



Deposited via The University of Sheffield.

White Rose Research Online URL for this paper:

<https://eprints.whiterose.ac.uk/id/eprint/225857/>

Version: Published Version

---

**Article:**

Zhou, Q., Yu, H., Chen, M. et al. (2025) Managing technological innovation for social good: a systematic literature review. *Strategic Change*. ISSN: 1086-1718

<https://doi.org/10.1002/jsc.2651>

---

**Reuse**

This article is distributed under the terms of the Creative Commons Attribution (CC BY) licence. This licence allows you to distribute, remix, tweak, and build upon the work, even commercially, as long as you credit the authors for the original work. More information and the full terms of the licence here:

<https://creativecommons.org/licenses/>

**Takedown**

If you consider content in White Rose Research Online to be in breach of UK law, please notify us by emailing [eprints@whiterose.ac.uk](mailto:eprints@whiterose.ac.uk) including the URL of the record and the reason for the withdrawal request.

SPECIAL ISSUE ARTICLE OPEN ACCESS

# Managing Technological Innovation for Social Good: A Systematic Literature Review

Qijun Zhou<sup>1</sup> | Honglan Yu<sup>2</sup>  | Ming Chen<sup>3</sup> | Matt Snell<sup>3</sup> | Kweku Adams<sup>4</sup>

<sup>1</sup>Adam Smith Business School, University of Glasgow, Glasgow, UK | <sup>2</sup>Sheffield University Management School, University of Sheffield, Sheffield, UK | <sup>3</sup>Huddersfield Business School, University of Huddersfield, Queensgate, UK | <sup>4</sup>School of Management, University of Bradford, Bradford, UK

**Correspondence:** Kweku Adams ([k.adams3@bradford.ac.uk](mailto:k.adams3@bradford.ac.uk))

**Received:** 2 November 2023 | **Revised:** 4 March 2025 | **Accepted:** 5 March 2025

**Keywords:** grand societal challenges | responsible innovation | social innovation | social value creation | systematic literature review

## ABSTRACT

The past decades have seen a growing recognition of a need to develop novel solutions to effectively and efficiently deliver inclusive values to society. However, the evolving literature in innovation management, for example, in the discourse of social innovation or responsible innovation, has yet to produce a consolidated knowledge base for how technologies could be managed for social good. Hence, this systematic review attempts to synthesize relevant literature regarding managing innovation for social good with a particular focus on the critical role technologies play. By doing so, two contributions to knowledge are presented. First, we identify three streams of conceptualization describing managing technological innovation for social good that require further synergies. Second, the findings indicate that the social consequences of technology and technological advancements remain unclear, which we call for a more evident discourse of social impacts and social good in the innovation management field.

**JEL Classification:** O31, O35

## 1 | Introduction

Innovation, especially when it is considered in relation to the advancement of science and technologies, enjoyed its reputation of being the “engine of growth” (Baumol 2002). Nevertheless, emphasizing the term “growth” implies innovation is managed toward economic good and that innovation management often includes a stage of commercialisation. Taking the definition of Trott (2005, 15) as an example, innovation management is “the management of all the activities involved in the process of idea generation, technology development, manufacturing and marketing of a new (or improved) product or manufacturing process or equipment”. Definitions like this hint at the fact that innovation is managed for the purpose of generating profit for organizations. Also, technology is being considered as an integral part of innovation management practices. Recent challenges created by the likes of high global displacement (Seifert et al. 2023), poverty (Aker et al. 2024), and climate change (Liu et al. 2024) have reiterated the need for management studies, especially innovation

management, to address social problems (Adams et al. 2022; Attah-Boakye et al. 2024; Fuglsang and Hansen 2022). Though organizations could assist in addressing social challenges through technological innovation, they often are hesitant to be devoted due to the high risk and lack of incentives for doing so (Geels 2014). Thus, there is a need to further explore how technological innovation can be managed for social good.

In addition, of particular interest to this study is the critical role technologies play in managing innovation for social good. Technology developments and applications have become an integral part of modern society as they influence the well-being and behaviors of individuals (Brey 2018). In this vein, technological innovation could be a main driver that creates social value, meanwhile, resulting in unintended consequences that may harm society (Mao et al. 2020). However, for conceptualizing the acts of managing innovation for social good, the role of technology has not always attracted focal attention. First, although the concept of responsible innovation is rooted

This is an open access article under the terms of the [Creative Commons Attribution](https://creativecommons.org/licenses/by/4.0/) License, which permits use, distribution and reproduction in any medium, provided the original work is properly cited.

© 2025 The Author(s). *Strategic Change* published by John Wiley & Sons Ltd.

## Summary

- Social good can be understood as approaches to addressing social problems or creating value for society.
- The majority of studies on innovation for social good are qualitative and focus on the European context.
- Both for-profit and non-profit organizations are involved in managing innovation for social good; the emerging focus on hybrid organizations and networks may represent a way forward.
- Current studies tend to examine innovation for social good in a broad and general manner, with limited clarification on the specific social benefits being created. There is a need for further discussion and improved measurement of the social impacts of innovation management.
- Our systematic review of current empirical studies on innovation for social good highlights the need for a clearer articulation of the specific social benefits that innovation management can contribute to.

in technology forecasting, its recent developments have been focused on policy frameworks and still lack clarity regarding the unintended consequences of technological development (Carbajal-Pina and Acur 2025). Second, studies using the social innovation concept mainly describe innovation practices that create social and collective value rather than private and are associated with significant and transformational change (Beckman et al. 2023). Yet, social innovation research focuses on innovative solutions to social problems but could still benefit from a more explicit focus on aligning with technological advancements Gupta et al. (2020). Third, besides the terms directly addressing social-related issues, considering social is one of the triple bottom lines of sustainability (Gimenez et al. 2012), terms like sustainable innovation or sustainability innovation may also be relevant to social good. In this vein, studies have tended to focus on the outcome of sustainability but not enough on how this was achieved and how it is attributed to technologies. Consequently, whereas the presence of different terminologies could explain managing innovation for social good and highlight its importance, the current understanding and knowledge regarding the role of technologies could still be fragmented.

Depending on the terminologies used, studies would have different perspectives and report on different roles of technologies in managing innovation for social good. Thus, there is a need to synthesize the current literature, leverage the lessons learned, and enlighten practices for managing technological innovation for social good. A systematic approach to selecting and reviewing literature is necessary for this purpose. There are gaps in the literature for this systematic review because existing reviews only looked at a specific type of innovation rather than the overall phenomenon. For example, the review from Dionisio et al. (2023) reviewed how digital social innovation could contribute to achieving sustainable development goals, whereas Haskell et al. (2021) investigated social innovation under the strong sustainability concept. The review from Agarwal et al. (2017), Bolz and Bruin (2019), and

Lubberink et al. (2017) has made attempts to compare different innovation activities and features but still lacks specific attention regarding how these types of innovation contribute to social good. Hence, we do not want to limit this study to a specific innovation typology, but instead, we want to explore managing innovation for social good as a phenomenon and provide an overview of how studies adopted different innovation management typologies have reported regarding the role of technologies. Accordingly, as an initial stage for the quest of clarifying managing technological innovation for social good, this review intends to address the following two review questions:

**RQ1.** *How were technologies discussed in studies adopting different concepts to investigate innovation for social good?*

**RQ2.** *What role do technologies play in managing innovation for social good?*

Consequently, this review intends to make a twofold contribution to knowledge. The first contribution is that, by focusing on “managing technological innovation for social good” as a phenomenon, we attempt to provide conceptual clarity on the relevant typologies in the domain of innovation management and review how technologies are discussed or mentioned accordingly. The intention is to leverage the lessons learned in a fragmented literature basis with a potential terminology jungle, identify overlapping descriptions, and consolidate a knowledge base for future studies interested in exploring managing technological innovation for social good. Second, by examining the critical role of technologies in managing innovation for social good, this study also contributes to the wider discourse regarding technologies and society. Doing so addresses the call from Gupta et al. (2020) regarding the synergy effect between technologies and social innovation and from responsible innovation discourse regarding how technological innovation could be managed from “do no harm” to “do good” (Ambos and Tatarinov 2022; Fernhaber and Zou 2022).

Subsequently, this study is structured as follows. The methodology for this systematic review will be presented next, detailing our approaches to developing keywords for the search, screening and selecting papers, and analyzing papers. This will be followed by the results of the systematic review and some discussions of findings. We conclude the paper by presenting implications for theory and practice.

## 2 | Methodology

To effectively review the current state of knowledge regarding innovation for social good, we adopted systematic approaches to search, screen, select, and analyze academic literature. This is to ensure a complete list of relevant studies as possible for a comprehensive synthesis of current state knowledge in the phenomenon of interest in an impartial manner (Cronin et al. 2008; Tranfield et al. 2003). The benefit of having systematic literature reviews compared to other types of literature reviews has also been evidenced in other studies focusing on specific innovation typologies or phenomena (e.g., Agarwal et al. 2017; Zhou et al. 2023, 2024).

## 2.1 | Developing Keywords

To retrieve a comprehensive set of relevant studies for analysis, database searching using keywords is used as the approach for identifying the relevant studies. For reliability and replicability purposes, the Scopus database was chosen to retrieve relevant studies. Although relying on a single database may result in the potential missing of relevant studies, Scopus is suggested by previous studies (e.g., Ghezzi et al. 2018) to be more inclusive and include a broadened scope of relevant work that could mitigate the risks of missing out. With the aim of this study set to explore the phenomenon of managing innovation for social good and not focusing on a specific type of innovation, some additional steps have been taken to develop the keywords for searching relevant literature. Based on the phenomenon of interest, we developed an initial Boolean expression for innovation management and social good generally to be more inclusive as (“innovation” OR “new product development” OR “new service development” OR “product design” OR “product engineering” OR “R&D” OR “research and development”) AND (responsible\* OR soci\* OR sustain\* OR ethical). This is to capture as wide a range of studies as possible relevant to the aim of this study and to see what types of innovation have been referred to for this phenomenon.

The search string was applied in the Scopus database, and we further limited the search to only include published journal articles, with English as the language and within the subject area of social science. A total of 40,185 papers appeared as a result. These papers are then sorted by highest citation first, with the first 20,000 downloaded, as this is the maximum allowed in Scopus for downloading paper records at once. We are particularly interested in the keywords mentioned in this initial record to further determine the keywords for later searches. Thus, a frequency test was performed on the 20,000 set of keywords from this record. Table 1 presents the results of this test, which led to identifying the keywords set for the later stage. Accordingly, Table 1 also partially contributed to addressing the first research question of this study.

## 2.2 | Search and Selection Procedure

The collection of keywords identified in the previous stage was then applied in the Scopus database, using the Boolean expression based on “OR”. Similar general exclusion criteria were applied, and as a result, below is the search string applied:

(TITLE-ABS-KEY (“social innovation”) OR (“green innovation”) OR (“eco innovation”) OR (“responsible innovation”) OR (“sustainable innovation”) OR (“responsible research and innovation”) OR (“environmental innovation”) OR (“frugal innovation”) OR (“sustainability oriented innovation”) OR (“green product innovation”) OR (“grassroots innovation”) OR (“green technological innovation”) OR (“green process innovation”) OR (“corporate social innovation”) OR (“inclusive innovation”) OR (“sustainable business model innovation”) OR (“sustainability innovation”) OR (“public sector innovation”)) AND (LIMIT-TO (SUBJAREA, “soci”) OR LIMIT-TO (SUBJAREA, “busi”)) AND (LIMIT-TO (DOCTYPE,

**TABLE 1** | Keyword frequency in the initial search.

| Keywords used                         | Frequency |
|---------------------------------------|-----------|
| Social innovation                     | 642       |
| Green innovation                      | 284       |
| Eco-innovation/eco innovation         | 238       |
| Responsible innovation                | 186       |
| Sustainable innovation                | 162       |
| Responsible research and innovation   | 125       |
| Environmental innovation              | 101       |
| Frugal innovation                     | 74        |
| Sustainability oriented innovation    | 49        |
| Green product innovation              | 36        |
| Grassroots innovation                 | 35        |
| Green technological innovation        | 29        |
| Green process innovation              | 24        |
| Corporate social innovation           | 22        |
| Inclusive innovation                  | 18        |
| Sustainable business model innovation | 18        |
| Sustainability innovation             | 16        |
| Public sector innovation              | 14        |

“ar”)) AND (LIMIT-TO (SRCTYPE, “j”)) AND (LIMIT-TO (LANGUAGE, “english”)).

A total of 8220 results were hit using these search terms, and all paper records, including authors, title, year, journal, abstract, and keywords, were downloaded for further screening. In the first step of screening, only articles from listed journals in the Association of Business School (ABS) Academic Journal Guide are included as a quality assurance measure, similar to some prior studies (Okwir et al. 2018; Soto-Simeone et al. 2021). This includes all ABS-listed journals, regardless of the ranking (i.e., ABS 1–4\*). Here, a total of 2650 papers are published in ABS-listed journals. The titles and abstracts of these papers are then screened with the guidance of exclusion criteria. Table 2 presents these criteria. This screening helped to narrow down the sample to 338 papers in total. These papers are all downloaded for full-text screening, where the same exclusion criteria reported in Table 2 were applied to further determine the relevance of studies to the research questions. The whole screening process was conducted by two authors separately to minimize selection bias. This systematic searching, selection and screening process led to a final sample of 70 articles for detailed analysis.

## 2.3 | Analysis Procedure

The analysis of the final sample of papers is done in a literature worksheet. Each article was reviewed rigorously, and key information was captured, including country, industry, research

**TABLE 2** | Exclusion criteria.

| Exclusion   | Description   |
|---|---|
| Papers that do not have a focus on managing innovation                  | Papers that focus solely on social entrepreneurship or corporate social responsibilities are excluded as these do not provide insights regarding managing innovation. |
| Papers that are not reporting empirical results on organizational level | Papers focusing on cities or regions are excluded, as they do not provide insights regarding managing innovation on an organizational level.                          |
| Papers that do not mention social impact of innovation                  | Papers that report only on the economic and environmental impact of innovation are excluded as they do not fit the focus of managing innovation for social good.      |
| Papers that do not mention technology or technological advancement      | Papers that reported on innovation that are not based on technology advancements or have not mention the role of technology usage in their study are excluded.        |

**TABLE 3** | Descriptive results.

|                     |  |
|---------------------|--|
| Journal information | 70 articles from 31 journals<br>Top 5 sourced journals: Business Strategy and the Environment ( $n = 9$ ); Technological Forecasting and Social Change ( $n = 9$ ); Journal of Business Research ( $n = 7$ ); Journal of Product Innovation Management ( $n = 5$ ); Business and Society ( $n = 4$ ) |
| Methodology         | Quantitative design: 46<br>Qualitative design: 22<br>Mixed method design: 2  |

method, data and sample, type of innovation mentioned, and the role technologies played. A descriptive analysis was done regarding the basic information of the studies, including distributions in years, journals, and methods. To understand the role of technologies reported in these studies, relevant statements are first extracted. We then applied thematic analysis to further aggregate the information to identify key roles of technologies in managing innovation for social good. The aggregation was done qualitatively.

### 3 | Results

#### 3.1 | Descriptive Analysis

The retrieval articles in our sample represent a range of different journals with different methodologies. Table 3 presents a summary of the descriptive results.

#### 3.2 | Innovation Approaches

In terms of the typologies commonly used for innovation in our sample, the result is largely consistent with the keyword development outcomes presented in Table 1. The retrieval studies

have mainly adopted social innovation (38/70), responsible innovation (14/70) and sustainability-related innovation (18/70) for their conceptualization regarding managing innovation for social good.

Accordingly, social innovation is the term mentioned the most and was used quite consistently in the reviewed study. Studies using social innovation for their conceptualisation usually pursue a novel solution for addressing social problems (e.g., Le Ber and Branzei 2010). Studies such as Cui et al. (2017, 3) also define that social innovation is usually adopted by “organizations whose primary purposes are social”; however, a variation of corporate social innovation has been adopted by a few studies, emphasizing the proactive actions from for-profit organizations to make a greater impact on society through innovation (e.g., Carberry et al. 2019). Although the definition of social innovation mentions a “novel solution” is needed, there is no direct link with technological advancement for developing this solution. Thus, studies taking a social innovation route tend not to put new technologies at the center of their discussions.

Whereas social innovation studies take technologies being available for granted, studies that adopt the responsible innovation conceptualization engage with technology development in earlier stages. For example, the study from Ambos and Tatarinov (2022) specifically discussed the role digital technologies played, both in managing innovation and as an outcome that led to novel solutions. This trend may be explained by the definition of responsible innovation that puts an emphasis on “responsive stewardship of science and innovation” (See, for example, Rauch and Ansari 2022; Liu et al. 2024). Similarly, Cha and Park (2024) emphasized proactively setting technological orientations to address social needs. Accordingly, adopting a responsible innovation conceptualization would mean an emphasis on anticipation and managing technological advancement even before its final purpose is apparent. However, based on retrieval studies in this review, it seems that responsible innovation is still mainly a political agenda, and challenges exist in translating this for how technological innovation could be managed for social good, especially for resource-constrained organizations like SMEs (Xie et al. 2024; Zhang et al. 2023).

Another set of terms that are referred to is related to sustainable innovation and its variance. For example, Fernandes et al. (2021, 2025) discussed sustainable innovation as “explicitly creating benefits for society for which companies pay the development costs”. For sustainable innovation, some studies have discussed social impact as part of sustainability (e.g., Bos-Brouwers 2010; da Nascimento et al. 2023), whereas other studies have explored the social impact of environmental sustainability, for example, on employment (Kunapatarawong and Martínez-Ros 2016; Zheng et al. 2023). Different from studies for social innovation, discussions for sustainable innovation are mainly targeting for-profit firms and focusing on industries such as manufacturing (e.g., Alerasoul et al. 2022).

Accordingly, there are two main findings regarding the first review question. Based on the dataset collected in this review, social innovation, responsible innovation, and sustainable innovation are among the most frequently used terms to describe how innovation management may lead to creating social value, albeit with different focuses on the role of technologies. Based on reviewing how these terms are applied in studies and how they address managing technologies accordingly, it is noted that innovation management concepts reveal different insights for different stages of technological development. Responsible innovation tends to be linked with technology management and governance at its early stages, whereas social innovation and sustainable innovation are more often used to explore the implications of technologies. In addition, sustainable innovations are mostly used to address environmental impacts; this was also noticed during the exclusion process of this study. The second finding is that studies based on constraint innovation-related terms have not been present in the current sample. This may be due to the focus of these studies reporting more on the process of innovation rather than the impact, i.e., social good, which is excluded in the screening stage.

### 3.3 | The Role of Technologies

Based on the analysis of the retrieval studies, it appears that studies take different perspectives on whether technologies or, more precisely, technological advancement is a necessary condition for innovation for social good. In this vein, Fu et al. (2024) proposed that having a “leading-edge” technology is not a must for innovation for social good, and the emphasis could be on adopting current products and services to meet different societal needs; however, they do agree that companies with leading technologies, such as the digital platform, should play a more leading role in the innovation process. Similarly, Bos-Brouwers (2010) reported that most sustainable innovation in their study can be categorized by innovation by design or function and that new technology mainly contributes to competitive advantages. On the contrary, studies following the responsible innovation discourse would argue that addressing grand challenges requires scientific breakthroughs and technological innovation (Liu et al. 2024). Hence, the need to steer science and technological breakthroughs has been the theoretical foundation for responsible innovation studies (Cha and Park 2024; Chen et al. 2024). As a result, it is necessary to further clarify the role of technologies in managing innovation for social good.

Specifically, three roles of technologies could be identified in the retrieval studies. First, technology could be treated as an enabler for innovation, meaning the solutions are only possible because of advancements in technologies (e.g., Kunapatarawong and Martínez-Ros 2016). For example, digital platforms have often been mentioned as vehicles for social benefits (Chen et al. 2024; Rauch and Ansari 2022; Wang et al. 2023). Viewing technology as an enabler of innovation then leads to studies discussing the need for new managerial capabilities to link new technologies with social problems. For example, Akter et al. (2024) reported on developing big data analytic capabilities and applying these to big poverty data to generate viable solutions. These new managerial capabilities are highlighting the need to find a fit between strategies, resource orchestration, and technological innovations (Cui et al. 2017). In this vein, Golgeci et al. (2022) conceptualized the capability as technology reflectiveness, showing the ability of managers to link technologies to societal needs. For managing innovation for social good, the more complex technologies are, the better support an organization needs to provide (Ambos and Tatarinov 2022).

Second, technology could also play a supporting role in innovation activities that are not technology-based. For example, Le Ber and Branzei (2010) discussed technologies as resources and leverages in collaborations between organizations and that the need for technological support would play a role in how strategic alliances are formulated for social innovation. Another case could be found in the scale-up process for social innovation. In this vein, Steinfield and Holt (2019) discussed how technologies, or technological knowledge, could support reproducing social innovation from an established market to an emerging market. Bhatt and Ahmad (2017) also reported on how technology could support forming social innovation as well as scaling it; the main challenge would be to adjust to the capabilities of the beneficiaries.

Third, technology brings uncertainty and unintended consequences that may lead to additional challenges (Dyck and Silvestre 2019). Studies adopting a responsible innovation lens have mainly reported on this aspect. In this regard, Pandza and Ellwood (2013) set the foundation for exploring and managing innovation responsibly based on the change of practices that new technologies may bring. Responsible innovation is, thus, about anticipating the consequences of technological advancements (Lehoux et al. 2021). In addressing additional social needs, firms practicing responsible innovation are faced with the more disruptive nature of technologies (Liu et al. 2024). However, the potential negative impact of technology may not appear until it is implemented. For instance, the negative impact of technologies may be due to the lack of competencies of individuals using them, particularly when the innovation is targeted toward the more vulnerable groups in society. For example, Seifert et al. (2023) reported technology-based social innovation implementation in a refugee camp and showcased a few instances of additional challenges that were not anticipated.

Consequently, the main finding for the second review question is that despite some arguments on the necessity of technological breakthroughs in addressing societal challenges, innovation does not need to be technologically based to create social good. However, even in managing non-technological

innovation for social good, a feel of how certain technology relates to society is needed. This would be particularly useful to counter the unintended consequences of technologies, especially considering the potential lack of competency of the user group in society.

## 4 | Discussion

Based on a systematic review of empirical studies on managing innovation for social good, with a particular emphasis on technologies, the findings indicate that innovation management research is increasingly called upon to address the urgent challenge of global societal concerns (GSCs). However, significant conceptual and empirical gaps remain in understanding the management of technological innovation for social good.

Despite some contributions to managing innovation for social good, a recurrent theme that appeared in the analysis is that studies have not always been specific in showing the impact of innovation on social good. This is more typical in survey-based studies (e.g., Chatterjee et al. 2024; Chen et al. 2024; Zahoor et al. 2024), as capabilities that could contribute to social or sustainable innovation are identified, but it remains unclear whether and how these capabilities could contribute similarly to addressing all social problems. We argue that this calls for a more direct approach to link technology development and its consequences with the potential social impact, either in the form of creating social value or neglecting social harm. The problem of being generic regarding social problems and social value is also reflected in the measurements for relevant constructs such as social innovation performance (e.g., Riviuccio et al. 2023) or responsible innovation performance (Zhang et al. 2023). These self-reported measures do not provide further information and details regarding the meaning of well-being or social welfare and may not be able to further capture the unintended negative impact of technologies.

For the social innovation studies, we acknowledged that the current focus has mainly been on understanding how individuals or organizations drive social innovation, but it has begun to draw attention from different management domains, such as international businesses (e.g., Adomako et al. 2024). However, it appears that technological innovation has yet to receive enough attention in this discourse and is not being built into the analytical models sufficiently. To further advance the knowledge of how technological innovation could be managed for social good, it is crucial to map the evolution of technology alongside general processes for managing innovation for social good. The findings and discussions, thus, lead to implications for further studies and managerial practices.

### 4.1 | Future Research Directions

Considering the need to still clarify managing innovation for social good, we point to some future directions research could take based on the findings of this review. These research directions are presented in Table 3, with indicative research questions.

A first implication for future research is that a clear understanding of the critical role technology plays in managing innovation for social good is still desired. A possible direction is to further draw on and aggregate the current knowledge in the fields of technological innovation management, technology for social good, and, more broadly, technology in society to set a solid foundation for managing technological innovation for social good. For example, a social construction of technology perspective would suggest that the nature of technology is also shaped by society and sheds light on factors that are often neglected in techno-economic theories of technological change and its impact (Olsen and Engen 2007).

Second, as managing innovation for social good is significantly impacted by institutional settings and context, exploring this phenomenon in different contexts, and ideally with more comparative studies, may bring more insights on social impact in developed countries, which contribute to bringing studies on constraint-based innovation into the discourse. This may also imply the need for more quantitative studies that may move beyond the boundaries of regions for generalization purposes. An example of this could be evidenced in Chu et al. (2024), but again, as they argued, generalization of their model is still needed. However, as previously indicated, there is a need to further develop measures that specifically address the role of technologies in these settings, either as dependent or moderating variables. To expand the scope of knowledge regarding technological innovation for social good, studies in social entrepreneurship that are excluded from the sample of this review may provide some additional insight (Table 4).

Third, taking a process-based view on innovation would suggest that the focus of research is not evenly distributed across different stages of the process. For example, only a few studies (e.g., Abhari et al. 2022) have shed light on the ideation stage for managing innovation for social good. It would be interesting for future research to further map out innovation processes and determine when consideration for social good should be built into managing innovation and when it will be most effective.

### 4.2 | Practice Implications

The findings of this research hope to inspire a more proactive approach from innovation management practitioners to explore their contributions to social good in different capacities. A direct implication for practice based on the findings is for managers to develop an awareness of the connection between technological advancement and social needs, which will guide innovation management practices. Developing this awareness is timely considering the era of the digital economy; managing innovation for social good could enable organizations to have sustainable competitive advantages and serve to create avenues for addressing grand societal challenges. This is timely considering the recent developments in Artificial Intelligence that are regarded as bringing new transformations. There may be a need for a change of mindset from doing no harm to doing good, leading to a more inclusive and collaborative approach to working with different stakeholders and communities. In this vein, managers need to balance making profits based on innovation and contributing to social good to unleash the full potential of innovation.

**TABLE 4** | Avenues for future research.

| Research direction   | Potential research questions   |
|--|--|
| Adopting social construction of technology as the theoretical lens         | <ul style="list-style-type: none"> <li>• How social construction of technology impact managing technological innovation for social good?</li> <li>• To what extent will the user competency of technology impact practices of managing innovation for social good?</li> </ul>  |
| Exploring innovation for social good in different contexts                 | <ul style="list-style-type: none"> <li>• What are the institutional conditions that can contribute to managing innovation for social good?</li> <li>• How would the practices of managing innovation for social good be impacted by institutional context?</li> <li>• What are the challenges in transferring social innovation from developed countries to emerging markets?</li> </ul> |
| Develop a process-based framework for innovation for social good practices | <ul style="list-style-type: none"> <li>• What different roles will technology play in different stages in managing innovation for social good?</li> <li>• What is the process of managing for social good?</li> </ul>  |

## 5 | Concluding Remarks

Based on a systematic review of empirical studies related to managing innovation for social good, this study concludes with the need for clarity in understanding the critical role of technology, not only in being responsibly developed but also purposefully navigated to create social good. Technological innovation in its current state is mainly being discussed for generating profit, with the popularity of areas such as business model innovation existing. Meanwhile, managing technological innovation for social good does not necessarily need to be a trade-off. This calls for future research to explore developing, modifying, and implementing technologies for social good to fully unpack the societal value of technological innovation.

### Conflicts of Interest

The authors declare no conflicts of interest.

### Data Availability Statement

Research data are not shared.

### References

- Abhari, K., E. J. Davidson, and B. Xiao. 2022. "Modeling Social Product Development Process, Technology, and Governance." *IEEE Transactions on Engineering Management* 69, no. 2: 409–422. <https://doi.org/10.1109/TEM.2020.2973234>.
- Adams, D., K. Adams, R. Attah-Boakye, S. Ullah, W. Rodgers, and D. Kimani. 2022. "Social and Environmental Practices and Corporate Financial Performance of Multinational Corporations in Emerging Markets: Evidence from 20 oil-rich African Countries." *Resources Policy* 78: 102756. <https://doi.org/10.1016/j.resourpol.2022.102756>.
- Adomako, S., X. Liu, R. M. Sarala, M. Ahsan, J. Y. Lee, and O. Shenkar. 2024. "Multinational Corporations and Social Innovation in Emerging Markets." *Management International Review* 64, no. 3: 343–363. <https://doi.org/10.1007/s11575-024-00540-w>.
- Agarwal, N., M. Grottke, S. Mishra, and A. Brem. 2017. "A Systematic Literature Review of Constraint-Based Innovations: State of the Art and Future Perspectives." *IEEE Transactions on Engineering Management* 64, no. 1: 3–15. <https://doi.org/10.1109/TEM.2016.2620562>.
- Akter, S., M. A. Hossain, U. Hani, D. Vrontis, A. Thrassou, and A. Arslan. 2024. "Addressing the Grand Challenges of Poverty With Data-Driven Creative Service Offerings." *Journal of Product Innovation Management* 41, no. 2: 236–266. <https://doi.org/10.1111/jpim.12679>.
- Alerasoul, S. A., G. Afeltra, R. B. Bouncken, and H. Hakala. 2022. "The Synergistic Impact of Market and Technology Orientations on Sustainable Innovation Performance: Evidence From Manufacturing Firms." *International Journal of Entrepreneurial Behavior & Research* 28, no. 6: 1556–1580. <https://doi.org/10.1108/IJEBR-10-2021-0799>.
- Ambos, T. C., and K. Tatarinov. 2022. "Building Responsible Innovation in International Organizations Through Intrapreneurship." *Journal of Management Studies* 59, no. 1: 92–125. <https://doi.org/10.1111/joms.12738>.
- Attah-Boakye, R., K. Adams, H. Yu, D. Mali, and H. Lim. 2024. "Growing Old, but Paying Back: Understanding How Age Influences Corporate Social Innovation Depth and Breadth of Multinationals in Weak Institutional Contexts." *Management International Review* 64, no. 3: 419–458. <https://doi.org/10.1007/s11575-024-00543-7>.

- Baumol, W. J. 2002. *The Free-Market Innovation Machine*. Princeton University Press.
- Beckman, C. M., J. Rosen, J. Estrada-Miller, and G. Painter. 2023. "The Social Innovation Trap: Critical Insights Into an Emerging Field." *Academy of Management Annals* 17, no. 2: 684–709. <https://doi.org/10.5465/annals.2021.0089>.
- Le Ber, M. J., and O. Branzei. 2010. "(Re)forming Strategic Cross-Sector Partnerships." *Business & Society* 49, no. 1: 140–172. <https://doi.org/10.1177/0007650309345457>.
- Bhatt, P., and A. J. Ahmad. 2017. "Financial Social Innovation to Engage the Economically Marginalized: Insights From an Indian Case Study." *Entrepreneurship & Regional Development* 29, no. 5–6: 391–413. <https://doi.org/10.1080/08985626.2017.1287961>.
- Bolz, K., and A. de Bruin. 2019. "Responsible Innovation and Social Innovation: Toward an Integrative Research Framework." *International Journal of Social Economics* 46, no. 6: 742–755. <https://doi.org/10.1108/IJSE-10-2018-0517>.
- Bos-Brouwers, H. E. J. 2010. "Corporate Sustainability and Innovation in SMEs: Evidence of Themes and Activities in Practice." *Business Strategy and the Environment* 19, no. 7: 417–435. <https://doi.org/10.1002/bse.652>.
- Brey, P. 2018. "The Strategic Role of Technology in a Good Society." *Technology in Society* 52: 39–45. <https://doi.org/10.1016/j.techsoc.2017.02.002>.
- Carbajal-Pina, C., and N. Acur. 2025. "From Principles to Practice: Responsible Implementation of Emerging Technologies Through Innovation Dilemmas." *IEEE Transactions on Engineering Management* 72: 18–28. <https://doi.org/10.1109/TEM.2024.3479413>.
- Carberry, E. J., P. Bharati, D. L. Levy, and A. Chaudhury. 2019. "Social Movements as Catalysts for Corporate Social Innovation: Environmental Activism and the Adoption of Green Information Systems." *Business and Society* 58, no. 5: 1083–1127. <https://doi.org/10.1177/0007650317701674>.
- Cha, H., and S.-M. Park. 2024. "Organizational Agility and Communicative Actions for Responsible Innovation: Evidence From Manufacturing Firms in South Korea." *Asia Pacific Journal of Management* 41, no. 3: 1345–1372. <https://doi.org/10.1007/s10490-023-09883-8>.
- Chatterjee, S., R. Chaudhuri, and D. Vrontis. 2024. "Antecedents and Consequence of Frugal and Responsible Innovation in Asia: Through the Lens of Organization Capabilities and Culture." *Asia Pacific Journal of Management* 41, no. 3: 979–1003. <https://doi.org/10.1007/s10490-021-09797-3>.
- Chen, Y., J. Li, and J. Zhang. 2024. "Digitalisation, Data-Driven Dynamic Capabilities and Responsible Innovation: An Empirical Study of SMEs in China." *Asia Pacific Journal of Management* 41, no. 3: 1211–1251. <https://doi.org/10.1007/s10490-022-09845-6>.
- Chu, I., M. Sewak, and R. Trivedi. 2024. "Market or Community? An Institutional Logics Interpretation of How MNE Subsidiaries Respond to Mandated Social Innovation in India." *Management International Review* 64, no. 3: 459–487. <https://doi.org/10.1007/s11575-024-00544-6>.
- Cronin, P., F. Ryan, and M. Coughlan. 2008. "Undertaking a Literature Review: A Step-By-Step Approach." *British Journal of Nursing* 17, no. 1: 38–43. <https://doi.org/10.1177/107808747000500401>.
- Cui, M., S. L. Pan, S. Newell, and L. Cui. 2017. "Strategy, Resource Orchestration and E-Commerce Enabled Social Innovation in Rural China." *Journal of Strategic Information Systems* 26, no. 1: 3–21. <https://doi.org/10.1016/j.jsis.2016.10.001>.
- Dionisio, M., S. J. de Souza Junior, F. Paula, and P. C. Pellanda. 2023. "The Role of Digital Social Innovations to Address SDGs: A Systematic Review." *Environment, Development and Sustainability* 26, no. 3: 5709–5734. <https://doi.org/10.1007/s10668-023-03038-x>.
- Dyck, B., and B. S. Silvestre. 2019. "A Novel NGO Approach to Facilitate the Adoption of Sustainable Innovations in Low-Income Countries: Lessons From Small-Scale Farms in Nicaragua." *Organization Studies* 40, no. 3: 443–461. <https://doi.org/10.1177/0170840617747921>.
- Fernandes, C. I., P. M. Veiga, J. J. M. Ferreira, and M. Hughes. 2021. "Green Growth Versus Economic Growth: Do Sustainable Technology Transfer and Innovations Lead to an Imperfect Choice?" *Business Strategy and the Environment* 30: 2021–2037. <https://doi.org/10.1002/bse.2730>.
- Fernhaber, S. A., and H. Zou. 2022. "Advancing Societal Grand Challenge Research at the Interface of Entrepreneurship and International Business: A Review and Research Agenda." *Journal of Business Venturing* 37, no. 5: 106233. <https://doi.org/10.1016/j.jbusvent.2022.106233>.
- Fu, X., X. Fu, P. N. Ghauri, and H. Khan. 2024. "Tackling Exigent Grand Challenges Through Corporate Social Innovation: Evidence From the COVID-19 Pandemic." *Journal of Product Innovation Management* 41, no. 2: 428–448. <https://doi.org/10.1111/jpim.12691>.
- Fuglsang, L., and A. V. Hansen. 2022. "Framing Improvements of Public Innovation in a Living Lab Context: Processual Learning, Restrained Space and Democratic Engagement." *Research Policy* 51, no. 1: 104390. <https://doi.org/10.1016/j.respol.2021.104390>.
- Geels, F. W. 2014. "Reconceptualising the Co-Evolution of Firms-In-Industries and Their Environments: Developing an Inter-Disciplinary Triple Embeddedness Framework." *Research Policy* 43, no. 2: 261–277. <https://doi.org/10.1016/j.respol.2013.10.006>.
- Ghezzi, A., D. Gabelloni, A. Martini, and A. Natalicchio. 2018. "Crowdsourcing: A Review and Suggestions for Future Research." *International Journal of Management Reviews* 20, no. 2: 343–363. <https://doi.org/10.1111/ijmr.12135>.
- Gimenez, C., V. Sierra, and J. Rodon. 2012. "Sustainable Operations: Their Impact on the Triple Bottom Line." *International Journal of Production Economics* 140, no. 1: 149–159. <https://doi.org/10.1016/j.ijpe.2012.01.035>.
- Golgeci, I., I. Ali, S. Bozkurt, D. M. Gligor, and A. Arslan. 2022. "The Impact of Corporate Support Programs on Environmental and Social Innovation: Empirical Insights From the Food and Beverage Industry." *International Journal of Operations & Production Management* 42, no. 7: 898–929. <https://doi.org/10.1108/IJOPM-10-2021-0640>.
- Gupta, S., V. Kumar, and E. Karam. 2020. "New-Age Technologies-Driven Social Innovation: What, How, Where, and Why?" *Industrial Marketing Management* 89: 499–516. <https://doi.org/10.1016/j.indma.2019.09.009>.
- Haskell, L., K. J. Bonnedahl, and H. I. Stål. 2021. "Social Innovation Related to Ecological Crises: A Systematic Literature Review and a Research Agenda for Strong Sustainability." *Journal of Cleaner Production* 325: 129316. <https://doi.org/10.1016/j.jclepro.2021.129316>.
- Kunapatarawong, R., and E. Martinez-Ros. 2016. "Towards Green Growth: How Does Green Innovation Affect Employment?" *Research Policy* 45, no. 6: 1218–1232. <https://doi.org/10.1016/j.respol.2016.03.013>.
- Lehoux, P., H. P. Silva, J. Denis, F. A. Miller, R. Pozelli Sabio, and M. Mendell. 2021. "Moving Toward Responsible Value Creation: Business Model Challenges Faced by Organizations Producing Responsible Health Innovations." *Journal of Product Innovation Management* 38, no. 5: 548–573. <https://doi.org/10.1111/jpim.12596>.
- Liu, Y., Y. Xing, F. Vendrell-Herrero, and O. F. Bustinza. 2024. "Setting Contextual Conditions to Resolve Grand Challenges Through Responsible Innovation: A Comparative Patent Analysis in the Circular Economy." *Journal of Product Innovation Management* 41, no. 2: 449–472. <https://doi.org/10.1111/jpim.12659>.

- Lubberink, R., V. Blok, J. Van Ophem, and O. Omta. 2017. "Lessons for Responsible Innovation in the Business Context: A Systematic Literature Review of Responsible, Social and Sustainable Innovation Practices." *Sustainability* 9, no. 5: 721. <https://doi.org/10.3390/su9050721>.
- Mao, C., R. Koide, A. Brem, and L. Akenji. 2020. "Technology Foresight for Social Good: Social Implications of Technological Innovation by 2050 From a Global Expert Survey." *Technological Forecasting and Social Change* 153: 119914. <https://doi.org/10.1016/j.techfore.2020.119914>.
- da Nascimento, L. S., J. R. da Rosa, A. R. Silva, and F. M. Reichert. 2023. "Social, Environmental, and Economic Dimensions of Innovation Capabilities: Theorizing From Sustainable Business." *Business Strategy and the Environment* 33, no. 2: 441–461. <https://doi.org/10.1002/bse.3506>.
- Okwir, S., S. S. Nudurupati, M. Ginieis, and J. Angelis. 2018. "Performance Measurement and Management Systems: A Perspective From Complexity Theory." *International Journal of Management Reviews* 20: 731–754. <https://doi.org/10.1111/ijmr.12184>.
- Olsen, O. E., and O. A. Engen. 2007. "Technological Change as a Trade-Off Between Social Construction and Technological Paradigms." *Technology in Society* 29, no. 4: 456–468. <https://doi.org/10.1016/j.techsoc.2007.08.006>.
- Pandza, K., and P. Ellwood. 2013. "Strategic and Ethical Foundations for Responsible Innovation." *Research Policy* 42, no. 5: 1112–1125. <https://doi.org/10.1016/j.respol.2013.02.007>.
- Rauch, M., and S. Ansari. 2022. "From 'Publish or Perish' to Societal Impact: Organizational Repurposing Towards Responsible Innovation Through Creating a Medical Platform." *Journal of Management Studies* 59, no. 1: 61–91. <https://doi.org/10.1111/joms.12737>.
- Rivieccio, G., K. Raies, and F. Schiavone. 2023. "Are You Attractive Enough? An Empirical Analysis on User innovators' Characteristics and the Creation of New Social Ventures." *Technological Forecasting and Social Change* 189: 122383. <https://doi.org/10.1016/j.techfore.2023.122383>.
- Seifert, L., N. Kunz, and S. Gold. 2023. "Sustainable Innovations for Humanitarian Operations in Refugee Camps." *International Journal of Operations & Production Management* 43, no. 10: 1554–1586. <https://doi.org/10.1108/IJOPM-05-2022-0302>.
- Soto-Simeone, A., C. Sirén, and T. Antretter. 2021. "The Role of Skill Versus Luck in New Venture Survival." *International Journal of Management Reviews* 23: 549–556. <https://doi.org/10.1111/ijmr.12262>.
- Steinfeld, L., and D. Holt. 2019. "Toward A Theory on the Reproduction of Social Innovations in Subsistence Marketplaces." *Journal of Product Innovation Management* 36, no. 6: 764–799. <https://doi.org/10.1111/jpim.12510>.
- Tranfield, D., D. Denyer, and P. Smart. 2003. "Towards a Methodology for Developing Evidence-Informed Management Knowledge by Means of Systematic Review." *British Journal of Management* 14: 207–222. <https://doi.org/10.1111/1467-8551.00375>.
- Trott, P. 2005. *Innovation Management and New Product Development*. 3rd ed. Pearson Education.
- Wang, N., J. Wan, Z. Ma, Y. Zhou, and J. Chen. 2023. "How Digital Platform Capabilities Improve Sustainable Innovation Performance of Firms: The Mediating Role of Open Innovation." *Journal of Business Research* 167: 114080. <https://doi.org/10.1016/j.jbusres.2023.114080>.
- Xie, X., Y. Wu, and C. B.-G. Tejerob. 2024. "How Responsible Innovation Builds Business Network Resilience to Achieve Sustainable Performance During Global Outbreaks: An Extended Resource-Based View." *IEEE Transactions on Engineering Management* 71: 12194–12208. <https://doi.org/10.1109/TEM.2022.3186000>.
- Zahoor, N., H. Khan, Z. Khan, and P. Akhtar. 2024. "Responsible Innovation in Emerging markets' SMEs: The Role of Alliance Learning and Absorptive Capacity." *Asia Pacific Journal of Management* 41, no. 3: 1175–1209. <https://doi.org/10.1007/s10490-022-09843-8>.
- Zhang, X., X. Teng, Y. Le, and Y. Li. 2023. "Strategic Orientations and Responsible Innovation in SMEs: The Moderating Effects of Environmental Turbulence." *Business Strategy and the Environment* 32, no. 4: 2522–2539. <https://doi.org/10.1002/bse.3283>.
- Zheng, M., G. F. Feng, R. A. Jiang, and C. P. Chang. 2023. "Does Environmental, Social, and Governance Performance Move Together With Corporate Green Innovation in China?" *Business Strategy and the Environment* 32: 1670–1679. <https://doi.org/10.1002/bse.3211>.
- Zhou, Q., R. Dekkers, and R. Chia. 2023. "Are James March's 'Exploration' and 'Exploitation' Separable? Revisiting the Dichotomy in the Context of Innovation Management." *Technological Forecasting and Social Change* 192: 122592. <https://doi.org/10.1016/j.techfore.2023.122592>.
- Zhou, Q., H. Yu, K. Adams, R. Attah-Boakyee, and J. Johansson. 2024. "Uncovering the Impact of Digital Technologies on Strategising: Evidence from a Systematic Literature Review." *International Journal of Management Reviews*. <https://doi.org/10.1111/ijmr.12387>.