



**UMS**

Universitas Muhammadiyah Surakarta



Workshop Bibliometrika

**SCIENCE MAPPING  
MENGGUNAKAN**

**BIBLIOMETRIKA**

3 Agustus 2023



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Pustakawan Madya  
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# POINTS OF DISCUSSIONS

**Pengantar Bibliometrika**

**Langkah-langkah  
melakukan analisis  
Bibliometrika**

**Metode Analisis  
Bibliometrika**

**Analisis Bibliometrika  
menggunakan Tools  
Bibliometrika**

A background network diagram consisting of grey spheres (nodes) connected by thin grey lines (edges), forming a complex web structure. The nodes are of varying sizes and are distributed across the left side of the slide.

# Pengantar Bibliometrika

1

**Sebuah riset ibarat  
sebuah kepingan puzzle**

...tiap keping disusun untuk mendapatkan gambar utuh...



Any time  
Since 2023  
Since 2022  
Since 2019  
Custom range...

Sort by relevance  
Sort by date

Any type  
Review articles

include patents  
 include citations

Create alert

**[PDF] The seven faces of information literacy**  
C Bruce - 1997 - researchgate.net  
... How can we engage students with the experience of **information literacy**? ... • **Information literacy** –critical location, evaluation and use of information • Digital **information literacy** ...  
☆ Save 📄 Cite Cited by 1683 Related articles All 7 versions ⇨

**Reframing information literacy as a metaliteracy**  
TP Mackey, TE Jacobson - College & research libraries, 2011 - crl.acrl.org  
... We begin with an exploration of traditional **information literacy** frameworks defined in the most common professional standards. The standards reflect how **information literacy** is ...  
☆ Save 📄 Cite Cited by 793 Related articles All 11 versions ⇨  
📄 292 🟢 2 🟡 222 🔵 0

**Rethinking information literacy**  
JW Marcum - The library quarterly, 2002 - journals.uchicago.edu  
... The appropriateness of the "learning methodology" of the **information literacy** ... **information literacy** to workplace competencies is outlined. The article proposes that **information literacy** be ...  
☆ Save 📄 Cite Cited by 351 Related articles All 12 versions ⇨  
📄 128 🟢 0 🟡 63 🔵 0

**A decade of critical information literacy: A review of the literature**  
E Tewell - Communications in information literacy, 2015 - pdxscholar.library.pdx.edu  
... into critical **information literacy**, including critical pedagogy and critiques of **information literacy**, in order to provide an entry point for this emerging approach to **information literacy**. ...  
☆ Save 📄 Cite Cited by 226 Related articles All 11 versions ⇨  
📄 89 🟢 2 🟡 52 🔵 0

Related searches

- "information literacy" **library students**
- "information literacy" **skills**
- "information literacy" **digital age**
- "information literacy" **instruction**
- "information literacy" **competency**
- "information literacy" **curriculum**
- lifelong learning** "information literacy"

**Towards information literacy indicators**  
... of **information literacy** is a priority at both national and international levels. Apart from initiatives outlined in this report in the education sector, **information literacy** has ... **Information literacy**

[PDF] researchgate

[PDF]

[PDF] jstor.org

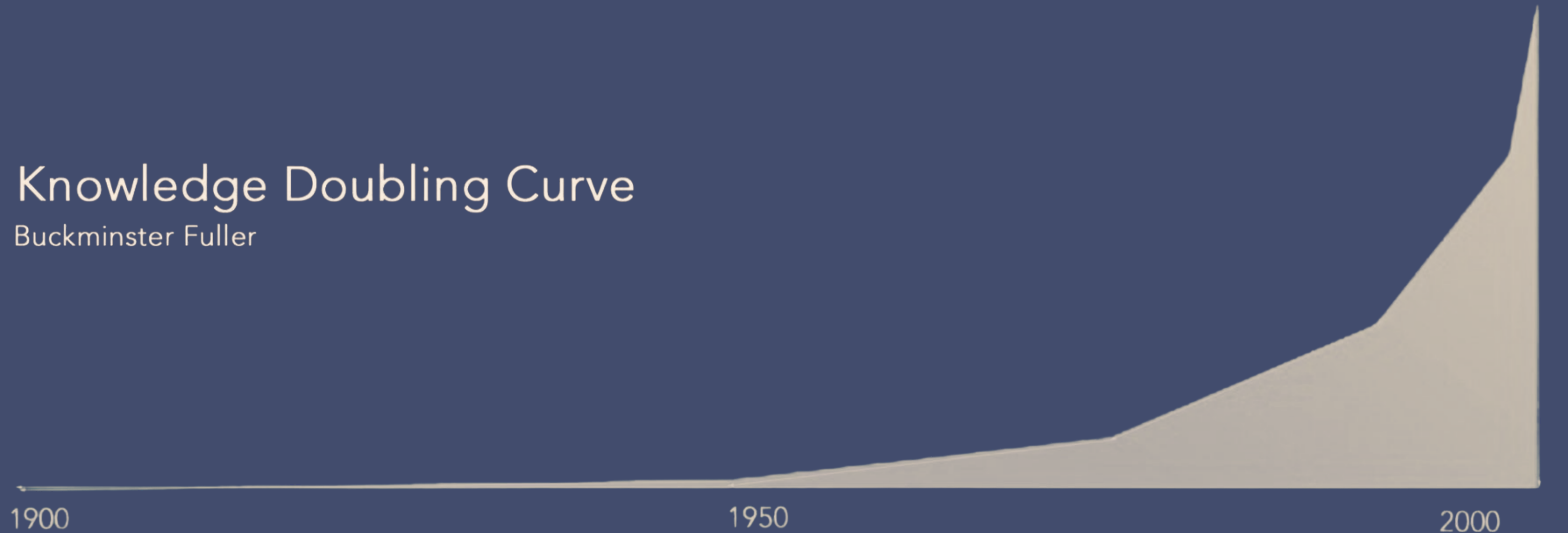
[PDF] pdx.edu  
Full View

[PDF] stir.ac.uk



# Knowledge Doubling Curve

Buckminster Fuller



Until 1900 human knowledge doubled approximately every century.

By 1945 knowledge was doubling every 25 years.

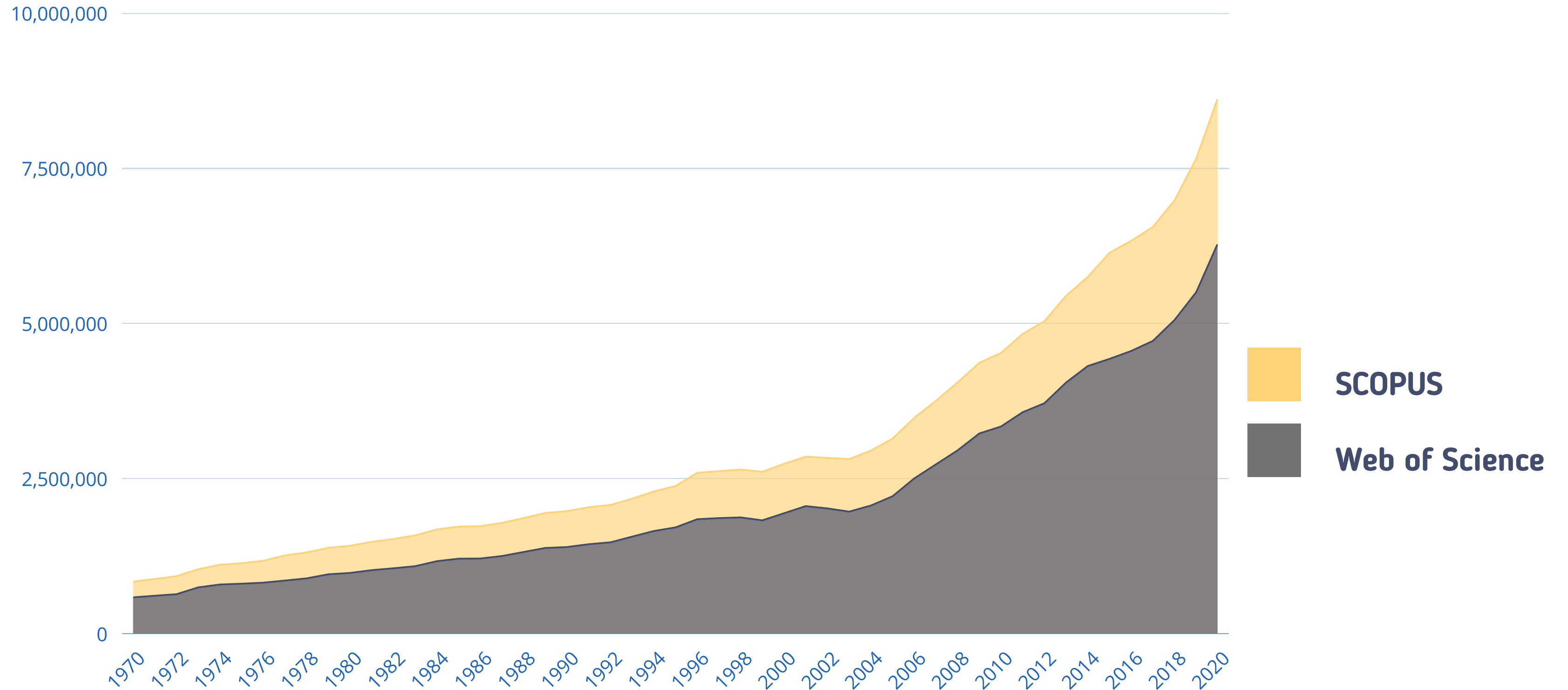
Currently, on average human knowledge is doubling every 13 months.

IBM predicts the build out of the "internet of things" will result in the doubling of knowledge every 12 hours.

<https://genuinebritishengineer.wordpress.com/2019/04/01/marc-my-words-the-coming-knowledge-tsunami-get-ready-if-you-think-you-are-overwhelmed-with-information-right-now-you-aint-seen-nothing-yet-i-was-shocked-yet-also-unsurprised-when-i-rea/>



# Pertumbuhan jumlah artikel

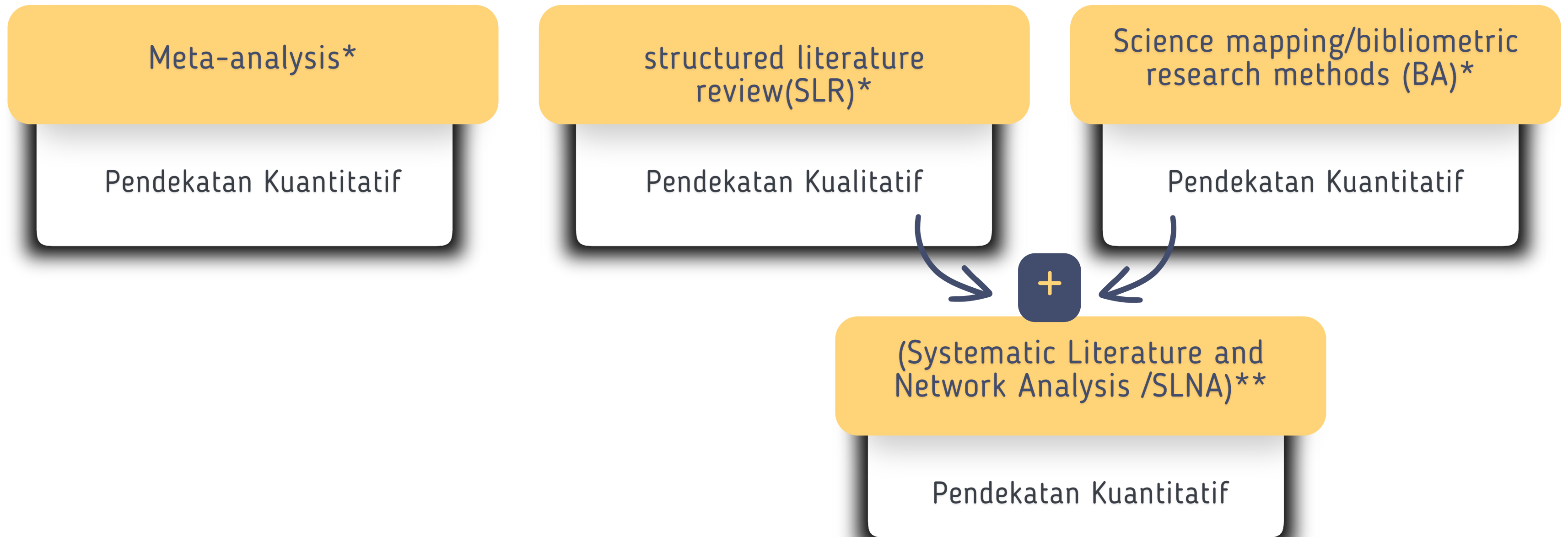


[https://figshare.com/articles/dataset/Scopus\\_1900-2020\\_Growth\\_in\\_articles\\_abstracts\\_countries\\_fields\\_and\\_journals/16834198](https://figshare.com/articles/dataset/Scopus_1900-2020_Growth_in_articles_abstracts_countries_fields_and_journals/16834198)





# Metode yang biasanya digunakan untuk mensistesis hasil-hasil riset terdahulu.

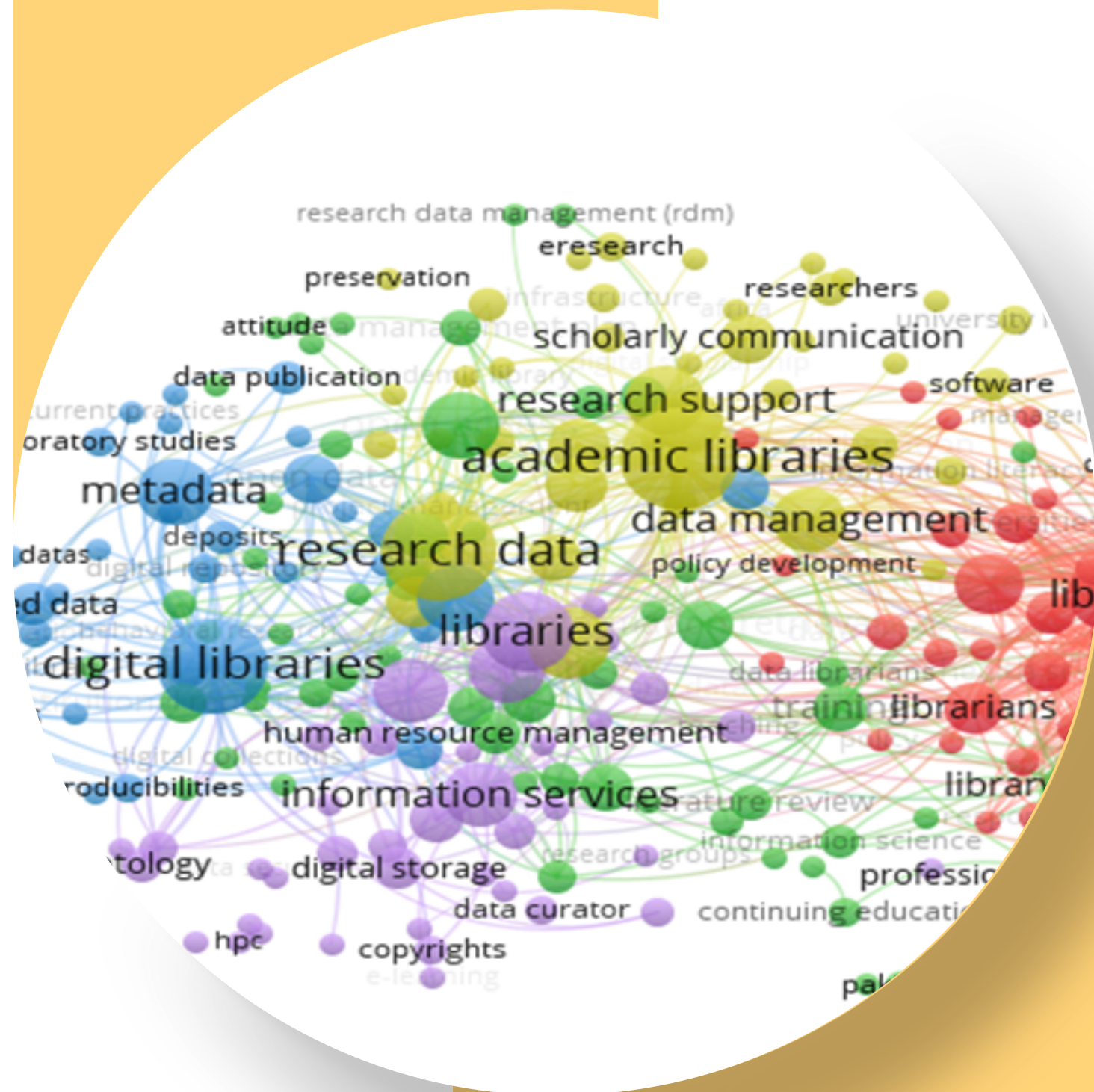


\* Zupic, I., & Čater, T. (2015). Bibliometric methods in management and organization. *Organizational research methods*, 18(3), 429-472.

\*\* Colicchia, C., Creazza, A., Noè, C., & Strozzi, F. (2018). Information sharing in supply chains: a review of risks and opportunities using the systematic literature network analysis (SLNA). *Supply chain management: an international journal*.

## Comparison of major review methods.

Review type	Goal	When to use	When not to use	Scope	Dataset	Analysis
Bibliometric analysis	Summarizes large quantities of bibliometric data to present the state of the intellectual structure and emerging trends of a research topic or field	When the scope of review is broad. When the dataset is too large for manual review.	When the scope of review is specific. • When the dataset is small and manageable enough that its content can be manually reviewed.	Broad	Large	Quantitative (evaluation and interpretation) Qualitative (interpretation only)
Meta-analysis	Summarizes the empirical evidence of relationship between variables while uncovering relationships not studied in existing studies.	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 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.	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	• Broad • Specific	Small but adequate	Quantitative (evaluation and interpretation)
Systematic literature review	Summarizes and synthesizes the findings of existing literature on a research topic or field.	When the scope of review is specific. • When the dataset is small and manageable enough that its content can be manually reviewed.	When the scope of review is broad. • When the dataset is too large for manual review.	Specific	Small	• Qualitative (evaluation and interpretation)



# Bibliometrics

“Bibliometrics is the application of mathematics and statistical methods to books and other media of communication”  
(Pritchard, 1969)

Borgman, C. L. (1989). Bibliometrics and Scholarly Communication. *Communication Research*, 16(5), 583-599. doi:10.1177/009365089016005002



## The journal coverage of Web of Science, Scopus and Dimensions: A comparative analysis

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Received: 26 September 2020 / Accepted: 9 March 2021  
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### Abstract

Traditionally, Web of Science and Scopus have been the two most widely used databases for bibliometric analyses. However, during the last few years some new scholarly databases, such as Dimensions, have come up. Several previous studies have compared different databases, either through a direct comparison of article coverage or by comparing the citations across the databases. This article aims to present a comparative analysis of the journal coverage of the three databases (Web of Science, Scopus and Dimensions), with the objective to describe, understand and visualize the differences in them. The most recent master journal lists of the three databases is used for analysis. The results indicate that the databases have significantly different journal coverage, with the Web of Science being most selective and Dimensions being the most exhaustive. About 99.11% and 96.61% of the journals indexed in Web of Science are also indexed in Scopus and Dimensions, respectively. Scopus has 96.42% of its indexed journals also covered by Dimensions. Dimensions database has the most exhaustive journal coverage, with 82.22% more journals than Web of Science and 48.17% more journals than Scopus. This article also analysed the research outputs for 20 selected countries for the 2010–2018 period, as indexed in the three databases, and identified database-induced variations in research output volume, rank, global share and subject area composition for different countries. It is found that there are clearly visible variations in the research output from different countries in the three databases, along with differential coverage of different subject areas by the three databases. The analytical study provides an informative and practically useful picture of the journal coverage of Web of Science, Scopus and Dimensions databases.

**Keywords** Dimensions · Journal coverage · Scholarly databases · Scopus · Web of science

# Menganalisis data bibliografis (metadata)

### References

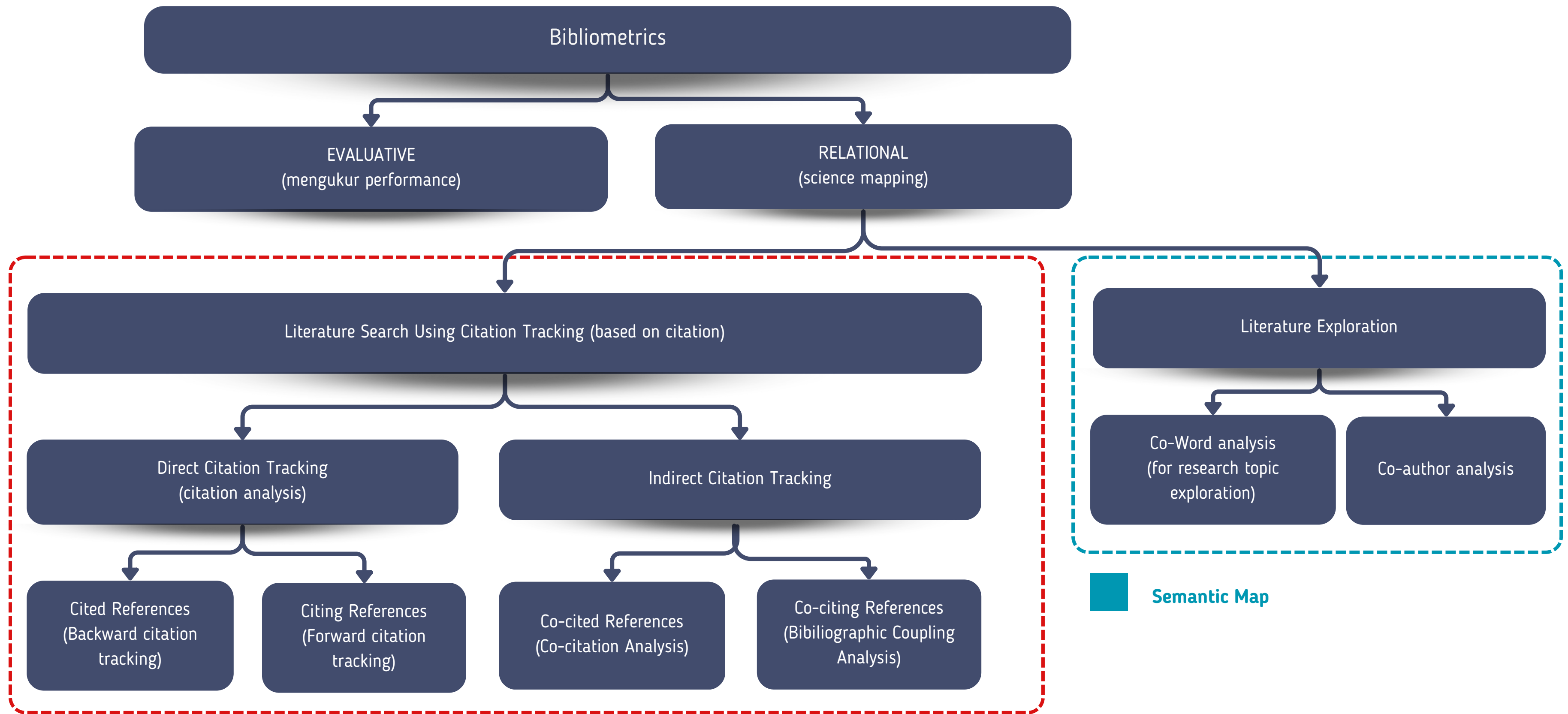
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# Bibliographic data

TY - JOUR  
 T1 - How to conduct a bibliometric analysis: An overview and guidelines  
 A1 - Donthu, Naveen  
 A1 - Kumar, Satish  
 A1 - Mukherjee, Debmalya  
 A1 - Pandey, Nitesh  
 A1 - Lim, Weng Marc  
 JO - Journal of Business Research  
 VL - 133  
 SP - 285  
 EP - 296  
 SN - 0148-2963  
 Y1 - 2021  
 PB - Elsevier  
 ER -

Authors	Author(s)	Title	Year	Source title	Volume	Issue	Art. No.	Page start	Page end	Page c	Cited by
Virkus S.,	650768073	Data scien	2020	Data Tech	54	5		643	663		
Cumming:	572023070	Assessing	2020	Journal of	60	7		726	751		
Thomas A	572195657	Developin	2020	Medical R	39	4		323	333		
Bishop B.	244695640	Scientists'	2020	Portal	20	4		677	692		
Zonderge	572081241	FAIR, safe	2020	Developm	45		100834				
Joo S., Pe	366211591	User need	2020	Journal of	52	3		633	646	2	
Banko L., I	571944992	Fast-Track	2020	ACS Comb	22	8		401	409		
Chawinga	571912477	Research c	2020	Journal of	46	4	102161			1	
Saleem Q.	572022343	The facts c	2020	Bottom Li	33	3		263	271		
Chiware E	234912974	Open rese	2020	Library Ma	41	7-Jun		383	399		
Rajabali B	572170335	Improving	2020	Library Ma	41	5-Apr		135	151		
Chiware E	234912974	Data libra	2020	Library Ma	41	7-Jun		401	416		
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Wang Z., \	572096225	From info	2020	IFLA Journ	46	1		5	14		
Anna N.E.	568753861	Big data a	2020	Library Hi	37	4		1	5	1	
Tamarro	855492190	Training D	2020	Communi	1177		CCIS	163	172		
Bauer B., I	572004368	Open scie	2020	VOEB-Mit	73	2		217	237		
Tzanova S	572193514	Changes in	2020	Education	36	3		281	299		
Bunkar A.	572171382	Perceptio	2020	DESIDOC J	40	3		139	146		
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Chawinga	571912477	Research i	2020	International Information and Library Rev				1	15		
Huang Y.,	572191144	Research c	2020	Journal of the Association for Information Science and Technology							
Fernande	571926522	Managem	2020	Lecture N	12246		LNCS	212	226		
Morriello	572183796	Birth and	2020	JLIS.it	11	3		1	15		

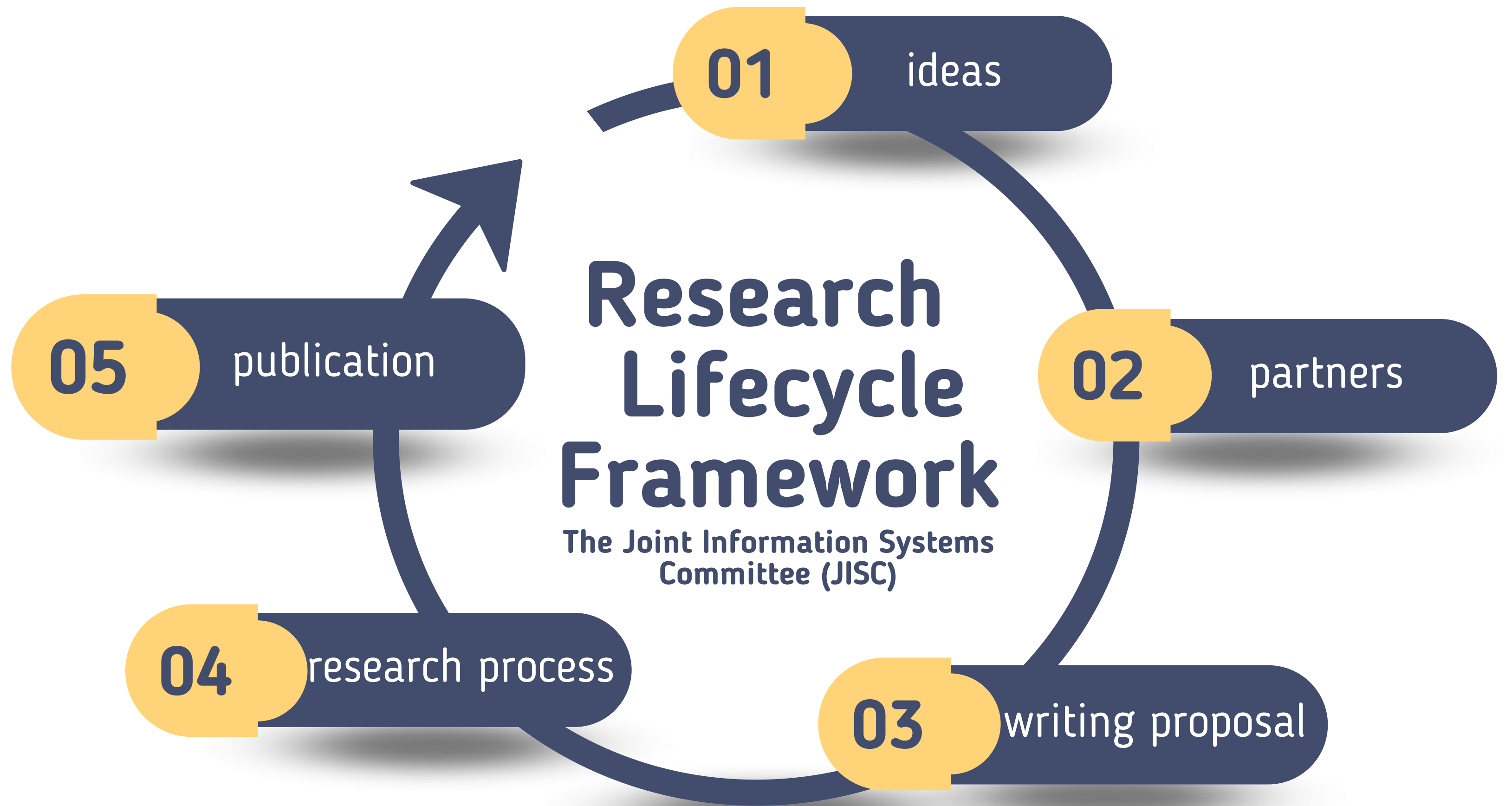




 **bibliographic map**

Modified from  
 Hirt J, Nordhausen T, Appenzeller-Herzog C and Ewald H. Using citation tracking for systematic literature searching - study protocol for a scoping review of methodological studies and a Delphi study [version 3; peer review: 2 approved] F1000Research 2021, 9:1386 <https://doi.org/10.12688/f1000research.27337.3>





# Research Lifecycle Framework

The Joint Information Systems Committee (JISC)

01

ideas

- mendapatkan daftar rekomendasi buku wajib baca untuk suatu topik/disiplin ilmu\*
- mengetahui state of the art\*\*
- brainstorming topik-topik riset

02

partners

- Mengidentifikasi kolaborator potensial untuk riset
- Mengidentifikasi pakar di bidang keilmuan yang bisa dijadikan tempat diskusi/konsultasi

03

writing proposal

- Mengetahui state of the art suatu bidang riset\*
- Mengetahui literatur/gagasan/teori/metode yang menjadi landasan suatu bidang ilmu

\*) Ranjbar-Sahraei, B., & Negenborn, R. (2017). Research positioning & trend identification: a data-analytics toolbox. (Version 2.2 ed.) Delft University of Technology. <http://aida.tudelft.nl/toolbox/aida-booklet>

\*\*\*) Zupic, I., & Čater, T. (2015). Bibliometric methods in management and organization. *Organizational research methods*, 18(3), 429-472.



# Research Lifecycle Framework

The Joint Information Systems Committee (JISC)

05

publication

- Mengetahui jurnal mana yang paling berpengaruh untuk suatu disiplin ilmu
- Mengidentifikasi jurnal yang paling sesuai dengan topik riset sebagai media publikasi

04

research process


- Mengetahui literatur/gagasan/teori/metode yang menjadi landasan suatu bidang ilmu
- Mengetahui riset-riset terkini di suatu bidang ilmu
- Mengetahui struktur pengetahuan suatu topik



# REFLEKSI



Bayangkan peluang apa saja yang bisa dikembangkan dari bibliometrika untuk kepentingan Anda, baik secara pribadi maupun profesi?

A background network diagram consisting of numerous grey nodes connected by thin grey lines, forming a complex web structure. The nodes are of varying sizes and are distributed across the left side of the slide.

# **Metode Analisis Bibliometrika**

# Metode utama analisis bibliometrika & Kegunaannya

Zupic, I., & Čater, T. (2015). Bibliometric methods in management and organization. *Organizational research methods*, 18(3), 429-472.



## Citation analysis

mengidentifikasi author/source/paper yang berpengaruh



## Co-citation analysis

mengidentifikasi landasan sebuah topik



## Bibliographic coupling analysis

mengidentifikasi topik riset terkini



## Co-author analysis

Melihat kolaborasi antar author/afiliasi/negara



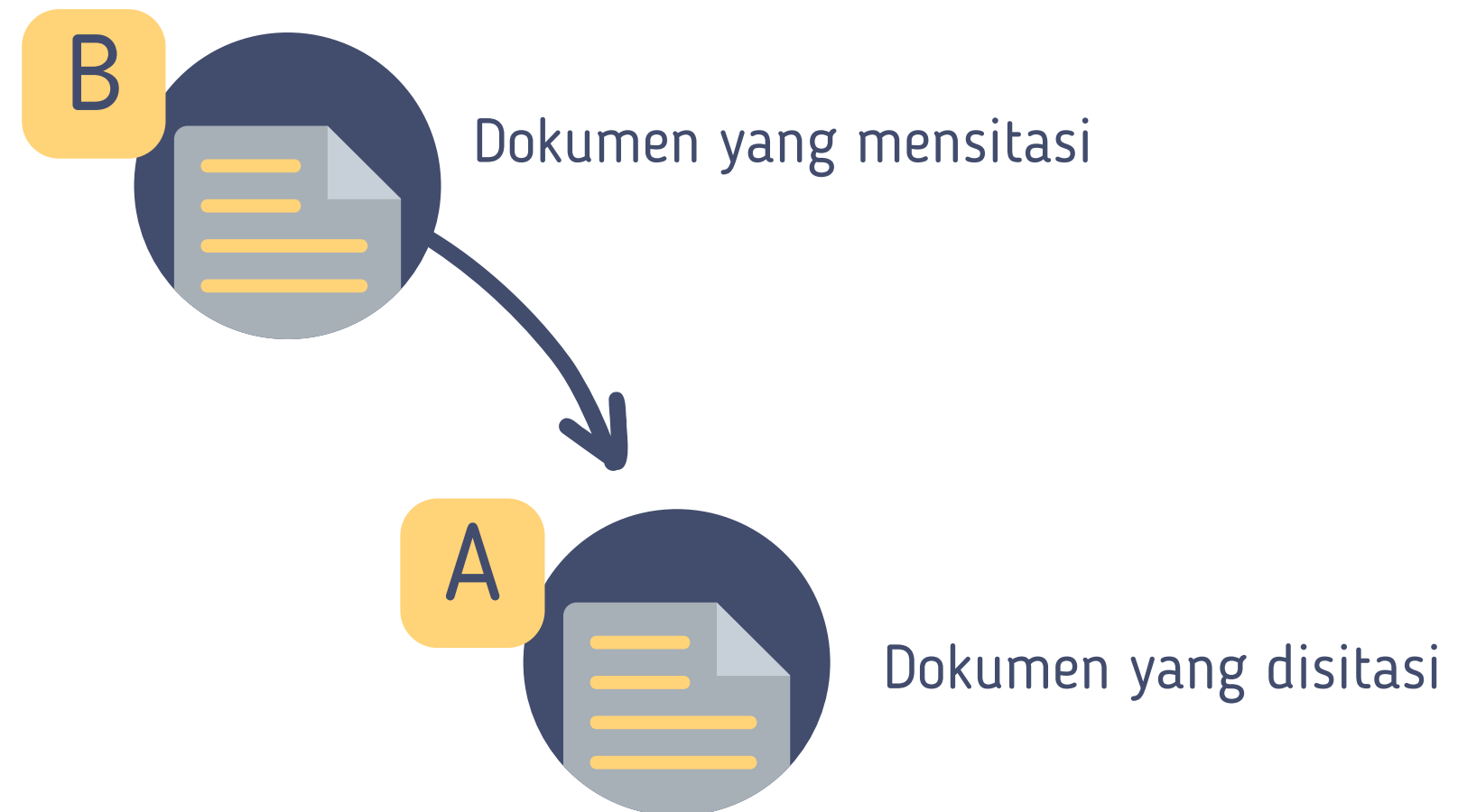
## Co-word analysis

Memetakan state of the art suatu topik riset

Sitasi mencerminkan keterkaitan intelektual antara unit analisis. Analisis sitiran digunakan untuk memperkirakan pengaruh dokumen, penulis, jurnal, institusi atau negara melalui tingkat sitasi.

## Analisis sitasi/ Citation analysis

### Unit analisis



# Analisis ko-sitasi/ Co-citation analysis

Menghubungkan dokumen, pengarang, atau jurnal berdasarkan kemunculan secara bersamaan dalam daftar referensi. Diasumsikan bahwa publikasi yang sering dikutip bersama secara tematik akan serupa.

## Unit analisis



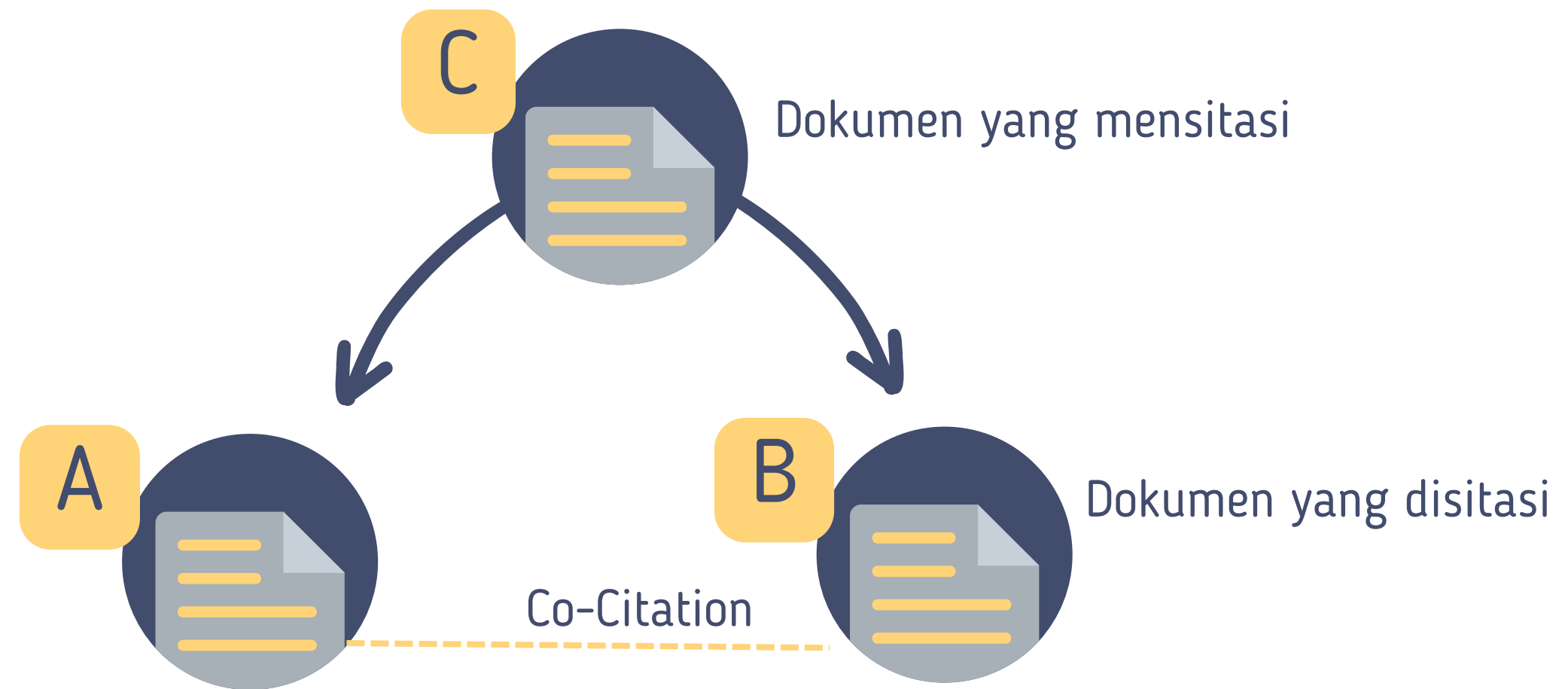
Dokumen



Pengarang



Jurnal



# Co-Citation relationship

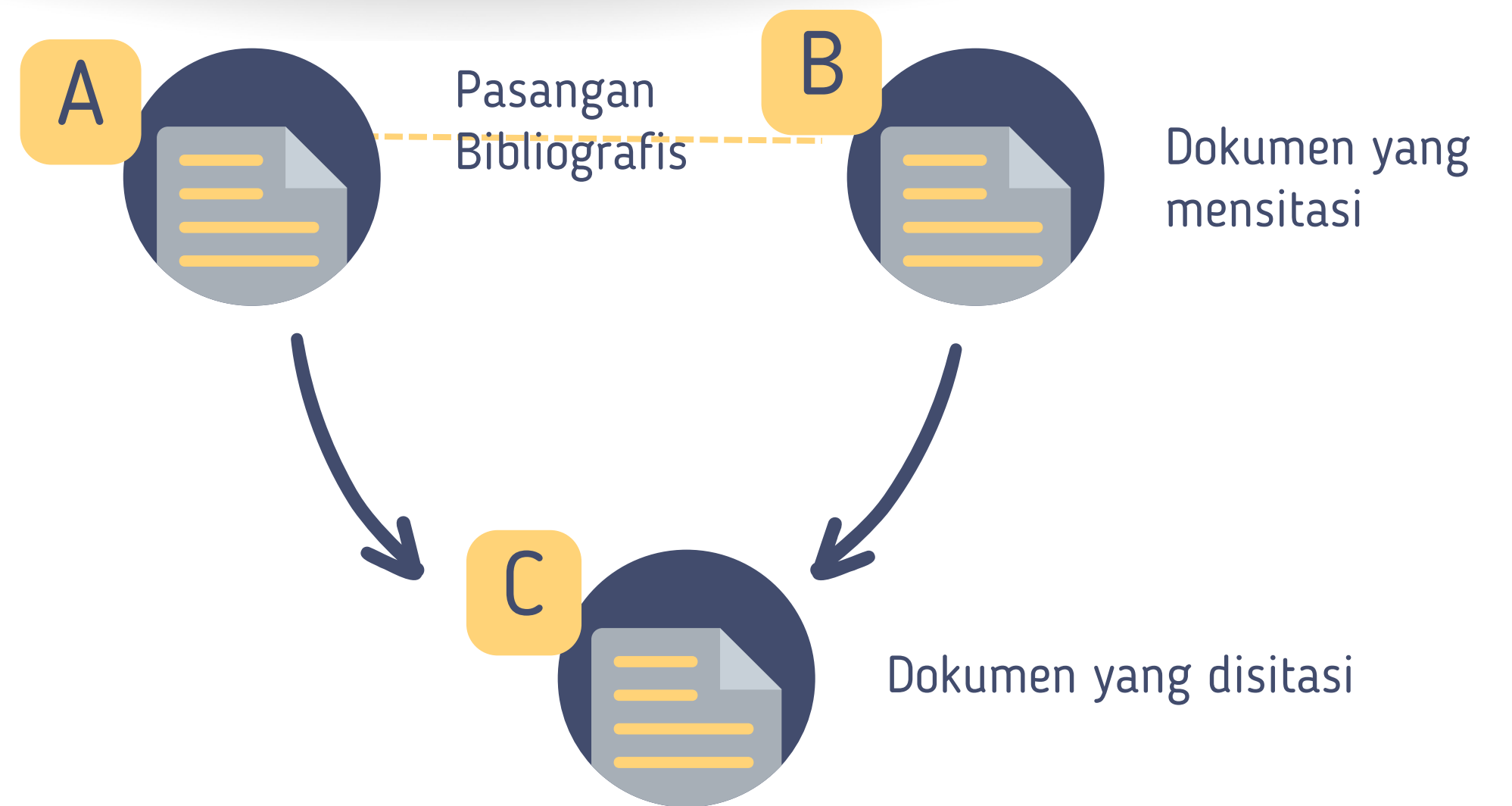
Document C



# Pasangan Bibliografis

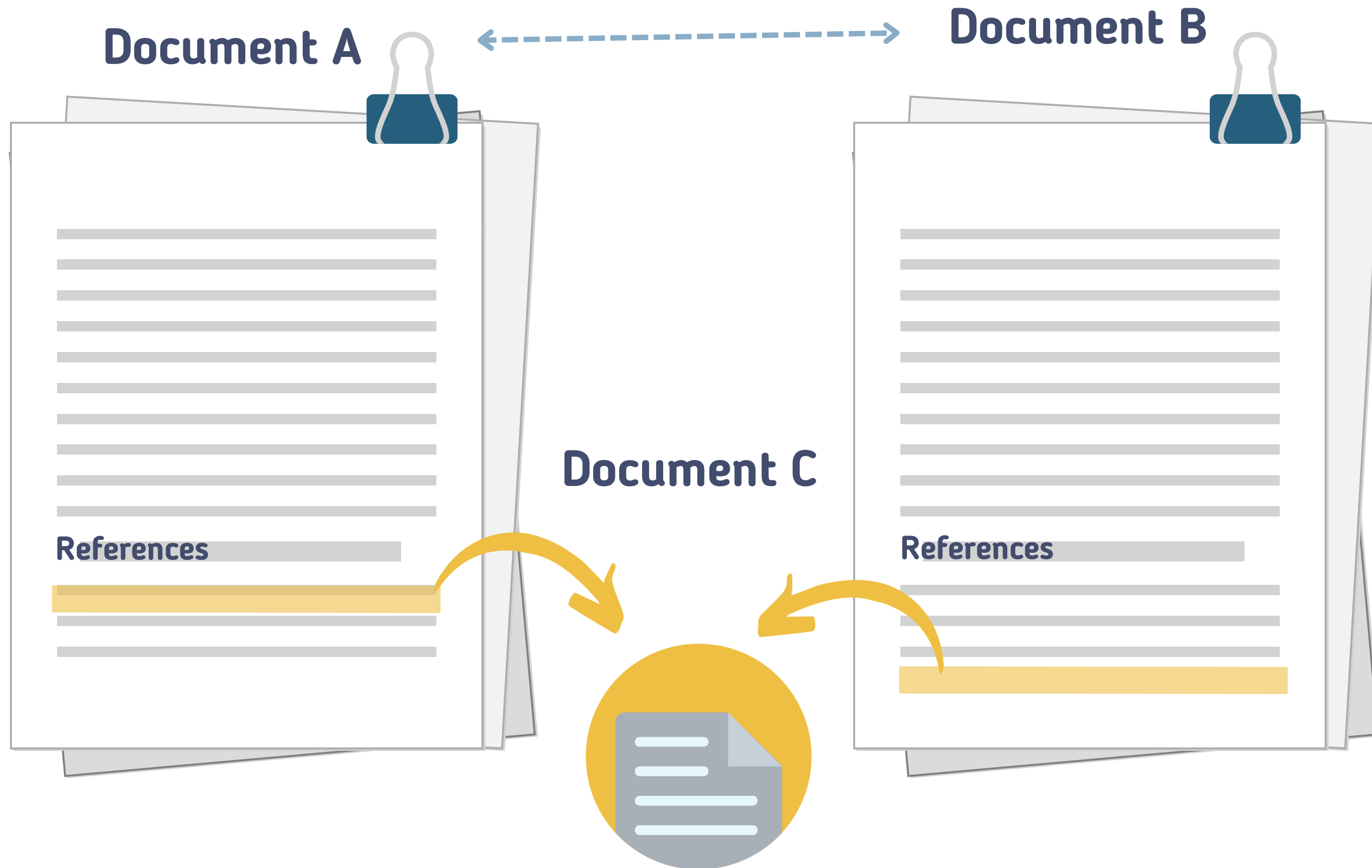
Menghubungkan dokumen, pengarang, jurnal, institusi atau negara berdasarkan referensi bersama. Diasumsikan bahwa dua publikasi yang memiliki rujukan yang sama, maka bahasan/isinya juga akan mirip

## Unit analisis





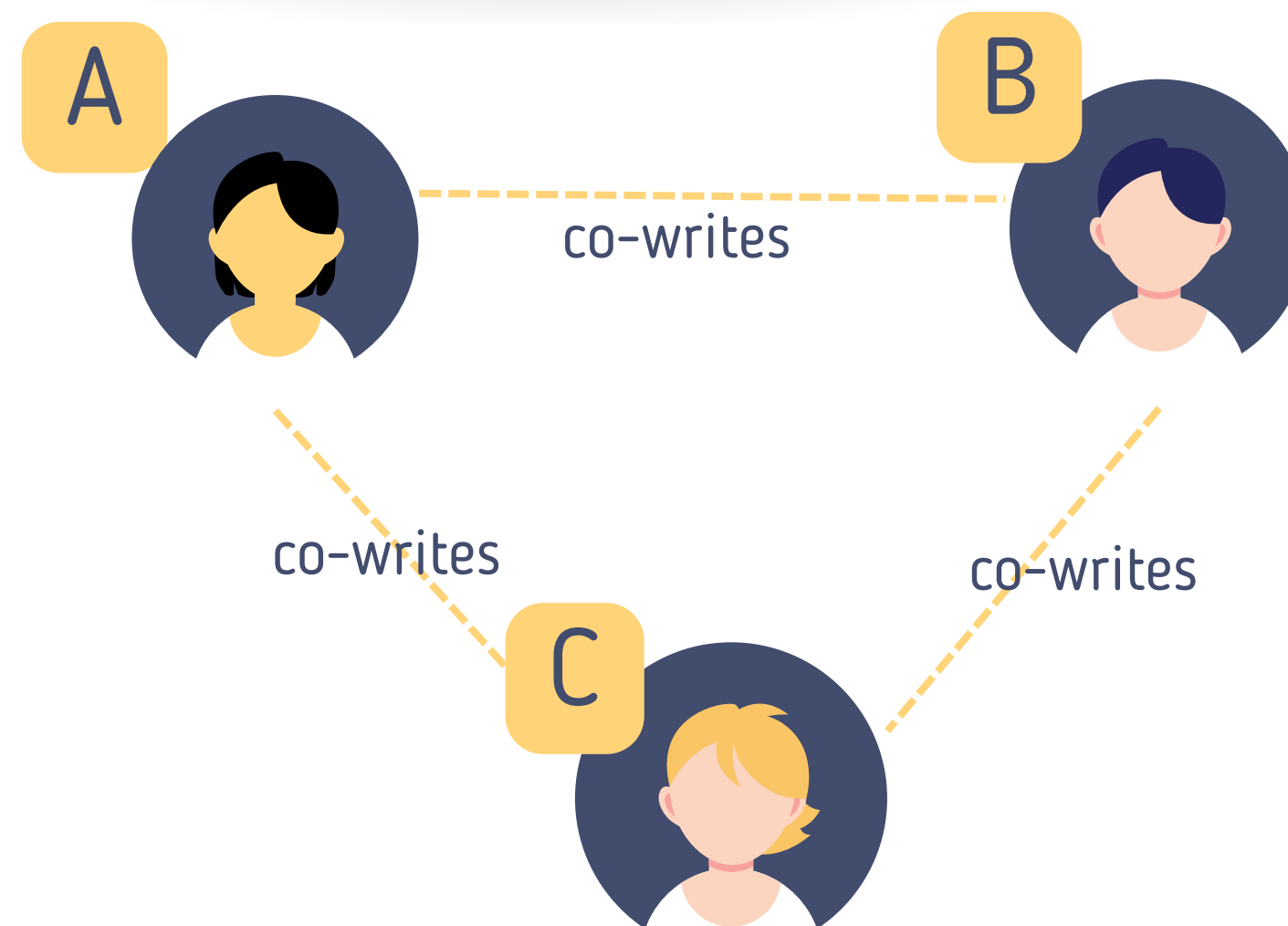
# Bibliographic Coupling relationship



Menggambarkan relasi antar antar penulis, ketika mereka menulis karya bersama

## Co-author Analysis

Unit analisis



Zupic, I., & Čater, T. (2015). Bibliometric methods in management and organization. *Organizational research methods*, 18(3), 429-472.

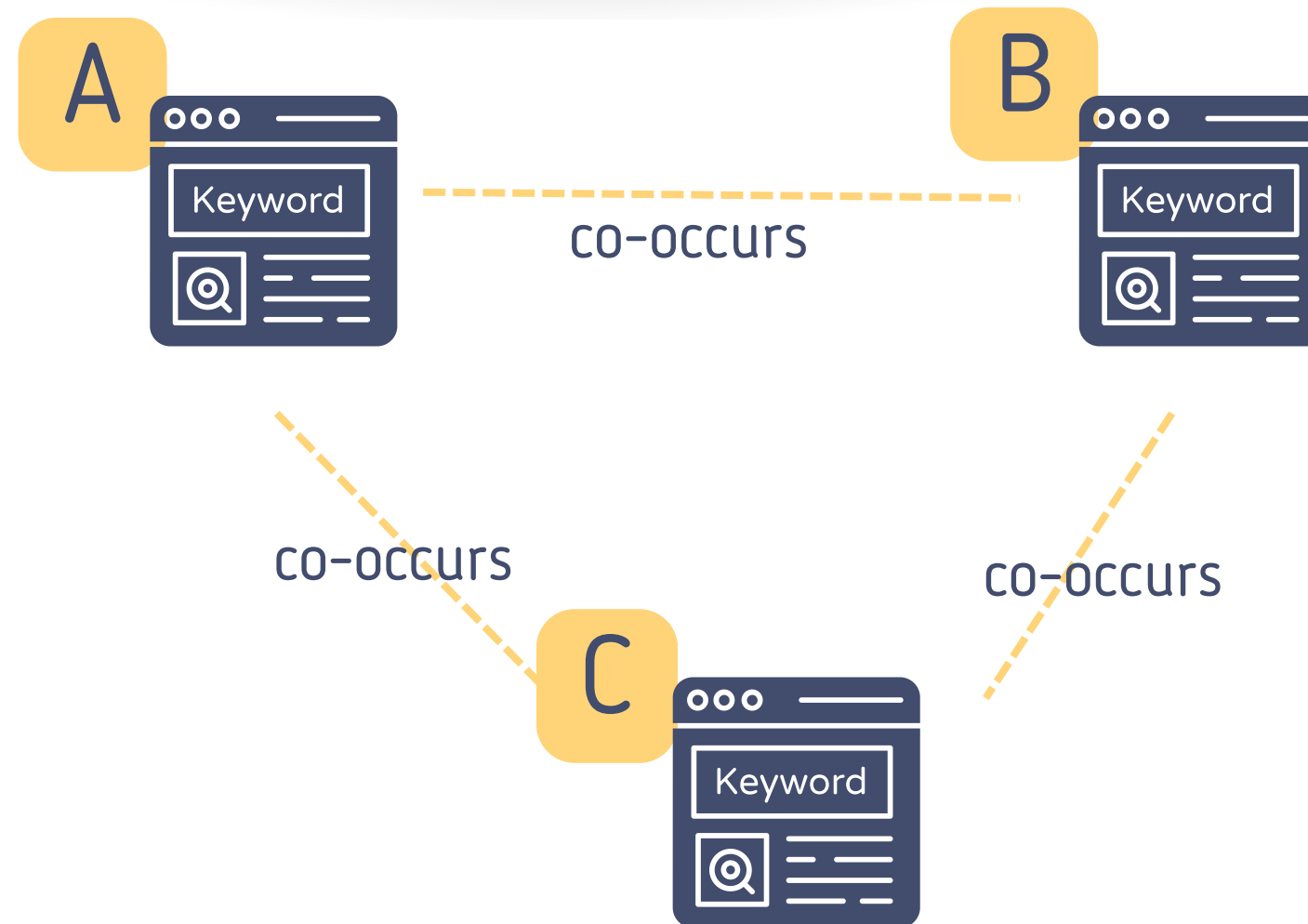
# Menggambarkan hubungan antar kata kunci

## Co-word Analysis

### Unit analisis

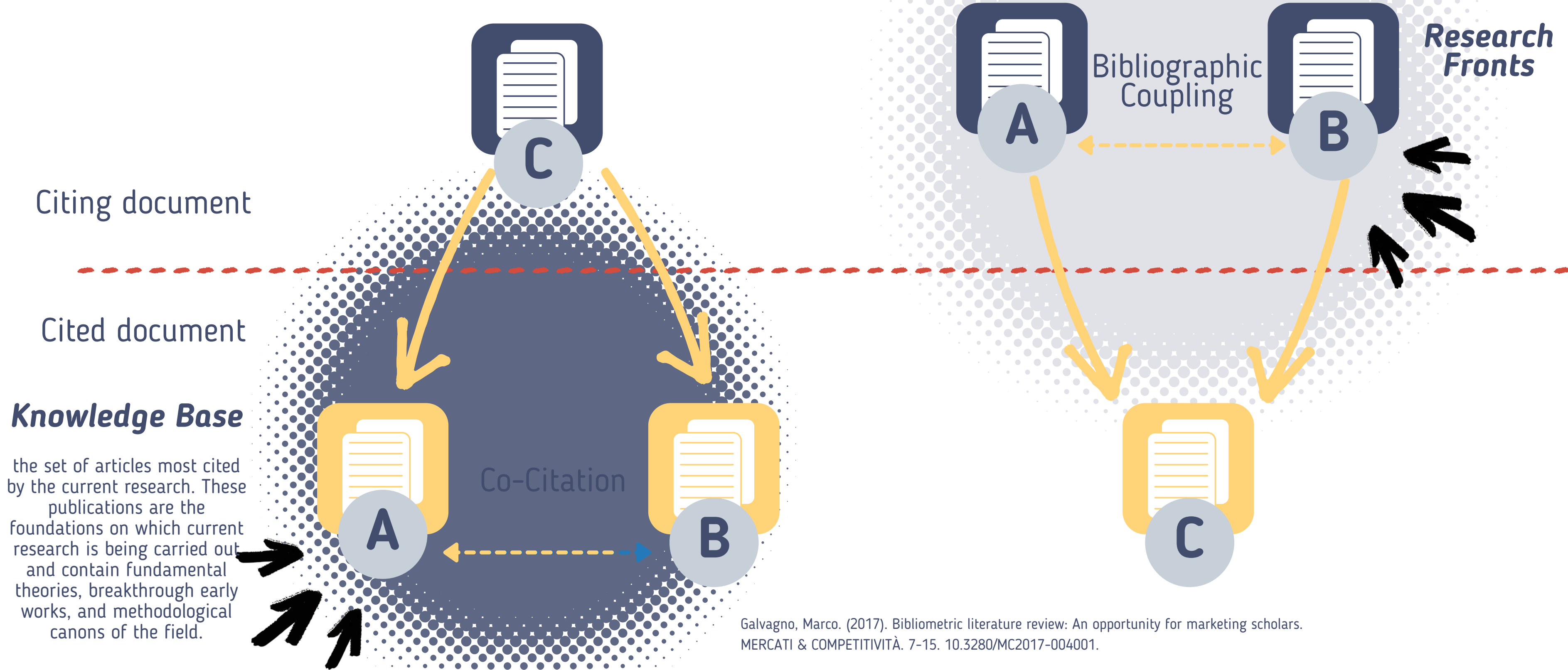


Kata kunci



Zupic, I., & Čater, T. (2015). Bibliometric methods in management and organization. *Organizational research methods*, 18(3), 429-472.

a research front is a densely cited network of recently published papers .....a group of recently published articles with a common topic, which are strictly connected by a network of citations among themselves and weakly connected with publications outside the group




Galvagno, Marco. (2017). Bibliometric literature review: An opportunity for marketing scholars. MERCATI & COMPETITIVITÀ. 7-15. 10.3280/MC2017-004001.

# contoh Hasil Co-word analysis

Article

## Mapping 50 Years of Small Group Research Through *Small Group Research*

Small Group Research  
2020, Vol. 51(6) 659–699  
© The Author(s) 2020  
Article reuse guidelines:  
sagepub.com/journals-permissions  
DOI: 10.1177/1046496420934541  
journals.sagepub.com/home/sgr  
SAGE

Kyle J. Emich<sup>1</sup> , Satish Kumar<sup>2</sup>, Li Lu<sup>3</sup>, Kurt Norder<sup>1</sup>, and Nitesh Pandey<sup>2</sup>

### Abstract

At its 50-year milestone, we assess the *Small Group Research (SGR)* corpus to reflect on the development of group research over the past half century. To do this, we examine the evolution of the corpus's context and content. We examine its context by assessing its impact, which journals it communicates with, and the internationality of its authors. We examine its content—the topics discussed in its articles—using keyword clustering and co-occurrence network analysis. We identify 10 research communities and track their relationships over the four editorial periods associated with the *SGR* corpus (lagged 2 years for influence): 1970–1981, 1982–1991, 1992–2010, and 2011–2019. Our analyses indicate that the global and local study of group dynamics has fluctuated over time and that phenomenologically based topics connect theoretical topics and stimulate theoretical development. We also provide three criteria to identify communities and topics of group research most likely to benefit from future integration.

### Keywords

group, team, review, content analysis

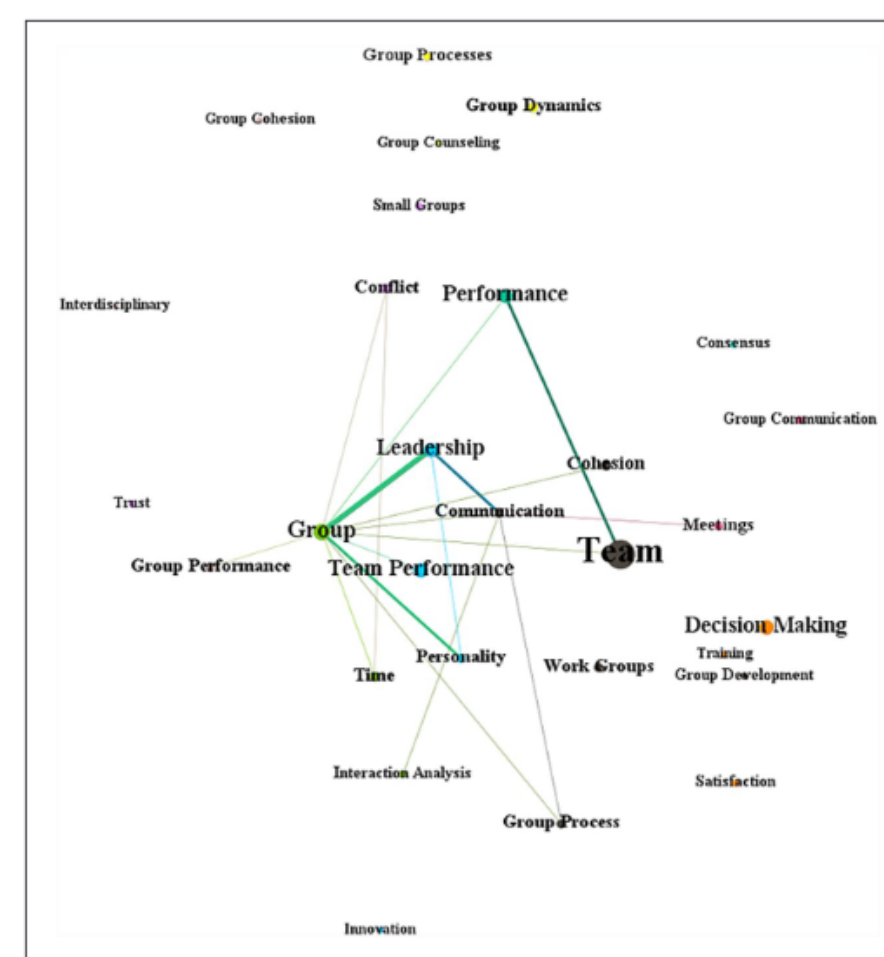


Figure 1. Keyword network 1970–1981.

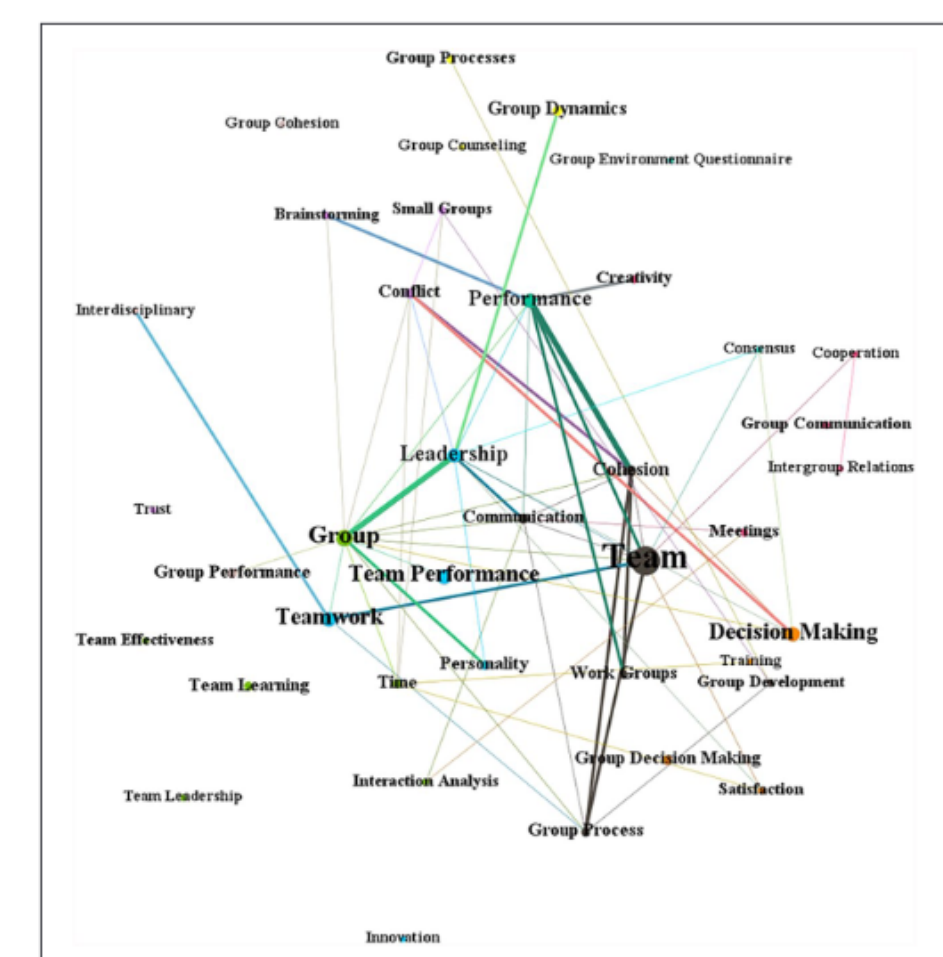


Figure 2. Keyword network 1982–1991.

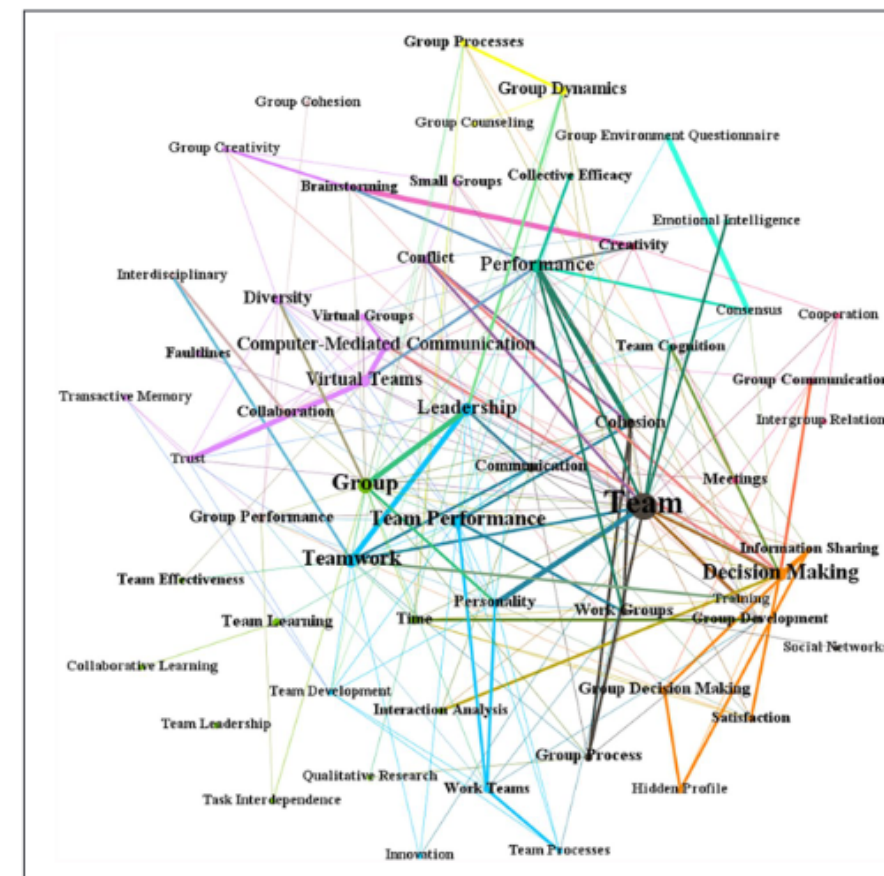


Figure 3. Keyword network 1992–2010.

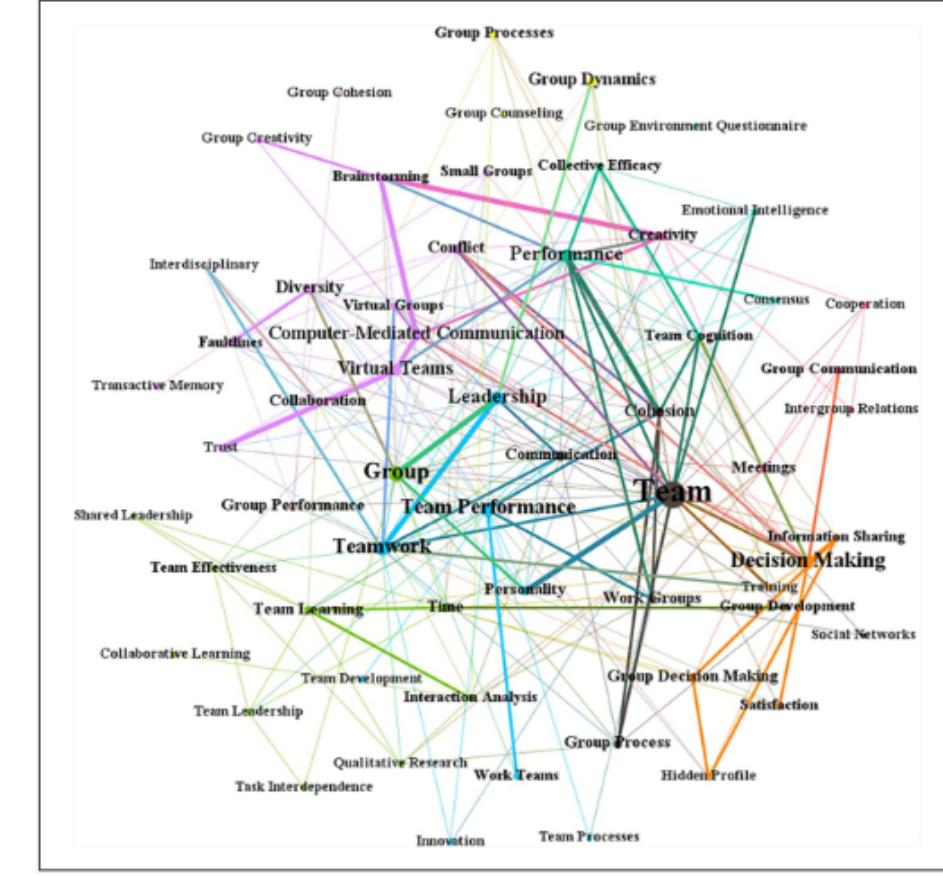


Figure 4. Keyword network 2011–2019.



## Mapping continuity and change in the intellectual structure of the knowledge base on problem-based learning, 1974–2019: A systematic review

Philip Hallinger<sup>a,b★</sup>

<sup>a</sup>*Mahidol University, Bangkok, Thailand;* <sup>b</sup>*University of Johannesburg, South Africa*

Problem-based learning (PBL) emerged during the 1970s in response to demands for active learning methods capable of developing transferable knowledge and skills in the training of doctors. Over succeeding decades, PBL was gradually adopted in other fields of education. This systematic review aimed to identify key streams of theory and empirical research that have emerged over time in PBL research and practice. The review sourced 12,036 Scopus-indexed documents published between 1974 and 2019. Science mapping was used to reveal the ‘intellectual structure’ or key research themes that have evolved in this literature over the past 45 years. The science mapping tool used in this review was author co-citation analysis conducted in VOSviewer software. Author co-citation analysis identified three schools of thought that together describe the intellectual structure of the PBL knowledge base: Design of PBL Curriculum and Instruction; PBL Effectiveness; Theory and Practice in Active Learning. In addition to portraying the intellectual structure of the literature as a whole, the review also conducted longitudinal analyses aimed at highlighting structural changes in this field over time. These analyses found that although the size and impact of schools of thought associated with Design of PBL Curriculum and Instruction and PBL Effectiveness increased over time, they remained stable in terms of theoretical foci. However, the Active Learning school evolved from a small school of authors associated with Cognitive Learning Theories prior to 2000 into the largest school of thought during the most recent decades. These findings both reaffirm the theoretical underpinnings of the PBL knowledge base and highlight its increasing integration with other forms of active learning.

**Keywords:** bibliometric; intellectual structure; PBL; problem-based learning; review; science mapping

# contoh

## Hasil Co-citation analysis

Hallinger, P. (2020). Mapping continuity and change in the intellectual structure of the knowledge base on problem-based learning, 1974–2019: A systematic review. *British Educational Research Journal*, 46(6), 1423–1444.

# Mapping the themes and intellectual structure of customer engagement: a bibliometric analysis

Mukta Srivastava

*Marketing, Balaji Institute of Modern Management, Pune, India, and*

Sreeram Sivaramakrishnan

*School of Business Management,*

*Narsee Monjee Institute of Management Studies University, Mumbai, India*

## Abstract

**Purpose** – Customer engagement (CE) as a domain of research started gaining impetus when it became apparent that it can be a key driver of a firm's performance, competitive advantage and loyalty. The purpose of this study is to develop a deep understanding of the CE construct in marketing literature using bibliometric analysis.

**Design/methodology/approach** – In this study, 940 articles were retrieved from Scopus, the well-known electronic database. Bibliographic coupling and co-occurrence analysis using VOSviewer along with content analysis were employed.

**Findings** – After careful content analysis, six clusters were identified through bibliographic coupling: (1) modeling customer engagement, (2) customer engagement theory and empirical validation, (3) customer engagement and service-dominant logic, (4) customer engagement and social media, (5) customer engagement and brand platforms and (6) engagement in other contexts. The outcomes of this study would not only be valuable for scholars working in the CE domain, but could also be useful for practitioners and policymakers who wish to enhance their understanding about CE.

**Originality/value** – Over the past decade, the research on CE construct has exploded owing to the growing interest of both scholars and practitioners in the field. Despite being a popular field of research, there is no published work on a comprehensive bibliometric analysis of the construct in marketing literature. The current study bridges this gap in the existing literature.

**Keywords** Customer engagement, Bibliometric analysis, Bibliographic coupling, Co-occurrence analysis, Cluster analysis, VOSviewer


**Paper type** Literature review

## Introduction

The term "customer engagement" (CE) was first defined by the Advertising Research

# contoh

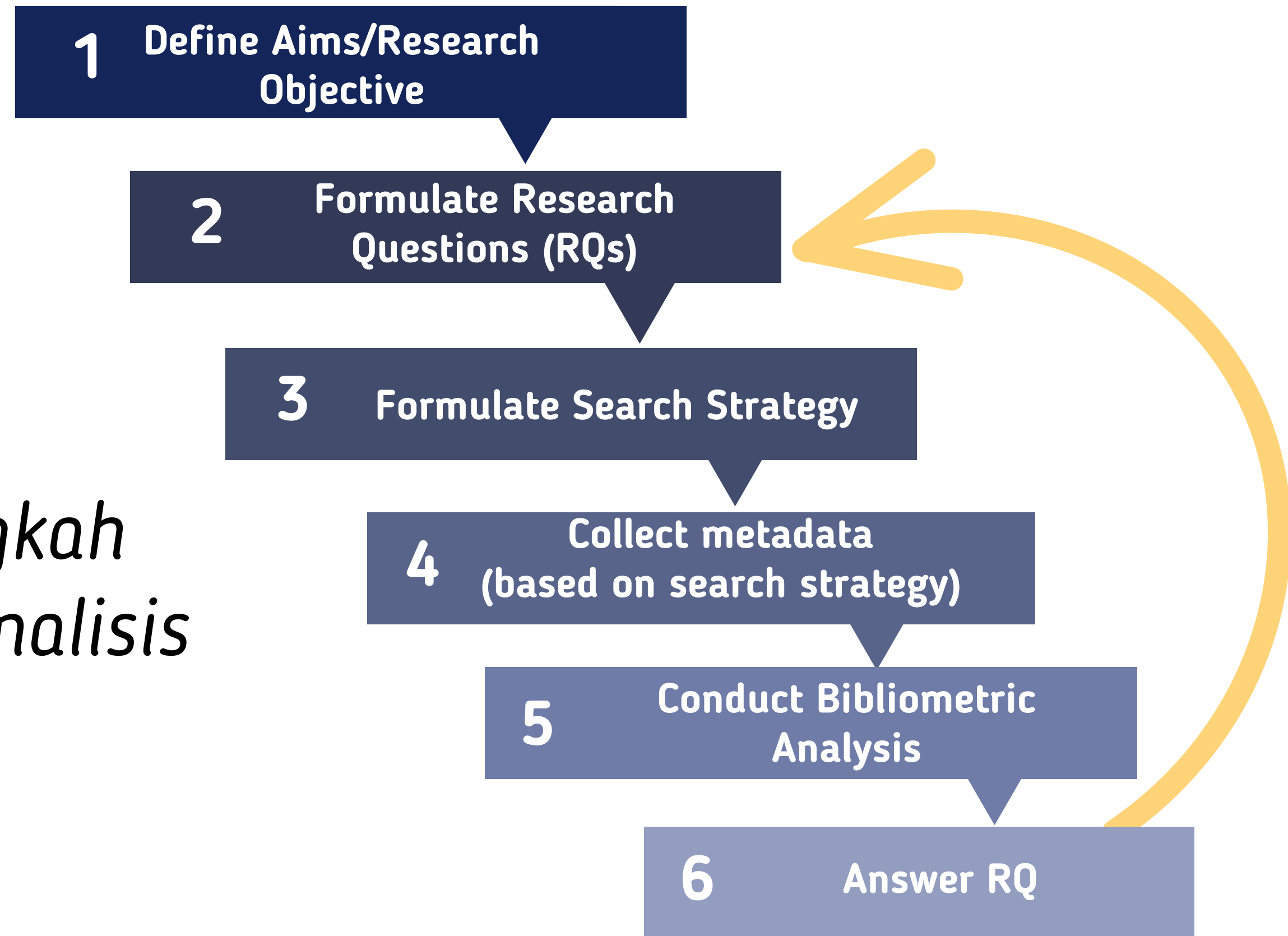
## Hasil Bibliographic coupling

A network diagram with grey nodes and lines, partially obscured by a dark blue arrow-shaped box.

**Langkah-langkah  
melakukan analisis  
Bibliometrika**



# Langkah-langkah melakukan Analisis Bibliometrika



# The bibliometric analysis procedure



Donthu, N., Kumar, S., Mukherjee, D., Pandey, N., & Lim, W. M. (2021). How to conduct a bibliometric analysis: An overview and guidelines. *Journal of Business Research*, 133, 285-296.



01

Define the aims and scope of the bibliometric study



## *Aims: Research Question*

The first step in research is to define the goal. In research, the goal is usually defined as a research question.

## *Scope: Eligibility Criteria*

also called inclusion and exclusion criteria



<https://guides.lib.vt.edu/SRMA/scope>  
<https://scientific-publishing.webshop.elsevier.com/research-process/finer-research-framework/>

## Choose the techniques for bibliometric analysis

### Research Questions Answered by Different Bibliometric Methods

<p><b>Which authors most influenced the research in a journal?</b>  <b>Which journals and disciplines had the most impact on a research stream?</b>  <b>What is the “balance of trade” between journals/disciplines?</b>  <b>Who are the experts in a given research field?</b>  <b>What is the recommended “reading list” for a specific area?</b></p>	Citation analysis
<p><b>What is the intellectual structure of literature X?</b>  <b>Who are the central, peripheral, or bridging researchers in this field?</b>  <b>How has the diffusion of the concept through research literature taken place?</b>  <b>What is the structure of the scientific community in a particular field?</b>  <b>How has the structure of this field developed over time?</b></p>	Co-citation analysis
<p><b>What is the intellectual structure of recent/emerging literature?</b>  <b>How does the intellectual structure of the research stream reflect the richness of the theoretical approaches?</b>  <b>How has the intellectual structure of small niche X developed through time?</b></p>	Bibliographical coupling
<p><b>Are authors from different disciplinary backgrounds working together on a new research field, or do they remain within disciplinary boundaries?</b>  <b>Which factors determine co-authorship?</b>  <b>What is the effect of collaboration on the impact?</b>  <b>Are co-authored articles more cited?</b>  <b>Do more prolific authors collaborate more frequently?</b>  <b>Are internationally co-authored papers more cited?</b>  <b>What is the social structure of the field?</b></p>	Co-author analysis
<p><b>What are the dynamics of the conceptual structure of a field?</b>  <b>Uncover the conceptual building blocks of a literature.</b>  <b>What are the topics associated with a particular line of research?</b>  <b>Track the evolution of concept X.</b></p>	Co-word analysis

Menggunakan dataset sendiri?

Menggunakan dataset dari sumber data bibliografis?  
Sumber yang mana?  
Bagaimana caranya?



# Beberapa pertimbangan pemilihan database sebagai sumber data



Apakah cakupan (coverage) database tersebut memadai untuk penelitian yang akan dilakukan?



Apakah data yang didapatkan tidak memiliki kesalahan, seperti duplikasi dan entrian yang salah?



Apakah dataset yang didapatkan memenuhi persyaratan teknis untuk analisis bibliometrika yang akan dilakukan?

# Apakah cakupan (coverage) database tersebut memadai untuk penelitian yang akan dilakukan?

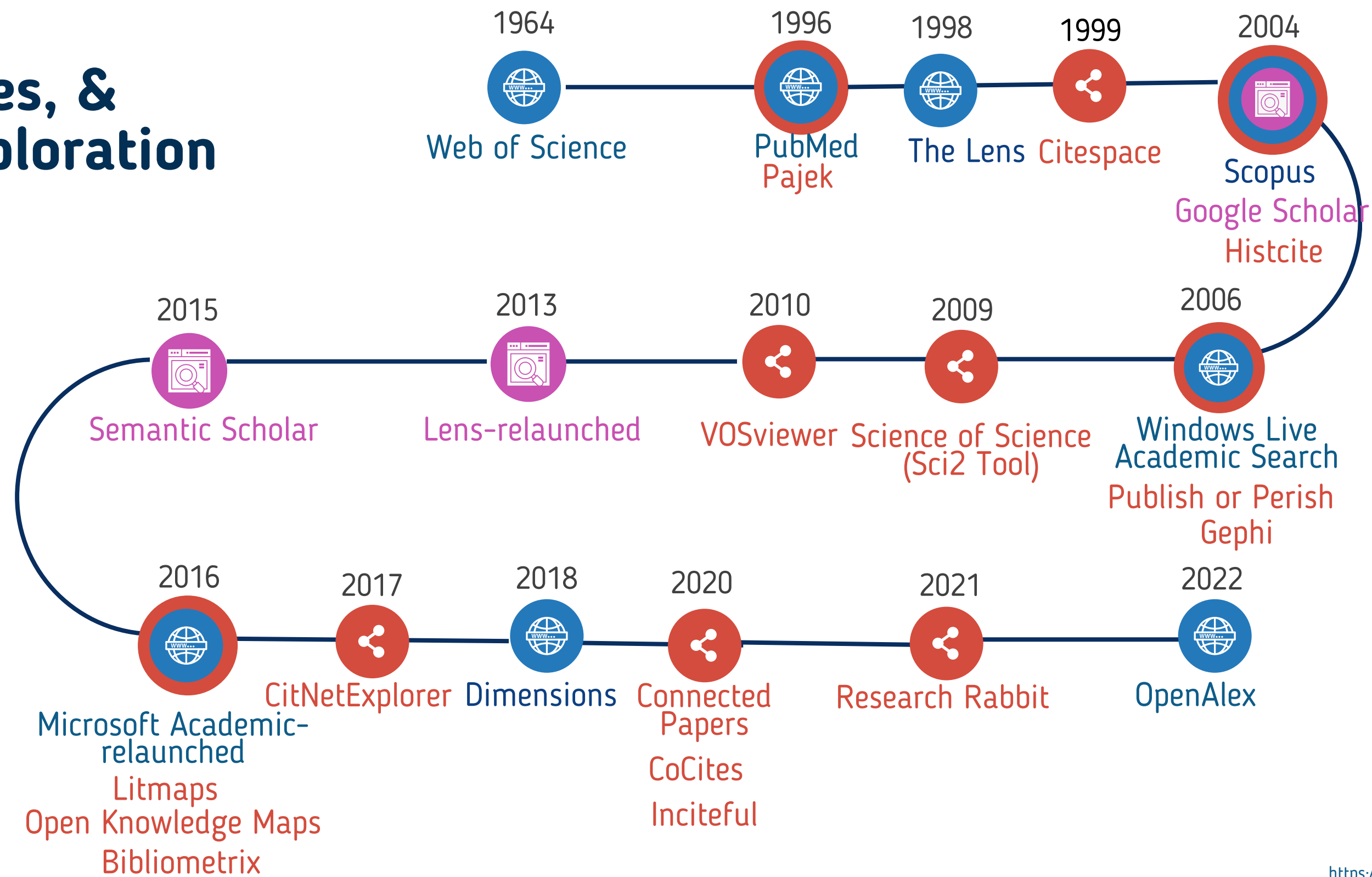
## Perbandingan Lens, Dimensions, Scopus, PubMed, IEEE Explore

Database Name	Database Type	Size	Restrospective Coverage	Records Type	Interface access	% OA
Lens	Search engine	236,413,556	1800 - present	Journal articles, book chapters, books, theses, conference proceedings, components, datasets, libguides, reference entries, reports	Open	17.17%
Dimensions	Search engine	120,767,627	1667 - present	Journal articles, book chapters, conference proceedings, preprints, monographs, edited books	Open	28.41%
Scopus	Bibliographic database	81,523, 838	1864 - present	Journal articles, conference proceedings, reviews, letters, book chapters, notes, editorials, short surveys, conference reviews, books	Paywalled	20.53%
PubMed	Bibliographic database	32,929,255	1799 - present	Journal articles, clinical trials, clinical studies, randomized controlled trials, reviews, guidelines	Open	11.51%
IEEE Xplore Digital Library	Digital library	5,302,091	1902 - present	Conference proceedings, journal articles, magazines, standards, books, courses	Open	1.81%

Gusenbauer, M. Search where you will find most: Comparing the disciplinary coverage of 56 bibliographic databases. *Scientometrics* 127, 2683-2745 (2022). <https://doi.org/10.1007/s11192-022-04289-7>



# Databases, Search Engines, & Literature exploration Tools



Singh, V. K. , Singh, P., Karmakar, M., Leta, J. Mayr, P. (2021) The journal coverage of Web of Science, Scopus and Dimensions: A comparative analysis. Scientometrics. DOI<https://doi.org/10.1007/s11192-021-03948-5>

Osinska, V., and Klimas, R. (2021). Mapping science: tools for bibliometric and altmetric studies. Information Research, 26(4), paper 909. Retrieved from <http://InformationR.net/ir/26-4/paper909.html> (Archived by the Internet Archive at <https://bit.ly/3oWTKVW>) <https://doi.org/10.47989/irpaper909>

<https://medium.com/litmaps/-8f0dbc87390a>

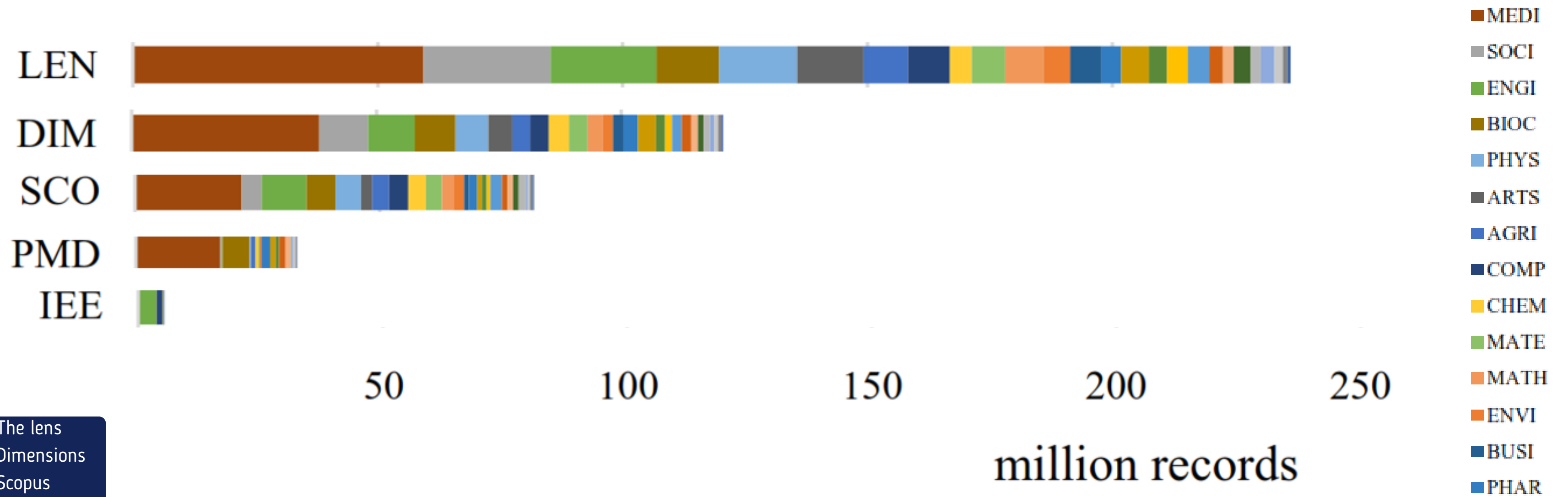
<https://medium.com/connectedpapers/announcing-connected-papers-a-visual-tool-for-researchers-to-find-and-explore-academic-papers-89146a54c7d4>

<https://library.ust.hk/sc/researchrabbit/#:~:text=The%20company%20behind%20ResearchRabbit%20had,with%20an%20institutional%20email%20address.>

<https://openknowledgemaps.org/news>



# Subject coverage



LEN : The lens  
 DIM : Dimensions  
 SCO : Scopus  
 PMD : PubMed  
 IEE: IEEE Explore

Gusenbauer, M. Search where you will find most: Comparing the disciplinary coverage of 56 bibliographic databases. *Scientometrics* 127, 2683–2745 (2022). <https://doi.org/10.1007/s11192-022-04289-7>



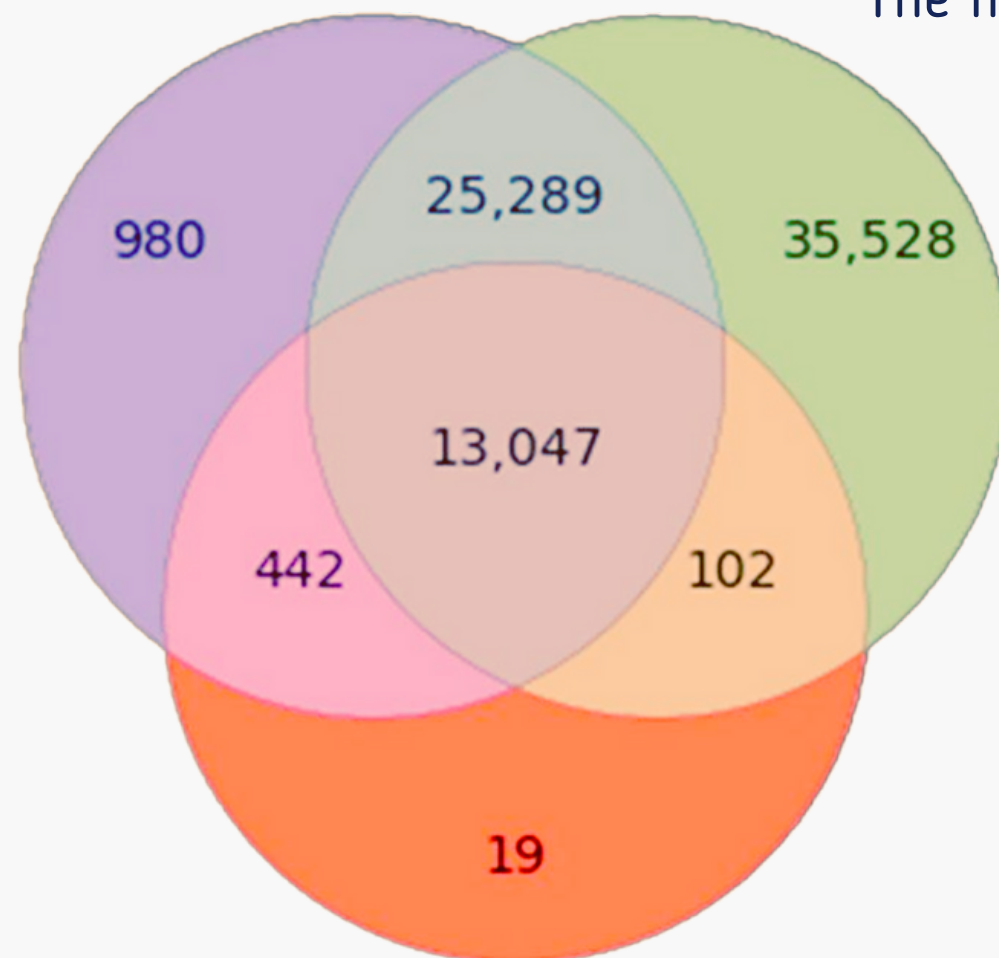
Apakah data yang didapatkan tidak memiliki kesalahan, seperti duplikasi dan entrian yang salah?

## Journal Coverage Overlap

**SCOPUS**

**DIMENSIONS**

The most exhaustive



**Web of Science**

The most selective

**Database**

**Total Coverage**

**Disciplines**

Database	Total Coverage	Disciplines
Dimensions	73.966	cakupan pada bidang Ilmu Sosial dan Seni & Humaniora lebih baik
Scopus	39.758	Sebagian besar di bidang Ilmu Hayati, Ilmu Fisika, dan Teknologi
Web of Science	13.610	Sebagian besar di bidang Ilmu Hayati, Ilmu Fisika, dan Teknologi

Singh, V. K. , Singh, P., Karmakar, M., Leta, J. Mayr, P. (2021) The journal coverage of Web of Science, Scopus and Dimensions: A comparative analysis. Scientometrics. DOI <https://doi.org/10.1007/s11192-021-03948-5>

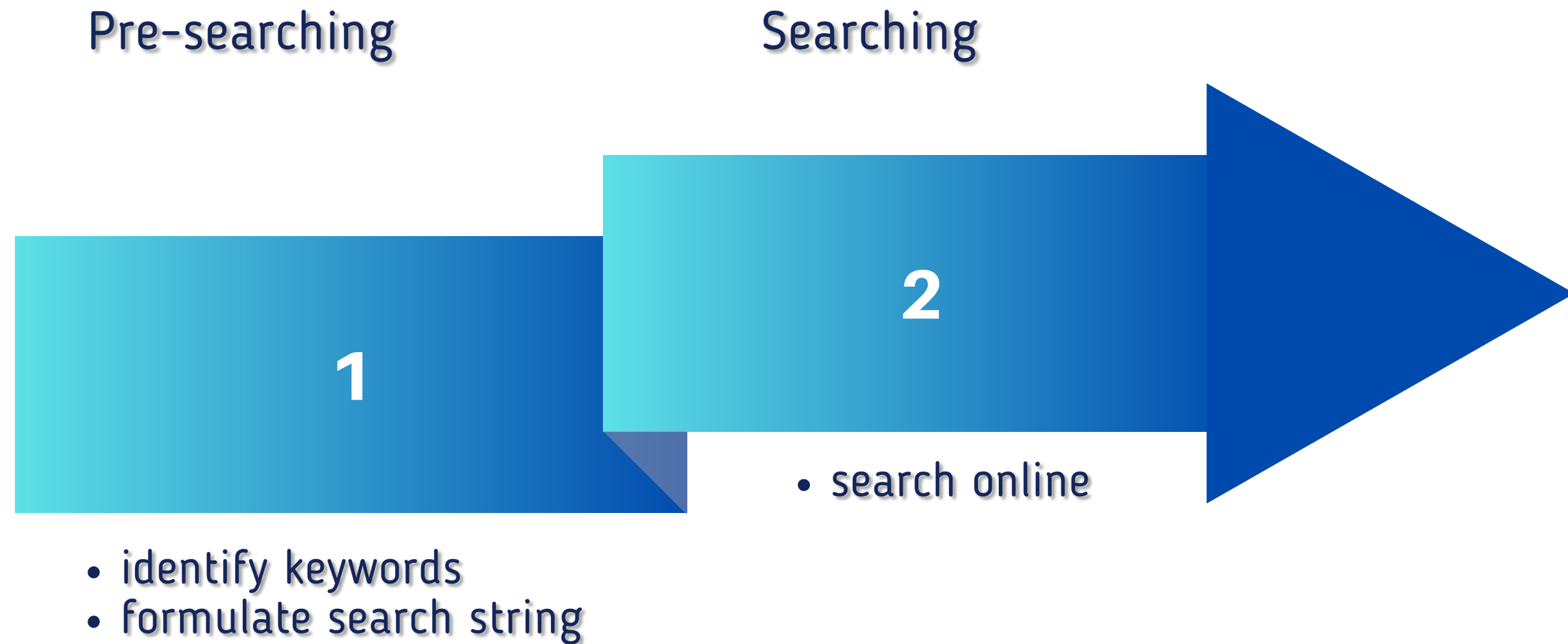
# Apakah dataset yang didapatkan memenuhi persyaratan teknis untuk analisis bibliometrika yang akan dilakukan?

## Perbandingan Lens, Dimensions, Scopus, PubMed, IEEE Explore

Nama Database		Coverage	Analisis Bibliometrika yang disupport				
			Citation Analysis	Co-Citation	Bibliographic Coupling	Co-occurrence	Co-authorship
Lens	Gratis	Multidisiplin	✓		✓	✓	✓
Dimensions	Gratis	Multidisiplin	✓	✓	✓		✓
Scopus	Berbayar	Multidisiplin	✓	✓	✓	✓	✓
PubMed	Gratis	Multidisiplin				✓	✓
IEEE Xplore Digital Library	Gratis	Teknik, Komputer				✓	✓

Semakin lengkap dataset yang didapatkan, semakin flexible analisis bibliometrika bisa dilakukan

# Mengunduh data dari pangkalan data



<https://libguides.uttyler.edu/DatabaseBasics>  
<https://libguides.library.cqu.edu.au/c.php?g=760913&p=5456502>  
<https://pressbooks.ulib.csuohio.edu/csu-fyw-rhetoric/chapter/basic-guidelines-for-academic-research-database-searches/>  
<https://libguides.umgc.edu/searching-basics>  
<https://bsu.libguides.com/c.php?g=884997&p=6359705>  
<https://researchguides.dartmouth.edu/TDI-MPH/search-pubmed>

## Pre-searching

Penelusuran literatur berawal dari pertanyaan penelitian (Research Question)

Untuk membantu merumuskan pertanyaan penelitian kita bisa memanfaatkan Research Question Formulation Framework

CONTOH: PICO

# PICO FRAMEWORK

**POPULATION**  
(or participants, principle person or thing, problem, predicament, process);

P

**POPULATION/PROBLEM/PROCESS**  
The population doesn't need to be human. In engineering, it is most often a problem or process.

who or what

**INTERVENTION**  
(or a novel therapy, treatment, test, program, educational technique, investigation of time/exposure/analysis, issues of interest including risk, predictors, anomaly, or improvement);

I

**INTERVENTION/ INQUIRY/ INVESTIGATION/ IMPROVEMENT**  
Possible solution

how or why

**COMPARISON**  
(or standard of operation/care/technique, placebo, or possibly no comparison);

C

**COMPARISON**  
Current practice or opposing viewpoints

**OUTCOME**  
(results or endpoint).

O

**OUTCOMES**  
Measuring what worked best

CLINICAL OR HEALTH CARE RELATED

<https://crln.acrl.org/index.php/crlnews/article/view/8814/9416#b3-0730476>

ENGINEERING RELATED

<https://libguides.asu.edu/engineering/PICO>

Not all PICO elements may be needed for an effective search, depending on the topic.



# A bibliometric analysis of the application of artificial intelligence to advance individualized diagnosis and treatment of critical illness

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*Contributions:* (I) Conception and design: YT Yu, C Zhu; (II) Administrative support: LJ Lu, ZX Wu; (III) Provision of study materials or patients: YX Liu, YT Yu, ZX Wu; (IV) Collection and assembly of data: C Zhu, YT Yu, YX Liu; (V) Data analysis and interpretation: ZX Wu, YT Yu; (VI) Manuscript writing: All authors; (VII) Final approval of manuscript: All authors.

\*These authors contributed equally to this work.

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**Background:** Artificial intelligence (AI) has been extensively applied in the individualized diagnosis and treatment of critical illness, and numerous studies have been published on this topic. Therefore, a bibliometric analysis of these publications should be performed to provide a direction of hot topics and future research trends.

**Methods:** A bibliometric analysis was performed on the research articles to identify the hot topics and any unsolved issues regarding the use of AI in individualized diagnosis and treatment of critical illness. Articles published from January 2011 to December 2021 were retrieved from the Web of Science (WOS) core collection database for bibliometric analysis, and a cross-sectional analysis of the relevant studies that had been registered at ClinicalTrials.gov was also conducted.

**Results:** The number of articles published showed an annually increasing trend, with a worldwide geographic distribution over the past decade. Ultimately, 427 research articles were included in the bibliometric analysis. The relevant articles were divided into four separate clusters that focused on AI application aspects, prediction model establishment, coronavirus disease 2019 (COVID-19) treatment and outcome assessments, respectively. “Machine learning” was the most frequent keyword (147 occurrences, 165 links, and 395 total link strengths) followed by “risk”, “models”, and “mortality”. With 205 articles, the United States of America (USA) had interacted the most with other countries (20 links, and 94 total link strength), while the domestic research institutes in China had infrequently collaborated with others. Approximately 130 trials focusing on the application of AI in the intensive care unit (ICU) and emergency department (ED) had been registered at ClinicalTrials.gov, and most of them (n=71, 54.6%) were interventional. The main research objectives of these trials were to provide decision making assistance and

Publikasi :  
January 2011 to December 2021

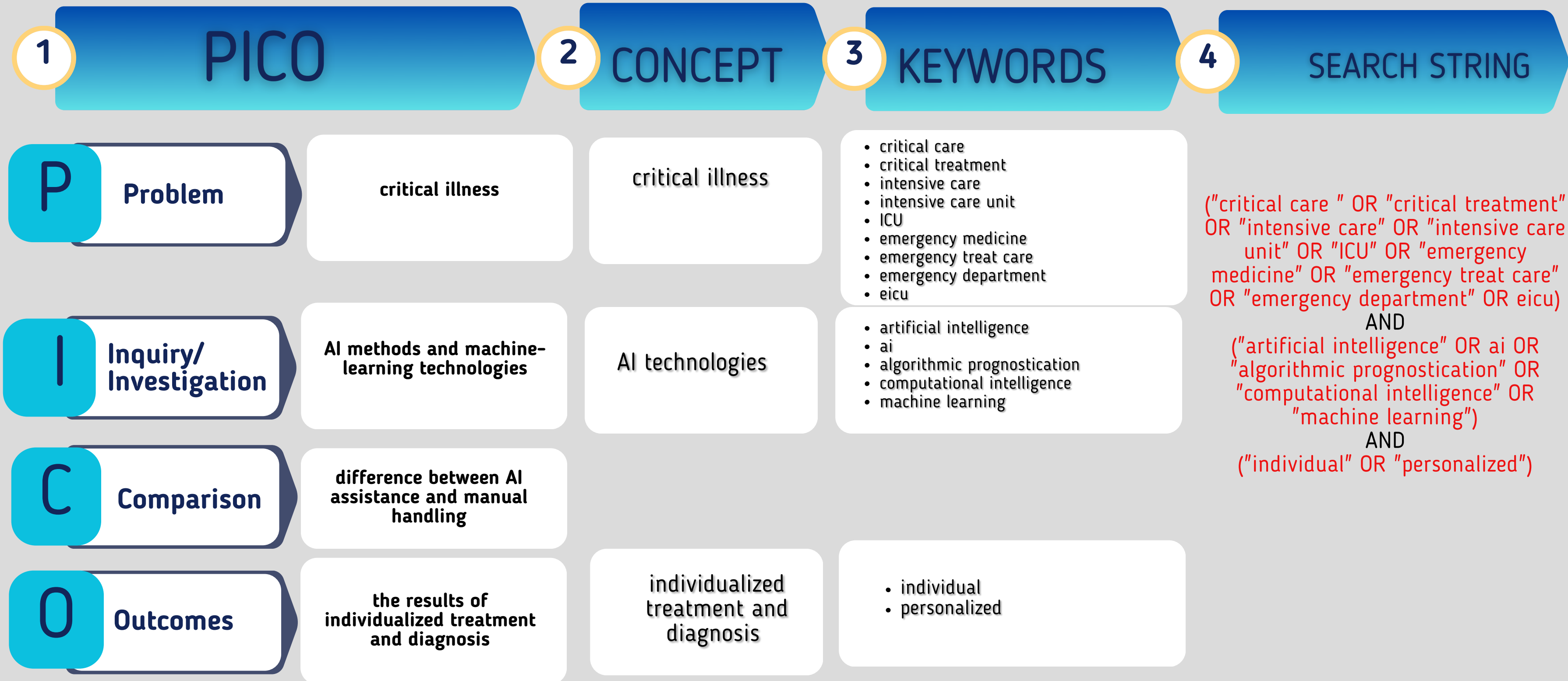
Database :  
Web of Science (WoS) core collection & ClinicalTrials

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9469176/pdf/atm-10-16-854.pdf>



# RQ to literature search

hot topics and future research trends on Artificial intelligence (AI) application in the individualized diagnosis and treatment of critical illness



Not all PICO elements may be needed for an effective search, depending on the topic.



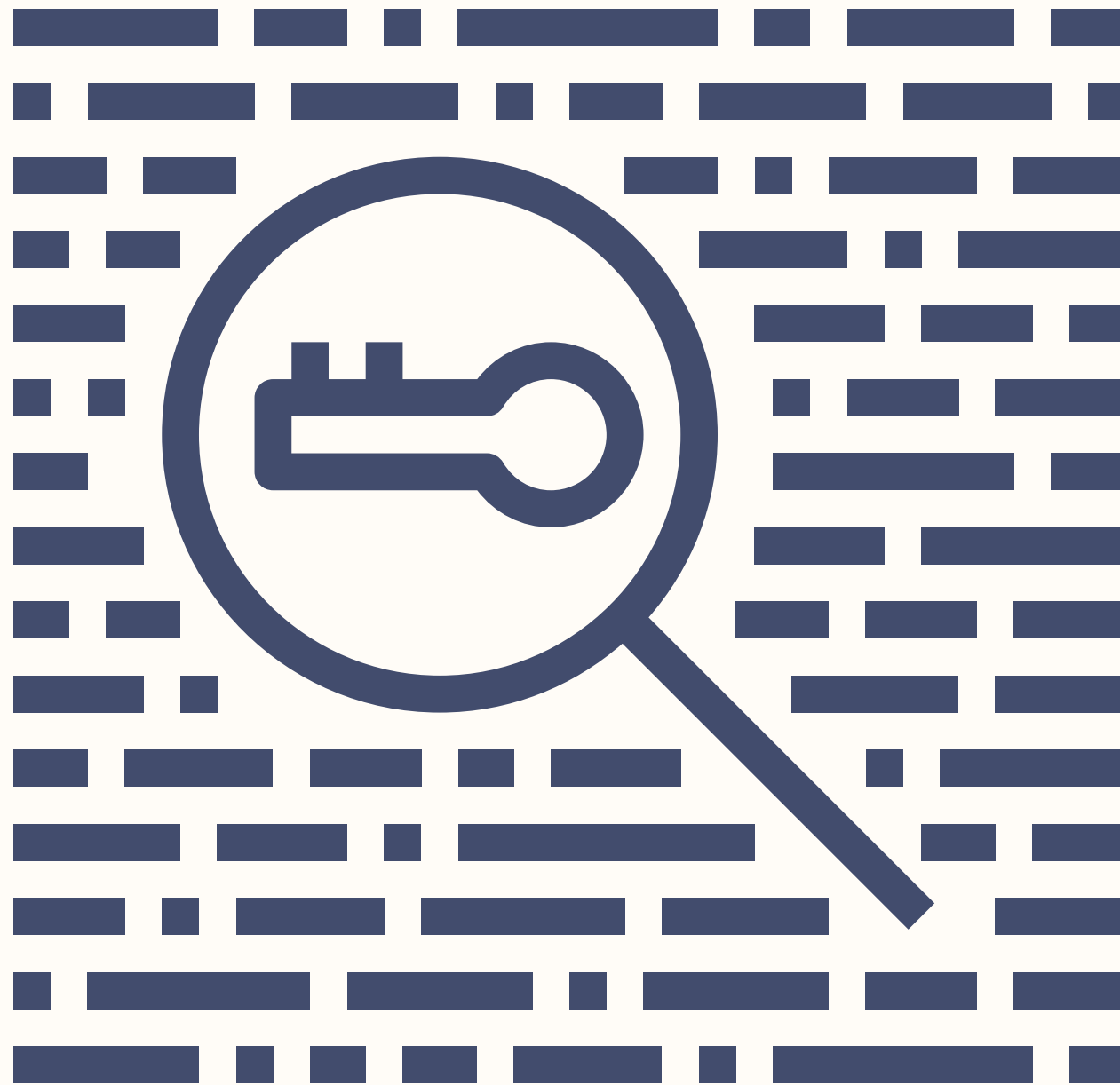
## Search Template

Focused Research Question	What is the effectiveness of <u>fish oil or omega-3 fatty acids</u> in patients with dementia?
Research articles that are highly relevant to your research topic	

1. Identify free text terms and controlled vocabulary terms for each concept.
2. Combine search terms within each concept with Boolean Operator **OR**
3. Combine different concepts with Boolean Operator **AND**

	Concept 1 /Population/Problem	Concept2 /Intervention/Exposure	Additional concept (if any) /comparison/outcome
<b>Key concepts</b>  <i>Identify the key concepts based on your research topic.</i>	patients with dementia	fish oil or omega-3	
<b>Free text terms / natural language terms</b>  (synonyms, UK/US terminology, medical/laymen's terms, acronyms/abbreviations, drug brands, more narrow search terms)  <i>List down your keywords for each concept.</i>	Dementia Dementias Alzheimer Alzheimer's Alzheimers Lewy Body Lewy bodies	Fish oil fish oils Omega-3 omega 3 Omega3 eicosapentanoic acid eicosapentanoic acids eicosapentaenoic acid eicosapentaenoic acids EPA	

# Identifying Keywords



## Sinonim

01

curriculum = curricula = syllabus;  
salafism = salafi salafist = salafis = salafiya = salafiyya

## Akronim

02

ADHD = Attention Deficit Hyperactivity Disorder;  
Diabetes mellitus = DM

## Variasi Ejaan

03

organization, organisation;

## Jamak

04

syllabi, syllabus, syllabuses

## Scientific & Common names

05

green tea = camellia sinensis

## Istilah khas di suatu negara

06

dissertation (US); thesis (UK)

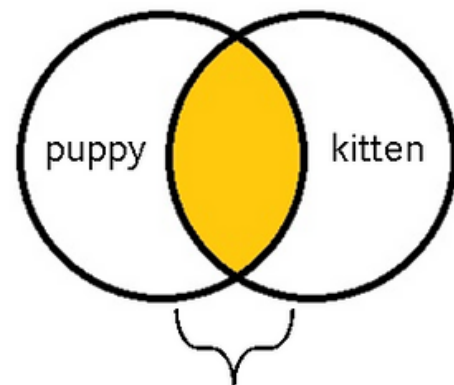
formulate search string

# Search operators

Search engines think in keywords combined using Boolean Operators (AND, OR, NOT).

**01** AND

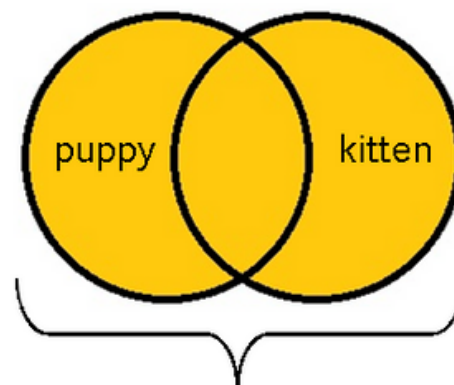
Only results that contain both keywords



Both terms  
**puppy AND kitten**

**02** OR

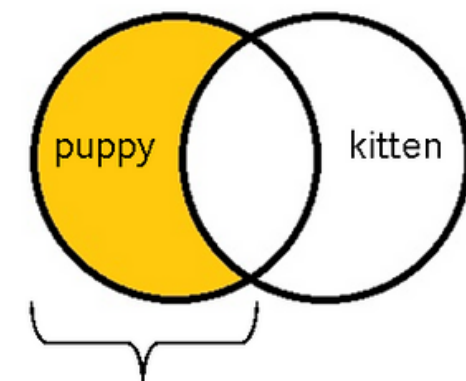
Results containing keywords A or B



Either term  
**puppy OR kitten**

**03** NOT

Results containing keywords A excluding any with keyword B



Just one term  
**puppy NOT kitten**

# SEARCH SYNTAX

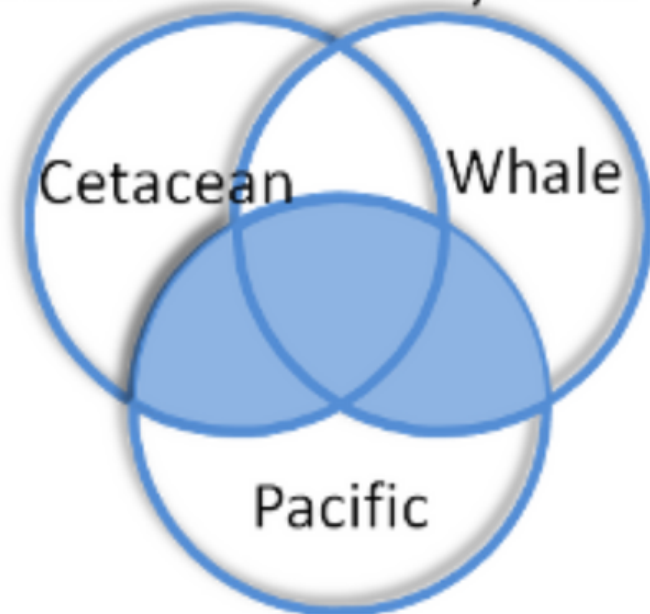
## formulate search string

phrase searching	quotation marks "....."	We want to search for the exact phrase (words as a group with the exact order)	"artificial intelligence"
Truncation	Asterik *	broaden your search to include various word endings and spellings	Child* educat* = educate, education, educated, educational adoles* = adolescent, adolescents, adolescence contamina* = contamination, contaminants, contaminated, contaminate, contaminates
Wild card	Question mark ?	broaden your search to include various word spellings	Col?r

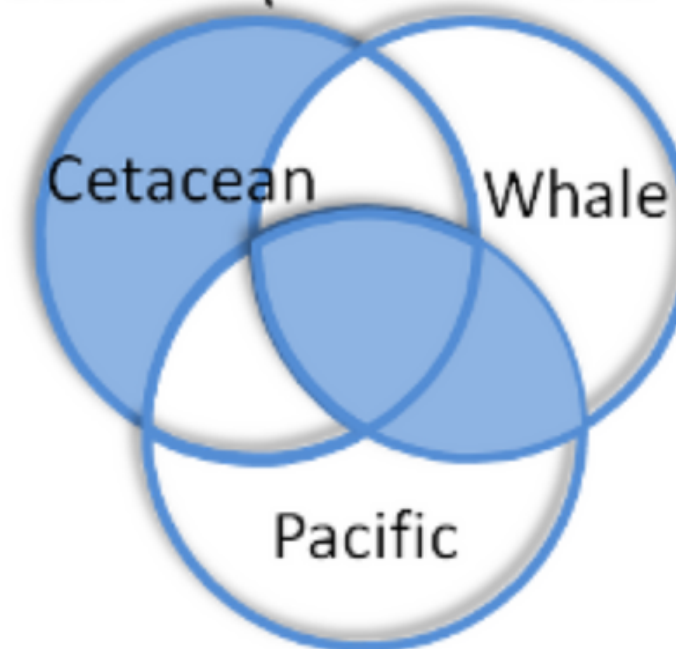
# formulate search string

parentheses can be used to build a search with a combination of Boolean Operators

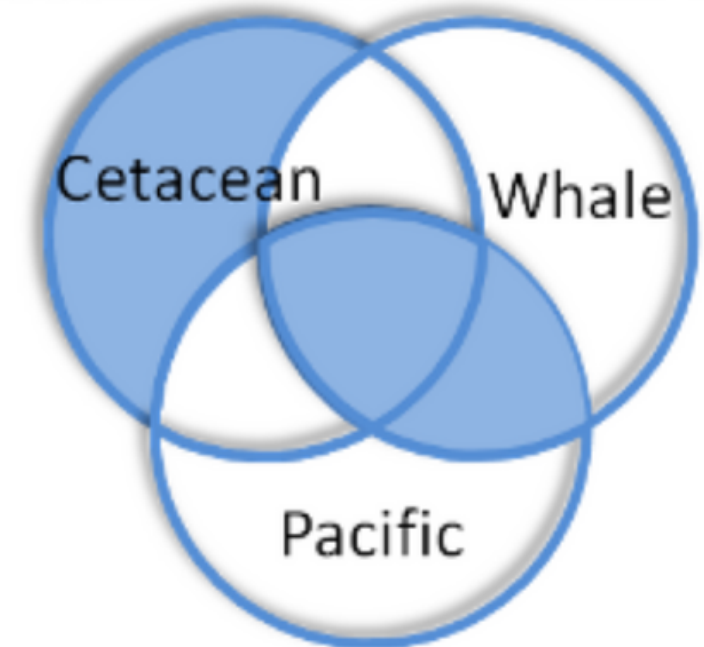
(Cetacean OR Whale) AND Pacific



Cetacean OR (Whale AND Pacific)



Cetacean OR Whale AND Pacific

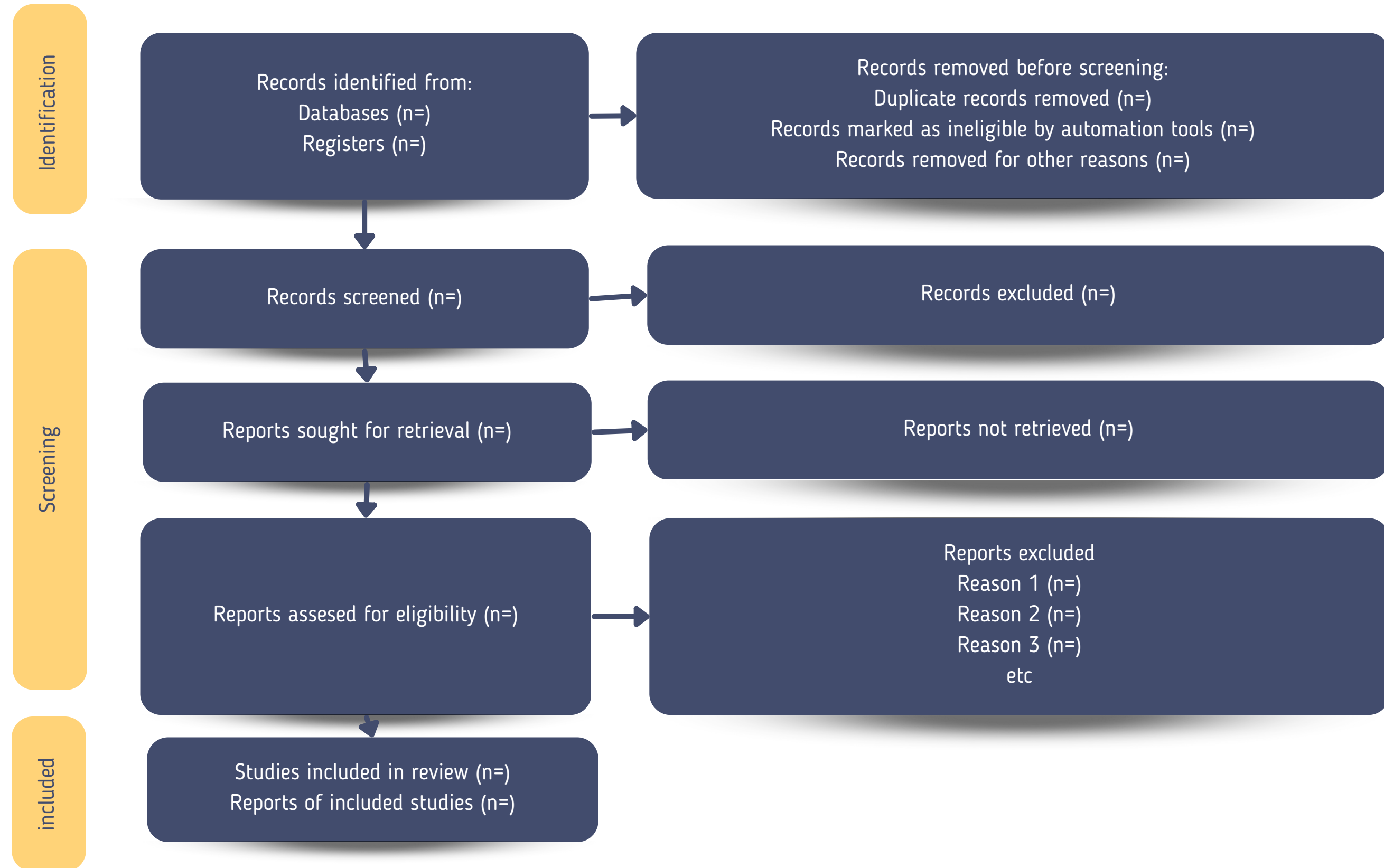


<https://guides.library.manoa.hawaii.edu/c.php?g=105358&p=684347>

## *Catat proses penelusuran*

- *pangkalan data yang digunakan*
- *search query yang digunakan*
- *tanggal penelusuran*
- *Jumlah hasil penelusuran*
- *Proses screening dan hasilnya*

# PRISMA FLOW DIAGRAM



A network diagram with grey nodes and lines, partially obscured by a yellow and blue arrow-shaped graphic.

**Analisis Bibliometrika  
menggunakan Tools  
Bibliometrika**



# Tools for Conducting Bibliometric Mapping

## Bibexcel

University of Umea

OS: Windows

UI: Desktop

## Biblioshiny

University of Naples Federico II

OS: Runs in R

UI: Web

## BiblioMaps

University of Lyon

OS: Runs in Python

UI: Web

## CiteSpace

Drexel University

OS: Windows

UI: Desktop

## VOSviewer

Leiden University

OS: Win, OSX, Linux

UI: Desktop

## CitNetExplorer

Leiden University

OS: Win, OSX, Linux

UI: Desktop

## Sci2Tools

Cyber infrastructure for Network Science

Center

OS: Win, OSX, Linux

UI: Desktop

VOSviewer uses the VOS mapping technique, where VOS stands for “visualization of similarities.”

Home

Features

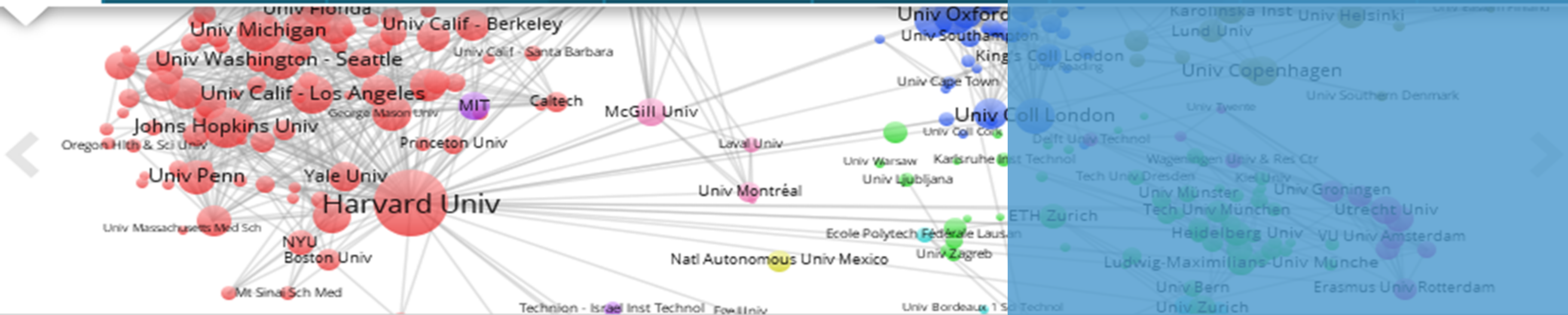
Getting Started

Download

Publications

Products

Contact



## Welcome to VOSviewer

VOSviewer is a software tool for constructing and visualizing bibliometric networks. These networks may for instance include journals, researchers, or individual publications, and they can be constructed based on citation, bibliographic coupling, co-citation, or co-authorship relations. VOSviewer also offers text mining functionality that can be used to construct and visualize co-occurrence networks of important terms extracted from a body of scientific literature.

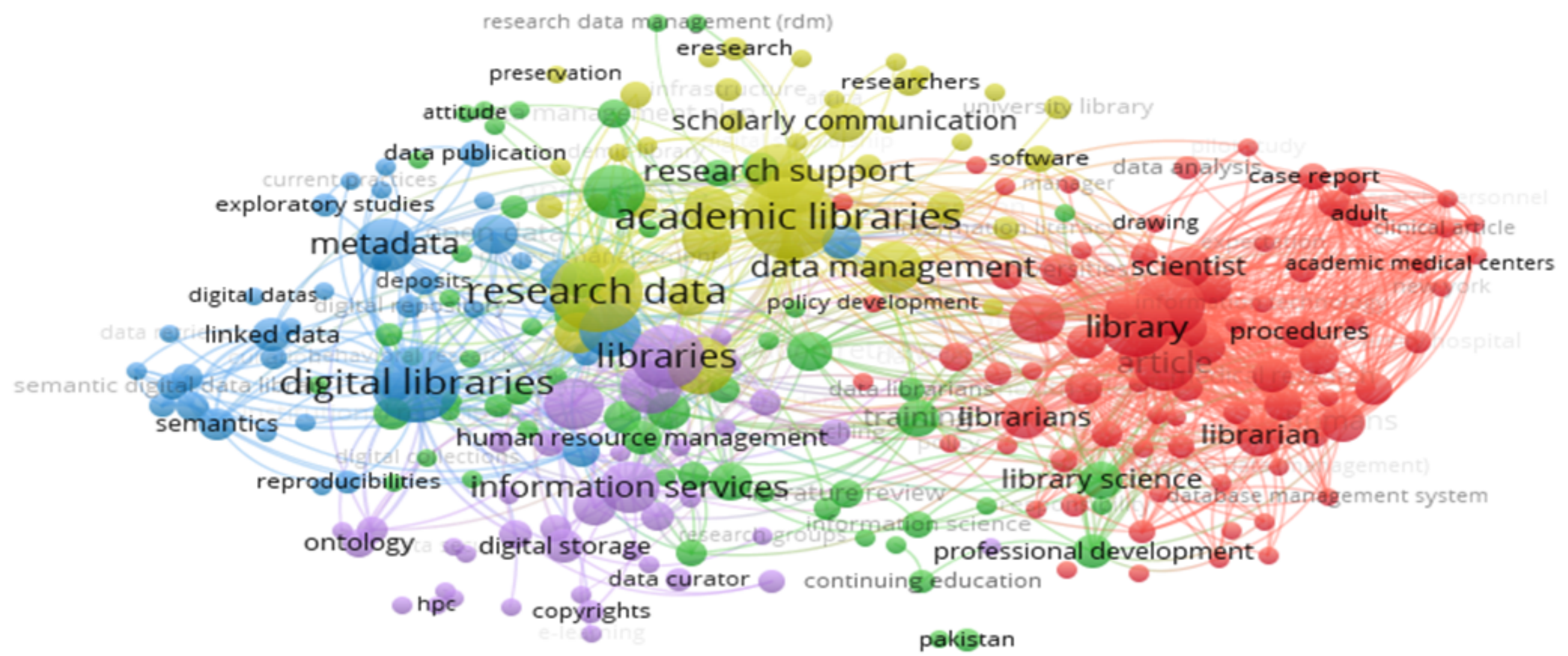


VOSviewer menggunakan pendekatan distance-based dalam memvisualisasikan jejaring bibliomerika jarak antara dua node menunjukkan relasi node. Secara umum, semakin dekat jarak antara dua node, semakin tinggi relasinya

Filter:

267 items (7 clusters):

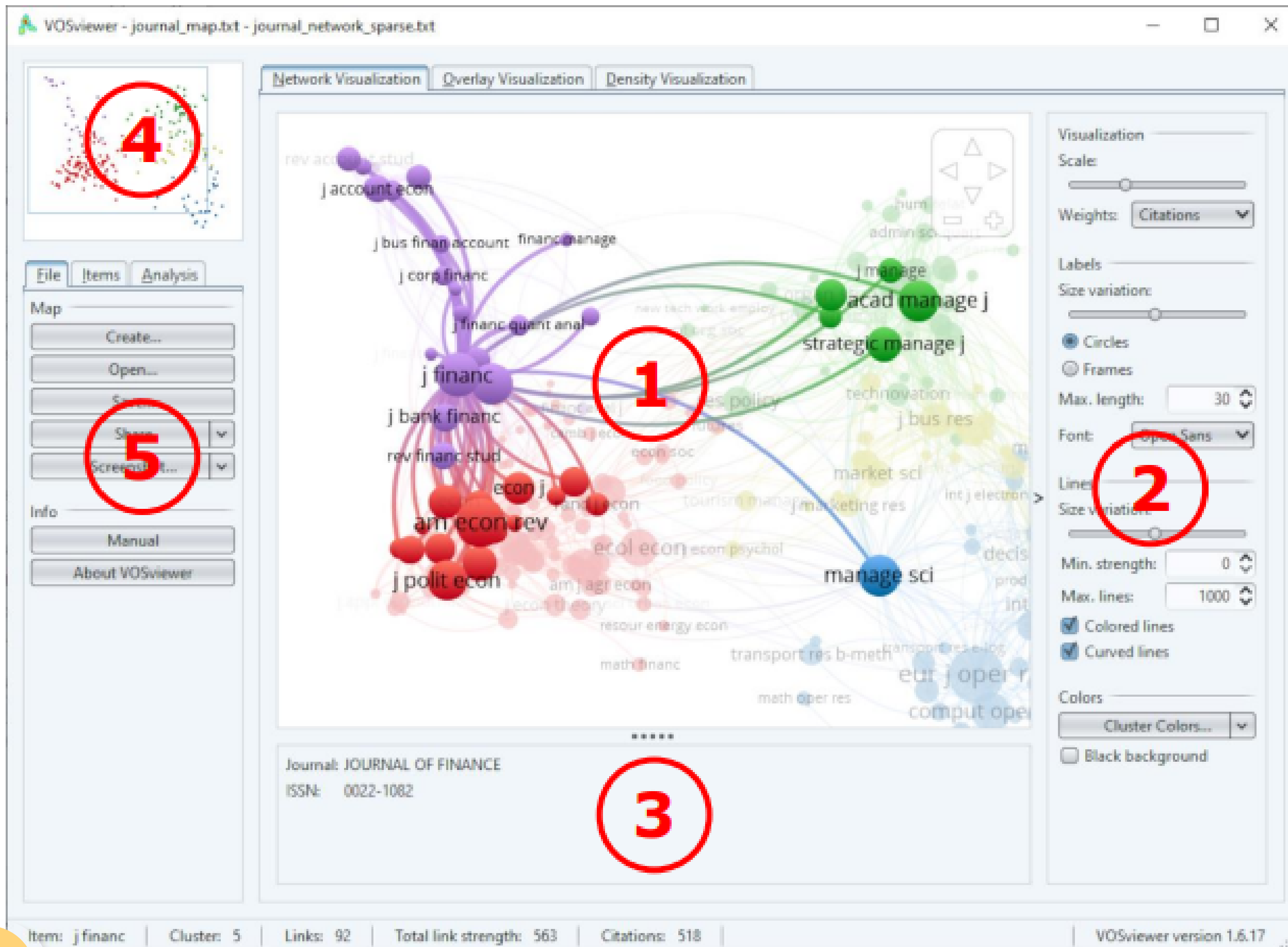
- Cluster 1 (78 items)**
- academic medical cente
- adult
- article
- biomedical research
- case report
- clinical article
- consultation
- data analysis
- data base
- data collection
- data management plans
- data services
- database management :
- database management :
- drawing
- education
- education and training
- expectation
- female
- health science
- health services research
- human



# Instalasi

1. Install Java (<https://www.java.com/download/>)
2. Downloads file VOSviewer (<https://www.vosviewer.com/download>), ekstrak dan simpan di folder sesuai pilihan
3. Untuk menjalankan VOSviewer, buka folder tempat penyimpanan VOSviewer
4. Klik dua kali pada file aplikasi atau file berekstensi .exe.

Bisa juga dibuat shortcut aplikasi VOSviewer di desktop Anda untuk memudahkan akses.



- Panel utama VOSviewer
1. Panel utama/main panel
  2. Panel options
  3. Panel Informasi
  4. Panel overview
  5. Panel action

# VOSviewer: data source

## from bibliographic database

- WoS
- Scopus
- Dimensions
- Lens
- PubMed

## From reference manager

- RIS
- EndNote
- Refworks

## through API

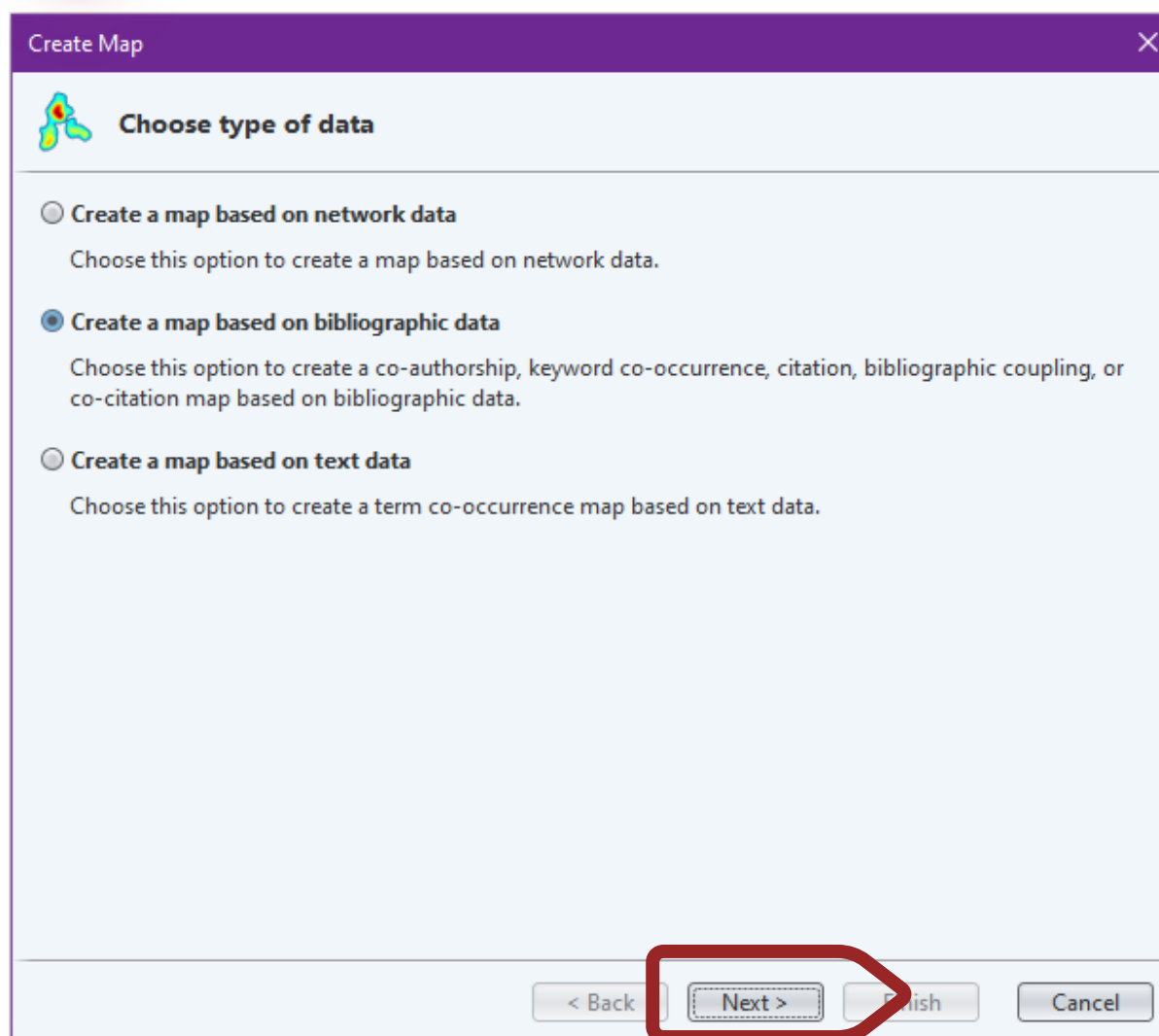
- Crossref
- OpenAlex
- Europe PMS
- Semantic Scholar
- OCC
- COCI
- Wikidata

## ***Membuat peta semantik kata kunci***





1 buka menu create



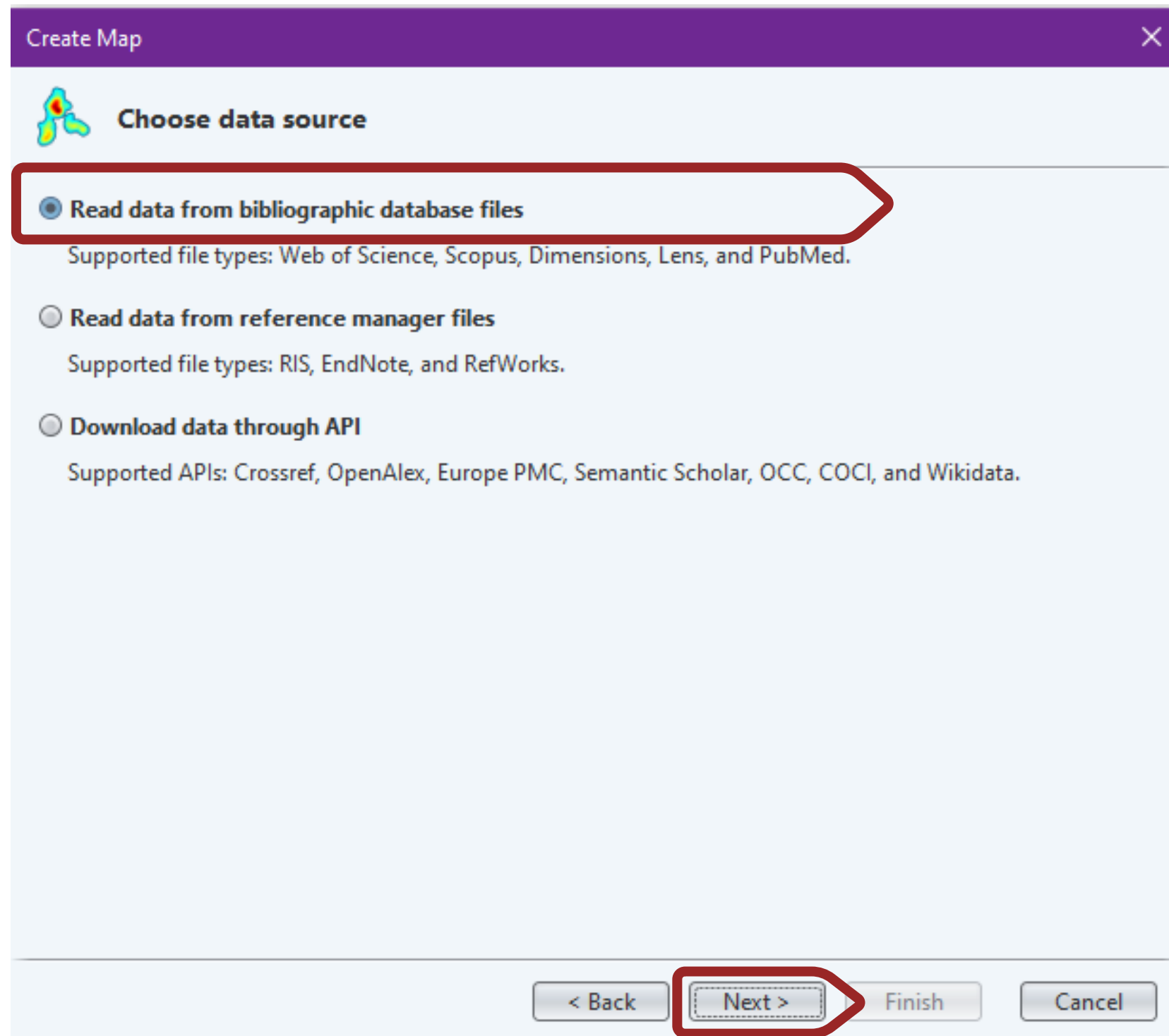
klik next

opsi create a ap based on network data digunakan ketika kita akan membuka file hasil analisis VOSviewer

opsi create a map based on a text data digunakan untuk melakukan NLP menggunakan data teks (judul dan abstrak)





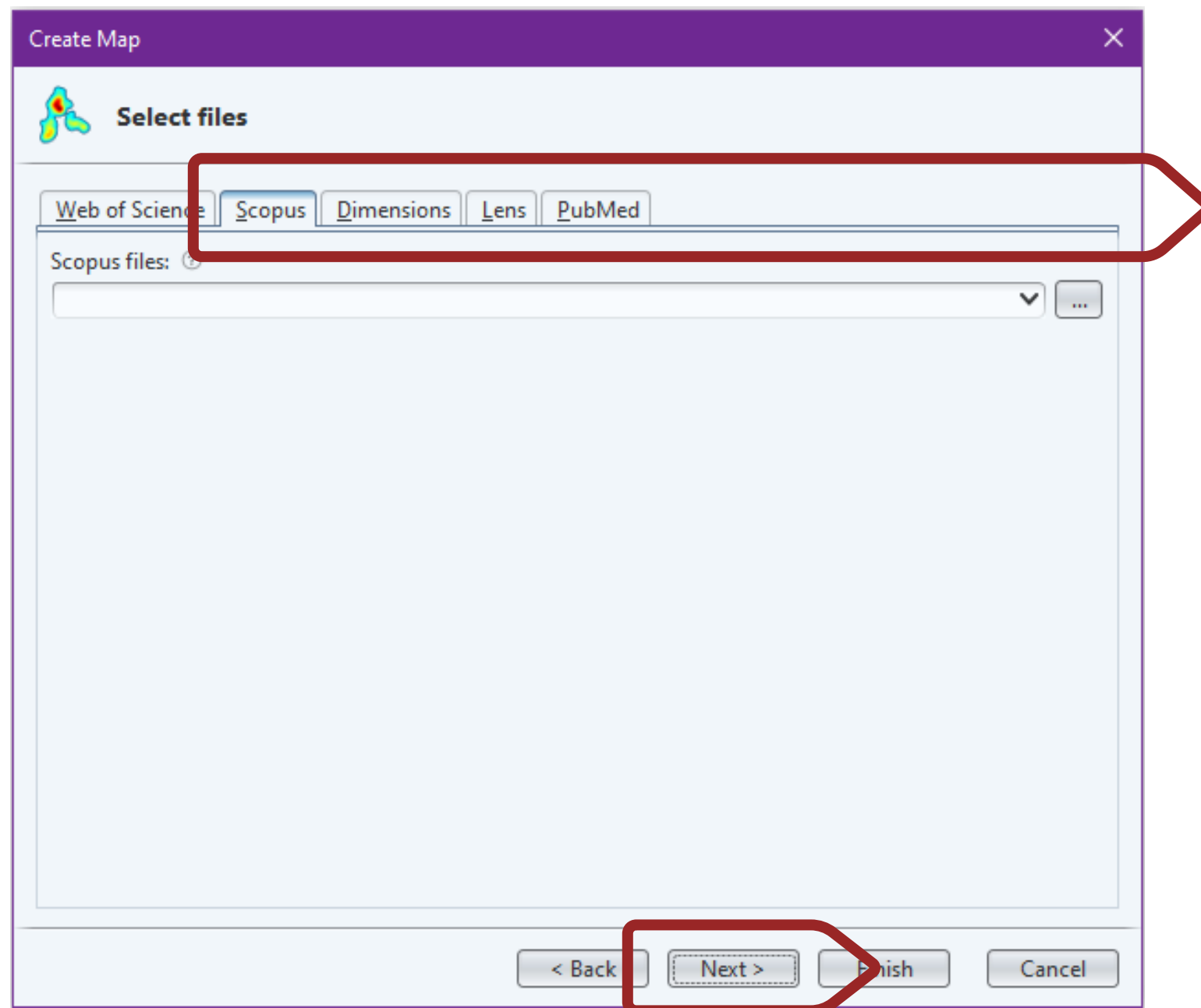


2

read data from bibliographic files

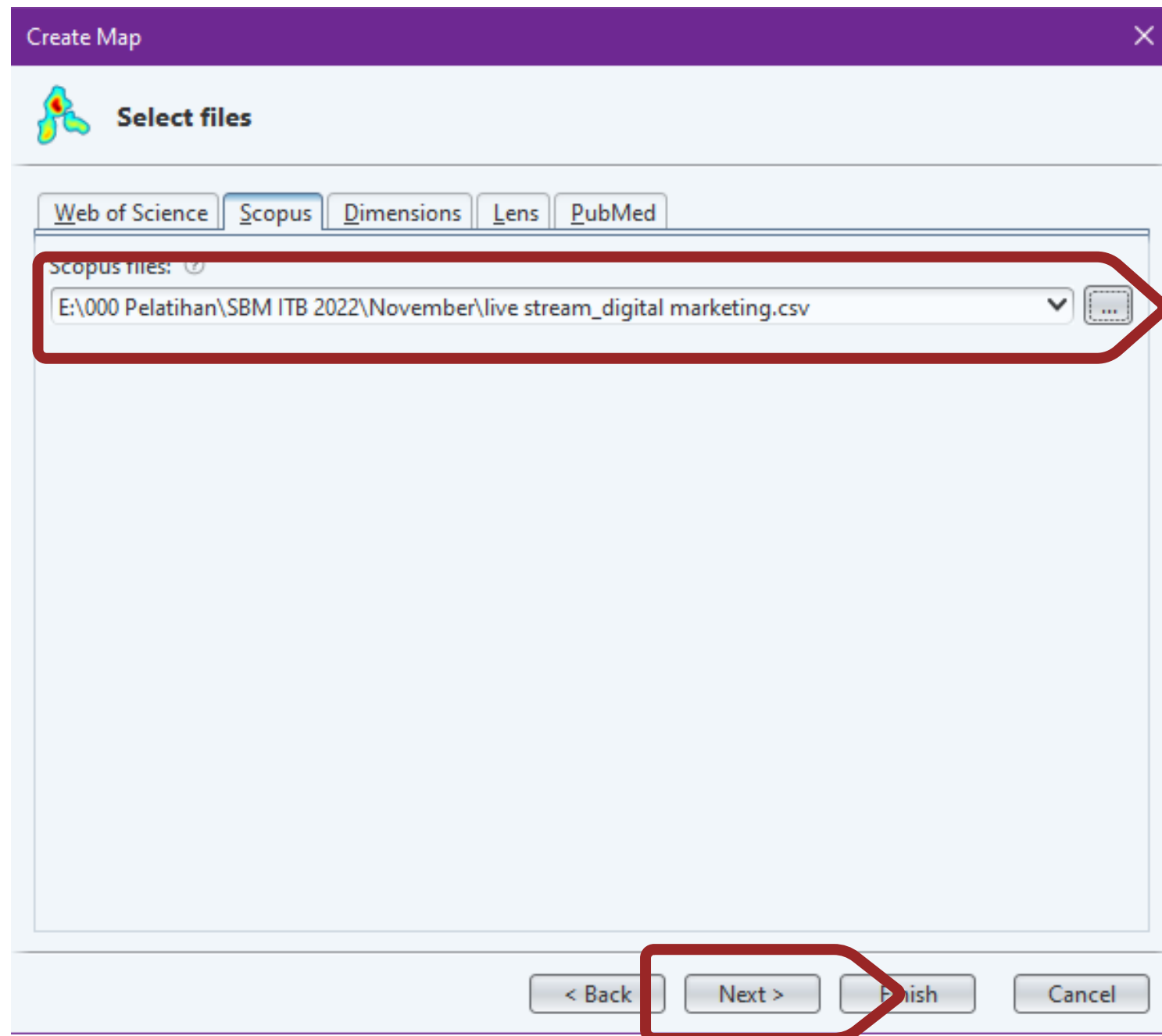
Opsi read data from reference manager files digunakan ketika data yang akan diolah didapatkan dari reference manager tools misalnya file RIS

Opsi download data through API digunakan ketika kita tidak menyiapkan data, tapi ingin langsung mendapatkan data dari database menggunakan API



3


buka tab sesuaikan dengan database sumber data yang digunakan



4

buka data yang telah disiapkan  
beberapa file CSV bisa dibuka sekaligus

Create Map ✕

 **Choose type of analysis and counting method**

Type of analysis: ?

Co-authorship

Co-occurrence

Citation

Bibliographic coupling

Co-citation

Unit of analysis:

All keywords

Author keywords

Index keywords

Counting method: ?

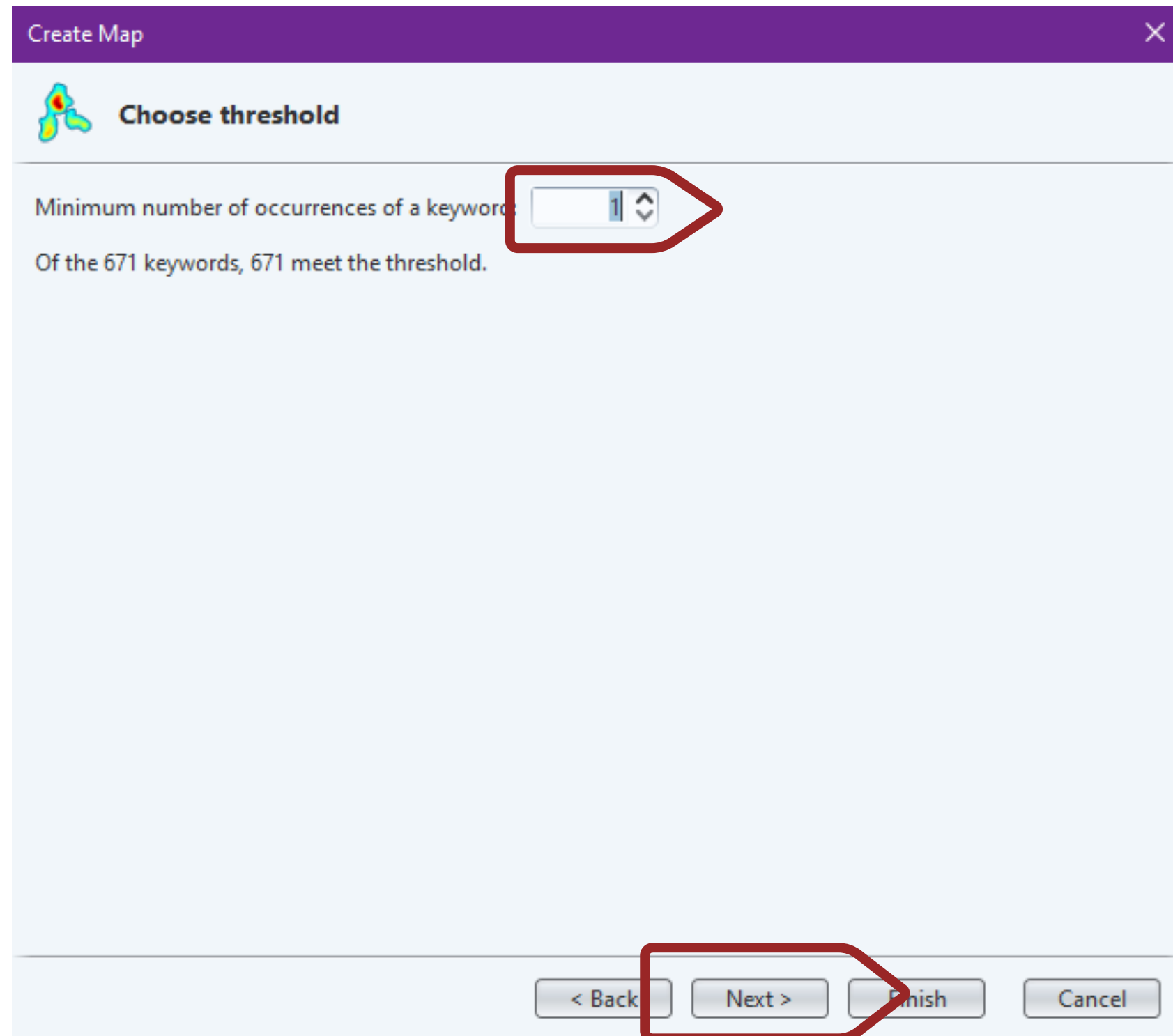
Full counting

Fractional counting

VOSviewer thesaurus file (optional): ?

5


Pilih toe analisis co-occurance  
Pilih unit analisis author keywords



6

Lakukan filtering dengan menetapkan nilai ambang batas  
Semakin tinggi nilai threshold semakin sedikit kata kunci yang nanti akan diproses lebih lanjut

Create Map ×

 **Choose number of keywords**


For each of the 671 keywords, the total strength of the co-occurrence links with other keywords will be calculated. The keywords with the greatest total link strength will be selected.

Number of keywords to be selected:

7

Tentukan jumlah kata kunci yang akan diproses lebih lanjut

Create Map ✕

 **Verify selected keywords**

Selected	Keyword	Occurrences	Total link strength <span>▼</span>
<input checked="" type="checkbox"/>	live streaming	31	136
<input checked="" type="checkbox"/>	e-commerce	25	117
<input checked="" type="checkbox"/>	purchase intention	14	63
<input checked="" type="checkbox"/>	e-commerce live streaming	11	40
<input checked="" type="checkbox"/>	streaming media	5	37
<input checked="" type="checkbox"/>	social media	5	31
<input checked="" type="checkbox"/>	live streaming e-commerce	7	29
<input checked="" type="checkbox"/>	social presence	7	29
<input checked="" type="checkbox"/>	live streaming commerce	7	28
<input checked="" type="checkbox"/>	live streaming shopping	7	25
<input checked="" type="checkbox"/>	electronic commerce	3	24
<input checked="" type="checkbox"/>	multimedia communication	3	24
<input checked="" type="checkbox"/>	live-streaming	6	23
<input checked="" type="checkbox"/>	digital marketing	5	22
<input checked="" type="checkbox"/>	business	2	20
<input checked="" type="checkbox"/>	deep learning	3	20
<input checked="" type="checkbox"/>	engagement	4	20
<input checked="" type="checkbox"/>	internet	3	20
<input checked="" type="checkbox"/>	machine learning	2	20
<input checked="" type="checkbox"/>	perceived value	4	19

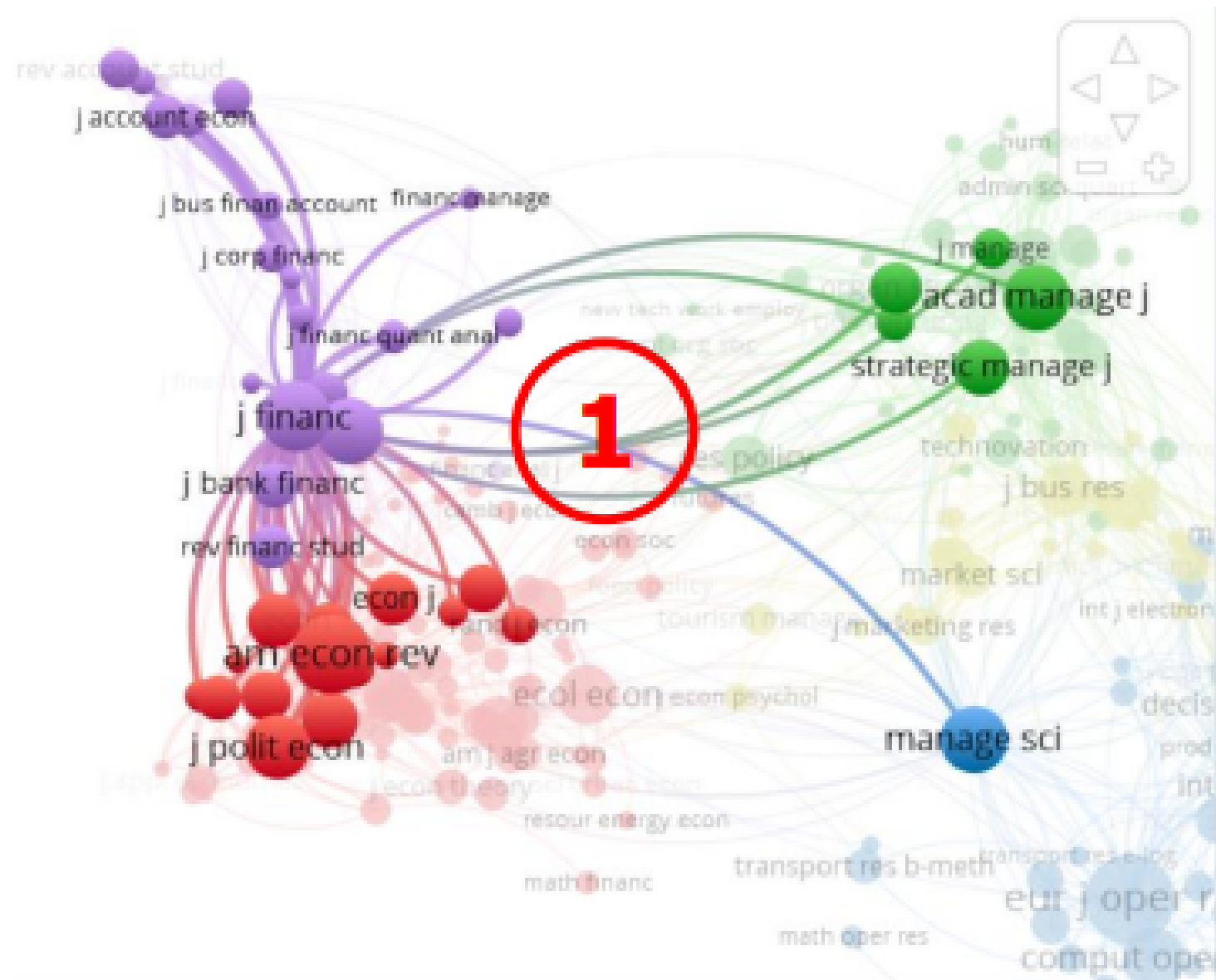
< Back Next > **Finish** Cancel

8

Lakukan verifikasi akhir atas kata kunci yang akan divisualisasikan. Daftar kata kunci bisa disimpan dengan melakukan klik kanan, dan pilih menu export selected keywords.







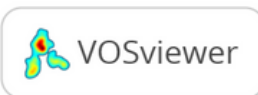
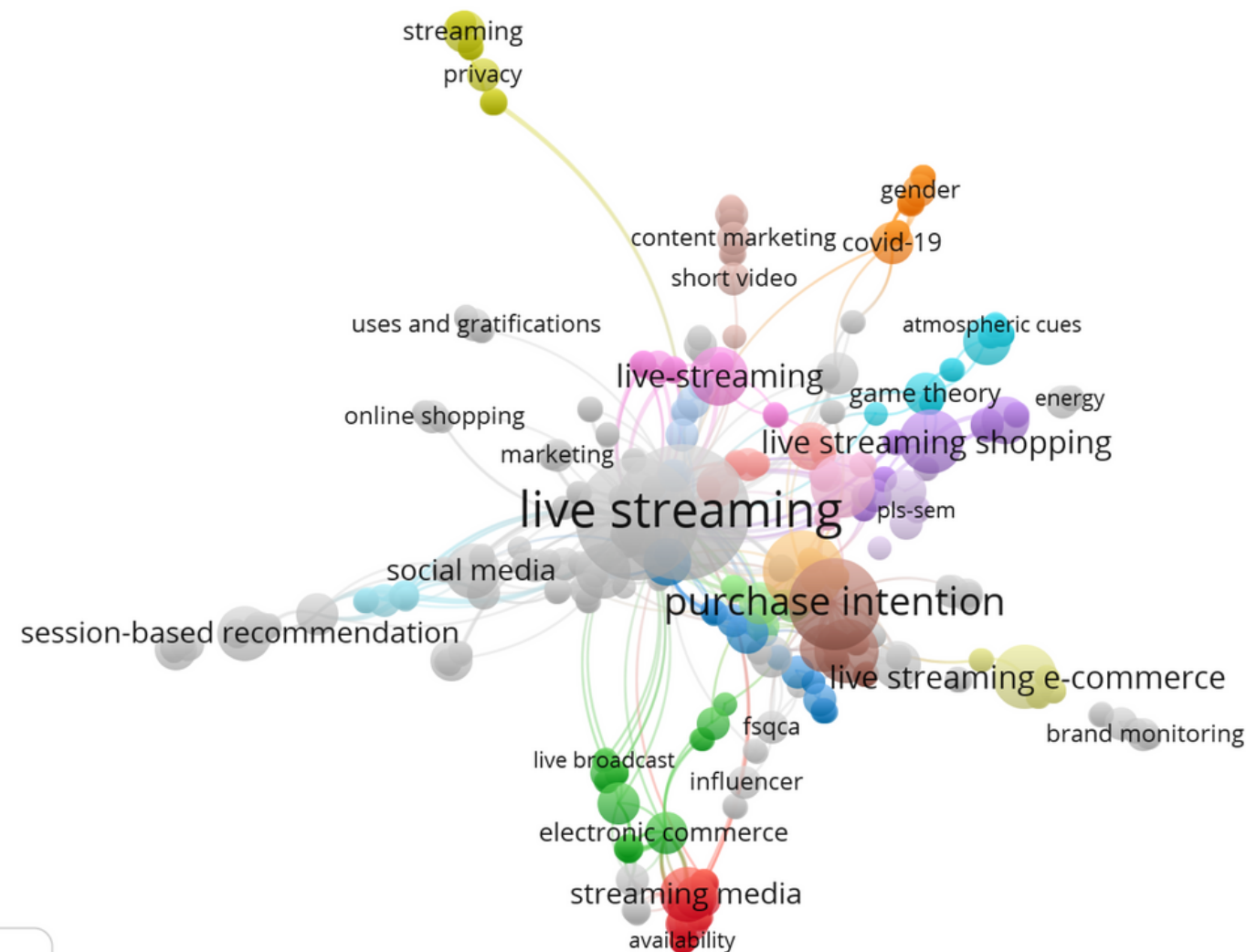
Panel Utama (main panel)

Panel utama menyajikan visualisasi peta yang sedang aktif.

Ada 3 opsi visualisasi yang ditampilkan di main panel:

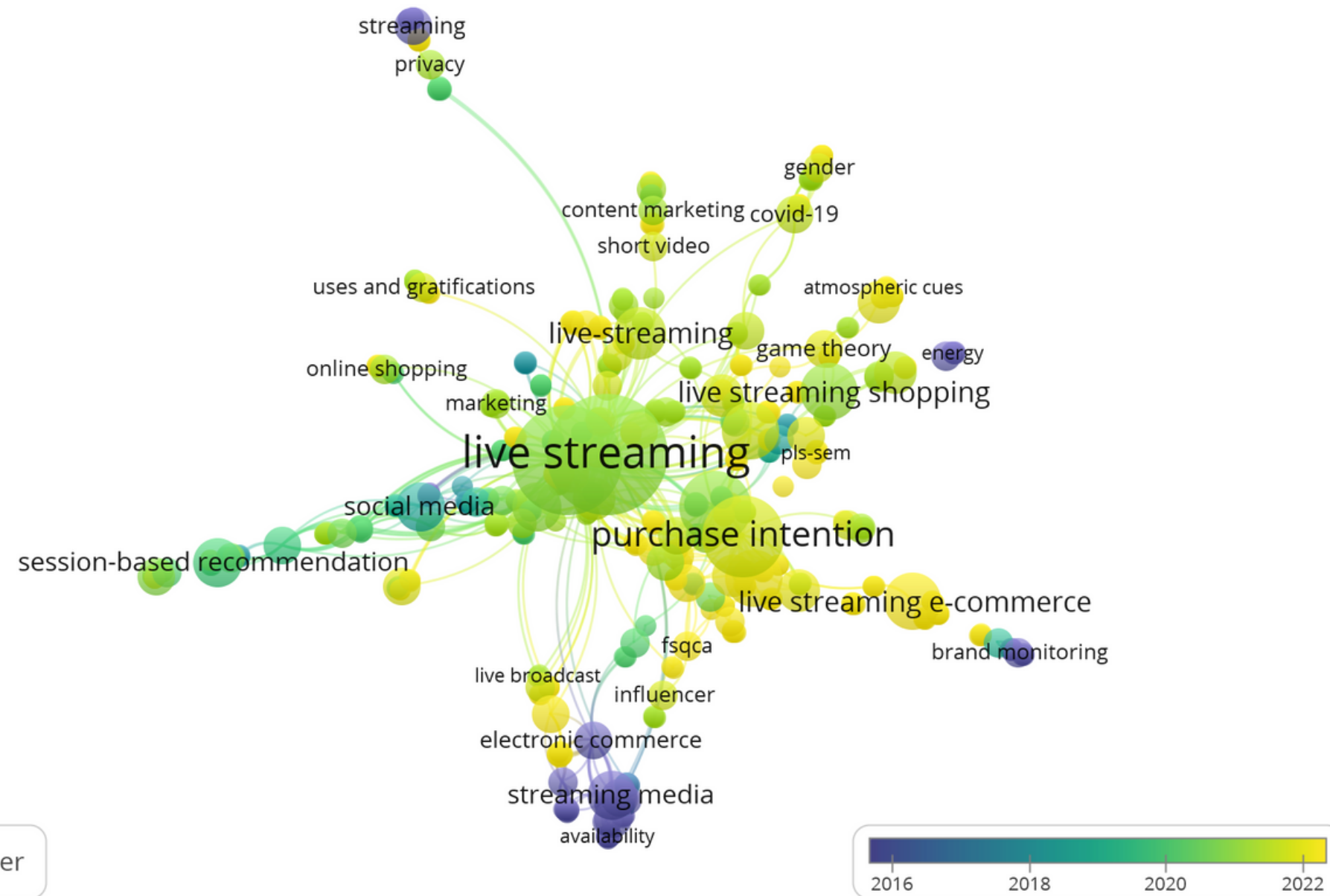
- network visualization,
- overlay visualization,
- density visualization.

# Network Visualization



- Ini merupakan peta pertama yang dilihat
- Pada *network visualization*, satu items diwakili oleh satu label dan satu node/lingkaran.
- Ukuran label dan node suatu item ditentukan oleh bobot item tersebut. Semakin tinggi bobot item, maka ukuran label dan node akan semakin besar.
- Warna suatu item ditentukan warna klaster
- Garis antar item mewakili relasi (*links*). Secara default, hanya akan ditampilkan 1000 garis yang mewakili 1000 relasi paling kuat.
- Jarak antara 2 item mengindikasikan keterkaitan antar item. Secara umum, semakin dekat jarak antar 2 item, maka relasi mereka semakin kuat.

# Overlay Visualization



- Overlay visualization sama dengan network visualization, hanya warna itemnya berbeda.
- Pada overlay, warna suatu item ditentukan oleh skor item tersebut. Warna default adalah biru (skor terendah) hingga hijau ke kuning (skor tertinggi).
- Tiga jenis penghitungan skor: Average Publication Year, Average citations, Average normalized citations.
- Warna node menunjukkan karakteristik tertentu, sesuai jenis pembobotan yang dipilih, misalnya bobot berdasarkan frekuensi kemunculan (occurrence) dan rerata tahun publikasi (average publication year)
- pada bagian bawah terdapat color bar yang menunjukkan bagaimana score item diwakili sebagai warna pada visualisasi

# Density Visualization

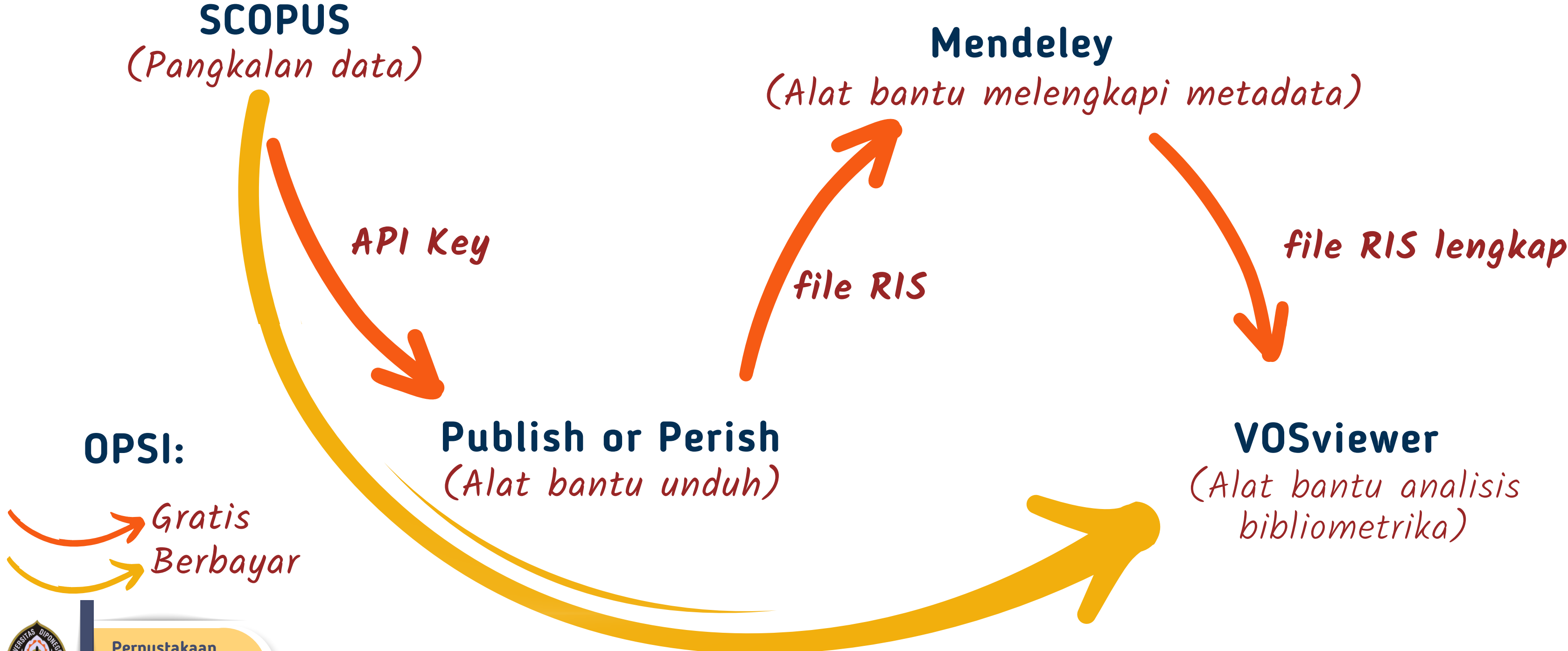


- Density visualization bisa ditampilkan dalam dua variasi: item density visualization & cluster density visualization.
- Pada visualisasi ini, warna menunjukkan distribusi item/node.
- Visualisasi kerapatan ini memungkinkan seseorang untuk bisa dengan cepat mengidentifikasi area yang rapat, dimana banyak node berdekatan satu sama lain.
- Semakin banyak item di sekeliling suatu titik dan semakin tinggi bobot item di sekelilingnya, semakin dekat warna titik tersebut menjadi kuning

## *Mengunduh data dari Scopus*

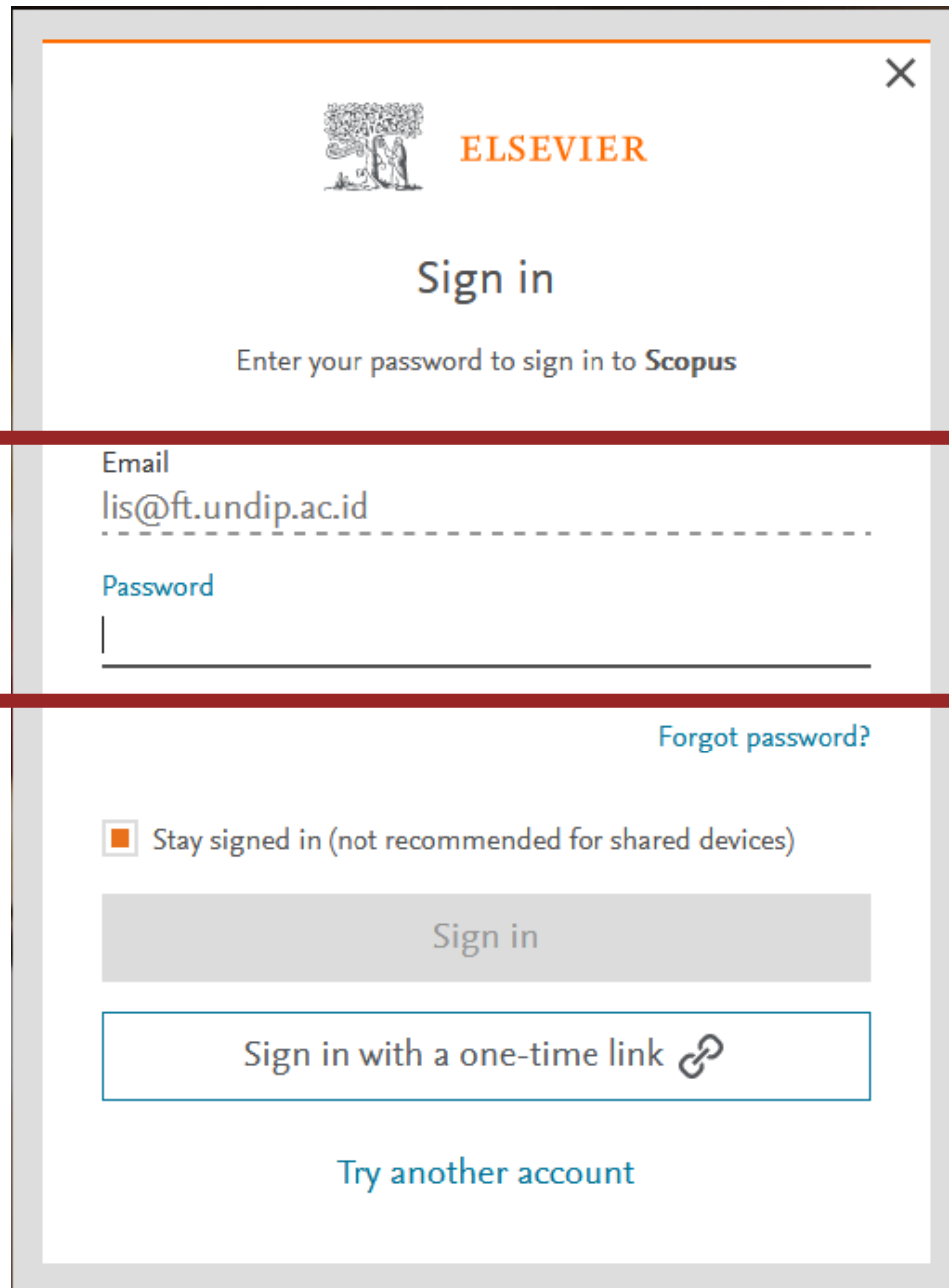


# Workflow menyiapkan data dari Scopus



# Langkah unduh data dari SCOPUS

## 1. Sign in



The image shows the Elsevier sign-in interface. At the top, there is the Elsevier logo and the text "Sign in". Below this, it says "Enter your password to sign in to Scopus". There are two input fields: "Email" with the value "lis@ft.undip.ac.id" and "Password" which is empty. A red arrow points to the email field. Below the password field is a "Forgot password?" link. There is a checkbox for "Stay signed in (not recommended for shared devices)". At the bottom, there is a "Sign in" button, a "Sign in with a one-time link" button, and a "Try another account" link.

## 2. Search

Brought to you by Universitas Diponegoro



Search Sources SciVal ? ? ? ? ? LS

### Start exploring

Discover the most reliable, relevant, up-to-date research. All in one place.

Documents Authors Affiliations Search tips ?

Search within  
Article title, Abstract, Keywords

Search documents \*  
bibliometrics

+ Add search field + Add date range Advanced document search >

Search

Search History Saved Searches

**PENELUSURAN BISA MEMANFAATKAN ADVANCE SARCH**



Start searching and your history will appear here. If you need help to start searching, see our [search tips](#).

Learn more about what Scopus can do for you

Show less ^ Don't show again



20,671 document results

TITLE-ABS-KEY ( bibliometrics )

Edit Save Set alert

### 3. Filter data bila diperlukan

### 4. Pilih/centang semua hasil penelusura

Documents Secondary documents Patents View Mendeley Data (1980)

Analyze search results Show all abstracts Sort on: Cited by (highest)

20,671 document results

Document title Authors Year Source Cited by

<input type="checkbox"/> All	CSV export	Download						
<input type="checkbox"/> 1	Clustering by fast search and find of density peaks	Rodriguez, A., Laio, A.	2014	Science 344(6191), pp. 1492-1496	3176			
	View abstract	View at Publisher	Related documents					
<input checked="" type="checkbox"/> 2	Maps of random walks on complex networks reveal community structure	Rosvall, M., Bergstrom, C.T.	2008	Proceedings of the National Academy of Sciences of the United States of America 105(4), pp. 1118-1123	2799			
	View abstract	View at Publisher	Related documents					
<input checked="" type="checkbox"/> 3	bibliometrix: An R-tool for comprehensive science mapping analysis	Aria, M., Cuccurullo, C.	2017	Journal of Informetrics 11(4), pp. 959-975	1948			
	View abstract	View at Publisher	Related documents					

Refine results Limit to Exclude

Open Access

- All Open Access (8,985)
- Gold (4,751)
- Hybrid Gold (711)
- Bronze (2,083)
- Green (6,115)

Learn more

Year

- 2023 (28)
- 2022 (3,124)
- 2021 (2,705)





# 20,671 document results

TITLE-ABS-KEY ( bibliometrics )

Edit Save Set alert

Search within results...

## Refine results

Limit to Exclude

## Open Access

- All Open Access (8,985) >
- Gold (4,751) >
- Hybrid Gold (711) >
- Bronze (2,083) >
- Green (6,115) >

Learn more

## Year

- 2023 (28) >
- 2022 (3,124) >
- 2021 (2,705) >

Documents Secondary documents Patents

View Mendeley Data (1980)

## Analyze search results

Show all abstracts Sort on: Cited by (highest)

All CSV export Download View citation overview View cited by Save to list

	Document title	Authors	Year	Source	Cited by
1	Clustering by fast search and find of density peaks	Rodriguez, A., Laio, A.	2014	Science 344(6191), pp. 1492-1496	3176
	<a href="#">View abstract</a> <a href="#">View at Publisher</a> <a href="#">Related documents</a>				
2	Maps of random walks on complex networks reveal community structure <i>Open Access</i>	Rosvall, M., Bergstrom, C.T.	2008	Proceedings of the National Academy of Sciences of the United States of America 105(4), pp. 1118-1123	2799
	<a href="#">View abstract</a> <a href="#">View at Publisher</a> <a href="#">Related documents</a>				
3	bibliometrix: An R-tool for comprehensive science mapping analysis	Aria, M., Cuccurullo, C.	2017	Journal of Informetrics 11(4), pp. 959-975	1948
	<a href="#">View abstract</a> <a href="#">View at Publisher</a> <a href="#">Related documents</a>				

5. Buka Menu Export



## 6. Pilih opsi CSV pada settingan ekspor. Centang semua heading, kecuali funding details \*

Export document settings

You have chosen to export 20671 documents

Select your method of export

MENDELEY  ExLibris RefWorks  RIS Format EndNote, Reference Manager  CSV Excel  BibTeX  Plain Text ASCII in HTML

What information do you want to export?

Citation information  Bibliographical information  Abstract & keywords  Funding details  Other information

Author(s)  Author(s) ID  Document title  Year  EID  Source title  volume, issue, pages  Citation count  Source & document type  Publication Stage  DOI  Open Access

Affiliations  Serial identifiers (e.g. ISSN)  PubMed ID  Publisher  Editor(s)  Language of original document  Correspondence address  Abbreviated source title

Abstract  Author keywords  Index keywords

Number  Acronym  Sponsor  Funding text

Tradenames & manufacturers  Accession numbers & chemicals  Conference information  Include references

Export document settings

The amount of documents you have selected for export is available with **citation information only**.

Select export type

CSV - Only the first 2,000 documents  CSV - Only the first 20,000 documents, citation information only

Email address

When completed, we will email you a link to download your export. The link will be available for 7 days.

Cancel Export

7. Klik export




# *Data Cleaning menggunakan Thesaurus*



# Thesaurus

Create Map ✕

 **Verify selected keywords**

Selected	Keyword ^	Occurrences	Total link strength
<input checked="" type="checkbox"/>	live stream	3	8
<input checked="" type="checkbox"/>	livestream e-commerce	1	5
<input checked="" type="checkbox"/>	live stream e-commerce	1	3
<input checked="" type="checkbox"/>	live-streamer	1	4
<input checked="" type="checkbox"/>	live streamer perspective	1	4
<input checked="" type="checkbox"/>	live streaming	31	136
<input checked="" type="checkbox"/>	live stream-ing	1	7
<input checked="" type="checkbox"/>	live-streaming	6	23
<input checked="" type="checkbox"/>	live streaming broadcasts	1	4
<input checked="" type="checkbox"/>	live streaming commerce	7	28
<input checked="" type="checkbox"/>	live-streaming commerce	1	5
<input checked="" type="checkbox"/>	live-streaming commerce	1	7
<input checked="" type="checkbox"/>	live streaming e-commerce	1	3
<input checked="" type="checkbox"/>	livestreaming e-commerce	1	2
<input checked="" type="checkbox"/>	live streaming e-commerce	7	29
<input checked="" type="checkbox"/>	live-streaming e-commerce	4	14
<input checked="" type="checkbox"/>	live-streaming e-commerce platform	1	11
<input checked="" type="checkbox"/>	live streaming marketing pattern	1	4
<input checked="" type="checkbox"/>	live streaming of e-commerce	1	4
<input checked="" type="checkbox"/>	live-streaming platform	1	3

Kenapa perlu menggunakan thesaurus?

Karena seringkali ditemukan kata kunci yang berbeda penulisan atau beberapa kata kunci yang sebenarnya mewakili satu konsep yang sama

# Data cleaning menggunakan Thesaurus

Create Map

Choose type of analysis and counting method

Type of analysis: ?

- Co-authorship
- Co-occurrence
- Citation
- Bibliographic coupling
- Co-citation

Unit of analysis:

- All keywords
- Author keywords
- Index keywords

Counting method: ?

- Full counting
- Fractional counting

VOSviewer thesaurus file (optional): ?

A VOSviewer thesaurus file can be used to merge different variants of, for instance, a source title, an author name, an organization name, a cited reference, or a keyword.

< Back Next > Finish Cancel

VOSviewer memiliki menu untuk memudahkan penggunaannya merapikan data, yakni Thesaurus

File ini bisa digunakan untuk menggabungkan atau membersihkan kata kunci yang tidak diinginkan

File thesaurus merupakan file teks (.txt) yang perlu disiapkan pengguna VOSviewer dan berisi daftar kata kunci

# Cara menyiapkan file Thesaurus

Create Map

Verify selected keywords

Selected		Total link
<input checked="" type="checkbox"/>	graduate	
<input checked="" type="checkbox"/>	higher ed	
<input checked="" type="checkbox"/>	informat	8 38
<input checked="" type="checkbox"/>	information seeking behavior	8 38
<input checked="" type="checkbox"/>	education	7 37
<input checked="" type="checkbox"/>	information seeking	8 34
<input checked="" type="checkbox"/>	information seeking behaviour	7 32
<input checked="" type="checkbox"/>	information needs	6 30
<input checked="" type="checkbox"/>	information sources	4 29
<input checked="" type="checkbox"/>	academic libraries	5 21
<input checked="" type="checkbox"/>	self-efficacy	6 21
<input checked="" type="checkbox"/>	information technology	4 20
<input checked="" type="checkbox"/>	perception	2 16
<input checked="" type="checkbox"/>	information-seeking behavior	3 15
<input checked="" type="checkbox"/>	undergraduate students	4 15
<input checked="" type="checkbox"/>	graduate education	4 14
<input checked="" type="checkbox"/>	information behaviour	3 14
<input checked="" type="checkbox"/>	information-seeking behaviors	3 14
<input checked="" type="checkbox"/>	qualitative research	4 14
<input checked="" type="checkbox"/>	research	3 14

Export selected keywords...

< Back   Next >   Finish   Cancel

Unduh daftar kata kunci pada tahapan verifikasi

Export Selected Keywords

Look In: Administrator

- android
- Mendeley Desktop
- .QtWebEngineProcess
- 3D Objects
- Contacts
- Desktop
- Documents
- Downloads
- Favorites
- Links
- Music
- Pictures
- Zotero

File Name:

Files of Type: Text files (\*.txt)

Export   Cancel

Daftar kata kunci akan tersimpan dalam format txt

# Cara menyiapkan file Thesaurus

File txt bisa dibuka di notepad

ATAU

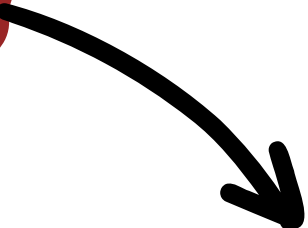
dicopy dan ditempelkan seluruh recordnya di sheet excel

```
IL_keywordslist.txt - Notepad
File Edit Format View Help
id keyword occurrences total link strength
1 academic (university) libraries 2 13
2 academic integrity 1 4
3 academic libraries 5 21
4 academic library 1 4
5 academic library use 1 4
6 academic performance 1 4
7 academic search 1 3
8 academic work 1 4
9 achievement 1 5
10 active learning 1 3
11 active search 1 6
12 adult attachment 1 5
13 advanced-practice pharmacist 1 5
14 allied health students 1 5
15 analytics 1 5
16 anand agricultural university 1 3
17 and ongoing search 1 6
18 anesthesiology 1 6
19 anticipatory socialization 1 4
```

	A	B	C	D	E
1	id	keyword	occurrences	total link strength	
2	1	academic (university) libraries	2	13	
3	2	academic integrity	1	4	
4	3	academic libraries	5	21	
5	4	academic library	1	4	
6	5	academic library use	1	4	
7	6	academic performance	1	4	
8	7	academic search	1	3	
9	8	academic work	1	4	
10	9	achievement	1	5	
11	10	active learning	1	3	
12	11	active search	1	6	
13	12	adult attachment	1	5	
14	13	advanced-practice pharmacist	1	5	
15	14	allied health students	1	5	
16	15	analytics	1	5	
17	16	anand agricultural university	1	3	
18	17	and ongoing search	1	6	
19	18	anesthesiology	1	6	
20	19	anticipatory socialization	1	4	
21	20	application process	2	8	



Cek dari daftar kata kunci unduhan, kata mana saja yang akan digabungkan atau mana yang akan dihilangkan, kemudian inputkan pada thesaurus



	A	B
1	label	replace by
2	uses and gratification	uses and gratifications
3	video	videos
4	supply chain	supply chains
5	structural equation model (sem)	structural equation modeling (sem)
6		
7		
8		
9		

- Buat tabel baru menggunakan excel
- Buat 2 kolom, dengan header label dan replace by
- Isikan kata kunci yang ingin digabung atau dieliminasi
  - Bila sebuah label disertai dengan label alternatif (replace by), maka berarti label tersebut akan digantikan oleh label alternatif
  - Bila sebuah label tidak disertai dengan label alternatif (kolom "replace by" kosong), maka berarti label tersebut akan diabaikan (tidak muncul) dalam visualisasi
- Bila sudah selesai, disimpan dalam format .txt



# Cara menggunakan file Thesaurus

Create Map

Choose type of analysis and counting method

Type of analysis: ?

- Co-authorship
- Co-occurrence
- Citation
- Bibliographic coupling
- Co-citation

Unit of analysis:

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< Back Next > Finish Cancel

Ulang kembali proses analisis menggunakan VOSviewer dari awal (tahapan CREATE)

File thesaurus bisa dibuat dan diunggah pada tahapan ke 3, yakni "Choose type of analysis and counting method"

Tahapan ke 3 langsung dilanjutkan ke tahap berikutnya, sesuai dengan tahapan penggunaan VOSviewer

# Use Case



# Ada yang didiskusikan?





Thank You