Variable Science Mapping as Literature Review Booster – Systematic Literature Review and Empirical Evidence

Przemyslaw Tomczyk & Philipp Brüggemann

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Presenter

Philipp Brüggemann,
FernUniversität in Hagen,
Germany

Overview

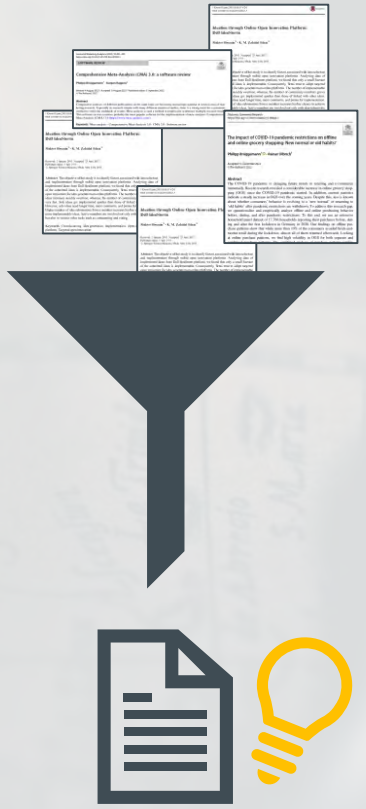
1. Introduction
2. Analyses
   - I. Systematic Literature Review
   - II. In-depth expert interviews
   - III. Comparison
3. Conclusion
4. Future directions

1. Introduction

1. Introduction

There are several **different methods**

to **compile** research papers



1. Introduction

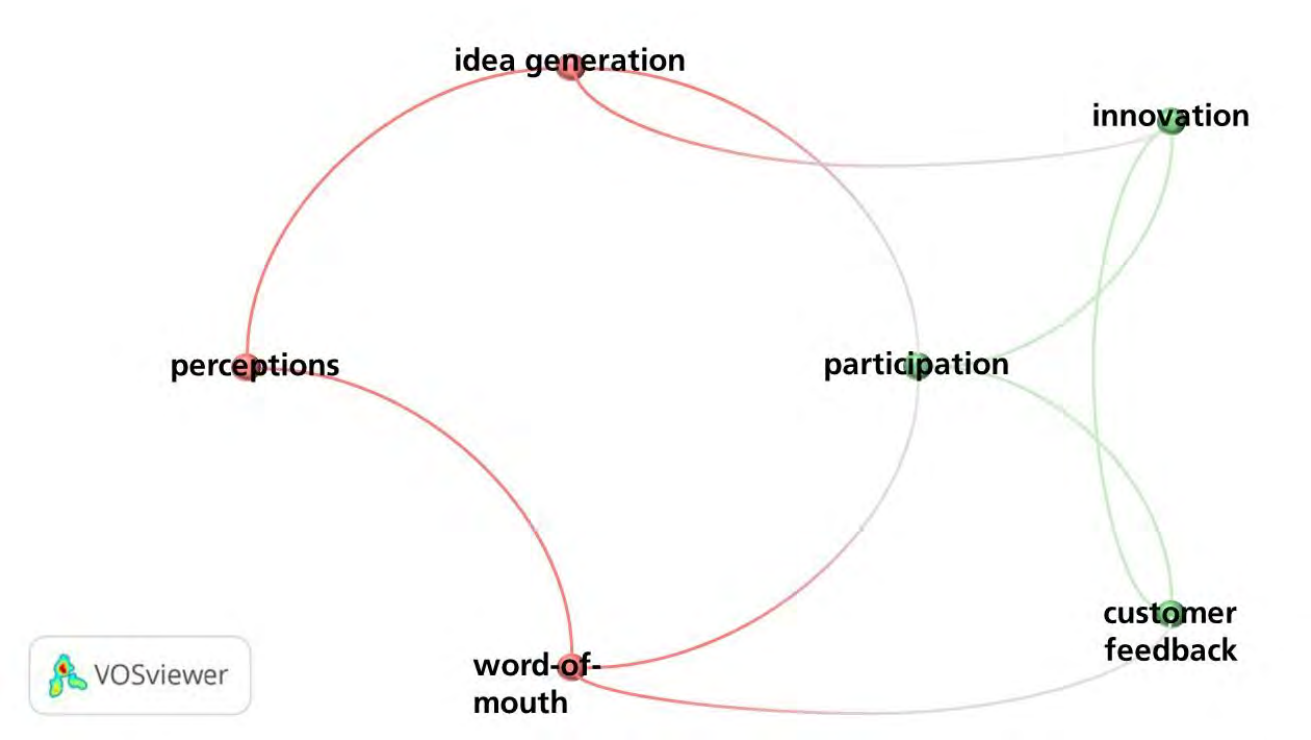
Different methods to **compile** research papers

	A	B	C	D	E	F	G	H	
2	No	Authors,Title,Year,Source title,Cited by,Link,Author Keywo	Title	Year	Journal	Citation	ABS	Empirical/non-empirical	Theory/d
11	9	Akarsu T.N., Marvi R., Foroudi P.,	Service failure research in the hospitality and tourism industry : a synopsis of past, present a	2023	International Journal of Contemporary Hospitality Ma	3	3	empirical	data driv
12	10	Kotzab H., Bäumler I., Gerken P.,	The big picture on supply chain integration – insights from a bibliometric analysis	2023	Supply Chain Management	5	3	empirical	data driv
14	12	Baker H.K., Kumar S., Goyal K., Gupta P.,	International journal of finance and economics: A bibliometric overview	2023	International Journal of Finance and Economics	1	3	empirical	data driv
15	13	Lu L., Norder K.A., Sawhney A., Emich K.J.,	Setting the programmatic agenda: A comprehensive bibliometric overview of team mecha	2023	Journal of Business Research		3	empirical	data driv
27	25	Perlines F.H., Ariza-Montes A., Blanco-González-Tejero C.,	Intrapreneurship research: A comprehensive literature review	2022	Journal of Business Research	2	3	empirical	data driv
28	26	Wu H., Xu Z., Skare M.,	How do family businesses adapt to the rapid pace of globalization? a bibliometric analysis	2022	Journal of Business Research		3	empirical	data driv
32	30	Muskat B., Anand A., Contessotto C., Tan A.H.T., Park G.,	Team familiarity—Boon for routines, bane for innovation? A review and future research ag	2022	Human Resource Management Review	1	3	empirical	data driv
39	37	Bavik A., Koseoglu M.A.,	Intellectual structure of leadership studies in hospitality and tourism	2022	International Journal of Contemporary Hospitality Ma	2	3	empirical	data driv
180	178	Ali A., Ramakrishnan S., Faisal F., Ullah Z.,	Bibliometric analysis of global research trends on microfinance institutions and microfinance	2022	International Journal of Finance and Economics	2	3	empirical	data driv
193	191	Sood S., Rawat K., Sharma G.,	3-D Printing Technologies From Infancy to Recent Times: A Scientometric Review	2022	IEEE Transactions on Engineering Management	5	3	empirical	data driv
208	206	Zhang Y., Hou Z., Yang F., Yang M.M., Wang Z.,	Discovering the evolution of resource-based theory: Science mapping based on bibliometri	2021	Journal of Business Research	5	3	empirical	data driv
219	217	Wong A.K.F., Köseoglu M.A., Kim S.S., Leung D.,	Contribution of corporate social responsibility studies to the intellectual structure of the hosp	2021	International Journal of Hospitality Management	7	3	empirical	data driv
221	219	Garechana G., Río-Belver R., Zarrabeitia E., Álvarez-Meaza I.,	From research to industry: A quantitative and qualitative analysis of science-technology tra	2021	IEEE Transactions on Engineering Management		3	empirical	data driv
227	225	Di Vaio A., Hasan S., Palladino R., Profita F., Mejri I.,	Understanding knowledge hiding in business organizations: A bibliometric analysis of resea	2021	Journal of Business Research	29	3	empirical	data driv
228	226	Bretas V.P.G., Alon I.,	Franchising research on emerging markets: Bibliometric and content analyses	2021	Journal of Business Research	34	3	empirical	data driv
236	234	Rocha R.G., Pinheiro P.G.,	Organizational Spirituality: Concept and Perspectives	2021	Journal of Business Ethics	28	3	empirical	data driv
239	237	Palácios H., de Almeida M.H., Sousa M.J.,	A bibliometric analysis of trust in the field of hospitality and tourism	2021	International Journal of Hospitality Management	30	3	empirical	data driv
240	238	Subramony M., Groth M., Hu X.J., Wu Y.,	Four Decades of Frontline Service Employee Research: An Integrative Bibliometric Review	2021	Journal of Service Research	24	4	empirical	data driv
241	239	Huang D., Jin X., Coghlan A.,	Advances in consumer innovation resistance research: A review and research agenda	2021	Technological Forecasting and Social Change	24	3	empirical	data driv
243	241	Forliano C., De Bernardi P., Yahiaoui D.,	Entrepreneurial universities: A bibliometric analysis within the business and management d	2021	Technological Forecasting and Social Change	54	3	empirical	data driv
244	242	Wong A.K.F., Koseoglu M.A., Kim S.,	Creation and dissemination of hospitality and tourism research outputs in the new millenniu	2021	International Journal of Contemporary Hospitality Ma	10	3	empirical	data driv
255	253	Caputo A., Pizzi S., Pellegrini M.M., Dabić M.,	Digitalization and business models: Where are we going? A science map of the field	2021	Journal of Business Research	107	3	empirical	data driv
256	254	Sprong N., Driessen P.H., Hillebrand B., Molner S.,	Market innovation: A literature review and new research directions	2021	Journal of Business Research	31	3	empirical	data driv
257	255	Verma S., Yadav N.,	Past, Present, and Future of Electronic Word of Mouth (EWOM)	2021	Journal of Interactive Marketing	76	3	empirical	data driv
261	259	Shashi S., Centobelli P., Cerchione R., Ertz M.,	Food cold chain management: what we know and what we deserve	2021	Supply Chain Management	12	3	empirical	data driv
283	281	Mariani M.M., Al-Sultan K., De Massis A.,	Corporate social responsibility in family firms: A systematic literature review	2021	Journal of Small Business Management	26	3	empirical	data driv
293	291	Vadalkar S., Chavan G., Chaudhuri R., Vrontis D.,	A critical review of international print advertisements: evolutionary analysis, assessment a	2021	International Marketing Review	2	3	empirical	data driv
311	309	Dana L.-P., Kumar S., Pandey N., Sureka R.,	The Journal of Small Business Management: A bibliometric overview of 1996–2019	2021	Journal of Small Business Management	18	3	empirical	data driv
319	317	Andersen N.,	Mapping the expatriate literature: a bibliometric review of the field from 1998 to 2017 and	2021	International Journal of Human Resource Manageme	40	3	empirical	data driv
325	323	Daim T., Lai K.K., Yalcin H., Alsoubie F., Kumar V.,	Forecasting technological positioning through technology knowledge redundancy: Patent c	2020	Technological Forecasting and Social Change	41	3	empirical	data driv
329	327	Kumar S., Pandey N., Haldar A.,	Twenty years of Public Management Review (PMR): a bibliometric overview	2020	Public Management Review	25	4	empirical	data driv
344	342	Barnett M.L., Henriques I., Husted B.W.,	Beyond Good Intentions: Designing CSR Initiatives for Greater Social Impact	2020	Journal of Management	104	4*	empirical	data driv
355	353	Kipper L.M., Furstenau L.B., Hoppe D., Frozza R., Iepsen S.,	Scopus scientific mapping production in industry 4.0 (2011–2018): a bibliometric analysis	2020	International Journal of Production Research	95	3	empirical	data driv
361	359	Donthu N., Kumar S., Pattnaik D.,	Forty-five years of Journal of Business Research: A bibliometric analysis	2020	Journal of Business Research	244	3	empirical	data driv
385	383	Klarin A.,	Mapping product and service innovation: A bibliometric analysis and a typology	2019	Technological Forecasting and Social Change	28	3	empirical	data driv
393	391	Zhu J., Song L.J., Zhu L., Johnson R.E.,	Visualizing the landscape and evolution of leadership research	2019	Leadership Quarterly	58	4	empirical	data driv
396	394	Gaviria-Marin M., Merigó J.M., Baier-Fuentes H.,	Knowledge management: A global examination based on bibliometric analysis	2019	Technological Forecasting and Social Change	185	3	empirical	data driv
402	400	de Alcantara D.P., Martens M.L.,	Technology Roadmapping (TRM): a systematic review of the literature focusing on models	2019	Technological Forecasting and Social Change	44	3	empirical	data driv
109	407	Ferreira F.A.F.,	Mapping the field of arts-based management: Bibliographic coupling and co-citation analys	2018	Journal of Business Research	109	3	empirical	data driv
110	408	Castillo-Vergara M., Alvarez-Marin A., Placencio-Hidalgo D.,	A bibliometric analysis of creativity in the field of business economics	2018	Journal of Business Research	140	3	empirical	data driv
112	410	Fang Y., Yin J., Wu B.,	Climate change and tourism: a scientometric analysis using CiteSpace	2018	Journal of Sustainable Tourism	187	3	empirical	data driv
134	432	Zupic I., Čater T.,	Bibliometric Methods in Management and Organization	2015	Organizational Research Methods	1620	4	non-empirical	theory
137	435	Lee C.I.S.G., Felps W., Baruch Y.,	Toward a taxonomy of career studies through bibliometric visualization	2014	Journal of Vocational Behavior	82	4	empirical	data driv
143	441	Peters H.P.F., van Raan A.F.J.,	Co-word-based science maps of chemical engineering. Part I: Representations by direct mu	1993	Research Policy	157	4*	empirical	data driv
144	442	Peters H.P.F., van Raan A.F.J.,	Co-word-based science maps of chemical engineering. Part II: Representations by combine	1993	Research Policy	59	4*	empirical	data driv

Systematic Literature Review

1. Introduction

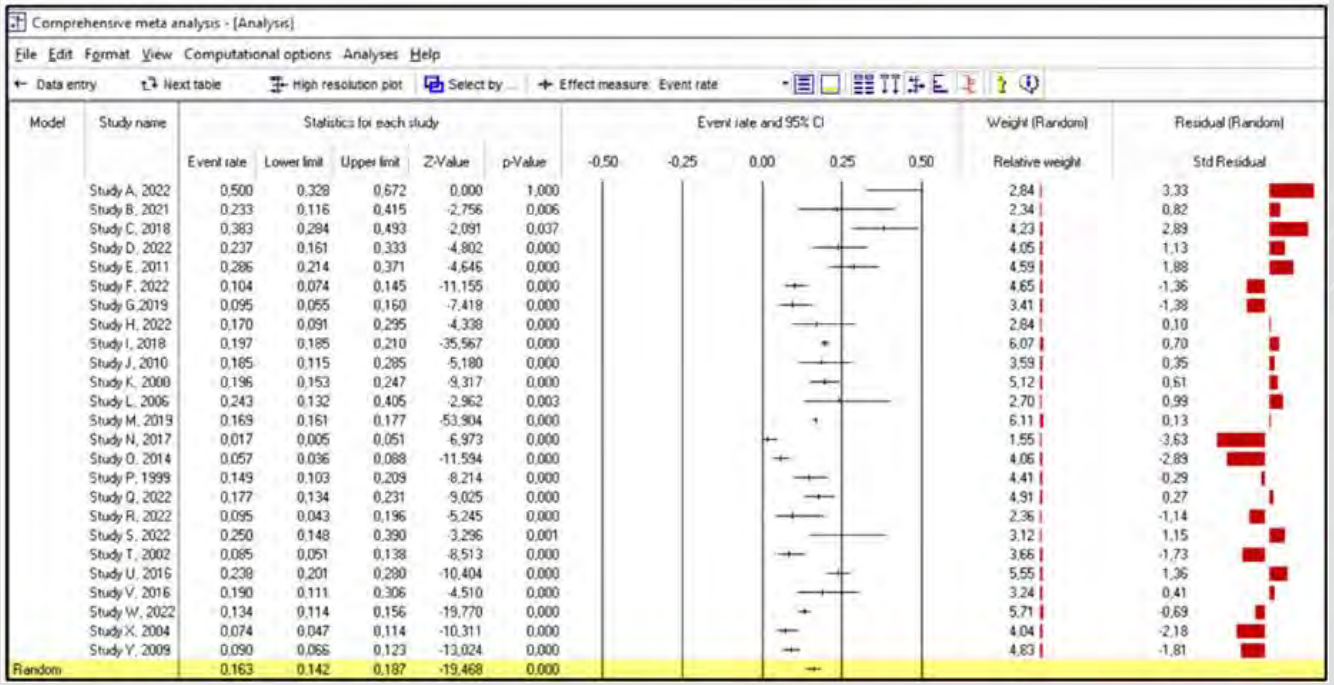
Different methods to **compile** research papers



Classical Science Mapping (CSM)

1. Introduction

Different methods to **compile** research papers



Meta-Analysis

1. Introduction

→ No approach to aggregate **empirical models** yet!

1. Introduction

Idea: Aggregate and map empirical models from different papers → **Variable Science Mapping (VSM)**

Why aggregation of empirical models and findings?

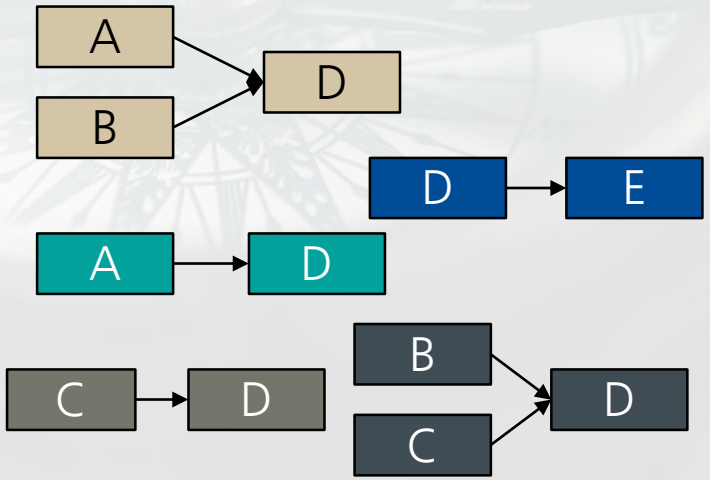
1. Overview of specific research fields/models
2. Detecting inconsistent results
3. Identification of research gaps

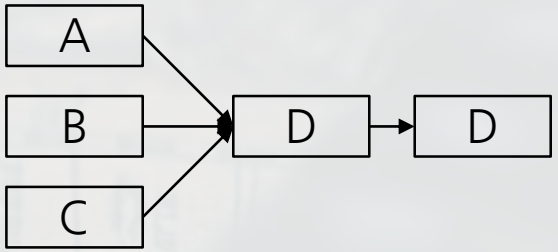
1. Introduction

Five **Research papers** on one topic

Five different **models**

Science map based on variables





2. Analyses

2. Analyses – Research Design

I. Systematic literature review

- Papers using **Classical Science Mapping (CSM)**
- 63 top-tier articles
- 12 steps (adapted from Christofi et al., 2021; Vrontis & Christofi, 2019)

II. In-depth expert interviews

- 9 hand-picked experts
- Interviews based on Kvale and Brinkmann (2018)

→ Evaluation **of Classical Science Mapping (CSM)**

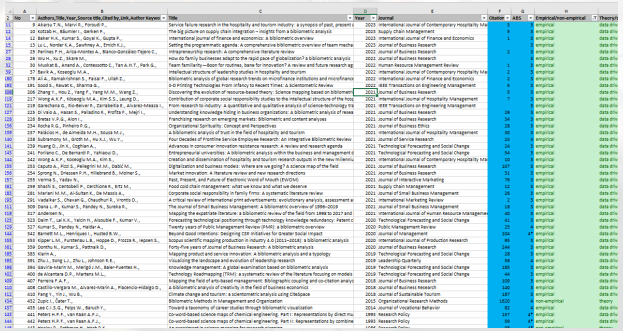
→ Evaluation **Variable Science Mapping (VSM)**

III. Comparison of findings

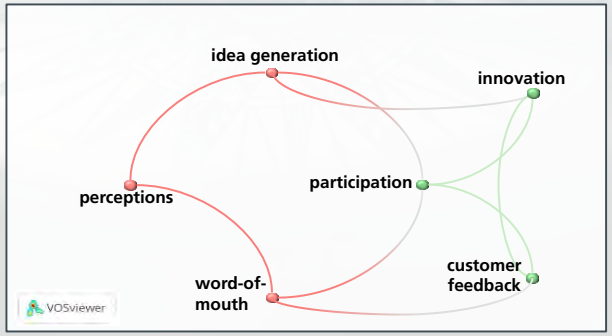
2. Analyses – III. Comparison

2. Analyses – III. Comparison

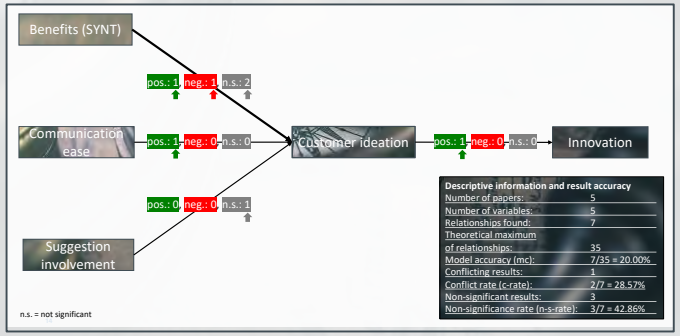
Comparison of..



Systematic Literature Review



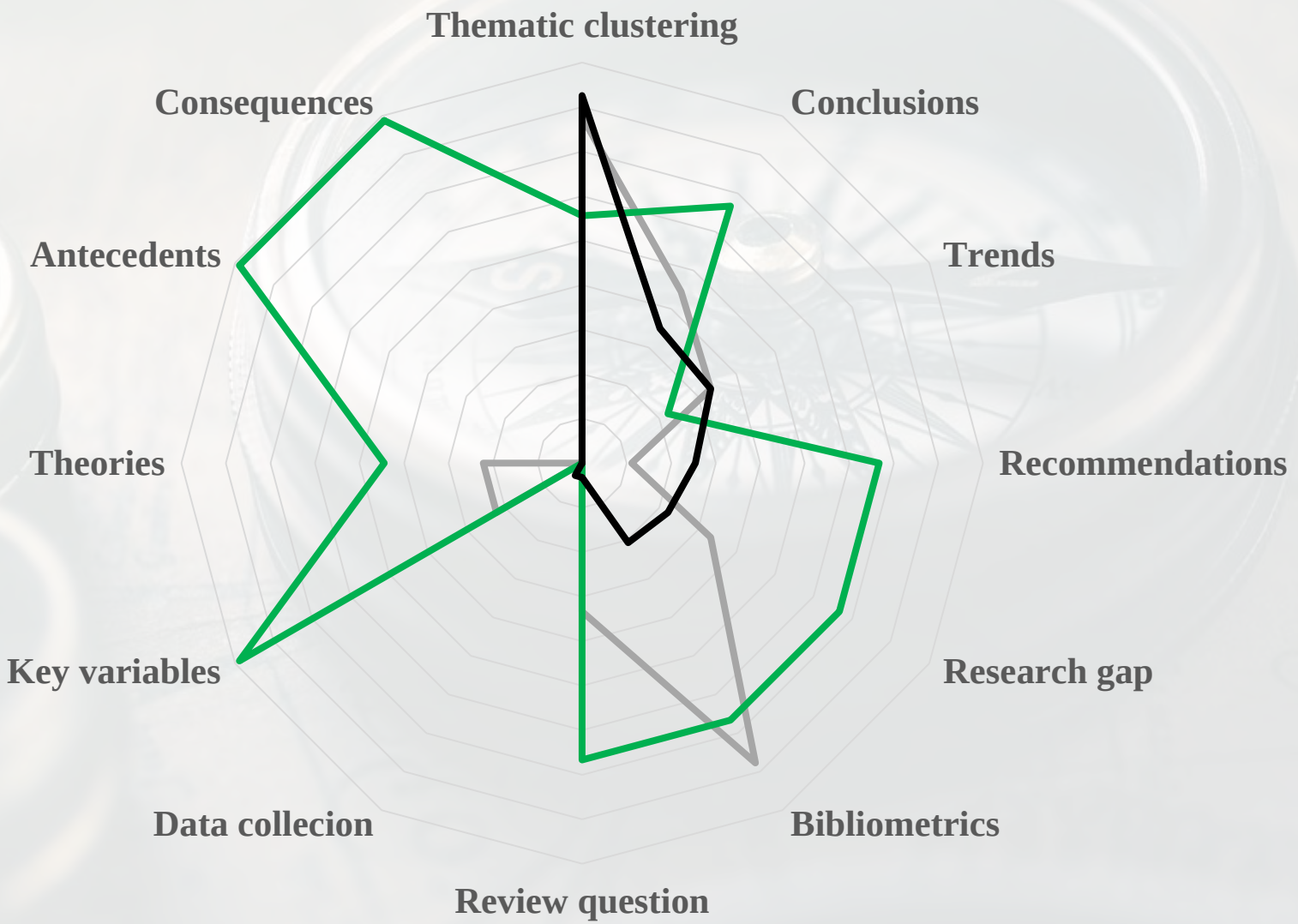
Classical science mapping (CSM)



Variable Science Mapping (VSM)

… with respect to the 12 steps

2. Analyses – III. Comparison



Note: The values for Literature review are transformed to values from 1 to 6 to achieve comparability

3. Conclusion

3. Conclusion

Classical Science Mapping (CSM):

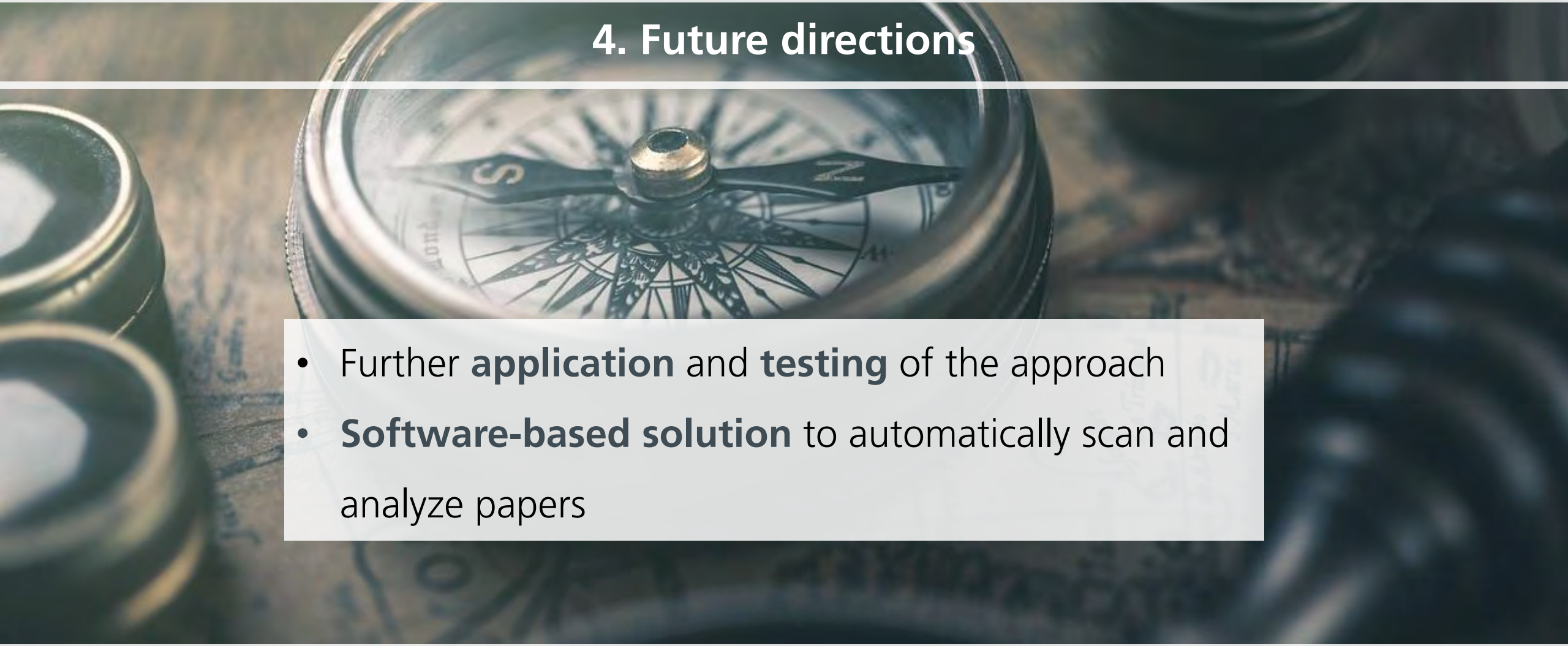
- Actual use: **Thematic clustering**
- Possibilities by experts' estimation: **Bibliometrics, Review questions, Trends, …**

Variable Science Mapping (VSM):

- Possibilities by experts' estimation: **Antecedents, Consequences, Key Variables, Review questions, Bibliometrics, Research gap, Recommendations, …**

→ VSM seems to be superior compared with previous approached

4. Future directions



- Further **application** and **testing** of the approach
- **Software-based solution** to automatically scan and analyze papers

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Przemyslaw Tomczyk, PhD

Assistant Professor
Kozminski University, Warsaw, Poland

https://www.kozminski.edu.pl/pl/spolecznosc/wizytowka/dr-przemyslaw-tomczyk/

PTomczyk@kozminski.edu.pl

Philipp Brüggemann, PhD

Postdoctoral Researcher
Chair of Business Administration, especially Marketing, University of Hagen, Germany

www.fernuni-hagen.de/marketing/

Philipp.Brueggemann@fernuni-hagen.de