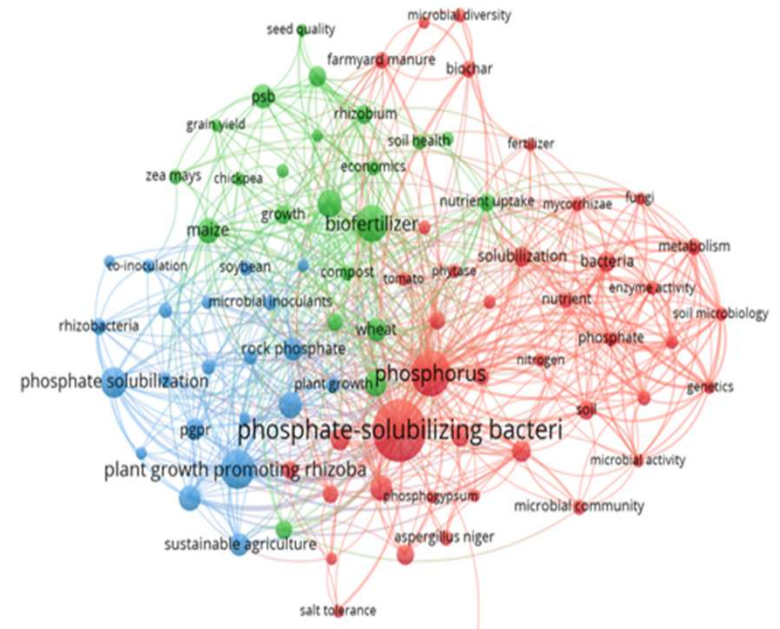




Paper Bibliometrik: Menemukan Ide & Membangun Kerangka Penelitian

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Konsep Dasar Analisis Bibliometrik

Biblio --berasal dari bahasa Latin & Yunani -Biblion - yang merujuk pada buku /dokumen. Kata Metrik berasal dari bahasa latin dan Yunani , "Metricus" yang merujuk pada pengukuran.

Konsep ini pertama kali diusulkan oleh Pritchard (1969)- Penerapan matematika dan metode statistik pada buku dan media komunikasi lainnya.

Kajian bibliometrik adalah proses menganalisis dan mengklasifikasikan kumpulan data bibliografi (dataset) serta menyusun ringkasan yang representatif (Donthu dkk, 2020)

Bibliometrik berarti pengukuran dari sifat sifat kumpulan dokumen (Ahmi, 2022).

Sifat-sifat kumpulan dokumen meliputi metadata dokumen/ artikel
Metadata disebut juga data bibliografi

Metadata artikel: Judul sumber, nama penulis, judul artikel, tahun, kata kunci, referensi, nama penerbit, afiliasi penulis, negara, dan abstrak

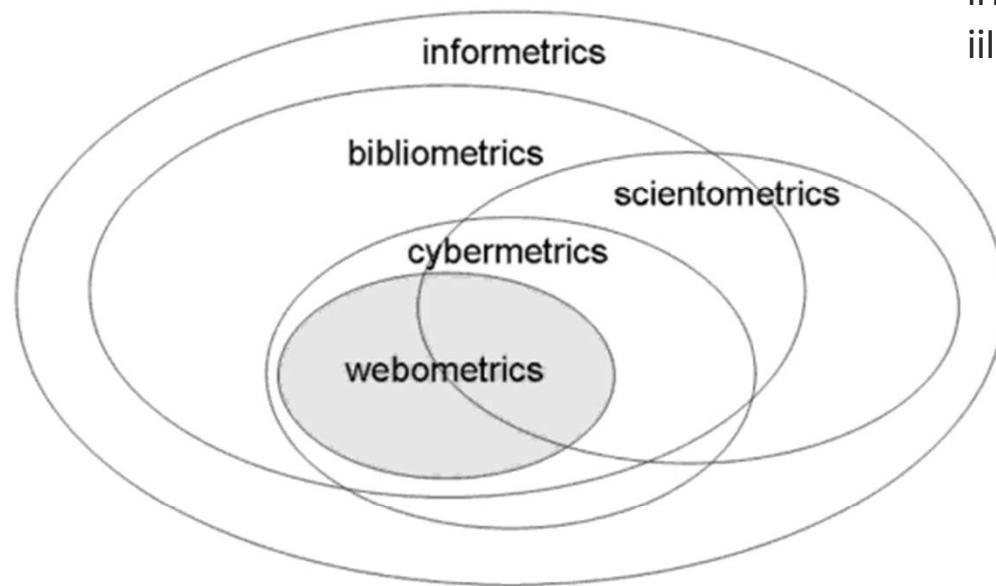
<https://play.google.com/books/reader?id=kZ9BEAAAQBAJ&pg=GBS.PR20&hl=id>

Konsep Dasar Analisis Bibliometrik

Fokus Analisis bibliometric : Literatur & Dokumen Ilmiah
Unit analisis: Publikasi, Sitasi & Referensi

<https://play.google.com/books/reader?id=kZ9BEAAAQBAJ&pg=GBS.PR20&hl=id>

Konsep Metrik Terkait



Bibliometrik merupakan subbidang dari informetrika (diperkenalkan oleh Blackert and Siegel (1979) dan Nacke (1979)

Informetrika : Semua studi metrik yang terkait dengan ilmu informasi

Scientometrics diperkenalkan oleh Nalimov & Mulcenko (1969). Studi tentang ilmu pengetahuan yang mencakup pertumbuhan, produktivitas, struktur, hubungan antar bidang.

Sibermetrik merupakan studi yang berkaitan dengan dunia maya dan situs web (mengukur pertumbuhan, memeriksa keaslian, mengukur penggunaan, dll

Webometrik merupakan subbidang sibermetrik, Studi yang fokus pada World Wide Web. Dicituskan oleh Almind & Ingwersen (1997)

Ahmi, A. (2022). Bibliometric analysis for beginners (UUM press). UUM press.

Perbedaan BA/ Meta analysis & SLR

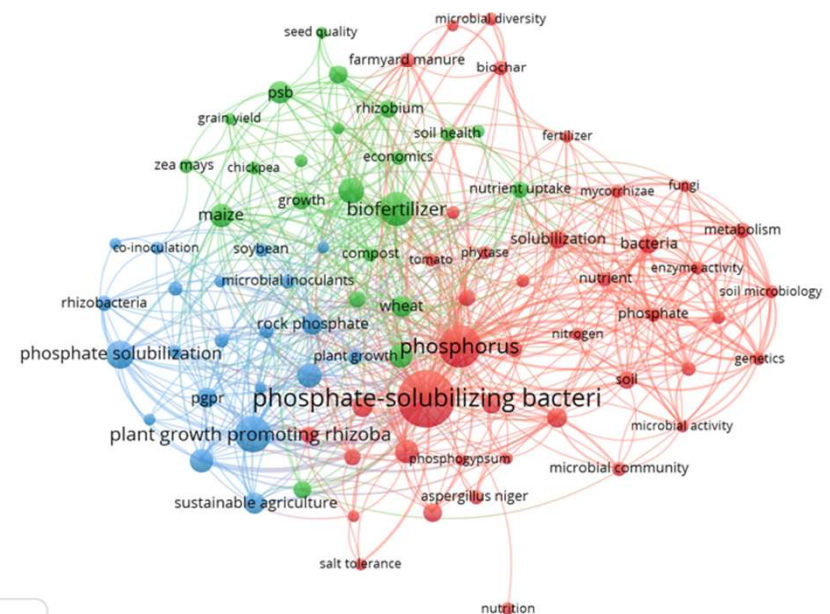
Table 1
Comparison of major review methods.

Review type	Goal	When to use	When not to use	Scope	Dataset	Analysis
Bibliometric analysis	<ul style="list-style-type: none"> Summarizes large quantities of bibliometric data to present the state of the intellectual structure and emerging trends of a research topic or field. 	<ul style="list-style-type: none"> When the scope of review is broad. When the dataset is too large for manual review. 	<ul style="list-style-type: none"> When the scope of review is specific. When the dataset is small and manageable enough that its content can be manually reviewed. 	<ul style="list-style-type: none"> Broad 	<ul style="list-style-type: none"> Large 	<ul style="list-style-type: none"> Quantitative (evaluation and interpretation) Qualitative (interpretation only)
Meta-analysis	<ul style="list-style-type: none"> Summarizes the empirical evidence of relationship between variables while uncovering relationships not studied in existing studies. 	<ul style="list-style-type: none"> When the focus of review is to summarize results rather than to engage with content, which may be broad or specific. When studies in the field are homogenous. When the number of homogeneous studies available is sufficiently high. When the number of homogeneous studies remaining after removing low quality studies is sufficiently high. 	<ul style="list-style-type: none"> When studies in the field are heterogeneous. When the number of homogenous studies is relatively low. When the number of high-quality homogeneous studies is relatively low. 	<ul style="list-style-type: none"> Broad Specific 	<ul style="list-style-type: none"> Large Small but adequate 	<ul style="list-style-type: none"> Quantitative (evaluation and interpretation)
Systematic literature review	<ul style="list-style-type: none"> Summarizes and synthesizes the findings of existing literature on a research topic or field. 	<ul style="list-style-type: none"> When the scope of review is specific. When the dataset is small and manageable enough that its content can be manually reviewed. 	<ul style="list-style-type: none"> When the scope of review is broad. When the dataset is too large for manual review. 	<ul style="list-style-type: none"> Specific 	<ul style="list-style-type: none"> Small 	<ul style="list-style-type: none"> Qualitative (evaluation and interpretation)

(Donthu, 2022)

- **Mengevaluasi Kinerja.** Memetakan distribusi literatur berdasarkan tahun, penulis, subjek area, negara, afiliasi, type dokumen, bahasa. Mengevaluasi Dampak Penelitian berdasar sitasi dan metrik lainnya
- **Memetakan keadaan terkini publikasi** Memvisualisasikan dan memetakan jaringan bibliometrik subyek penelitian tertentu.
- **Mengevaluasi Tren.** Mengetahui perkembangan terkini topik penelitian tertentu
- **Mengevaluasi jurnal**
- **Mengetahui evolusi tema penelitian & kesenjangan penelitian**
- **Pengembangan kebijakan dan publikasi**

Manfaat Analisis Bibliometrik



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Contoh Paper Bibliometrik

BACA: Jurnal Dokumentasi dan Informasi, Vol. 43, No. 2, 2022

ISSN 0125-9008 (Print); ISSN 2301-8593 (Online)

DOI: 10.14203/j.baca.v43i2.854

SK Dirjen Dikti Ristek - Kemdikbudristek No. 105/E/KPT/2022 (Peringkat 2 SINTA)



Analisis bibliometrik perkembangan penelitian bidang ilmu geografi

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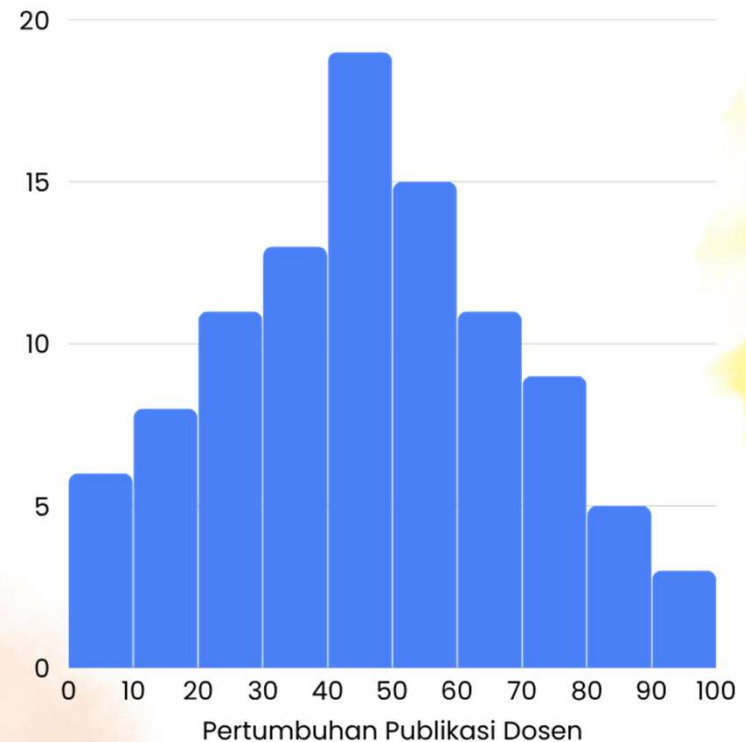
Diajukan: 07-02-2022; **Direview:** 24-06-2022; **Diterima:** 07-10-2022; **Direvisi:** 28-09-2022

ABSTRACT

Research data and publications that have been carried out can be essential data in bibliometric analysis to determine the development of an institution's publication profile. This study aims to analyze the research publication by geography lecturers at Gajah Mada University, indexed by Scopus in 1991-2021. This analysis includes the distribution of publications, types, sources of publication documents, the most prolific authors, collaborating affiliations, and trending publication themes. The research method used was a quantitative descriptive method by conducting a bibliometric analysis of the publication of the lecturers of the Faculty of Geography, Gadjah Mada University, indexed by Scopus. The findings showed that (a) there were 801 total publications, with an increase in the number of publications since 2014 (8 documents) and peaking in 2020 (218 documents); (b) the most published documents were conference papers (58.67%); (c) Most source documents from the IOP Conference Series Earth and Environmental Science; (d) Most lecturers collaborated with the Laboratoire de Géographie Physique; (e) The most productive lecturer was Marfai, M.A.; and (f) Research trends themed Worldview 2, Mapping, Remote

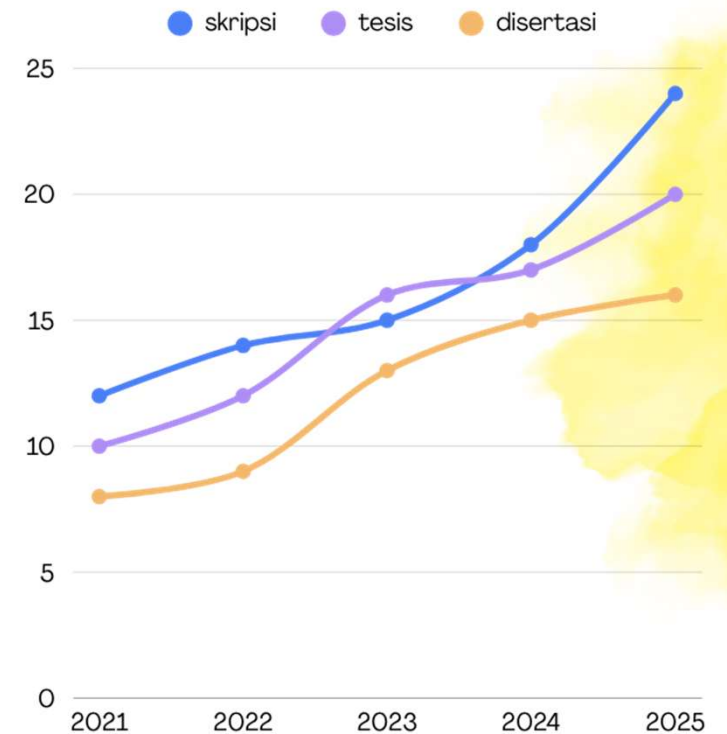
Data di sekitar kita

- Data Skripsi Mahasiswa
- Data Tesis Mahasiswa
- Data Disertasi Mahasiswa
- Data Publikasi Dosen
- Data Artikel Jurnal bidang tertentu
- Data Jurnal bidang tertentu.
- Data Penggunaan koleksi oleh mahasiswa



Apa yang sudah dilakukan dengan data?

- Hasil penelitian mahasiswa, tema apa yang dominan?
- Pertumbuhan publikasi di kampus kita?
- Siapa Penulis yang paling produktif?
- Dosen/peneliti di kampus kita berkolaborasi dengan kampus mana saja?
- Prosentase Pemanfaatan Koleksi Perpustakaan?
- Topik penelitian apa yang sedang tren untuk bidang tertentu?



Bagaimana melakukan Kajian Bibliometrik?

1. Menetapkan **Topik Penelitian**
2. Menetapkan beberapa **tujuan penelitian** dan atau pertanyaan penelitian.
3. Mengidentifikasi **Kata Kunci**
4. Menentukan **basisdata** yang akan digunakan (Scopus)
5. **Mengumpulkan dataset**
6. Melakukan **Cleaning Data**
7. Melakukan **visualisasi & analisis data**
8. Interpretasi data

<https://play.google.com/books/reader?id=kZ9BEAAAQBAJ&pg=GBS.PR20&hl=id>

Bibliometric Analysis Tool



BiblioPlot

Aplikasi Visualisasi Data Bibliometrik untuk Analisis Kinerja dan Pemetaan Ilmu

Menetapkan Topik

1. Menetapkan **Topik Penelitian**

- Pastikan topik yang dipilih dapat diidentifikasi kata kuncinya dengan mudah
- Topik yang dipilih jangan terlalu luas dan jangan terlalu spesifik
- Datasetnya tersedia
- Belum pernah diriset oleh peneliti sebelumnya (lakukan pencarian di beberapa database) cek sumber data, periode, atribut bibliometric yang telah dieksplorasi

<https://play.google.com/books/reader?id=kZ9BEAAAQBAJ&pg=GBS.PR20&hl=id>

Menetapkan tujuan dan pertanyaan penelitian

Menetapkan beberapa tujuan penelitian dan atau pertanyaan penelitian.

Contoh Pertanyaan Penelitian:

RQ 1 - Bagaimana tingkat pertumbuhan penelitian tentang

RQ 2 - Bagaimana distribusi regional yang mengidentifikasi negara negara yang terlibat aktif dalam penelitian tentang.....

RQ 3 - Topik penelitian apa yang paling sering dirujuk

RQ4 - Jurnal apa saja yang paling banyak berkontribusi pada penelitian

RQ 5 - Siapa penulis yang paling produktif dan berpengaruh?

Rq 6 - Bagaimana tren penelitian topik pada rentang tahun 2020-2026?

RQ 7 - Tema apa yang paling populer pada topik penelitian?

RQ 8 - Bagaimana struktur intelektual penelitian tentang?

RQ 9 - Siapa saja peneliti yang dominan aktif dalam penelitian?

<https://play.google.com/books/reader?id=kZ9BEAAAQBAJ&pg=GBS.PR20&hl=id>

Mengidentifikasi Kata Kunci

No.	Topic	Keywords
1.	Flipped classroom	“flipped classroom” OR “flipped learning”
2.	MOOCs	“massive open online course” OR MOOC
3.	E-commerce	“e-commerce” OR “electronic commerce” OR “ecommerce”
4.	Ethical leadership	“ethical leadership” OR “ethical manager*”
5.	Halal	halal
6.	Islamic banking	“Islamic banking” OR “Islamic finance”
7.	Blockchain	Blockchain OR “block chain”
8.	Women entrepreneur	“wom?n* entrepreneur*” OR “female* entrepreneur*” OR busineswom?n OR “business wom?n”
9.	IT governance	“IT Governance” OR “Information Technology Governance” OR “I&T Governance” OR “Information and Technology Governance” OR “ICT Governance” OR “Information and Communication Technology Governance” OR “IS Governance” OR “Information System Governance”

- Ruang lingkup perlu dijelaskan

<https://play.google.com/books/reader?id=kZ9BEAAAQBAJ&pg=GBS.PR20&hl=id>

Sumber Metadata Kajian Bibliometrik

Sumber Metadata :

Web of Science
Google Scholar
Dimension
Lens

Scopus

Microsoft Academic
PubMed

Kajian bibliometrik hanya menganalisis berdasarkan metadata. Bibliometrik dapat dilakukan sebelum melakukan tinjauan pustaka, dan dibagian penulisan tesis atau penelitian lainnya (Ahmi, 2022)

<https://play.google.com/books/reader?id=kZ9BEAAAQBAJ&pg=GBS.PR20&hl=id>

Mengumpulkan Dataset

Gunakan beberapa strategi pencarian

Pencarian Frasa , gunakan **tanda kutip ("...")**
Pencarian persis, gunakan **{kurung kurawal}**
Menghubungkan beberapa Kata Kunci, gunakan **Boolean Operator** (AND, OR, AND NOT)
Simbol **Wildcard** (tanda tanya ? dan tanda Bintang *) tanda tanya menggantikan satu karakter, tanda Bintang menggantikan beberapa karakter.

<https://play.google.com/books/reader?id=kZ9BEAAAQBAJ&pg=GBS.PR20&hl=id>

Mengumpulkan Dataset

Mengunduh Dataset

Export 470 documents to CSV [?](#)



What information do you want to export?

Citation information

Bibliographical information

Abstract & keywords

Funding details

Other information

Author(s)

Document title

Year

EID

Source title

Volume, issues, pages

Citation count

Source & document type

Publication stage

Affiliations

Serial identifiers (e.g. ISSN)

PubMed ID

Publisher

Editor(s)

Language of original document

Correspondence address

Abbreviated source title

Abstract

Author keywords

Indexed keywords

Number

Acronym

Sponsor

Funding text

Tradenames & manufacturers

Accession numbers & chemicals

Conference information

Include references

Select all information



Truncate to optimize for Excel [?](#)



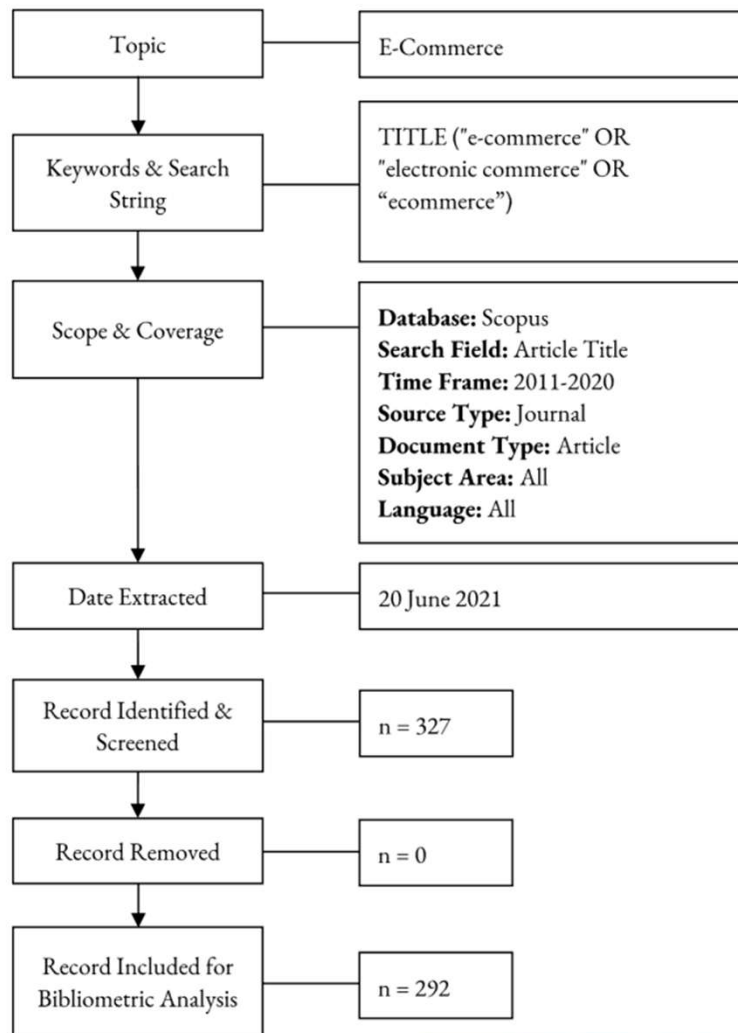
Save as preference

Export

<https://play.google.com/books/reader?id=kZ9BEAAAQBAJ&pg=GBS.PR20&hl=id>

Mengumpulkan Dataset

Protokol sistematis
untuk mendapatkan
dataset



<https://play.google.com/books/reader?id=kZ9BEAAAQBAJ&pg=GBS.PR20&hl=id>

Teknik Analisis Bibliometrik

Performance Analysis

Science Mapping



Metode Analisis Bibliometrik

- Co-Authorship Analysis
- Co-Occurance Analysis
- Citation Analysis
- Co -Citation Analysis
- Bibliographical Coupling

Metode Analisis Bibliometrik

• Co-Authorship Analysis.

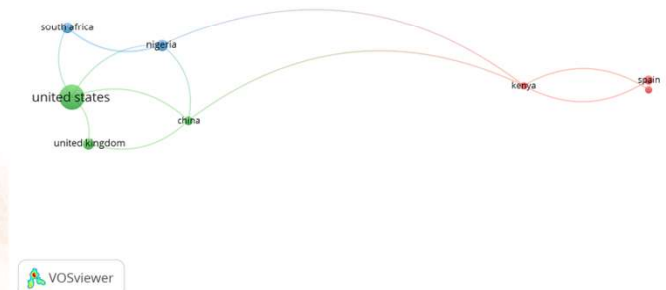
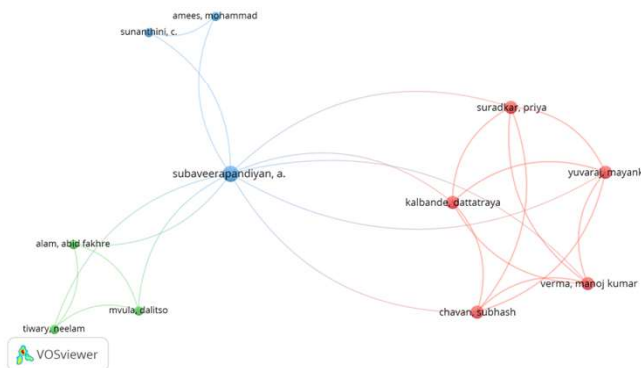
Memetakan jaringan kolaborasi antar penulis, afiliasi / negara penulis/paper yang berpengaruh

Verify selected countries

Selected	Country	Documents	Citations	Total link strength
<input checked="" type="checkbox"/>	united states	36	809	4
<input checked="" type="checkbox"/>	united kingdom	7	401	2
<input checked="" type="checkbox"/>	canada	6	210	0
<input checked="" type="checkbox"/>	nigeria	7	204	5
<input checked="" type="checkbox"/>	india	12	190	2
<input checked="" type="checkbox"/>	south africa	7	159	3
<input checked="" type="checkbox"/>	china	5	148	4
<input checked="" type="checkbox"/>	pakistan	3	106	1
<input checked="" type="checkbox"/>	taiwan	3	74	1

Verify selected authors

Selected	Author	Documents	Citations	Total link strength
<input checked="" type="checkbox"/>	cox, andrew m.	3	304	8
<input checked="" type="checkbox"/>	pinfield, stephen	2	277	6
<input checked="" type="checkbox"/>	lo, leo s.	6	199	1
<input checked="" type="checkbox"/>	rutter, sophie	1	187	2
<input checked="" type="checkbox"/>	andrews, james e.	2	175	4
<input checked="" type="checkbox"/>	yoon, jungwon	2	175	4
<input checked="" type="checkbox"/>	hervieux, sandy	3	163	3
<input checked="" type="checkbox"/>	wheatley, amanda	3	163	3
<input checked="" type="checkbox"/>	ward, heather	1	110	2
<input checked="" type="checkbox"/>	cao, gaohui	1	100	2
<input checked="" type="checkbox"/>	li, xuguang	1	100	2
<input checked="" type="checkbox"/>	liang, mengli	1	100	2

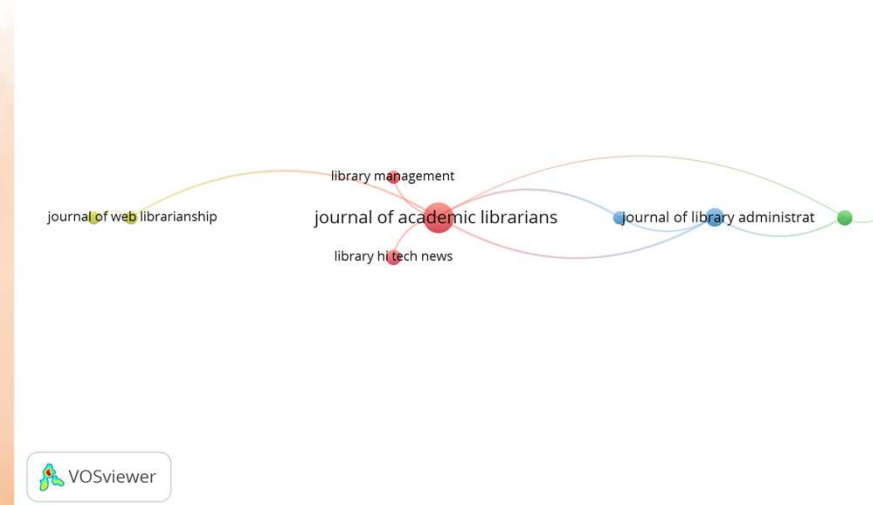


Metode Analisis Bibliometrik

- Citation Analysis: memetakan penulis, jurnal, paper afiliasi & negara yang berpengaruh

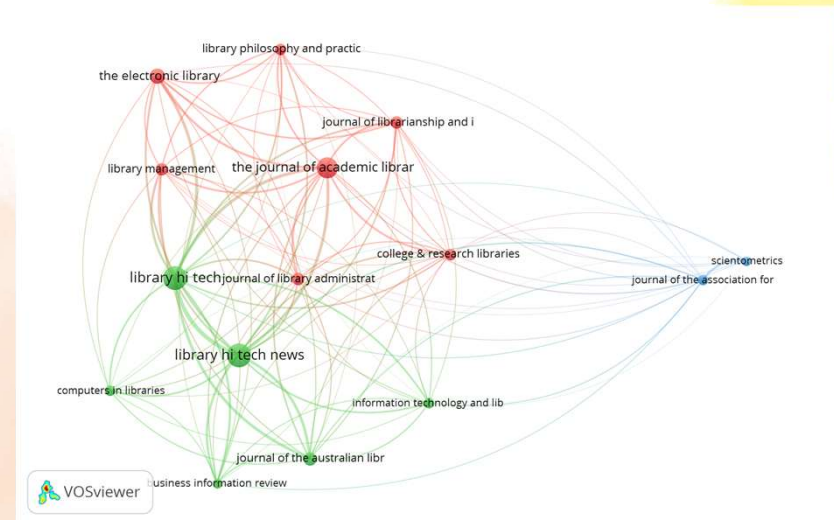
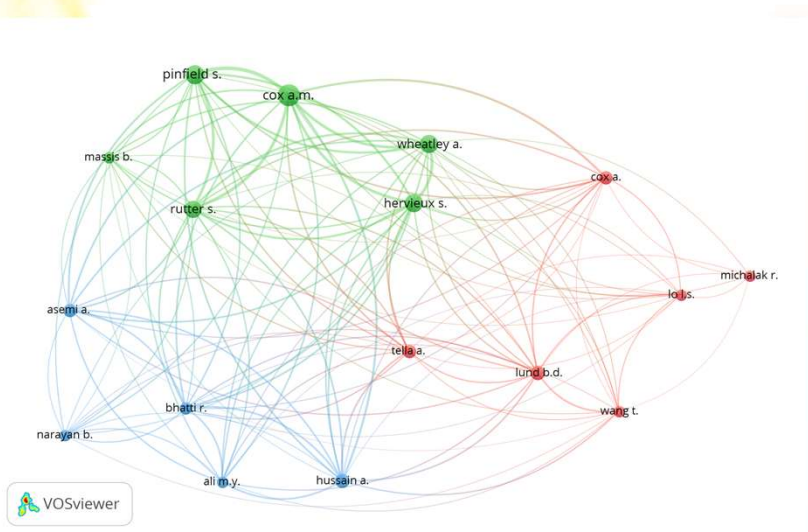
Verify selected sources

Selected	Source	Documents	Citations	Total link strength
<input checked="" type="checkbox"/>	journal of academic librarianship	16	470	14
<input checked="" type="checkbox"/>	library hi tech	4	380	4
<input checked="" type="checkbox"/>	college and research libraries	3	108	1
<input checked="" type="checkbox"/>	journal of web librarianship	3	87	4
<input checked="" type="checkbox"/>	journal of the australian library and info...	3	82	5
<input checked="" type="checkbox"/>	journal of library administration	6	79	7
<input checked="" type="checkbox"/>	library management	3	69	2
<input checked="" type="checkbox"/>	library hi tech news	4	64	2
<input checked="" type="checkbox"/>	information technology and libraries	5	61	0
<input checked="" type="checkbox"/>	college and research libraries news	4	38	0
<input checked="" type="checkbox"/>	library philosophy and practice	2	20	0




Metode Analisis Bibliometrik

- Co -Citation Analysis
- Referensi yang sama-sama muncul di satu dokumen maka akan dihubungkan (referensi, sources, author)
- Referensi yang paling populer pada topik ini

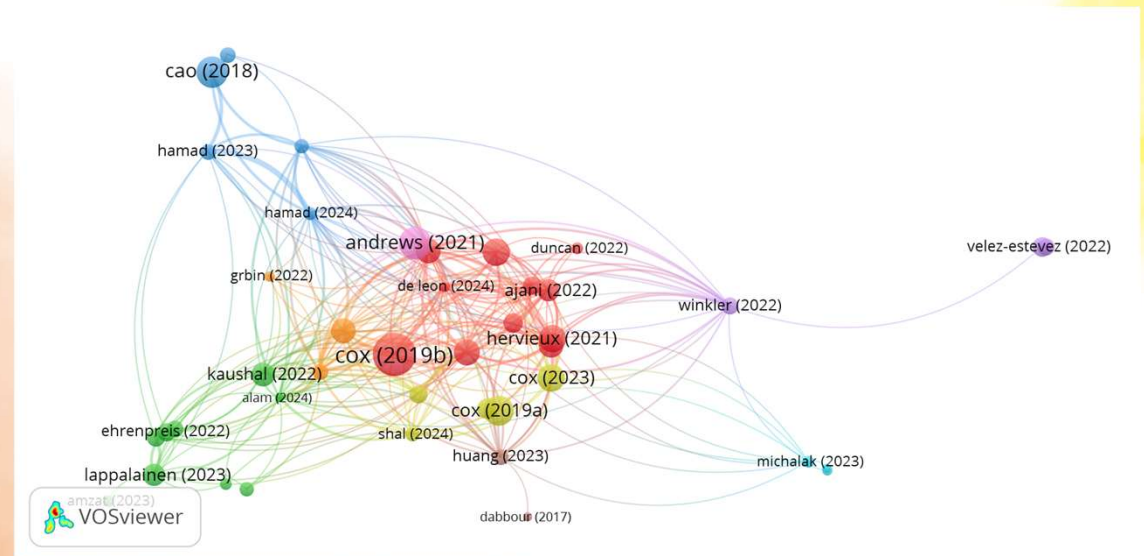


Metode Analisis Bibliometrik

- Bibliographical Coupling
Menghubungkan dokumen yang memiliki referensi yang sama; memetakan landasan/fondasi sebuah topik

 Choose type of analysis and counting method

Type of analysis: ⓘ	Unit of analysis:
<input type="radio"/> Co-authorship	<input checked="" type="radio"/> Documents
<input type="radio"/> Co-occurrence	<input type="radio"/> Sources
<input type="radio"/> Citation	<input type="radio"/> Authors
<input checked="" type="radio"/> Bibliographic coupling	<input type="radio"/> Organizations
<input type="radio"/> Co-citation	<input type="radio"/> Countries



Referensi

Ahmi, A. (2022). *Bibliometric analysis for beginners* (UUM press). UUM press.

Donthu, N., Kumar, S., Mukherjee, D., Pandey, N., & Marc, W. (2021). How to conduct a bibliometric analysis : An overview and guidelines. *Journal of Business Research*, 133(March), 285–296.
<https://doi.org/10.1016/j.jbusres.2021.04.070>