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Developing new knowledge: A virtual collection of project management review articles



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1. Introduction

Review articles are a cornerstone for the development of any scholarly field, including project management. They are scientific texts that map, assess, and analyse existing research to understand the current research field and open up pathways to the future (Rousseau et al., 2008; Tranfield et al., 2003). With regard to the development of a given research field, review articles take stock of the past, clarify the meaning of key concepts, systematize existing knowledge, and provide a clear contribution to advance the knowledge in that field. Review articles build on existing evidence in a traceable and transparent manner, and they either continue or disrupt the future direction of a field. They also provide shortcuts to future studies because they synthesise and summarise research in ways that help researchers to familiarise themselves with the key concepts and directions in the academic literature without having to undergo a thorough review themselves.

Review articles differ in their aims and objectives. For example, they can create typologies or classifications for a topic, demonstrate its genesis and trajectory of development, or illustrate links with other research fields. Moreover, review articles can track the roots, structuring, and citation history of a selected topic or an entire research field. Breslin and Gatrell (2023) introduce a useful metaphor for conducting reviews, as they distinguish between *miners* (who dig deep into a specific bounded and established topic) and *prospectors* (who cross disciplinary boundaries to venture beyond existing silos of knowledge) and they suggest a miner–prospector continuum of types of theorizing through literature reviews. With any of these approaches, good quality review articles must always develop solid, novel theoretical contributions to the field. This also makes them challenging to develop.

The International Journal of Project Management (IJPM) mostly publishes empirical articles, but it also welcomes strong reviews and conceptual articles (Huemann & Martinsuo, 2020). Guided by numerous discussions between authors and the editorial group, and within the community of project management, our intention with this virtual collection of IJPM review articles is to (1) reinvigorate the journal's stance towards review articles by acknowledging their important role for the theoretical development of the field, and (2) to provide examples of previously published systematic and bibliometric literature reviews that demonstrate the breadth of the project management field, make inspiring contributions, and open up pathways for future research. We share key conclusions in order to guide future literature reviews so that they will provide knowledge contributions to project management. The collection focuses on systematic and bibliometric reviews that pursue a holistic coverage of a research topic or the entire field, whereas other types of reviews (integrative reviews and conceptual studies) are purposefully excluded.

2. Selection procedure

For this virtual collection, we focused on articles published in IJPM in the past six years (2017–2022) and searched for review articles that are relevant to project management as a research field rather than as industrial sector. We used a combination of Web of Science (WoS) and Scopus databases to select exemplary review articles that capture a range of topics and methodologies and thus provide a good basis for a discussion and future directions. We used WoS to develop an initial baseline list of review articles, which we then manually refined by exploring the article performance parameters through Scopus and by reviewing the abstracts and methodology sections. Through that initial scanning we wanted to make sure that the articles included in the collection use a substantive review methodology (e.g. systematic, traditional, or bibliometric) to develop their contribution. This procedure yielded a shortlist of 30 review articles. We validated the list of articles ourselves to avoid omitting any relevant reviews.

Through reading the abstracts of the shortlisted review articles, we decided to focus on articles that offer a theoretical contribution to project management as a research field. To this end, we eliminated articles that are limited to a specific sector, industry segment, or project type. Additionally, we excluded articles that do not substantively contribute to theory building or are not based on a robust conceptual and theoretical background.

Subsequently, we compiled a selection of review articles that

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contribute new theoretical knowledge on project management as a general research field. In an effort to focus on articles that offer robust conceptual and theoretical development and solid execution of the claimed review methodology, we finally selected 11 articles for the virtual collection. These articles differ in their level of analysis (individual, team, project, firm/organisation, network, research field) and methodology (non-systematic and systematic literature reviews and bibliometric analyses). As such, the collection combines both the breadth and depth of topics in research on project management.

3. Overview of review articles in this virtual collection

After a careful reading of the review articles in full, we clustered them based on their levels of analysis and their contribution the field. The selected articles encompass the core conceptual levels of individuals and teams, organisations and their governance, and networks involving multiple organisations. We supplemented these core levels with an additional group of articles that offer distinct perspectives or angles of view on the field of project management research. Hence, the articles in this collection cover a conceptual space spanning multiple levels of theorising in projects. An overview of the conceptual structure of this virtual collection is presented in Fig. 1.

Articles in the perspectives on project management cluster (Fig. 1) deal with the development of conceptual and theoretical ideas, often spanning multiple levels of analysis. This group of articles features analyses of existing trends and opportunities that strengthen and extend

project management as a general research field. By contrast, review articles in the project network cluster are concerned with groups of organisations that operate together to achieve a common goal through their projects. The key focus in this cluster of articles pertains to varied inter-organisational phenomena in project networks that have come to constitute an increasingly rich and versatile research topic. The organisational level cluster covers review articles that consider alternative and novel viewpoints on the governance of projects, and it occasionally intersects with the project networks and the individuals and teams levels of analysis. Finally, the individuals and team level of analysis is about leadership and other micro-level practices in project organisations, some examples of which include learning and decision-making.

In the following sections we present short summaries of the articles included in this virtual collection, focusing on their framing, core ideas, methodology, and main contributions to project management.

3.1. Perspectives on project management

The review article by Leiringer and Zhang (2021) takes stock of the application of organisational capabilities in research on project organisation. The authors acknowledge the increasing use of strategic management theories in research concerning project-based organisations and they focus on studies that concern organisational capabilities. Their chosen approach is a semi-systematic literature review, based on a broad database search and screening of relevant articles, and on a purposive categorisation of extant research. The thematic analysis reveals a

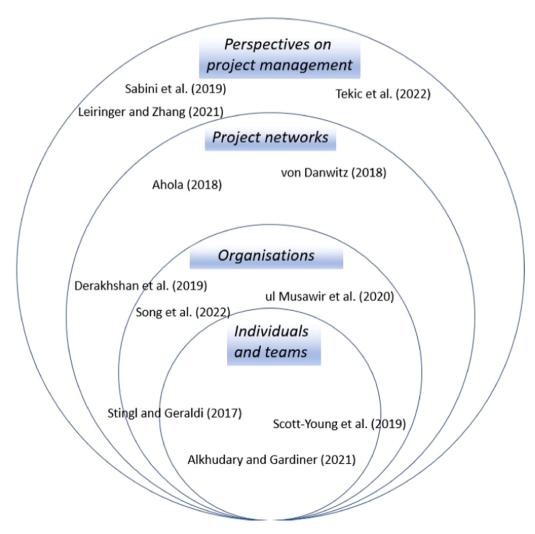


Fig. 1. Position of the selected review articles in the virtual collection based on their focus and contribution.

concentration of previous project research on capability identification, capability development, and relationship between capabilities and performance. They offer a thorough view of future research possibilities, with encouragement to clarify the concepts and constructs, make purposive choices concerning levels of analysis, and choosing appropriate methods and capability operationalizations for each research task.

In their mapping of research on sustainable projects, Sabini et al. (2019) focused on sustainable project management. They assumed that sustainability might deal with both the outcomes and processes of projects, which could challenge sustainability-oriented project research. They conducted a systematic literature review covering 25 years of research. Their analysis summarises why firms integrate sustainability into project management, how sustainability affects project management practices, and how sustainability can be implemented effectively. Sabini et al.'s review clarifies the field of sustainable project management conceptually and offers a structural view that both defines past research and guides future research. They encourage project studies to learn from other fields to understand the societal and practical potential of sustainability through projects, and to develop theoretical insights into sustainability in project management.

Tekic et al. (2022) used the lens of engaged scholarship to track the evolution of project studies. Their emphasis was on the unique positioning of project studies at the crossroads of (a) theory and practice and (b) multiple different domains, which required consideration of research relevance that could be achieved through engaged scholarship. They performed a longitudinal bibliometric analysis, covering project research broadly in recent decades and concentrating on the author groups' academic background versus the practitioners' backgrounds. In the review, their analysis divides project studies into three phases: execution methodology, organisational concept, and theoretical framework. The article gives examples of creative ways to visualise the outcomes of the bibliometric analysis and a critical consideration of the development direction of project studies. Additionally, it provokes further discussion of collaborative authorship in project studies.

3.2. Project networks

The article by Ahola (2018) deals with the phenomena of multiple organisations' cooperation on shared objectives to deliver projects. This focus unpacks a relatively recent stream of theorising in project scholarship on inter-organisational projects (IOPs), acknowledging the diversity and multiplicity of agendas that organisations bring to project organisation in order to participate in joint value-creation processes. The article presents a comprehensive traditional literature review to derive a theoretical typology of IOPs as its main contribution. The typology focuses on three ideal types of IOPs as a dominating form of organising production in a range of industries: the market-based network, the dyad-driven network, and the integrated core network. Although the article provides some key directions for future research, its key distinguishing feature is its theoretical development and discussion of ideal types of IOPs that can be drawn upon and used for further theory building in the field.

The review article by von Danwitz (2018) focuses on the inter-firm projects as a research theme straddling traditional project management research and research on inter-organisational relationships, partnering, alliancing, networks. and organisation studies. The systematic literature review covers a large body of literature published over the course of 26 years in order to clarify the key management issues and core terminology. The analytical framework is developed across two dimensions: the analytical level (including individual, project and contextual spheres) and stages of the temporary organising effort (project antecedents, project management, and project outcomes). The review reveals emerging trends, makes methodological suggestions, and suggests future research directions for research on dynamic, contextual and structural aspects of management of inter-firm projects. Additionally, the review positions inter-firm projects firmly at the core of project

management research, and it explicates approaches and management issues, both within and outside core project management publication outlets.

Derakhshan et al. (2019) deal with the topics of stakeholder theory within the broader theme of project governance and thereby connect the organisational and network levels of analysis. The aim of their review is to contribute to theory on project governance by bringing into the discussion the importance and role of stakeholders, both internal and external, for project organisation. The article presents a thematic analysis, with descriptive examples of the analytical process and coding structure provided in appendices. The transparency in demonstrating the development of the coding structure gives rigour and credibility to the review. Derakhshan et al. conclude their article by presenting a conceptual framework that argues for the inclusion of stakeholders within the broader theoretical discourse on project governance. The key distinguishing feature of the review article is its strong focus on stakeholder theory and contextualisation within project governance studies as the main contribution.

3.3. Project governance in organisations

Song et al. (2022) offer a meta-review of project governance studies spanning a 20-year period of research, while also combining the organisational and network levels of analysis. They develop a comprehensive framework using an interdisciplinary systematic literature review in order to develop themes within the broader field of project governance and discuss archetypes that extend previous views, while they also discuss their commonalities and differences. Document co-citation is used in analysis to develop thematic clusters in the literature review. The co-citation network is then further structured to develop four distinct archetypes: organisational project governance, organisational project governing, institutional project governance, and institutional project governing. Along those lines, authors identify the practice and contextual views that have the most potential for future exploration moving away from structuralist and static views on governance.

ul Musawir et al. (2020) focus on a general overview of project governance studies distinguishing between the theoretical perspective taken, forms of governance studied, and ways in which project governance can enable organisational strategy through projects. Their focus on the three most well-known project-related journals complements references to general management publications, as well as practitioner publications by main professional bodies. The analysis suggests several key definitions and theories to develop the framing for project governance in project, general management, and practitioner literature. The study develops a typology for context-specific project governance, distinguishing between projects led by a single organisation, by a dyad or triad of organisations, and by a network of organisations. ul Musawir et al. propose directions for future development concerning project governance generally, expanding project governance beyond the project life cycle model, leveraging emergent (as opposed to planned) strategies in projects, and linking academic and professional literature on project governance.

3.4. Leadership, decision-making, and learning

Alkhudary and Gardiner (2021) studied the stages in project managers' careers, including those before active involvement in managing projects and after the end of their career. They looked into careers as trajectories of learning and growth, including disturbance events in the different stages shaping the project managers' career paths. A systematic literature review approach yielded 42 key studies of project managers' careers, complemented with a follow-on focus group meeting. The study reveals a surprisingly scant attention to both entering the project manager profession and the moves to top executive positions later in the career. Alkhudary and Gardiner adopt ideas from the general adaptation syndrome model in order to point out events that mobilise project managers to react, learn, and move forward in their careers. The literature review draws attention to further research possibilities, both at the beginning and end of project managers' careers, the task switches in mid-career, and the interplay of careers and events in the surrounding environment.

The literature review conducted by Stingl and Geraldi (2017) concentrates on behavioural decision-making in projects as it attempts to bring clarity to the decision-making field, previously treated with fragmented theoretical choices. They build on three schools of thought adopted from behavioural strategy: reductionist, pluralist, and contextualist. Using a systematic approach, they searched for, mapped, and analysed extant research broadly both within and outside the project management field, and structured the findings according to the three schools of thought: decision-making as (1) a rational process, (2) a negotiation process, and (3) a sense-making process. Additionally, they examined many studies that draw from a combination of these three schools of thought. The main title of the review article, 'Errors, lies and misunderstandings', reflects the tendency of extant research to concentrate on the problems and mistakes of decision-making, while underplaying its successes, as one example of further research possibilities. The authors also encourage more multi-paradigmatic research that ties together multiple schools of thought in behavioural decision-making.

The article by Scott-Young et al. (2019) focuses on shared leadership in project teams, acknowledging that many people in the project team are involved in leadership tasks. They used a multilevel systems theoretical framework to analyse leadership and team functioning. Their chosen approach was a systematic literature review, covering the conceptualization of shared leadership and inputs, mediators, outcomes, and feedback loop in the shared leadership system on different levels. Their findings demonstrate shared leadership in projects as complex, multi-level systems, including versatile relations and paths of influence in their contexts and evolving over time. While suggesting that shared leadership has received little attention in the project management field, the review article's coverage of previous research indicates that partial aspects of it have been already identified, and it shows plentiful future research opportunities in various project contexts.

4. From mining to prospecting

In this virtual collection we have introduced a sample of review articles that represent a variety of contributions to project management theory, offer insightful pathways for future research, and act as examples to learn from for authors who are considering writing review articles. The selected articles represent the continuum of alternatives included in Breslin and Gatrell's continuum of *miner and prospector* approaches (Breslin & Gatrell 2023), as illustrated in Fig. 2. While the *miner* approach concerns delineating a research topic and synthesizing the knowledge around that topic, the *prospector* end of the continuum is about exploring connections with adjacent and distant topics, to develop new insights and initiate conversations. As a result, the review articles in this virtual collection provide a multidimensional view of our research field, facilitating the sense-making and contextualisation of several key topics in the research on projects and their management.

The review articles in this virtual collection predominantly appear at the *mining* end of the miner–prospector continuum, while revealing interesting conceptual gaps and synthesising literature around them. However, problematising the literature and other approaches towards the *prospecting* end of the continuum is less represented. Hence, we believe there is a significant opportunity for authors to use literature reviews to develop theory by venturing outside the traditional disciplinary boundaries of project management field. While this virtual collection focuses on review articles, not all such articles should follow the systematic review method, as there is not a 'one-size-fits-all' approach for answering a variety of different research questions (Klein &

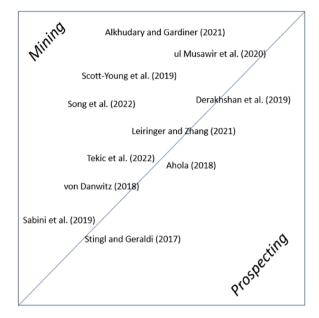


Fig. 2. Position of the review articles along the miner-prospector continuum.

Müller, 2020; Simsek et al., 2021). For example, prospecting might require mindful problematizing (Alvesson & Sandberg, 2020), for which also more traditional, integrative, or non-systematic literature reviews could be useful in integrating and combining complementary topics and for developing insights for project management (Klein & Müller, 2020).

5. Key takeaways from the virtual collection

First, an important outcome of this virtual collection is that it provides an overview of the *breadth of research topics* in the field of project management. Our analysis of the articles suggests that contemporary research has shifted away from the focus on single projects and their management. Conversations about the development of methods and the application of tools for managing single projects belong to the remit of professional bodies and practitioner guidelines, rather than in a journal with the aim of field-level theory development. However, there is continuous potential for contributions through extending, questioning, and problematising current approaches, theories, and received wisdom that underpin these methods and tools. For example, there is still great potential in theoretically informed and reinvigorated focus on classic project management topics, including planning, control, and design theory, as well as other approaches that aim to both advance and rethink the existing paradigm of managing (single) projects.

Second, the four different *levels of analysis* in the review articles all promote a common agenda: projects are at the core of contemporary societies, industries, and economies, and future research on projects should continue to expand the focus on individuals and teams, organisations and their governance, and networks involving multiple organisations and beyond. Moreover, new overarching perspectives on the field of project management should continue to be developed. The review articles in this virtual collection inspire ideas for not only new empirical studies but also review studies with important new insights. Additionally, some of the articles demonstrate an interplay between multiple levels of analysis, and multilevel and cross-level studies should become even more relevant in the future.

Third, our discussion of articles on the *miner-prospector continuum* suggests that systematic literature reviews in project management tend to favour in-depth analyses within the field, and relatively few reviews venture into uncharted theoretical territories. This may be an outcome of our selection process: prospecting may require more creative meth-odological approaches (e.g. problematizing or integrative reviews),

which were not included in our search. However, the low number of prospector studies may also be a manifestation of a disconnect between project management and other fields of research related to projects, such as strategy, innovation management, operations management, engineering, and organizational behaviour. Thus, we continue to advocate cross-disciplinary and cross-field discussions, to enrich both project management research and research within related domains. For example, a lot of impressive project management research is being published in such other fields and needs to be acknowledged in literature reviews (as well as in empirical studies).

Fourth, the eleven articles in this virtual collection offer ideas on some best practices to be considered in literature review articles. In line with an earlier editorial concerning articles' introductions (Huemann & Pesämaa, 2022), good review articles should demonstrate a well-justified rationale (gap, problem, need), clear contribution intent (goal), and guiding research question(s). The topic needs to be defined and delimited clearly, so that the review finds its position in the field of project management. The review methodology needs to be introduced comprehensively, so that readers can follow the process of selecting, screening, analysing, and interpreting the findings. The analysis needs to be insightful - mere numerical, technical listing, or charting is not sufficient - but the authors need to analyse the literature's evidence in depth. Published systematic literature reviews are expected to open pathways for future research. As such, good review contributions are clearly differentiated from tentative literature reviews that are often used by researchers to familiarise themselves with a topic in the exploratory stages a research project. It is important for all systematic reviews to develop new conceptual and/or theoretical knowledge that goes beyond summarising current state of the art of research on a topic.

6. Limitations and the way forward

This virtual collection also has limitations. The choice of a very recent timescale limited our attention to the most recent reviews only. This choice was purposive, as we wanted to highlight the current state of knowledge and possibilities for future research identified in these review studies. Even if articles published earlier than 2017 contain relevant knowledge and future research ideas to spark forthcoming empirical research, they no longer feature the latest research. Also, we purposely concentrated on systematic reviews with explicated review methodology sections while excluding conceptual studies, integrative reviews, and other approaches to literature reviews. While LJPM has published a wide variety literature review-based studies that contain inspiring ideas for forthcoming research, not all of those studies explicate and follow a systematic methodology, thus rendering them outside the scope of this virtual collection.

Similarly, our choice of articles for this virtual collection is limited to literature reviews that focus on and accomplish contributions to project management as a general research field. We purposely excluded a number of articles that elaborate on a niche topic in project management representing a segment of an industry sector or project type. Some examples of those topics are construction management, building information modelling, and public-private partnership projects. While articles addressing well-known (and popular) industry and policy settings often attract very high citation counts, their contributions are limited to a narrow segment of the readership of project management literature. In the miner-prospector continuum model, such articles serve an important role of identifying segments of a research field as niches for the extraction of knowledge based on an industry setting or an empirical manifestation of a conceptual idea or a method. In this way, such articles extract niche knowledge to develop contributions based on a practice or empirical setting as opposed to offering insights for valuable new conceptualisations of the field. Using the miner-prospector metaphor for review approaches, we can say that while such niche excavation articles are important, that they can only fulfil their potential after the prospecting and early phases of mining of a research field have been

undertaken.

To conclude, we see particularly strong potential in the development of review articles along the prospector end of the conceptual continuum discussed. In response to this, we would like to encourage the most *ambitious* and *big* ideas that authors can develop as insight-generating and theoretically aimed review articles. We would also like to encourage review articles focusing on the micro-level of practices within projects, and their teams and leadership. Similarly, while we appreciate the development of articles highlighting novel and robust applications of review methodologies, we would expect this to accompany an intellectually compelling and insightful theoretical contribution. We hope that this brief introduction to the virtual collection of project management review articles will help readers, authors, and reviewers of review articles to drive new, well-justified empirical research on the different levels of project management.

Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

References

- Ahola, T. (2018). So alike yet so different: A typology of interorganisational projects. International Journal of Project Management, 36(8), 1007–1018. https://doi.org/ 10.1016/j.ijproman.2018.07.005
- Alkhudary, R., & Gardiner, P. (2021). Stages in project managers' careers: Learning and growth opportunities. International Journal of Project Management, 39, 536–545.
- Alvesson, M., & Sandberg, J. (2020). The problematizing review: A counterpoint to Elsbach and Van Knippenberg's argument for integrative reviews. *Journal of Management Studies*, 57(6), 1290–1304.
- Breslin, D., & Gatrell, C. (2023). Theorizing through literature reviews: The minerprospector continuum. Organizational Research Methods, 26(1), 139–167. https://doi. org/10.1177/1094428120943288
- Derakhshan, R., Turner, R., & Mancini, M. (2019). Project governance and stakeholders: A literature review. *International Journal of Project Management*, 37(1), 98–116. https://doi.org/10.1016/j.ijproman.2018.10.007
- Huemann, M., & Martinsuo, M. (2020). Is the International Journal of Project Management the right choice for publishing your excellent research? *International Journal of Project Management*, 38(5), 310–312.
- Huemann, M., & Pesämaa, O. (2022). The first impression counts: The essentials of writing a convincing introduction. *International Journal of Project Management*, 40(7), 827–830. https://doi.org/10.1016/j.jiproman.2022.09.002
- Klein, G., & Müller, R. (2020). Literature review expectations of Project Management Journal[®]. Project Management Journal, 51(3), 239–241. https://doi.org/10.1177/ 8756972820916340
- Leiringer, R., & Zhang, S. (2021). Organisational capabilities and project organising research. International Journal of Project Management, 39(5), 422–436. https://doi. org/10.1016/j.jiproman.2021.02.003
- Rousseau, D. M., Manning, J., & Denyer, D. (2008). Evidence in management and organizational science: Assembling the field's full weight of scientific knowledge through syntheses. *The Academy of Management Annals*, 2(1), 475–515.
- Sabini, L., Muzio, D., & Alderman, N. (2019). 25 years of 'sustainable projects'. What we know and what the literature says. *International Journal of Project Management*, 37(6), 820–838. https://doi.org/10.1016/j.ijproman.2019.05.002
- Scott-Young, C. M., Georgy, M., & Grisinger, A. (2019). Shared leadership in project teams: An integrative multi-level conceptual model and research agenda. *International Journal of Project Management*, 37(4), 565–581.
- Simsek, Z., Fox, B., & Heavey, C. (2021). Systematicity in organizational research literature reviews: A framework and assessment. Organizational Research Methods. https://doi.org/10.1177/10944281211008652
- Song, J., Song, L., Liu, H., Feng, Z., & Müller, R. (2022). Rethinking project governance: Incorporating contextual and practice-based views. *International Journal of Project Management*, 40(4), 332–346. https://doi.org/10.1016/j.ijproman.2022.04.004
- Stingl, V., & Geraldi, J. (2017). Errors, lies and misunderstandings: Systematic review on behavioural decision making in projects. *International Journal of Project Management*, 35(2), 121–135. https://doi.org/10.1016/j.ijproman.2016.10.009
- Tekic, A., Zerjav, V., & Tekic, Z. (2022). Evolution of project studies through the lens of engaged scholarship: A longitudinal bibliometric analysis. *International Journal of Project Management*, 40(5), 531–546.

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- Tranfield, D., Denyer, D., & Smart, P. (2003). Towards a methodology for developing evidence-informed management knowledge by means of systematic review. *British Journal of Management*, 14, 207–222.
- ul Musawir, A., Bari Abd-Karim, S., & Mohd-Danuri, M. S. (2020). Project governance and its role in enabling organizational strategy implementation: A systematic literature review. *International Journal of Project Management*, 38(1), 1–16.
- von Danwitz, S. (2018). Managing inter-firm projects: A systematic review and directions for future research. *International Journal of Project Management*, 36(3), 525–541. https://doi.org/10.1016/j.ijproman.2017.11.004