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How to develop and frame impactful review articles: key recommendations

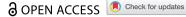
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How to develop and frame impactful review articles: key recommendations

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ABSTRACT

Developing and framing an impactful review article at a top journal can be a daunting challenge, especially for graduate students and junior academics. With rising demands related to review types, methods, and contributions, guidance is sorely needed. In this short commentary, we draw on our experience as authors, reviewers, and editors of reviews, as well as instructors of a doctoral seminar on literature reviews. Our goal is to offer key recommendations on the elements of an impactful review paper and on the crucial role that feedback can play in the process. We believe these suggestions, together with the contributions of the special issue, are a useful resource for prospective authors of influential review papers.

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Literature review; research synthesis; impactful research; scientific impact; recommendations

1. Introduction

Studying the literature is one of three fundamental modalities with which academics develop ideas and create knowledge in research (Clark & Key, 2021). While the other two modalities – logics and empirics – are based on mathematical representations of arguments and observations of real-world phenomena, literature plays a central role in all genres of research by tying together various streams of intellectual contribution. A natural outcome from studying the literature are syntheses and integrations of a body of work in the form of a review article.

Reviewing the literature is essential to almost any research project. It can justify an empirical study as one that contributes something new to the body of knowledge; provide theoretical foundations and frame the research methods for the proposed study; or indicate generativity by making links between prior knowledge and empirical findings. Literature reviews, as a distinct research method, can be defined as the process of providing 'a synthesis of the body of knowledge on one or several specified domains, topics, theories or research methodologies' (Ortiz de Guinea & Paré, 2018, p. 74).

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Standalone reviews can serve multiple objectives such as surveying the state of knowledge on a particular topic or phenomenon; building a new theory, research model or conceptual framework; testing a theory or set of hypotheses; revealing problems, weaknesses, contradictions, or controversies in a particular area of investigation; and providing a historical account of the development of theory and research on a given topic (Paré et al., 2015; Rowe, 2014).

The literature review process is particularly important to the development of doctoral students as it enables them to transition from novices (onlookers) to experts (insiders) in a particular research domain. It builds their confidence in academic work and language, enhances their ability to build on the works of others as well as ownership of their own research, and allows them to identify their contribution to scientific knowledge in their field. It also encourages them to see themselves as contributing members of their discipline and ultimately develop their own identity as scholars (Walter & Stouck, 2020).

However, developing a rigorous and impactful literature review as a standalone paper requires an in-depth understanding of the necessary processes and is by no means a trivial endeavour (Fisch & Block, 2018). Fortunately, there exist several resources that aid authors in this endeavour by providing classifications of review types (e.g. Paré et al., 2015; Rowe, 2014; Schryen et al., 2020), guiding authors through the steps necessary to conduct them (e.g. Boell & Cecez-Kecmanovic, 2014; Gusenbauer & Haddaway, 2021; vom Brocke et al., 2015), and providing tools to support the review process (e.g. Antons et al., 2021; Bandara et al., 2015; Wagner et al., 2022).

In this short essay, we aim to distill guidelines from these methodological resources as well as from our experience as editors, peer-reviewers, authors of several review articles, and instructors of a doctoral seminar on literature reviews. Partly complementing other similar efforts (e.g. Fisch & Block, 2018; Melillo, 2020; Patriotta, 2020; Webster & Watson, 2002), we offer a series of recommendations focused on the key elements expected in a review article as well as the instrumental role of soliciting feedback. Our recommendations are not to be understood as a strict template on how to develop and frame a review article section-by-section, but as an inspiration for the key elements to consider in the planning and writing of an impactful review paper.

2. The key elements expected in a review article

A review article typically has four main sections: introduction, methods, results, and discussion. Below we provide a series of pointers and suggestions relevant to each of these sections.

2.1 Introduction section

The introduction section of a review article usually starts with a broad overview of the phenomenon of interest to provide readers with a background of the topic (Toronto & Remington, 2020). This is usually followed by the purpose, research question and scope of the review. While the purpose describes the goal of the review and why it should be conducted, the research question identifies what the review proposes to answer (Aveyard, 2018). In this section it is also essential to clarify the scope of the review which refers to what's in and what's out. Clarifying the scope of the review helps to manage readers'

expectations and to ensure that it results in a manageable literature corpus. For instance, in their review of the use of the case study methodology by IS researchers, Dubé and Paré (2003) explain that their intent was 'not to achieve any goal as grandiose as a definitive assessment of any specific case article or positivist case research in general, but instead to gauge the extent to which positivist case research in [information systems] is taking advantage of, or ignoring, the valuable methodological insights or guidelines of leading case methodologists' (p.599).

Importantly, authors must explain the rationale for conducting their review. A common pitfall observed in many submissions involves providing insufficient justification for the importance of the topic and research questions, and for how the review article contributed new knowledge. As explained below, two distinct modes can be used to formulate research questions and justify the need for a review article, namely, gap-spotting and problematisation.

Gap-spotting represents the most prevalent strategy used by review authors. Precisely, the approach consists of constructing and formulating research questions based on gaps identified in the extant literature. Sandberg and Alvesson (2011) identified three basic modes of gap-spotting which they call confusion spotting, neglect spotting, and application spotting. First, confusion spotting is appropriate when previous research on a topic of interest exists, but available evidence is contradictory. Kitsiou et al.'s (2015) umbrella review of the effects of home telemonitoring on patients with chronic heart failure can be seen as a typical representative of this mode. According to these authors, growing interest on this topic has led to a rise in the number of systematic reviews and meta-analyses addressing the same or very similar research questions with a concurrent increase in discordant findings in terms of direction and magnitude of effects. They claim that differences in scope, methods of analysis, results, and quality of previous reviews cause great confusion and make it difficult for managers and policy makers to access the evidence available, and for researchers to know where gaps in the evidence exist. To sort out the identified confusion, the authors appraised and summarised evidence from 15 systematic reviews assessing the nature of the link between different types of home telemonitoring technologies and patient outcomes.

The second mode, neglect spotting, is not applicable in the particular context of standalone reviews given that it refers to situations where there is an unexplored territory, be it an overlooked area, an under-researched topic, or a lack of empirical support, that 'produces an imperative for the alert scholar to develop knowledge about the neglected area(s)' (Sandberg & Alvesson, 2011, p. 30). The third and final mode, called application spotting, is most relevant when one considers that a specific body of literature needs to be extended or complemented in some way or another. The goal is to provide an alternative perspective to refine or deepen our understanding of the topic of interest. A good illustration of this mode can be found in Coulon et al.'s (2021) review on project team momentum. According to these authors, while the concept of momentum has been extensively studied in different domains, there exists a lack of clarity and precision in existing conceptualisations which, in turn, has played a role in limiting researchers' theorising efforts. To further our understanding of momentum in projects, they examined past conceptualisations in the field of sports (the proposed alternative perspective) where momentum is generally associated with the members of a team working together in the pursuit of a common goal. Drawing on relevant sports literature, the authors proposed a unified definition of the concept of project team momentum, its antecedents, how it can evolve over the course of a project, and its influence on project success.

Overall, the purpose of gap-spotting is to inform follow-up research about areas of incomplete understandings, confusions, or contradictory results, and to envision how these issues could be addressed. One frequent problem we observed as editors and reviewers is that authors rightly identify gaps but omit to explain *why* filling those gaps is both relevant and important (e.g. Creevey et al., 2022; Johnsen & Lacoste, 2016). We concur with Paul and Criado (2020) that this is especially problematic when there are already other excellent reviews on the same topic published in highly reputed journals.

Problematisation represents a much less frequent, yet particularly powerful approach for constructing research questions (Alvesson & Sandberg, 2011). In the context of review projects, problematisation aims to reassess existing understandings of a domain, topic, or theory with a focus on challenging taken-for-granted ways of thinking and 'going beyond' them. In other words, the core idea is to challenge underlying assumptions in a significant way and not take previously established findings for granted (Chatterjee & Davison, 2021). Problematisation is most appropriate when reviews are intended to develop new theory or critically analyse the extant literature – that is, those which play a role in promoting collective reflections about the state-of-the-art in a domain and stimulating further debates around it (Alvesson & Sandberg, 2020; Patriotta, 2020). Alike gap-spotting, problematisation also varies in range and complexity. It can be used to question minor assumptions underlying existing research on a particular topic or challenge assumptions that may underlie an entire field or discipline (Sandberg & Alvesson, 2011).

There are a few seminal articles that illustrate the problematisation approach, such as Chan and Reich's (2007) review on the concept of IT alignment. In their synthesis, the authors took as given the assumption that alignment is inherently of value and contributes to organisational success but rejected the idea that alignment is a static, singledimensional factor or process, or that it is easy to attain, arguing that such assumptions or views constrain the development of the alignment literature. This mode of thinking allowed them to develop a process perspective on alignment, provide several constructive reflections on this stream of research, and highlight key implications for both research and practice. Similarly, Steininger et al.'s (2022) recent review of dynamic capabilities (DCs) in information systems research represents another good illustration of the problematisation approach. By problematising how prior studies have assumed IT mostly as part of the context in which DCs develop, the authors construct an argument for their work that critically challenges the current thinking and synthesises the interplay of IT and DCs. The uncovered hidden assumptions and problematic issues concern conceptualisations of DCs and IT, impacts of IT on DCs, and a stagnant view of DCs in information systems research. This critical synthesis led these authors to propose a research agenda with several actionable research paths.

2.2 Methods section

The methods section aims to describe the basic steps and important methodological choices involved in conducting a review project (Snyder, 2019). We recommend that authors be explicit about the type of review that they conduct and justify why this represents an appropriate method. Prospective authors must understand the similarities

and differences among the different review forms relevant to their discipline since choosing a review type is a strategic decision (Ortiz de Guinea & Paré, 2018). Not specifying the review type may lead to some confusion and misinterpretation and it opens the door to avoidable criticisms.

There exist several classifications of review types (e.g. Leidner, 2018; Paré et al., 2015; Rowe, 2014; Schryen et al., 2020) that authors can rely on to situate their contribution. Further, Ortiz de Guinea and Paré (2018) offer a tool that can help prospective authors choose the type of review that best corresponds to their situation. This tool, which takes the form of a decision tree, is based on six core dimensions: theoretical goal, systematicity and transparency, focus, coverage, data source and data analysis. The proposed tool 'shows the similarities and differences across review types and, as such, each path of the tree is characterised by a high level of internal coherence' (p.80). This way authors can ensure coherence between the objective, type, and methodological choices of their review.

It is worth noting that the label 'systematic review' has resulted in much confusion in several business fields. As explained in Paré et al. (2016), this term has been used as a qualifying adjective or as a classifying adjective. Used as a qualifying adjective, a systematic review denotes a structured and systematised review process. For example, Ullah and Lai (2013) provide a narrative account that systematically covers different facets of business-IT alignment, but their review may not be classified as a systematic review per se (see Paré et al., 2015). Used as a classifying adjective, a systematic review denotes a form of theory testing review with particular methodological standards and data analysis techniques. Ringeval et al. (2020) review on Fitbit-based interventions can be seen as a representative of a systematic review in the form of a meta-analysis that adopts the expected standards in terms of protection against bias and the quality assessment for the selection of primary studies. In short, to minimise confusion authors must clearly articulate how they use the term 'systematic review' in their work, that is, as a qualifying or classifying adjective.

Importantly, authors should avoid potential confusion of how they describe methodological characteristics of their review compared to how they conducted it. For instance, Creevey et al. (2022) refer to a systematic review in the title of their paper signalling that they employed a systematic review approach. However, given that the main objective was to collect and analyse the prominent research themes across the literature in social media and luxury, it appears that these authors conducted a scoping review.

Last, all literature reviews should be planned and conducted with the twin concepts of systematicity and transparency in mind (Paré et al., 2016; Templier & Paré, 2018). Systematic and transparent reviews are not only more trustworthy (Simsek et al., 2021), they also are more likely to be reproducible (Cram et al., 2020) and hold the potential to be more impactful (Wagner, Prester, Roche, et al., 2021). Consequently, our advice to prospective authors is to explain and justify methodological choices throughout the search, screen, quality appraisal, data extraction, and data analysis steps.

2.3 Results section

The results section of a review article should provide clear and compelling answers to the initial research questions. If the motivation for the paper is based on gap-spotting that

means closing the identified gaps in the literature, and if it is based on problematisation that means presenting the literature based on one or several new perspectives.

An important decision related to data analysis and synthesis is choosing the right balance between breadth and depth (Fisch & Block, 2018). On one hand, depth of analysis is central in reviews aimed at theory development or critical reviews. A problem observed in many such submissions is that authors do not engage enough with the literature, that is, they fail at giving their own version of the story, telling it in their own words and then advancing the story with compelling models, frameworks, or insights. Others fail at identifying and discussing controversies, disagreements, and ambiguities in the extant literature. On the other hand, breadth of analysis is more aligned with descriptive reviews, scoping reviews, meta-analyses, and reviews aimed at determining the extent, range, and nature of the literature in a specific research area. These review types typically rely on quantitative data analysis techniques (Paré et al., 2015).

Another good practice is to synthesise prior literature in a concept-centric way, using appropriate tables and figures (Paul & Criado, 2020). Concepts and themes are the building blocks for an effective synthesis of the literature that goes beyond a summary of papers. In their seminal editorial, Webster and Watson (2002) recommend analysing the literature in the form of a concept matrix. Such a presentation of the literature can help authors avoid 'laundry list' reviews that place the burden of making sense of the literature on the reader. For example, Piccoli and Ives (2005) present concept matrices on different barriers to the erosion of competitive advantages gained from IT-based strategic initiatives and thereby enable readers to appreciate the current state of research.

2.4 Discussion section

The discussion section of a scientific paper is where the main findings are synthesised, meaningful conclusions are derived, and important messages or 'take aways' are disseminated (Docherty & Smith, 1999; Skelton & Edwards, 2000). Review articles are no exception (Fisch & Block, 2018). In addition, common features of this section are descriptions of the study's methodological limitations and suggestions for future research efforts (Brutus & Duniewicz, 2012). Methodological limitations, such as limited coverage or shortcomings of a particular data analysis technique, are useful for understanding the importance of the weaknesses of the review as reported by the authors, placing the synthesis in context, and attributing a credibility level to it.

The discussion section of a review article can be particularly valuable when authors develop new theoretical propositions and models (e.g. Krasikova et al., 2013; von Krogh et al., 2012). When presenting these elements, it is crucial to explicitly dissociate statements that are based on the data (i.e. prior literature) from statements that belong to the review's original contribution. Such theoretical contributions are conjectural (Popper, 1962) and therefore an exception to the general rule that researchers should 'not go above the data' (Skelton & Edwards, 2000) and avoid speculation (Docherty & Smith, 1999). To signal that propositions go beyond prior work in a substantive manner, they may even be presented as 'theoretical conjectures' as illustrated in von Krogh et al. (2012).

According to Webster and Watson (2002), writing a review article implies using the past and present research to explore the future. This implies that the discussion section of a review paper should not only synthesise the extant literature but should also offer

suggestions for future research. Evidence for the scientific impact of a research agenda has been shown by Wagner, Prester, Roche, et al. (2021), who found that review articles that develop a detailed research agenda receive significantly more citations than those that do not. Suggestions for future research can come in various forms ranging from simply pointing out few promising directions to presenting a comprehensive research agenda. It is important that authors clearly articulate what kind of suggestions for future research they offer and how they align with the expectations of the particular review type they adopted. For example, developing a comprehensive research agenda is particularly important for scoping reviews that aim at exploring the literature in a new phenomenon and chart the literature for future research or for theoretical, critical, and problematising reviews that point to new research avenues based on a new theory or perspective.

It is essential to keep in mind that a research agenda goes beyond the identification of research gaps. It often includes specific and actionable recommendations on how the identified gaps can be closed by future research. Such recommendations can include potentially interesting data sources and empirical settings, suggestions for methodological approaches, and new theoretical perspectives that may be worthy of investigation. A recurrent criticism found in peer reviewers' reports is related to the fact that the proposed agenda appears disconnected from the review findings. Authors should ensure that link between the synthesis and the research agenda is clear. One example that illustrates what specific recommendations can be developed in a research agenda is the review by Wagner, Prester, and Paré (2021) on digital platforms for knowledge work. Their research agenda proposes a set of research avenues that map onto the three macro-level processes identified in the literature and their research agenda offers not only specific recommendations, but even discusses potential theoretical and practical implications of each research avenue. Another illustration of this recommendation can be found in Chan and Reich's (2007) where these authors provide a well-grounded research agenda along with a series of practical implications for both managers and teachers.

3. Feedback as a key ingredient of review articles

In the following paragraphs, we suggest leveraging various forms of feedback which can help to identify and fix errors, to improve internal coherence and alignment with the literature, and to clearly articulate the contribution of a review article. This is essential because there is an increasing variety of review types and methodologies, each with its distinct characteristics. Authors should familiarise with the available options because review articles are increasingly expected to reflect a nuanced understanding of the respective types (Rivard et al., 2018). Even after familiarising with relevant methodological works, it is an ongoing challenge to achieve a good fit between the different elements of the review and its archetypal characteristics and methods. Our experience suggests that feedback is one of the most effective means to address this challenge. We outline three facets especially relevant for doctoral students and junior academics.

First, we suggest developing a review protocol to specify the review plans, and to provide a substantive basis for soliciting feedback. A review protocol is a formal document that outlines the plan of the review project. It represents the foundation of the entire review process, and it can be published as a standalone article in a peer-reviewed journal or, alternatively, presented as a 'research in progress' paper at an academic conference and published in conference proceedings. This ensures that other researchers are aware that the review is being undertaken, minimising the amount of time and resources wasted on duplicate reviews. Overall, we believe there is much to be gained when business scholars appropriate the long-established practice of developing review protocols in medicine and the health sciences and adapt it to their goals.

The PhD seminar on *Literature reviews and knowledge synthesis* offered at HEC Montréal has repeatedly shown that a review protocol can be instrumental for in-depth discussions between prospective authors, the instructors, other faculty members, and peers. Developing a review protocol ensures that all methodological decisions are carefully considered and justified, enhancing the trustworthiness of the results and conclusions. It forces authors to think through the different stages of the review process at the beginning of their project and any associated challenges or issues. Table 1 presents the typical structure and content of a review protocol.

Second, although it is possible for a solo author to develop a highly impactful review (e.g. Vial, 2019), we concur with Paul and Criado (2020) that a small team of scholars is usually required to develop impactful review articles, so authors can exchange ideas and use the experience of those who have track record and more accumulated knowledge. One of our recent review papers (Wagner, Prester, & Paré, 2021) offers a case in point. In this article, detailed and in-depth reviews of prior works were completed by a doctoral student and a postdoctoral fellow, while indepth experience with review methods and the standards for publishing at top-tier journals was contributed by a full professor. Bringing these perspectives together allowed us to work constructively on several facets of the paper, including the selection of the most appropriate review type and characteristics, as well as the

Table 1. Structure and content of a review protocol.

Section	Content
Introduction	 Broad overview of the topic with generativity statements (what do we know and do not know, what remains to be known?)
	Definition of key concepts or description of core theories, if applicable
	 Rationale for the review relative to prior research and review papers (why is the review needed,
	why is it needed now?)
	Review objectives and questions
	Scope of the review (what's in and what's out)
	 Expected contributions (how will the review fundamentally change, challenge or advance scholars' understanding?)
Methods	 Type of review and justification (with reference to the review goals and methodological coherence)
	 Information sources and search strategy
	Eligibility criteria, screening process and flow diagram
	 Quality appraisal strategy, tool, and procedures (if applicable)
	Data extraction strategy and procedures
	Data analysis strategy and procedures
Conclusion	 Reconnect to the review objectives or questions
	 Potential implications of review findings for research, teaching, practice, or policymaking
	Methodological limitations
Statements	Acknowledgment
	Competing interest
	 Project plan (authors' roles and expected contributions, timetable, deliverables and milestones,
	data management plan, software tools used by team members)
	• Funding
	Protocol registration (registry, number, date)

Table 2. Key recommendations for the development of impactful review articles.

Section	Recommendations
Introduction	 Develop a broad overview of the phenomenon or topic of interest to provide readers with a background of the topic
	Provide a compelling rationale for conducting the review
	 Use the appropriate form of gap-spotting or problematization as a strategy for develop- ing review questions and enhancing the positioning a review article
	 Manage readers' expectations by clarifying the scope of the review
Methods	 Identify and justify the type of review being conducted (see Appendix A for an updated list of review types)
	 Clarify how the label "systematic review" is used, if at all
	 Be rigorous and systematic and explain all methodological decisions in a transparent manner (in the main text or in an appendix)
Results	 Provide clear and compelling answers to the initial questions
	 Choose the right balance between breadth and depth of analysis based on the type of review being conducted
	 Use tables and figures effectively to synthesize findings
Discussion	 Disseminate important messages or "take aways"
	 Dissociate statements that are based on prior literature from those that belong to the review's original contribution
	 Place the synthesis in context by highlighting its limitations
	 Develop a detailed and comprehensive research agenda that is tightly linked with the synthesis (with potential implications for research and practice)
General	 Develop a detailed review protocol using the structure presented in Table 1
recommendations	 We recommend working in teams (of three or more researchers) and using a software platform such as Covidence or Rayyan to streamline the review process and enable researchers to collaborate from anywhere
	 Get friendly reviews from close faculty members or respected peers prior to submitting a research synthesis to a conference or journal

overall clarity, coherence, and flow of the paper. Importantly, to streamline the review process and facilitate collaboration between dispersed team members we also recommend using a web-based literature review software such as Covidence or Rayyan.

Our third suggestion is getting informal or friendly reviews from close faculty members or respected peers before submitting their work. This is especially important when authors intend to submit their review paper to a top-tier journal. Friendly reviews are a strategy used by several scholars to gauge whether their ideas, arguments or methods will likely be well received by a given scholarly community (Cloutier, 2016). Informal reviews also represent an effective way of spotting significant problems or flaws in a review paper prior to submitting it to a conference or a journal. And when soliciting such feedback, it is good practice to formally acknowledge those who contributed to early drafts of a manuscript once it is accepted for presentation or publication.

Table 2 summarises the abovementioned key recommendations for the development and framing of impactful review articles.

4. Concluding remarks

In this short essay we provided experience-based recommendations related to the key components or features expected in a review article as well as the importance of soliciting feedback from peers and respected scholars. From our perspective, these are essential elements when aiming to develop and frame impactful review articles.



Disclosure statement

No potential conflict of interest was reported by the authors.

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Guy Paré is Professor of Information Technology and holds the Research Chair in Digital Health at HEC Montréal, Canada. His current research interests involve the barriers to adoption, effective use, and impacts of e-health technologies as well as literature review approaches and methods. His publications have appeared in top-ranked journals including MIS Quarterly, Journal of Information Technology, European Journal of Information Systems, Journal of the Association for Information Systems, Information & Management, Journal of the American Medical Informatics Association, and Journal of Medical Internet Research.

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References

Alvesson, M., & Sandberg, J. (2011). Generating research questions through problematization. Academy of Management Review, 36(2), 247-271. https://doi.org/10.5465/amr.2009.0188

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. https://doi.org/10.1111/JOMS.12582

Antons, D., Breidbach, C.F., Joshi, A.M., & Salge, T.O. (2021). Computational literature reviews: Method, algorithms, and roadmap. Organizational Research Methods, 26(1), 107-138. https:// doi.org/10.1177/1094428121991230

Aveyard, H. (2018). Doing a literature review in health and social care: A practical guide. https:// www.worldcat.org/title/doing-a-literature-review-in-health-and-social-care-a-practical-guide /oclc/153576237?page=citation

Bandara, W., Furtmueller, E., Gorbacheva, E., Miskon, S., & Beekhuyzen, J. (2015). Achieving rigor in literature reviews: Insights from qualitative data analysis and tool-support. Communications of the Association for Information Systems, 37, 8. https://doi.org/10.17705/1CAIS.03708

Boell, S.K., & Cecez-Kecmanovic, D. (2014). A hermeneutic approach for conducting literature reviews and literature searches. Communications of the Association for Information Systems, 34, 257-286. https://doi.org/10.17705/1CAIS.03412



- Brutus, S., & Duniewicz, K. (2012). The many heels of achilles: An analysis of self-reported limitations in leadership research. *The Leadership Quarterly*, *23*(1), 202–212. https://doi.org/10.1016/J. LEAQUA.2011.11.015
- Chan, Y.E., & Reich, B.H. (2007). IT alignment what have we learned? *Journal of Information Technology*, 22(4), 297–315. https://doi.org/10.1057/PALGRAVE.JIT.2000109
- Chatterjee, S., & Davison, R.M. (2021). The need for compelling problematisation in research: The prevalence of the gap-spotting approach and its limitations. *Information Systems Journal*, *31*(2), 227–230. https://doi.org/10.1111/isj.12316
- Clark, T., & Key, T.M. (2021). The methodologies of the marketing literature: Mechanics, uses and craft. *AMS Review*, 11(3), 416–431. https://doi.org/10.1007/S13162-021-00210-2
- Cloutier, C. (2016). How I write: An inquiry into the writing practices of academics. *Journal of Management Inquiry*, 25(1), 69–84. https://doi.org/10.1177/1056492615585875
- Coulon, T., Barki, H., & Paré, G. (2021). Conceptualizing project team momentum: A review of the sports literature. *International Journal of Managing Projects in Business*, 14(2), 270–299. https://doi.org/10.1108/IJMPB-11-2018-0263
- Cram, W.A., Templier, M., & Pare, G. (2020). (Re)considering the concept of reproducibility of literature reviews. *Journal of the Association for Information Systems*, *21*(5), 1103–1114. https://doi.org/10.17705/1JAIS.00630
- Creevey, D., Coughlan, J., & O'connor, C. (2022). Social media and luxury: A systematic literature review. *International Journal of Management Reviews*, 24(1), 99–129. https://doi.org/10.1111/IJMR. 12271
- Docherty, M., & Smith, R. (1999). The case for structuring the discussion of scientific papers: Much the same as that for structuring abstracts. *British Medical Journal*, *318*(7193), 1224–1225. https://doi.org/10.1136/bmj.318.7193.1224
- Dubé, L., & Paré, G. (2003). Rigor in information systems positivist case research current practices, trends, and recommendations. *MIS Quarterly*, *27*(4), 597–635. https://doi.org/10.2307/30036550
- Fisch, C., & Block, J. (2018). Six tips for your (systematic) literature review in business and management research. *Management Review Quarterly*, *68*(2), 103–106. https://doi.org/10.1007/S11301-018-0142-X
- Gusenbauer, M., & Haddaway, N.R. (2021). What every researcher should know about searching clarified concepts, search advice, and an agenda to improve finding in academia. *Research Synthesis Methods*, 12(2), 136–147. https://doi.org/10.1002/JRSM.1457
- Johnsen, R.E., & Lacoste, S. (2016). An exploration of the 'dark side' associations of conflict, power and dependence in customer–supplier relationships. *Industrial Marketing Management*, *59*, 76–95. https://doi.org/10.1016/j.indmarman.2015.12.011
- Kitsiou, S., Paré, G., & Jaana, M. (2015). Effects of home telemonitoring interventions on patients with chronic heart failure: An overview of systematic reviews. *Journal of Medical Internet Research*, *17* (3), e63. https://doi.org/10.2196/jmir.4174
- Krasikova, D.V., Green, S.G., & LeBreton, J.M. (2013). Destructive leadership: A theoretical review, integration, and future research agenda. *Journal of Management*, *39*(5), 1308–1338. https://doi.org/10.1177/0149206312471388
- Leidner, D.E. (2018). Review and theory symbiosis: An introspective retrospective. *Journal of the Association for Information Systems*, 19(6), 552–567. https://doi.org/10.17705/1jais.00501
- Melillo, K. (2020). A step-by-step guide to conducting an integrative review R. Remington, (Ed.), Springer Nature. [C. E. T.].
- Ortiz de Guinea, A., & Paré, G. (2018). What literature review type should I conduct? In R. Galliers & M.-K. Stein (Eds.), *The Routledge companion to management information systems* (pp. 73–82). Routledge.
- Paré, G., Tate, M., Johnstone, D., & Kitsiou, S. (2016). Contextualizing the twin concepts of systematicity and transparency in information systems literature reviews. *European Journal of Information Systems*, 25(6), 493–508. https://doi.org/10.1057/S41303-016-0020-3
- Paré, G., Trudel, M.-C., Jaana, M., & Kitsiou, S. (2015). Synthesizing information systems knowledge: A typology of literature reviews. *Information & Management*, *52*(2), 183–199. https://doi.org/10. 1016/J.IM.2014.08.008



- Patriotta, G. (2020). Writing impactful review articles. Journal of Management Studies, 57(6). https:// doi.org/10.1111/joms.12608
- Paul, J., & Criado, A.R. (2020). The art of writing literature review: What do we know and what do we need to know? International Business Review, 29(4), 101717. https://doi.org/10.1016/J.IBUSREV. 2020.101717
- Pawson, R., Greenhalgh, T., Harvey, G., & Walshe, K. (2005). Realist review-a new method of systematic review designed for complex policy interventions. Journal of Health Services Research & Policy, 10(1_suppl), 21-34.
- Piccoli, G., & Ives, B. (2005). Review IT-dependent strategic initiatives and sustained competitive advantage - a review and synthesis of the literature. MIS Quarterly, 29(4), 747–776. https://doi.org/ 10.2307/25148708
- Popper, K. (1962). Conjectures and refutations: The growth of scientific knowledge (29th ed.). Routledge.
- Ringeval, M., Wagner, G., Denford, J., Paré, G., & Kitsiou, S. (2020). Fitbit-based interventions for healthy lifestyle outcomes: Systematic review and meta-analysis. Journal of Medical Internet Research, 22(10), e23954. https://doi.org/10.2196/23954
- Rivard, S., Constantiou, I., & Hsu, C. (2018). Call for proposals for review articles. Journal of Strategic Information Systems, 27(2), I-II.
- Rowe, F. (2014). What literature review is not: Diversity, boundaries and recommendations. European Journal of Information Systems, 23(3), 241-255. https://doi.org/10.1057/EJIS.2014.7
- Sandberg, J., & Alvesson, M. (2011). Ways of constructing research questions: Gap-spotting or problematization? Organization, 18(1), 23-44. https://doi.org/10.1177/1350508410372151
- Schryen, G., Wagner, G., Benlian, A., & Paré, G. (2020). A knowledge development perspective on literature reviews: Validation of a new typology in the is field. Communications of the Association for Information Systems, 46(1), 134-186. https://doi.org/10.17705/1CAIS.04607
- Simsek, Z., Fox, B., & Heavey, C. (2021). Systematicity in organizational research literature review: A framework and assessment. Organizational Research Methods, 26(2), 10944281211008652. https://doi.org/10.1177/10944281211008652
- Skelton, J., & Edwards, S. (2000). The function of the discussion section in academic medical writing. British Medical Journal, 320(7244), 1269-1270. https://doi.org/10.1136/bmj.320.7244.1269
- Snyder, H. (2019). Literature review as a research methodology: An overview and guidelines. Journal of Business Research, 104, 333-339. https://doi.org/10.1016/J.JBUSRES.2019.07.039
- Steininger, D.M., Mikalef, P., Pateli, A., & Ortiz de Guinea, A. (2022). Dynamic capabilities in information systems research: A critical review, synthesis of current knowledge, and recommendations for future research. Journal of the Association for Information Systems, 23(2), 447-490. https://doi. org/10.17705/1JAIS.00736
- Templier, M., & Paré, G. (2018). Transparency in literature reviews: An assessment of reporting practices across review types and genres in top is journals. European Journal of Information Systems, 27(5), 503–550. https://doi.org/10.1080/0960085X.2017.1398880
- Toronto, C.E., & Remington, R. (Eds.). (2020). A step-by-step guide to conducting an integrative review. Springer International Publishing.
- Ullah, A., & Lai, R. (2013). A systematic review of business and information technology alignment. ACM Transactions on Management Information Systems, 4(1), 1–30. https://doi.org/10.1145/ 2445560.2445564
- Vial, G. (2019). Understanding digital transformation a review and a research agenda. Journal of Strategic Information Systems, 28(2), 118-144. https://doi.org/10.1016/J.JSIS.2019.01.003
- vom Brocke, J., Simons, A., Riemer, K., Niehaves, B., Plattfaut, R., & Cleven, A. (2015). Standing on the shoulders of giants: Challenges and recommendations of literature search in information systems research. Communications of the Association for Information Systems, 37, 205–224. https://doi.org/ 10.17705/1CAIS.03709
- von Krogh, G., Haefliger, S., Spaeth, S., & Wallin, M.W. (2012). Carrots and rainbows: Motivation and social practice in open source software development. MIS Quarterly, 36(2), 649-676. https://doi. org/10.2307/41703471



- Wagner, G., Lukyanenko, R., & Paré, G. (2022). Artificial intelligence and the conduct of literature reviews. *Journal of Information Technology*, *37*(2), 209–226. https://doi.org/10.1177/02683962211048201
- Wagner, G., Prester, J., & Paré, G. (2021). Exploring the boundaries and processes of digital platforms for knowledge work a review of information systems research. *Journal of Strategic Information Systems*, 30(4), 101694. https://doi.org/10.1016/J.JSIS.2021.101694
- Wagner, G., Prester, J., Roche, M., Benlian, A., Schryen, G., Paré, G., & Templier, M. (2021). Which factors affect the scientific impact of review papers in is research? A scientometric study. *Information & Management*, *58*(3), 103427. https://doi.org/10.1016/j.im.2021.103427
- Walter, L., & Stouck, J. (2020). Writing the literature review: Graduate student experiences. *Canadian Journal for the Scholarship of Teaching and Learning*, 11(1), 9. https://doi.org/10.5206/cjsotl-rcacea.2020.1.8295
- Webster, J., & Watson, R. (2002). Analyzing the past to prepare for the future: Writing a literature review. MIS Quarterly, 26(2), 13–23. https://www.jstor.org/stable/4132319
- Wong, G., Greenhalgh, T., & Pawson, R. (2010). Internet-based medical education: A realist review of what works, for whom and in what circumstances. *BMC Medical Education*, *10*, 12.
- Wright, A., & Michailova, S. (2023). Critical literature reviews: A critique and actionable advice. *Management Learning*, *54*(2), 177–197.

Appendix Main literature review types

Primary objective	Methodological reference	Illustration
Narrative reviews primarily aim to provide a broad overview of a research topic or phenomenon, usually with no clear methodological approach	Green et al. (2006)	Chan and Reich's (2007)
Descriptive reviews seek to determine the extent to which a body of studies in a given domain reveals any interpretable patterns or trends with respect to preexisting propositions, theories, or methodological guidelines	Pickering and Byrne (2014)	Dubé and Paré (2003)
Scoping reviews are primarily concerned with emergent topics and aim to assess the size and scope of available literature and inform researchers about promising avenues for future research	Arksey and O'Malley (2005)	Wagner et al. (2021)
Meta-narrative reviews aim to make sense of the extant literature on a broad, confusing, and multi-disciplinary topic. Authors do so by identifying and unpacking the meta-narratives to provide a historical look at how particular research traditions have unfolded over time and shaped the kind of questions being asked, the methods used, and the empirical findings	Greenhalgh et al. (2005)	Greenhalgh et al. (2009)
Conceptual reviews seek to refine ambiguous concepts to be included in subsequent theorising efforts or clarify overused or vague concepts that are prevalent so that scholars who subsequently use them will speak of the same thing	Walker and Avant (2011)	Coulon et al. (2021)
Critical reviews attempt to take a reflective account of the research that has been done on a given topic, phenomenon, method, or theory to reveal problems, tensions, debates, controversies, or inconsistencies	Wright and Michailova (2023)	Weiner et al. (2020)
Problematisation reviews are a particular form of critical reviews. They aim to interrogate and reimagine existing literature so to generate new and better ways of thinking about a specific phenomenon, topic, concept, or theory	Alvesson and Sandberg (2020)	Steininger et al. (2022)
Qualitative systematic reviews aim to integrate prior empirical (qualitative or quantitative) findings to provide answers to questions about 'what works' or 'what works best'	Higgins et al. (2019)	Paré et al. (2010)
Meta-analyses seek to develop a quantitative summary of the evidence with the help of specific statistical techniques. They combine findings from empirical studies into a single pooled estimate	Steel et al. (2021)	Ringeval et al. (2020)
Systematic reviews that are continually updated, incorporating relevant new evidence as it becomes available	Elliott et al. (2017)	Thombs et al. (2020)
	Narrative reviews primarily aim to provide a broad overview of a research topic or phenomenon, usually with no clear methodological approach Descriptive reviews seek to determine the extent to which a body of studies in a given domain reveals any interpretable patterns or trends with respect to pre-existing propositions, theories, or methodological guidelines Scoping reviews are primarily concerned with emergent topics and aim to assess the size and scope of available literature and inform researchers about promising avenues for future research Meta-narrative reviews aim to make sense of the extant literature on a broad, confusing, and multi-disciplinary topic. Authors do so by identifying and unpacking the meta-narratives to provide a historical look at how particular research traditions have unfolded over time and shaped the kind of questions being asked, the methods used, and the empirical findings Conceptual reviews seek to refine ambiguous concepts to be included in subsequent theorising efforts or clarify overused or vague concepts that are prevalent so that scholars who subsequently use them will speak of the same thing Critical reviews attempt to take a reflective account of the research that has been done on a given topic, phenomenon, method, or theory to reveal problems, tensions, debates, controversies, or inconsistencies Problematisation reviews are a particular form of critical reviews. They aim to interrogate and reimagine existing literature so to generate new and better ways of thinking about a specific phenomenon, topic, concept, or theory Qualitative systematic reviews aim to integrate prior empirical (qualitative or quantitative) findings to provide answers to questions about 'what works' or 'what works best' Meta-analyses seek to develop a quantitative summary of the evidence with the help of specific statistical techniques. They combine findings from empirical studies into a single pooled estimate Systematic reviews that are continually updated, incorporating relevant new	Narrative reviews primarily aim to provide a broad overview of a research topic or phenomenon, usually with no clear methodological approach Descriptive reviews seek to determine the extent to which a body of studies in a given domain reveals any interpretable patterns or trends with respect to pre-existing propositions, theories, or methodological guidelines Scoping reviews are primarily concerned with emergent topics and aim to assess the size and scope of available literature and inform researchers about promising avenues for future research Meta-narrative reviews aim to make sense of the extant literature on a broad, confusing, and multi-disciplinary topic. Authors do so by identifying and unpacking the meta-narratives to provide a historical look at how particular research traditions have unfolded over time and shaped the kind of questions being asked, the methods used, and the empirical findings Conceptual reviews seek to refine ambiguous concepts to be included in subsequently use them will speak of the same thing Critical reviews attempt to take a reflective account of the research that has been done on a given topic, phenomenon, method, or theory to reveal problems, tensions, debates, controversies, or inconsistencies Problematisation reviews are a particular form of critical reviews. They aim to integrate prior empirical (qualitative or quantitative) findings to provide answers to questions about "what works' or "what works best" Meta-analyses seek to develop a quantitative summary of the evidence with the help of specific statistical techniques. They combine findings from empirical studies into a single pooled estimate Systematic reviews that are continually updated, incorporating relevant new

(Continued).

Review type	Primary objective	Methodological reference	Illustration
Umbrella review (also called review of systematic reviews, overview of reviews or meta-review)	Umbrella reviews aim to aggregate findings from prior qualitative systematic reviews or meta-analyses that address causal relationships	Thomson et al. (2010)	Kitsiou et al. (2017)
Case survey	Case surveys aim to integrate findings from prior case studies, transforming qualitative data into quantitative data, using a coding scheme and expert judgments	Larsson (1993)	Rivard and Lapointe (2012)
Theoretical review (also called theory development review)	Theoretical reviews bring together diverse streams of work and use various qualitative synthesis approaches and methods to develop a new theory, model, nomological network or conceptual framework	Webster and Watson (2002)	von Krogh et al. (2012)
Realist review	Realist reviews are a particular form of theoretical reviews. They seek to develop new explanations by unpacking the mechanisms of how complex interventions work or why they succeed or fail in particular contexts	Pawson et al. (2005)	Wong et al. (2010)
Meta-synthesis	A meta-analysis is a review method for synthesising primary qualitative data from case studies. It makes refining, extending, or generating new theory possible through the identification of recurring patterns across the re-examined cases	Hoon (2013)	Habersang et al. (2019)
Meta-ethnography	A meta-ethnography is a review method which seeks to deal with the synthesis and interpretation of a small number of ethnographic case studies	Noblit and Hare (1988)	Britten et al. (2002)

Cited references:

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.

Arksey, H., & O'Malley, L. (2005). Scoping studies: towards a methodological framework. International Journal of Social Research Methodology, 8(1), 19-32. Britten, N., Campbell, R., Pope, C., Donovan, J., Morgan, M., & Pill, R. (2002). Using meta ethnography to synthesise qualitative research: a worked example. Journal of Health Services Research & Policy, 7(4), 209-215.

Chan, Y.E., & Reich, B.H. (2007). IT alignment: what have we learned? Journal of Information Technology, 22(4), 297-315.

Coulon, T., Barki, H., & Paré, G. (2021). Conceptualizing project team momentum: A review of the sports literature. International Journal of Managing Projects in Business, 14(2), 270-299.

Dubé, L., & Paré, G. (2003). Rigor in IS positivist case research: Current practices, trends, and recommendations. MIS Quarterly, 27(4), 597-635.

Elliott, J.H., Synnot, A., Turner, T., Simmonds, M., Akl, E. A., McDonald, S., et al. (2017). Living systematic review: 1. Introduction—the why, what, when, and how. Journal of Clinical Epidemiology, 91, 23-30.

Green, B.N., Johnson, C.D., & Adams, A. (2006). Writing narrative literature reviews for peer-reviewed

journals: secrets of the trade. Journal of Chiropractic Medicine, 5(3), 101-117.



- Greenhalgh, T., Robert, G., Macfarlane, F., Bate, P., Kyriadidou, O., & Peacock, R. (2005). Storylines of research in diffusion of innovation: a meta-narrative approach to systematic review. Social Science & Medicine, 61, 417-430.
- Greenhalgh, T., Potts, R.W.W., Wong, G., Bark, P., & Swinglehurst, D. (2009). Tensions and paradoxes in electronic patient record research: a systematic literature review using the meta-narrative method. The Milbank Quarterly, 87(4), 729-788.
- Habersang, S., Küberling-Jost, J., Reihlen, M., & Seckler, C. (2019). A process perspective on organizational failure: a qualitative meta-analysis. Journal of Management Studies, 56(1), 19-56.
- Higgins, J. P., Thomas, J., Chandler, J., Cumpston, M., Li, T., Page, M. J., & Welch, V. A. (Eds.). (2019). Cochrane handbook for systematic reviews of interventions. John Wiley & Sons.
- Hoon, C. (2013). Meta-synthesis of qualitative case studies: an approach to theory building. Organizational Research Methods, 16(4), 522-556.
- Kitsiou, S., Paré, G., Jaana, M., & Gerber, B. (2017). Effectiveness of mHealth interventions for patients with diabetes: An overview of systematic reviews", PLoS ONE, 12(3), e0173160.
- Larsson, R. (1993). Case survey methodology: Quantitative analysis of patterns across case studies. Academy of Management Journal, 36(6), 1515-1546.
- Noblit, G.W., & Hare, R.D. (1988). Meta-ethnography: Synthesizing qualitative studies (Vol. 11). Sage. Paré, G., Moqadem, K., Pineau, G., & St-Hilaire, C. (2010). Clinical effectiveness of home telemonitor ing programs in the context of diabetes, asthma, heart failure and hypertension: A systematic review. Journal of Medical Internet Research, 12(2), e21.
- Pawson, R., Greenhalgh, T., Harvey, G., & Walshe, K. (2005). Realist review-a new method of systematic review designed for complex policy interventions. Journal of Health Services Research & Policy, 10(1_suppl), 21-34.
- Pickering, C., & Byrne, J. (2014). The benefits of publishing systematic quantitative literature reviews for PhD candidates and other early-career researchers. Higher Education Research & Development, 33(3), 534-548.
- Ringeval, M., Wagner, G., Denford, J., Paré, G., & Kitsiou, S. (2020). Fitbit-based interventions for healthy lifestyle outcomes: systematic review and meta-analysis. Journal of Medical Internet Research, 22(10), e23954.
- Rivard, S., & Lapointe, L. (2012). Information technology implementers' responses to user resistance: Nature and effects. MIS Quarterly, 36(3), 897-920.
- Steel, P., Beugelsdijk, S., & Aguinis, H. (2021). The anatomy of an award-winning meta-analysis: Recommendations for authors, reviewers, and readers of meta-analytic reviews. Journal of International Business Studies, 52, 23-44.
- Steininger, D.M., Mikalef, P., Pateli, A., & Ortiz-de-Guinea, A. (2022). Dynamic capabilities in information systems research: A critical review, synthesis of current knowledge, and recommendations for future research. Journal of the Association for Information Systems, 23(2), 447-490.
- Thombs, B.D., Bonardi, O., Rice, D.B., Boruff, J.T., Azar, M., He, C., et al. (2020). Curating evidence on mental health during COVID-19: A living systematic review. Journal of Psychosomatic Research, 133, 110113.
- Thomson, D., Russell, K., Becker, L., Klassen, T., & Hartling, L. (2010). The evolution of a new publication type: Steps and challenges of producing overviews of reviews. Research Synthesis Methods, 1(3/4), 198-211.
- von Krogh, G., Haefliger, S., Spaeth, S., & Wallin, M.W. (2012). Carrots and rainbows: motivation and social practice in open source software development. MIS Quarterly, 36(2), 649-676.
- Wagner, G., Prester, J., & Paré, G. (2021). Exploring the boundaries and processes of digital platforms for knowledge work: A review of information systems research. The Journal of Strategic Information Systems, 30(4):101694.
- Walker L.O., & Avant, K.C. (2011). Strategies for theory construction in nursing. 5th ed. Boston: Prentice Hall.
- Webster, J., & Watson, R.T. (2002). Analyzing the past to prepare for the future: writing a literature review. MIS Quarterly, 26(2), xiii-xxiii.



Wiener, M., Saunders, C., & Marabelli, M. (2020). Big-data business models: A critical literature review and multiperspective research framework. Journal of Information Technology, 35(1), 66-91.

Wong, G., Greenhalgh, T., & Pawson, R. (2010). Internet-based medical education: A realist review of what works, for whom and in what circumstances. BMC Medical Education, 10(1).

Wright, A., & Michailova, S. (2022). Critical literature reviews: A critique and actionable advice. Management Learning, 13505076211073961.