this research uses data from The Scopus database of 345 publications that discuss Innovation in organizations. This data was gathered between 2019 and 2023. The data was then processed using VOSViewer to create maps and visualizations, which were then translated. This study found a downward trend in the topic of organizational innovation research. The decrease occurs every year, with the notable exception of 2020, which saw a significant increase. Business, management, and accounting accounted for the largest percentage of discussion, 37.8%, or 292 articles, among the total of 345 articles. The United Kingdom holds the record for most publications. By using network visualization,

it is possible to see how subjects like organization, organizational innovation, and people are related to one another. The relationship between the descriptions in each area serves as evidence of this.

Conclusion

The closer the documents are to one another, the more links there are between the descriptions. This research is limited to the Scopus database as a source of data publications. Through this study, in order for an organization to grow and thrive, it is critical to do further research on organizational innovation.

Abbreviation

RIS Research Information Systems
VOS Visualization of Similarities

Acknowledgement

We want to thank Dr. Ika Nurul Qamari, S.E. M.Si, and Dr. Arni Surwanti, M.Si, for the guidance and suggestions they provided so that this journal could be written well. We also thank Dr. Udin, M.M.,

who has provided recommendations for journal publication.

Author Contributions

FAR wrote the manuscript and provided data, INQ provided data and analysis, and AS provided data and analysis. All authors reviewed the final manuscript.

Conflict of Interest

The authors declare no conflicts of interest.

Ethics Approval

There are no living subjects in this research, and informed consent is not applicable.

Funding

This research did not receive any financial support.

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