

Organizational Changes; Bibliometric Analysis For 2016-2022

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Abstract

Purpose - This study aims to determine the changes that are taking place and to analyze Organization Change publication trends regarding the number of articles, the number of citations to a journal, the relevance of affiliation, the most authors, publishers and network clusters. This research is the first step to look at existing research and find research themes related to organizational change

Design/methodology/approach - This research uses the Bibliometric analysis method. The data was obtained through searching the Google Scholar (GS) database with the word Organization Change in the category Article title, Abstract, Keywords. Approximately 153 articles were obtained in the initial results with 569 citations (56.9 citations/year)

Findings and Discussion – The search results obtained 129 articles, the citation data also changed, with 367 citations and 52.43 citations/year, during the 2016-2022 period. From the results, 129 articles were refined and the citation data also changed to 367 citations and 52.43 citations each year. The results of the study show that the most cited authors are a. J Suwaryo HKK, and its most relevant affiliate is the University of Indonesia. b. Aslami and Rahman are the most authors, ejournal.unsrat.ac.id is the largest publisher c. words that often appear are organization change, change, organization, organizational change, and study.

Conclusion - Bibliometric mapping supports the scientific explanation between probability theory and evidence. Research on Organizational Change can be developed more broadly on themes that appear few and have not been widely included in research in the last seven years. Therefore, this research is expected to be a reference for further research.

Keywords - Organization Change, Management, Bibliometrics, Analysis, Change

Introduction

In times of crisis, organizations are currently experiencing major changes. This is mainly related to motivation and effective decision-making strategies to motivate. The great emphasis is on implementing changes in organizations to increase their competitiveness and profitability. To be able to survive, organizations must constantly adapt to circumstances and events that occur in the environment, both near and far. As it is not only important for the survival of the organization, but also

for its further development, it is necessary to make adjustments while addressing the problems associated with change. The progress of the organization depends on what organizational changes have been made.

According to Hadi (2022); Pono et al. (2022) work discipline and work motivation have an impact on employee performance. So that the process of organizational change will be affected by work discipline, work environment and work motivation. According to Marshak & Bushe (2018) The 75% failure rate is often associated with top-down organizational change, visionary leadership models, and change management. Every organizational change solution creates new problems, no general model of organization can survive. Organizational change and organizational development can be carried out with various strategies and approaches.

This research is important to find out what changes are happening and what is needed so that these changes can be implemented and also what impact will be caused if these changes are implemented. Organizational change research continues to be a concern as organizations grow. Researchers try to find strategies and ways of acting for good organizational change in organizational development throughout history. Change management and organizational development are continuous management processes that respond promptly to dynamic factors in the environment of the organizations in which they operate (Naveed, Khalid, and Baloch 2018).

Change, from a management point of view, represents a transformation of organizational strategy, or a transformation of culture in the case of companies as a result of changes in environment, structure, technology and people. It is necessary to consider that there are differences between change management, resulting from changes in technology and changes based on different management styles, but these changes affect each other. Change management is a very broad field, and approaches to managing change vary widely, from one organization to another and from project to project (Laurentiu, 2016).

Therefore, we are interested in looking at research on organizational change. This research is the first step to look at existing research and find research themes related to organizational change. Several questions were used to focus this research: what is the latest research on the use of bibliometrics over the last seven years? Who are the most influential authors in a dissertation? Can this research be the basis for the keywords that are the focus of this research? By answering these questions, we can finally enter into further research related to Organizational Change with themes that are still minimally researched.

Methods, Data, and Analysis

In reviewing the literature on organizational change, we use bibliometric analysis. Bibliometric analysis is a popular method for exploring and analyzing large amounts of scientific data. Bibliometric analysis aims to help create an overall picture of a particular theme, show the interrelationships between published journals, and generate ideas for further research (Nandiyanto, Biddinika, et al.,

2020).

According to Muhaemin Sidiq (2019) a simple bibliometric guide can be made simply with a few steps that have been described in a simple analysis guide. The bibliometric method is sometimes known as scientometrics which is part of the research evaluation methodology from various literature that has been produced by many researchers/writers, it is very possible to do your own analysis related to bibliometrics using a separate method (Elegaard and Wallin 2015).

The purpose of the bibliometric analysis in this study was to find out the research developments related to organizational change. This study reviews journal publications on organizational change published in the Google Scholar (GS) database for the period 2016 to 2022 and attempts to analyze core authors/co-authors, affiliations/institutions, articles cited with the keyword "organizational change". To visualize the obtained database analyzed using VOSviewer. VOSviewer is software used to create, visualize and explore maps based on network data. VOSviewer quickly and easily creates maps of up to thousands of items, and can even display maps of up to 10,000 items. VOSviewer also functions to search, zoom, scroll and facilitate large map detail (van Eck and Waltman 2019).

Bibliometric research will benefit organizations and the community both in general and organizations because it can help view and transform published metadata into maps/visualizations that can be more easily managed to gain useful insights. For example, starting from the identification of geographic coverage, collaboration, knowledge clusters, keywords, themes, author affiliations, journals, technologies, etc. which are part of the framework for identification (Hadi et al., 2020).

The VOSviewer used is version 1.6.18, while the Publish or Perish (PoP) application is used to select literature using a web base. The use of PoP applications in stages to describe the initial data search for visual analysis of research results. After all the data has been reviewed, the data is stored in the RIS format and then processed using the VOSviewer application (Machmuda et al. 2022). The resulting bibliometric map describes the interrelationships between the main search domains, in the form of lines that are interconnected and form a visualization. Bibliometric mapping stages take from previous studies (Machmuda et al. 2022). Selection steps:

1. Keyword Selection. To retrieve data, previously researchers need to direct the problem to be studied to be the main key to the search.
2. Initial Data Search. After getting the keywords, researchers conduct a review library through the PoP application using GS indexed journals which are then stored in RIS format
3. Compilation of Preliminary Statistical Drawings. Articles that have been saved in the RIS format is served via the Zotero application. Through the Zotero Application, articles are then reviewed for completeness of the data.
4. Data Interpretation. Data interpretation is done using the application VOSviewer. The results of the VOSviewer visualization describe the data in the form of variable maps related to the selected keywords and have the

opportunity to be developed.

Stages of analysis with VOSviewer:

1. Retrieving data from GS using CSV extension to VOSviewer.
2. Processing bibliometric data.
3. Network visualization/Density visualization

How to analyze the bibliometric of organizational change as shown in Figure 1

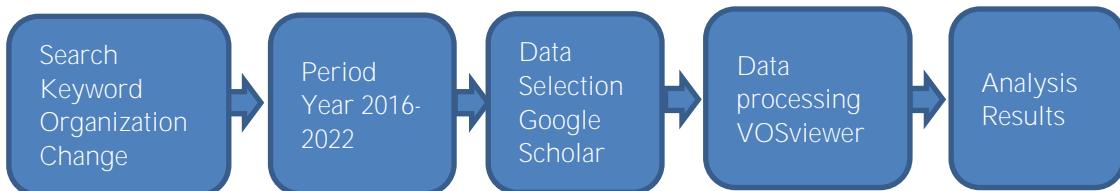


Figure 1. Bilbometric analysis of the five-step

Discussion and Results

The output is analyzed by VOSviewer software based on PoP software to determine the most frequently occurring keywords. However, the number of keywords that appear most often is adjusted to the needs of data collection and analysis. VOSviewer is a computer program used to visualize bibliometric maps. In the VOSviewer software, there are 3 (three) visualization displays in bibliometric analysis, namely network visualization, overlay visualization and density visualization. Before the search results were refined, a total of 153 articles were obtained from the GS database. After repairs were made, a total of 129 articles were obtained from the GS database which were grouped together.

Preliminary results identified around 153 articles with 569 citations (56.9 citations/year). As for the results of improving the article search, a total of 129 articles were obtained; citation data has also changed, with 367 citations and 52.43 citations/year. The full results of the initial search comparison and refined search metrics are presented in Table 1.

Table 1. The full results of the initial search comparison and refined search metrics are presented

Data Metrik	Pencarian awal	Pencarian perbaikan
Sumber	"Organization Change"	"Organization Change"
Tahun Terbit	2016-2020	2016-2020
Dokumen	153	129
Kutipan	569	367
Kutipan/Tahun	56,9	52,43
Kutipan/Kertas	3,72	2,84
Penulis/Makalah	1,93	1,95
h_index	11	9
g_index	18	14
hl_norm	8	6
hl_tahunan	0,8	0,86

The researchers try to present the main contribution in this study. The process is to produce 129 articles with the keyword "Organization Change" with the highest citation value and the top 10 most cited articles. with the results shown in Table 2 below.

Table 2. The highest citation value and the top 10 most cited articles

No	Publikasi Tahun	Pengarang	Judul	Jurnal	Mengutip	Penerbit
1	2016	J Suwaryo, HKK Daryanto...	Organizational culture change and its effect on change ... & BIROKRASI: Jurnal Ilmu ... readiness through organizational commitment		43	scholarhub.ui.ac.id
2	2018	AM Zahro, AY Sobri, A Nurabadi	Kepemimpinan perubahan kepala sekolah dalam peningkatan mutu pendidikan	JAMP: Jurnal Administrasi Dan ...	25	journal2.um.ac.id
3	2016	S Rumangkit	Pengaruh sosialisasi organisasi pada komitmen afektif Jurnal Bisnis Darmajaya yang dimediasi oleh kesesuaian nilai		22	jurnal.darmajaya.ac.id
4	2017	EA Pradani, D Lelonowati, S Sujianto	Keterlambatan Pengumpulan Berkas Verifikasi Klaim BPJS Di RS X: Apa Akar Masalah Dan Solusinya?	Jurnal Medicoeticolegal Dan ...	16	neliti.com
5	2020	S Rumangkit	Mediator analysis of perceived organizational support: role of spiritual leadership on affective commitment	JDM (Jurnal Dinamika Manajemen)	12	journal.unnes.ac.id
6	2021	H Susanti	Manajemen Pendidikan, Tenaga Kependidikan, Standar Pendidik, dan Mutu Pendidikan	Asatiza: Jurnal Pendidikan	12	ejournal.stai-tbh.ac.id
7	2016	R Nurjanah, R Rofaida, S Suryana	Kepribadian Karyawan Dan Budaya Organisasi: Faktor Determinan Keterikatan Karyawan (Employee Engagement)	Jurnal Manajemen	11	ecojoin.org
8	2019	DT Wibawani, BB Wiyono...	Kepemimpinan Visioner Kepala Sekolah Sebagai Pemimpin Perubahan Dalam Peningkatan Mutu Pendidikan	JAMP: Jurnal Administrasi ...	11	journal2.um.ac.id
9	2017	HM Nor, KNI Ku Ismail	The Moderating Effects of Independent Directors' Human Capital on the Relationship between Related Party Transactions and Firm Performance: Evidence ...	Jurnal Pengurusan	9	researchgate.net
10	2018	NG Guamaradewi, WL Mangundjaya	Dampak Kesiapan Individu dan Kesiapan Organisasi untuk Berubah bagi Komitmen Afektif untuk Berubah	Jurnal Manajemen Aset ...	9	iptek.its.ac.id

The total link strength attribute, in table 3, describes the total strength relationship of the coauthorship relationship from one researcher to another researcher. If we look at figure 2, Aslami and Rahman are the most authors in various documents with 3 documents each. Judging from the total link strength data (in table 3 and figure 2), Kusumawati and Wijaya both have correlations between authors. Kusumawati collected 2 points, followed by Wijaya who has the same points, namely 2.

Table 3. Authors and Total Links

No	Author	Documents	Total link strength
1	kusumawati, h	2	2
2	wijaya, nhs	2	2
3	aslami, n	3	0
4	azhar, i	2	0
5	mangundjaya, wl	2	0
6	rahman, a	3	0
7	rumangkit, s	2	0
8	suryanto, s	2	0

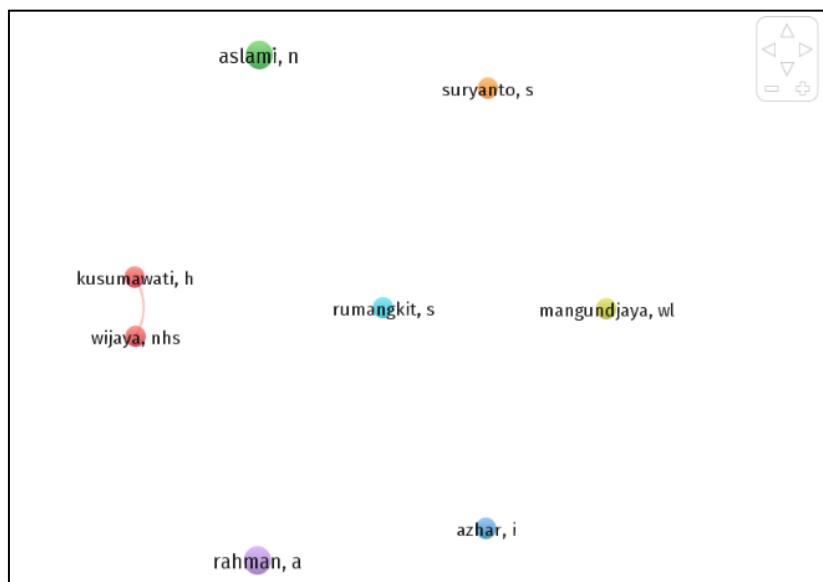


Figure 2. Network on the GS database

Judging from the number of articles in published journals (see Table 4), ejournal.unsrat.ac.id is the largest publisher. Published journals also link the most keywords;

Table 4. Top 10 Publishers Publishing Organization Change Topic

No	Penerbit	Artikel
1	ejournal.unsrat.ac.id	7
2	journal.unnes.ac.id	4
3	ummaspul.e-journal.id	3
4	scholarhub.ui.ac.id	3
5	repository.unair.ac.id	3
6	pdfs.semanticscholar.org	3
7	neliti.com	3
8	jurnal.unismuhpalu.ac.id	3
9	journal2.um.ac.id	3
10	repository.unair.ac.id	2

If you look at Table 5, the 5 words that often appear are organization change, change, organization, organizational change, and study

Table 5. Frequently Appearing Words

Term	Occurrences	Relevance Score
organization change	495	0.0656
change	329	0.0502
organization	266	0.0811
organizational change	176	0.1009
study	149	0.1631
change management	100	0.181
process	80	0.1663
research	77	0.2141
management	74	0.2065
development	70	0.2525

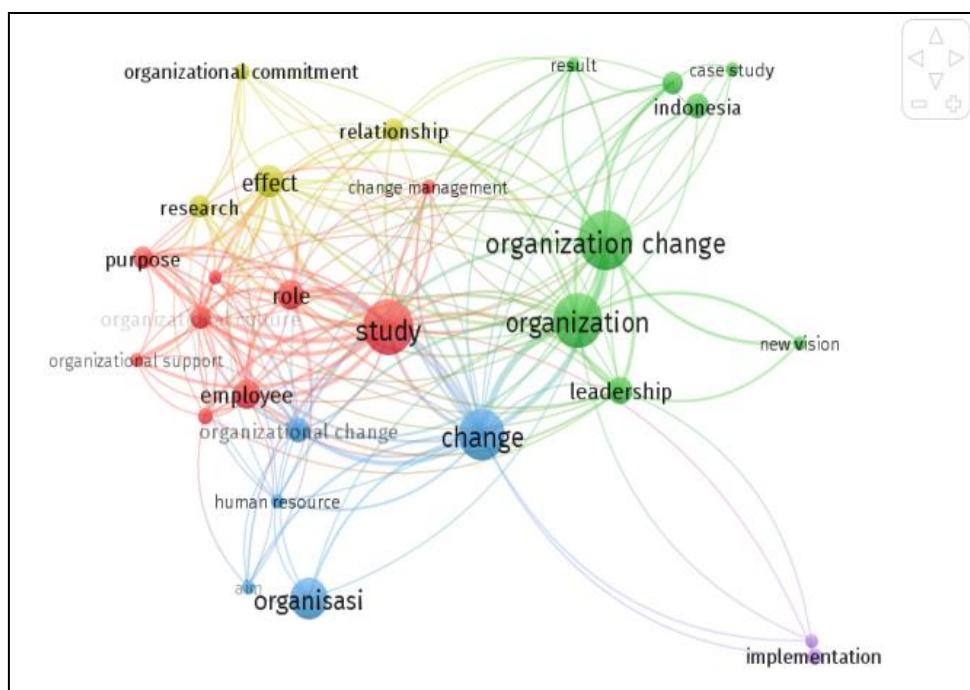


Figure 3. Network visualization on the GS database

The results of the VOSviewer mapping using keywords can be shown in Figure 3. In the network visualization graph above, 5 clusters were found, which were distinguished by color, namely red, green, blue, yellow, and purple. This data is generated through VOSviewer calculations with a minimum number of events set at 3. The keywords that appear in each cluster can be seen in Table 6.

Table 6. Keywords Representing Each Cluster

No	Gugus	Elemen
1	Pertama Gugus (Merah)	change management (12), employee (28), employee performance (16), influence (16), organizational culture (33), organizational support (13), purpose (29), role (36), study (71)
2	Kedua Gugus (Hijau)	case study (4), indonesia (7), leadership (26), new vision (8), organization (56) , organization change (47), process (14), result (11)
3	Ketiga Gugus (Biru)	aim (9), change (62) , human resource (12), organisasi (7), organizational change (26)
4	Keempat Gugus (Kuning)	effect (46) , organizational commitment (10), relationship (21), research (21)
5	Kelima Gugus (Ungu)	implementation (3), philosophy (4)

Each cluster has a main keyword related to a particular topic. In the first cluster, the word study is the most common keyword. In the second group, the word organization is the most common keyword, and in the third cluster, the most common keyword is change. The fourth most common keyword cluster is in the word effect, while the fifth most common keyword cluster is in the word philosophy.

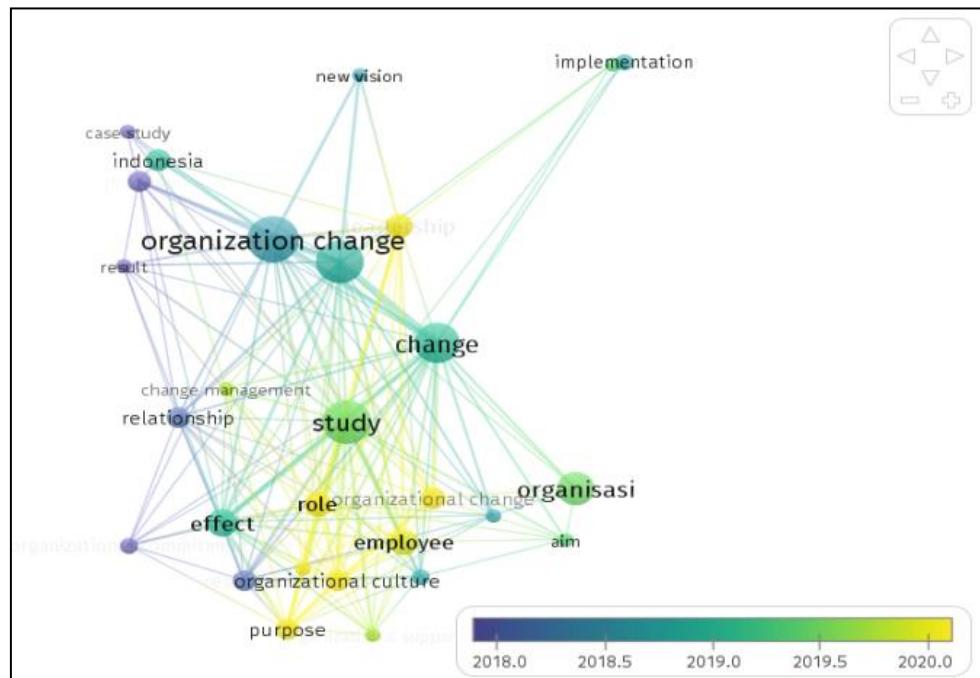


Figure 4. Overlay Visualization on the GS database

VOSviewer's Analysis for Density Visualization (see Figure 5) gives us a color difference map. The bright yellow and uppercase keywords mean they are the top

words in the latest research. The word Organization Change is big and bright yellow in color because it is the main keyword. The words Change, Study, and Organization are colored yellow even though they tend to be blue, meaning that this word has become a concern in recent writing. Meanwhile, words that are green and tend to be blue mean that these keywords rarely appear in the article. For example, the words implementation, new vision, relationship, purpose, and aim are lower case, this means that these words have not been included in much research in the last five years.

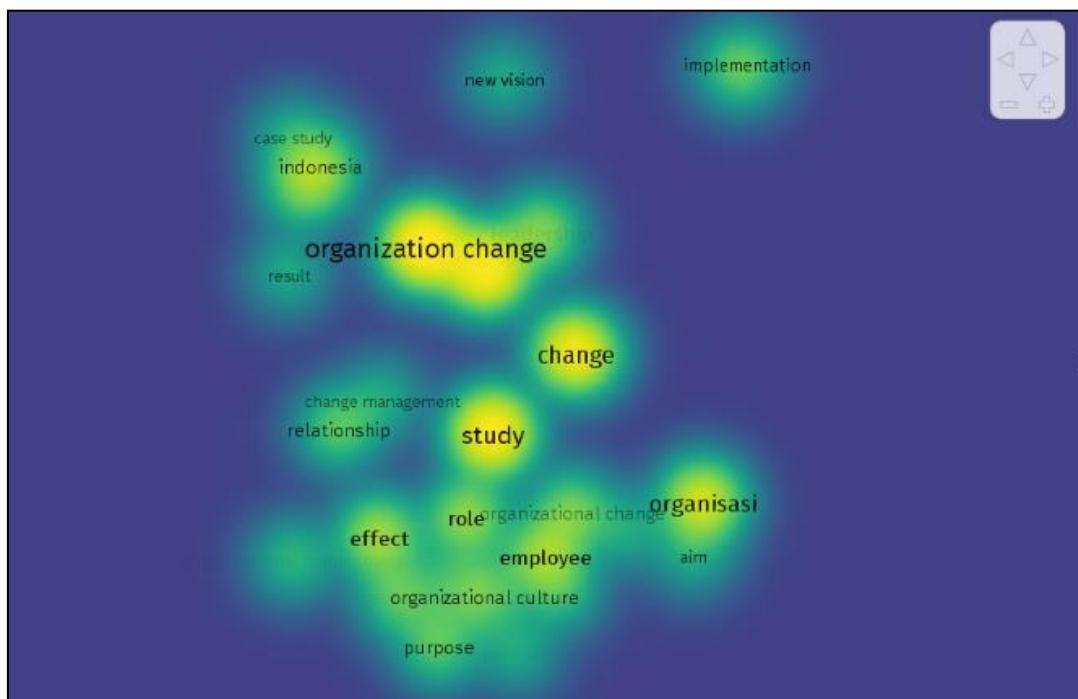


Figure 5. Density Visualization in the GS database

Conclusion

The research used the Bibliometric analysis method which was visualized with VOSviewer by searching the Google Scholar (GS) database with the word Organization Change during the 2016-2022 period with the category of article title, abstract, keywords in 153 articles obtained in the initial results with 569 citations (56.9 citations) /year). Results of article search improvements Through bibliometric analysis, 129 articles were obtained, citation data also changed, with 367 citations and 52.43 citations/year. Organization Change research theme is quite a concern and the trend of publication. This is evidenced by Google Scholar data which shows that on average articles, posts and keywords appear every year with 52.43 citations/year.

The results of the study show that the most cited author, J Suwaryo HKK, cited 43 and the most relevant affiliation was the University of Indonesia. In table 3 which describes the total strength relationship of the coauthorship relationship

from one researcher and another researcher. In table 3 and figure 2, Aslami and Rahman are the largest authors in various documents with 3 documents each. Kusumawati and Wijaya both have correlations between authors, each of which has 2 points in common.

On table 4, the top publisher publishing the topic "Organization Change" is ejournal.unsrat.ac.id with a total of 7 articles. In table 5, the words that often appear are organization change, change, organization, organizational change, and study. In graph four, the overlay visualization of GS data related to the last five years on organization change research is related to the main and most common keywords, namely study, organization, change, and effect. Bibliometric mapping also supports the scientific explanation between theory and probability evidence.

This research can be a basis for further research which can be based on a graph of five by looking at keywords in dark and small areas, for example new vision, Indonesian case study, results, change management, purpose, organizational culture, human resources, and Implementation. From this study it shows that GS research with this theme is still small and has not been widely included in research in the last five years, so further research is needed to add to this research. In addition to the themes offered above, it is necessary to look for themes that have not appeared in the last seven years.

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