

## ORIGINAL RESEARCH ARTICLE

# Unravelling the Rationales behind Business Model Innovation for Sustainable Value

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## Abstract

Despite recent research clarifying some of its core constructs, business model innovation (BMI) literature still lacks conceptual consistency, particularly regarding the architecture that articulates the mechanisms of value creation, delivery, and capture at the individual, organizational, value network, and societal levels of analysis. In response to recent research calling for the identification of BMI rationales, we draw on a systematic literature review to unravel how the rationales underlying the strategic choice to adopt BMIs shape and align the multilevel mechanisms that result in distinct coherent BMI architectures. Our contributions are twofold: first, we provide scholars with further conceptual consistency for BMI as well as new research avenues by identifying three main BMI architectures: (1) rational sympathy-based, (2) rational commitment-based, and (3) rational egoism-based. Second, this research provides a diagnostic and guiding tool to help managers select and align mechanisms within a cohesive BMI architecture to generate more sustainable value at various levels.

**Keywords:** *Business model innovation; Moral philosophy; Multilevel mechanisms; Systematic literature review*

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Both the increased use of digital technologies and consideration of social and environmental concerns have driven organizations to reconfigure their business models (BMs), that is, to adjust the ways in which they create, deliver, and capture value (Ahlgren Ode & Louche, 2024; Ancillai et al., 2023; Berends et al., 2016; Broccardo et al., 2023; Desyllas et al., 2022; Sjödin et al., 2023; Snihur & Markman, 2023; Verhoef et al., 2021; Weerawardena et al., 2021; Zhang et al., 2021). This phenomenon of BM reconfiguration (e.g., Prescott & Filatotchev, 2021), generally known as business model innovation (BMI), has become increasingly interesting to both scholars and managers and now constitutes a specific research field (Demil et al., 2018; Laszczuk & Mayer, 2020; Spieth et al., 2025; Täuscher, 2018; Wirtz et al., 2016). A BM is commonly defined as an architecture that unifies value creation, delivery, and capture mechanisms in a cohesive system of functional relations

(Teece, 2010). BMI, in turn, involves a change of one or more BM mechanisms (i.e., value creation, delivery, and capture mechanisms) and/or the architecture that connects them (Foss & Saebi, 2017).

However, it remains unclear how BMI connects with the mechanisms through which firms create, deliver, and capture value (Foss & Saebi, 2018; Maucuer & Renaud, 2019; Moingeon & Lehmann-Ortega, 2010), which has created important conceptual gaps (Spieth et al., 2025). This issue is even more concerning in the current 'openness paradigm', where organizations increasingly innovate their BMs by opening value creation, delivery, and capture mechanisms across organizational frontiers (Chesbrough, 2003; De Oliveira et al., 2021). The rapid advancement of digital technologies fundamentally further amplifies this dynamic, enabling new forms of value creation, alternative delivery channels, and innovative capture mechanisms

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that transcend traditional organizational boundaries (Merín-Rodríguez et al., 2024; Verhoef et al., 2021). Such mechanisms can be expanded at different levels, within the organization, across the value networks, with the growing collaboration of companies to implement new BMs (Matarazzo et al., 2021; Sánchez & Ricart, 2010; Solaimani et al., 2018), or at the broader societal level with sustainable business activities (Broccardo et al., 2023; Fobbe & Hilletoft, 2021; He & Ortiz, 2021; Narayan & Tidström, 2020; Velter et al., 2020). These changes involve the reconfiguration of value creation, delivery, and capture mechanisms across multiple levels – individual, organizational, value network, and societal (Bocken et al., 2013; Lepak et al., 2007). We refer to these as multilevel mechanisms, which describe how organizations design BMI across different levels.

According to insights from recent studies on BMI (Foss & Saebi, 2017; Ilyas et al., 2024; Kraus et al., 2020; Laszczuk & Mayer, 2020; Maucuer & Renaud, 2019; Menter et al., 2024; Snihur & Markman, 2023; Spieth et al., 2025; Wirtz et al., 2016), scholars have called for a multilevel approach (Bocken et al., 2013; Lepak et al., 2007) to develop a more unified conceptualization of BMI. However, to address this gap, we need to identify the main reasons why organizations reconfigure their multilevel mechanisms in specific ways. In particular, the selection and alignment of such mechanisms may be affected by managerial mental models or schemas (Martins et al., 2015), such as the rationales that underlie the decisions of organizations to adopt BMI (Grieco, 2021; Kim, 2017; Schneckenberg et al., 2019; Spiess-Knafl et al., 2015). Rationales can be defined as a 'metalogic' (Spiess-Knafl et al., 2015, p. 114): a set of principles and reasons that guide managers in their strategic decisions to adopt BMI and cohesively implement new types and levels of value creation, delivery, and capture mechanisms. Yet, such rationales have not been fully explored (Grieco, 2021), leaving an important gap in the cognitive perspective of BMI (Bhatti et al., 2021; Frankenberger & Sauer, 2019; Martins et al., 2015).

To address this gap, this research builds on Singer's (1994) 'strategy as moral philosophy' framework, which conceptualizes strategy as grounded in diverse rationales. Singer's framework identifies a plurality of strategic rationales, ranging from calculative ones that target organizational interests, to ethical ones that integrate social, political, and environmental concerns into strategic decision-making. It offers an original analytical lens to examine how various rationales, which do not constitute BMI architectures per se, shape and align the underlying mechanisms of value creation, delivery, and capture across levels, ultimately giving rise to distinct coherent BMI architectures. Accordingly, this research aims to address the following research question: 'How do the rationales underlying the strategic choice to adopt BMI help define distinct BMI architectures?'

Drawing on a systematic literature review of 79 BMI articles (see Appendix A for the list of 79 papers), this study adopts an integrative literature review approach (Torraco, 2005) aimed

at critically synthesizing existing research to develop new conceptual insights. This approach is particularly appropriate for a fragmented and evolving field such as BMI, as it enables both consolidation of current knowledge and advancement of theoretical understanding (Breslin & Gatrell, 2023; Elsbach & van Knippenberg, 2020).

By integrating and interpreting the findings, we identify three main BMI architectures based on the interaction of the most prevalent rationales that underlie BMI adoption and multilevel mechanisms. The first BMI architecture is *rational sympathy*, which focuses on cocreating and co-delivering value to end users to capture long-term profits at the organizational level. *Rational commitment* architecture, the second one, emphasizes creating and delivering sustainable value with the network and society to enable long-term creation, delivery, and capture of value at the societal level. The third BMI architecture is *rational egoism*, which involves a calculative openness to the value network for creating and delivering value, with the aim of capturing greater organizational value in the short term. By distinguishing between rationales, multilevel mechanisms, and BMI architectures, this study clarifies key conceptual ambiguities in BMI research and provides an original framework that connects managerial rationales with the configuration of multilevel mechanisms. We therefore contribute to a more comprehensive understanding of how organizations design their BMs for sustainable value creation.

## Theoretical background

### Conceptualizing distinct BMI mechanisms: A multilevel perspective

According to Teece's (2010) widely used definition of a BM (Foss & Saebi, 2017), its components include value creation, delivery, and capture mechanisms. Value creation involves the resources, capabilities, processes, and activities that firms require to generate tangible value (Carraresi & Bröring, 2021; Demil & Lecocq, 2010; Dopfer et al., 2017). Value delivery relates to how value is exchanged with various partners and customers (Baber et al., 2019; Burström et al., 2021), and value capture relates to the extent to which actors succeed in retaining for themselves a share of the value that is created (Lepak et al., 2007).

Literature on BMI shows that these mechanisms increasingly are being implemented at broader levels of analysis than the focal organization (De Oliveira et al., 2021; Frankenberger et al., 2014). This trend is reflected in the development of new BMs that create, deliver, and capture value by collaborating with close partners from the value networks of organizations (e.g., clients, suppliers, competitors, and end users) or even with social stakeholders (e.g., citizens, associations, and public institutions). Accordingly, several scholars call for the development of a multilevel approach to refine the conceptualization

of BMI, focusing on why and how value is created, delivered, and captured at multiple levels of analysis (Bocken et al., 2013; Lepak et al., 2007).

To date, the literature has identified four main levels of analysis for new BM mechanisms: (1) individual, (2) organizational, (3) value network, and (4) societal. Lepak et al. (2007) show that value can be variably created and captured at these levels. Bocken et al. (2013), using their value mapping tool for sustainable business modeling, find that in addition to being created, delivered, or captured in new ways through BMI at the organizational level (employees, investors, and shareholders), value can be missed, wasted, or even destroyed – especially at the intermediary levels of firm value networks (suppliers, partners, and customers) or wider levels of society and environment (academia, media, external agencies, government, community, and the environment) (see Table 1).

### **Perspective of ‘strategy as moral philosophy’ to identify BMI architecture**

Although the multilevel approach is promising because it offers precise insights into how value can be created, delivered, and

captured at different levels, it provides few insights into the reasons that such mechanisms get connected with distinct architectures through BMI, rather than working in isolation. That is, current multilevel studies overlook the identification of a core component of BMI, which is the architecture that unifies new BM mechanisms in a cohesive system of functional relationships (Foss & Saebi, 2018; Teece, 2010).

Because mechanisms constitute ‘an answer to a how-question underlying a causal why-question’ (Ylikoski, 2019, p. 16), a key element of developing a further conceptualization of BMI architecture is to explain how multilevel mechanisms are aligned in a specific way. In line with calls to identify the rationales (i.e., the sets of principles and reasons forming distinct metalogics) that underlie strategic choices to adopt BMI (Grieco, 2021; Kim, 2017; Spiess-Knafl et al., 2015), we draw on Singer’s (1994) ‘strategy as moral philosophy’ framework. This specific, holistic framework is, to the best of our knowledge, the only one to identify a comprehensive spectrum of rationales that guide strategic decisions. Singer (1994) defined nine rationales according to an integrative approach of moral philosophy, ranging from traditional economic rationales (individual and/or organizational interests) to more ethical ones (voluntary integration of societal

**Table 1.** Multilevels of value creation, delivery, and capture

|                | Value creation   | Value delivery   | Value capture   |
|----------------|--|--|---|
| Individual     | Process of an individual to develop skills and knowledge               | Delivering the created value by sharing their expertise              | Value capture when they receive recognition through their expertise   |
| Organizational | Creation of value by developing products and services for target users | Distribution of the products and services to customers               | Conversion of created value to sustain competitive advantage and generate revenue   |
| Value network  | Collaboration to create more value through partnerships                | Delivering value with the network of partners by sharing information | Mutual benefits from collaboration in terms of competitive advantage and revenue generation   |
| Societal       | Development of new programs and incentives to expand value to society  | Delivering of programs to different customers such as institutions   | Value capture in terms of societal impacts that could manifest through improvement of quality of life, economic development, and/or sustainable practices |

Source: Own elaboration, based on Bocken et al. (2013) and Lepak et al. (2007).

**Table 2.** Rationales that underlie strategic choices

| Rationale                | Definition   |
|--------------------------|--|
| Rational egoism          | Serves only the organization and its shareholders’ short-term interests  |
| Rational sympathy        | Serves stakeholders’ interests to achieve organizational long-term interests                                     |
| Rational commitment      | Deliberately serves a nonfinancial cause (through pursuing social and/or environmental impact)                   |
| Deliberative rationality | Undertakes a political dialogue on organizational goals with external stakeholders                               |
| Rational expressivity    | Pursues an organizational sense of autonomy  |
| Systematic rationality   | Strategy emerges over time as a function of the historical organization’s experience and capabilities            |
| Utilitarianism           | Strategy is based on a social cost-benefit analysis aimed at achieving the greatest good for the greatest number |
| Contractarianism         | Integrates justice and social fairness concerns with strategy  |
| Deontology               | Strategy is driven by respect for moral duties   |

Source: Singer (1994).

concerns) (see Table 2). By combining it with a multilevel approach of BMI, we can go further by identifying more precisely the BMI rationales that the emerging, cognitive view of BMI antecedents has not yet defined (Bhatti et al., 2021; Frankenberger & Sauer, 2019; Martins et al., 2015) and demonstrate how these rationales shape the multilevel mechanisms, leading to distinct coherent BMI architectures.

Integrating several strategic rationales as expressions of managerial cognition, thus, allows for a more comprehensive understanding of the diversity and coherence of BMI architectures. In particular, the framework conceptualizes rationales as forms of ends-rationality that vary in their degree of sophistication, reflecting advances in decision-making theories that move beyond the classical assumption of perfect rationality. Singer (1994) distinguishes between rationales focused on goal achievement (e.g., rational egoism, rational sympathy, and rational commitment) and those oriented toward the process of goal formulation itself (e.g., deliberative, expressive, and systematic rationality). The latter incorporates core principles of bounded rationality – such as the search for alternatives, satisfying rather than optimizing, and organizational learning and adaptation (Simon, 1979). This distinction echoes Simon's (1979, p. 498) separation between normative theories of decision-making ('what to decide') and descriptive theories ('how to decide'). In addition to these increasingly refined forms of ends-rationality, Singer's framework also includes forms of ethical reasoning that emphasize the means rather than the ends. These include utilitarian reasoning based on social cost-benefit analysis, contractarian views grounded in fairness and justice, and deontological reasoning based on moral duty and values. This broader perspective expands the range of schemas available to decision-makers.

By integrating this plurality of rationales from diverse decision-making traditions, Singer's framework enriches the cognitive perspective on BMI. Prior research tends to focus on a narrow range of rationales – such as sustainability-driven logic (Pinkse et al., 2023) or specific reasoning mechanisms like analogical reasoning or conceptual combination (Martins et al., 2015) – and often overlooks the coexistence, overlap, and interdependence of multiple rationales in real-world strategic decisions (Singer, 1994). Moreover, unlike prior research, which does not accommodate a multilevel analysis of BMI, our conceptualization of rationales as expressions of managerial cognition allows us to integrate different levels of value creation, delivery, and capture mechanisms. For example, while forms of ends-rationality are typically centered on the organizational level, ethical reasoning engages mechanisms that operate at the value network and societal levels. When applied to the specific objective of BMI adoption, the framework can address both constrained and voluntary rationales that guide BMI adoption, as well as those driven by the goal of capturing more economic value at the organizational level (i.e., traditional, profit-driven BMI) or that

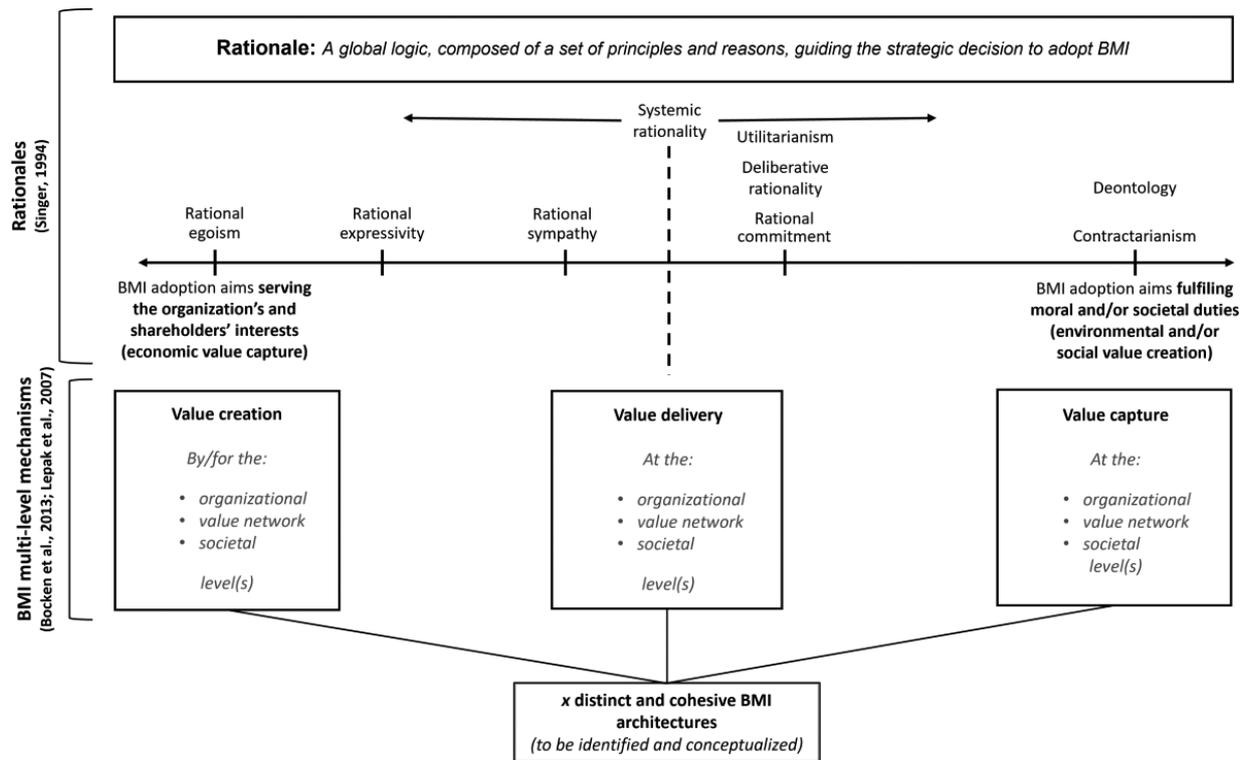
aim at social and/or environmental value creation beyond organizational frontiers (i.e., sustainable BMI) (Bocken et al., 2013).

With this 'strategy as moral philosophy' framework, we can go further by identifying more precisely the BMI rationales (Bhatti et al., 2021; Frankenberger & Sauer, 2019; Martins et al., 2015) and how they work cohesively within the same architecture while operating at distinct levels of analysis (see Figure 1). Crucially, rationales serve as cognitive metalogics that guide managerial choices and ensure coherence within BMI – a perspective consistent with the cognitive approach to BMI, which highlights the role of mental schemas in shaping BMI design (Bhatti et al., 2021; Frankenberger & Sauer, 2019; Martins et al., 2015).

## Review methodology

The *Cochrane Handbook for Systematic Reviews* (Higgins & Green, 2011, p. 6) defines systematic review as a methodology that aims to collect 'all evidence that fits pre-specified eligibility criteria in order to answer a specific research question; it uses explicit systematic methods that are selected with a view to minimizing bias, thus providing more reliable findings from which conclusions can be drawn and decisions made'. This method is particularly appropriate for our research because of its exploratory nature (Tranfield et al., 2003). We propose to explore and synthesize a large body of literature on BMI to reveal the various rationales behind BMI adoption and their associated architectures of multilevel mechanisms.

Beyond exploration and description, our review is conceived as an integrative literature review, a genre of scholarly work that aims to 'critique and synthesize representative literature on a topic in an integrated way such that new frameworks and perspectives on the topic are generated' (Torraco, 2005, p. 356). Integrative reviews seek to derive new theoretical insights by critically analyzing and reconfiguring existing research (Elsbach & van Knippenberg, 2020), especially in fragmented or emerging domains. In the context of this study, our integrative review specifically brings together BMI research that explicitly examines both the mechanisms of value creation, delivery, and capture, and the rationales associated with such mechanisms shaping BMI adoption. Although conceptually rich, this body of work remains fragmented across strategic management perspectives, spanning from firm-level efficiency-based views to societal-level sustainability-oriented approaches. Our integrative approach aims to bridge these fragmented research streams by exploring how different rationales shape and align with multilevel BMI mechanisms, thus contributing to advancing the cognitive perspective of BMI (Bhatti et al., 2021; Frankenberger & Sauer, 2019; Martins et al., 2015). Integrative reviews typically combine two functions: 'taking stock' of the current literature and 'moving forward' by offering a novel conceptual contribution. This process of systematic exploration



**Figure 1.** Synthesis of theoretical framework for studying BMI architectures.

Source: Own elaboration.

BMI, business model innovation.

serves as a foundation for a deeper integrative effort, whereby we not only map and describe existing knowledge but also critically connect, interpret, and reorganize it to produce a value-added theoretical framework. By engaging in this integrative process, this study moves beyond descriptive synthesis to develop an original framework that highlights how diverse rationales shape and align multilevel mechanisms in BMI. This approach is well adapted to the aim of integrative reviews, which is to generate new conceptual insights from existing bodies of knowledge (Breslin & Gatrell, 2023; Elsbach & van Knippenberg, 2020; Patriotta, 2020). In this sense, our work offers both a consolidation of what is known and a platform for future theoretical development in the field of BMI.

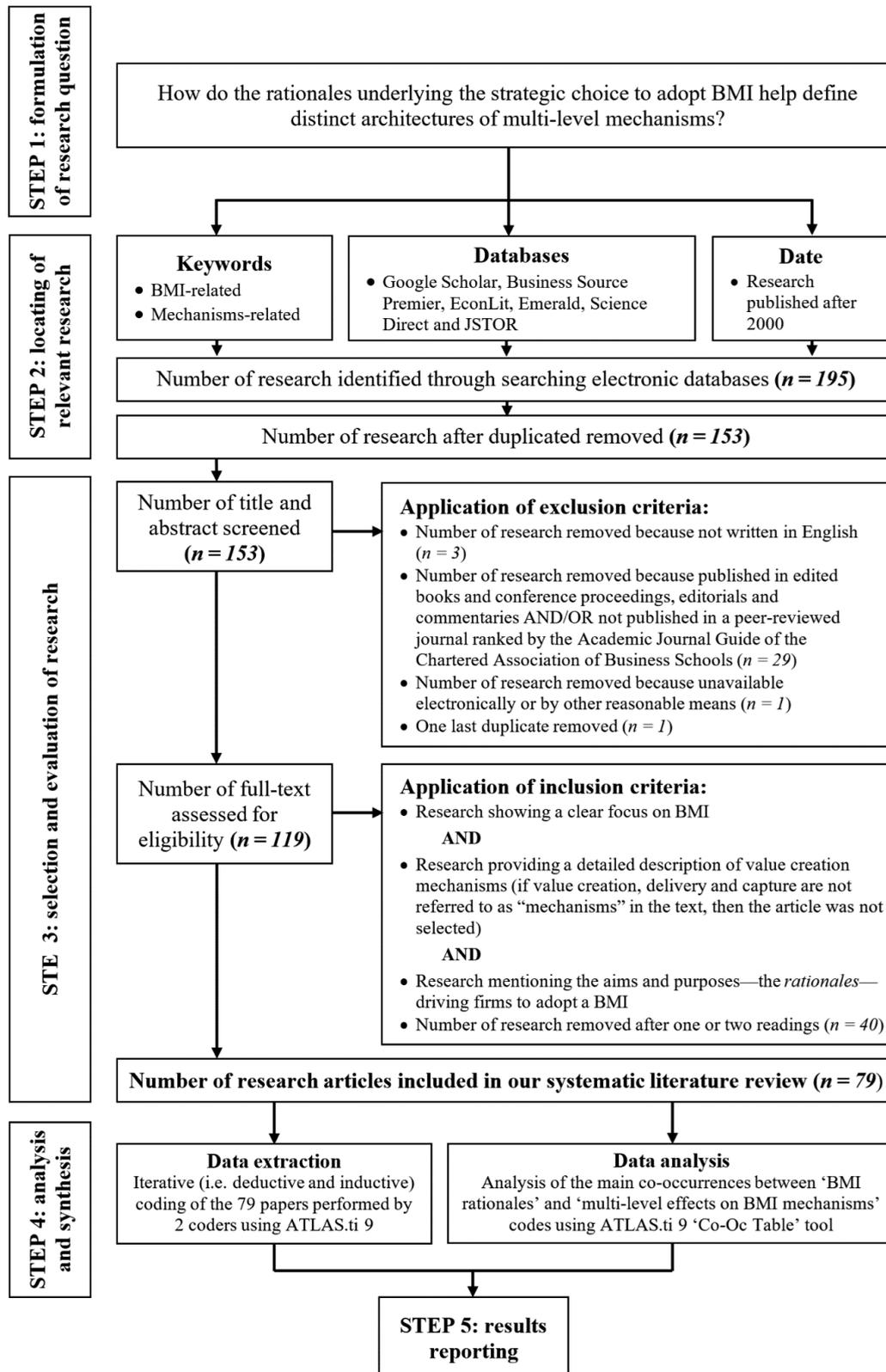
To ensure the rigor and transparency of the process, we adopted the five-step methodology developed by Denyer and Tranfield (2009). Accordingly, we have specified the parameters of our review (keywords, databases, time spans, and languages) and the procedure used to select the studies, using consecutive exclusion and inclusion criteria. Figure 2 summarizes this protocol.

### Locating relevant research

We undertook a preliminary literature review (Foss & Saebi, 2017, 2018; Lepak et al., 2007; Singer, 1994) to identify the key

concepts and keywords for our database search, as it is usually the first step of a systematic literature review (Bakhuis et al., 2024; Bejjani et al., 2023; Marikyan et al., 2019). We used keyword combinations related to BMI and its associated value creation, delivery, and capture mechanisms; these combinations generated a total of 48 search strings (see Table 3). To avoid any omissions in terms of keywords, our initial list was reviewed and validated by two senior professors recognized as experts in the field of BMs. Additionally, the keyword selection was discussed during a workshop held at a leading strategy conference, where it received feedback from multiple scholars specializing in BM research. In line with previous research, we generated a list of keywords with broad coverage (Kauppi et al., 2018; Müller-Seitz, 2012).

We conducted our search in late 2021 on Google Scholar, Business Source Premier, EconLit, Emerald, Science Direct, and JSTOR, all search engines we judged to cover the relevant literature. We chose differing settings depending on the capacities of each database. In Google Scholar, with its cross-discipline coverage and elementary research criteria, we searched only the titles for keywords. In Business Source Premier, EconLit, Emerald, and JSTOR, we added abstracts, and in Science Direct, we added keywords to our search. In each case, we followed Wirtz et al. (2016) to consider only articles published since 2000, the year that corresponds to the emergence of BMI



**Figure 2.** Summary of systematic review protocol.  
Source: Own elaboration.  
BMI, business model innovation.

**Table 3.** Keywords used in systematic literature review

| BMI-related keywords           | Mechanism-related keywords |
|--------------------------------|----------------------------|
| Business model innovation      | Value creation             |
| Business model change          | Value generation           |
| Business model reconfiguration | Value delivery             |
| Business model transformation  | Value distribution         |
| Business model adaptation      | Value capture              |
| Business model evolution       | Value appropriation        |
| Business model dynamics        |                            |
| Business model reinvention     |                            |

Source: Own elaboration

Note: although central to our research question, the terms 'architectures' and 'rationales' were not included to keywords for launching databases and selecting BMI articles because they are too scarcely used in current literature, whereas mechanisms-related keywords are widely mobilized (Foss & Saebi, 2017, 2018). BMI, business model innovation.

literature as a field. This screening process enabled us to identify a total of 195 studies, which we reduced to 153 after checking for duplicates.

### Selection and evaluation of research

The next step of our review was carried out by one researcher and consisted in applying exclusion factors to the 153 identified studies (see Figure 2). First, we excluded three research papers that were not written in English. While this language restriction may omit some relevant studies, it reflects a common and accepted practice in systematic literature reviews within management research, where English is the predominant language of scientific communication (Bakhuis et al., 2024; Bejjani et al., 2023; Kaur et al., 2021). Notably, several prior reviews (e.g., Ellwood et al., 2017; Jayatilke & Lai, 2018; Nolan & Garavan, 2016; Yu, 2023) have applied similar criteria, citing accessibility and the widespread use of English in research as key reasons. We acknowledge that this represents a limitation of our study, potentially excluding valuable contributions published in other languages; however, it allows for a focused and manageable corpus that aligns with international scholarly standards. Second, we decreased the number of references to 121 by excluding studies published in edited books, conference proceedings, editorials, commentaries, and case studies (e.g., for teaching purposes), thus retaining only peer-reviewed papers, as traditionally done in systematic literature reviews (Bhimani et al., 2019; Cheng et al., 2023; Le Loarne-Lemaire et al., 2021). All peer-reviewed articles were included regardless of their methodology, encompassing qualitative, quantitative, mixed-method, and conceptual research. We only included articles published in journals ranked by the Chartered Association of Business Schools. This approach was consistent with our objective of selecting and analyzing literature of adequate quality by integrating all peer-reviewed journals, as proposed by many authors of systematic reviews

(Ardito et al., 2015; Vilariño del Castillo & Lopez-Zafra, 2022; Wiewiora et al., 2019). This criterion also reflects Podsakoff et al.'s (2005) assertion that only publications in peer-reviewed journals can be considered validated knowledge that is likely to have an impact on scholarly discourse. Third, we excluded one reference that was unavailable electronically or by other reasonable means and removed another reference that was identified as a duplicate and overlooked during the initial screening process, reducing the number of papers to 119 (see Figure 2).

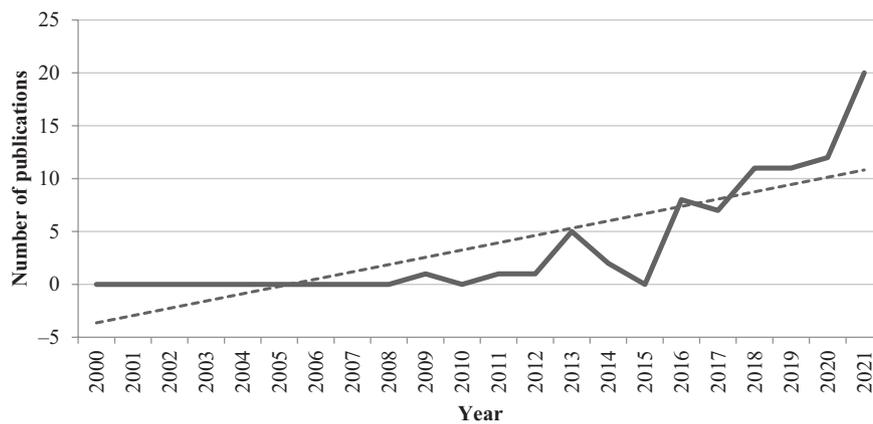
At this stage, two researchers independently read the 119 articles in full and evaluated them based on three explicit inclusion criteria, with a third researcher acting as an arbitrator in cases of disagreement. The criteria were as follows:

1. This study must demonstrate a clear focus on BMI;
2. This study must provide a detailed description of value creation mechanisms, meaning that at least one of the terms, value creation, delivery, or capture, must be referred to explicitly as a mechanism within the body of the text (articles that did not conceptualize these processes as mechanisms were excluded);
3. This study must include an explicit mention of the aims and purposes – or rationales – that drive firms to adopt BMI.

Applying these criteria led to a reduction from 119 to 86 articles. Subsequently, a second reading of the selected articles during the coding process led to the exclusion of an additional seven papers. Specifically, two articles were excluded for lacking a clear focus on BMI (criterion 1), and five were excluded for failing to sufficiently address the rationales behind BMI adoption (criterion 3), thus resulting in a final sample of 79 articles. We carried out a descriptive analysis before undertaking the coding process to highlight the corpus's main features. First, we analyzed the chronological evolution of the 79 articles, finding that only 10 were published before 2016, which marked the beginning of a significant growth in publications demonstrating the increasing academic interest in BMI (see Figure 3). Second, we found that though the articles of the corpus were published in 36 journals, two journals – *Journal of Cleaner Production* and *Journal of Business Research* – contributed the most entries (17 and 14 entries, respectively) (see Appendix B for an overview of included journals). Third, the majority of the selected articles (56) used qualitative methodologies; only eight used a quantitative methodology, and six employed mixed methods. The corpus also includes nine conceptual papers.

### Analysis and synthesis

We coded the 79 papers using ATLAS.ti 9 software, relying on an iterative theorizing approach (Corbin & Strauss, 2008; Saldaña, 2021). This methodology consisted of moving back



**Figure 3.** Evolution of publications per year.

and forth between an initial theoretical codebook (composed of the main categories of BMI rationales and multilevel mechanisms) and data that served to enrich the codebook with frequently emerging constructs, thereby developing new knowledge through the detection of patterns across the investigated thematic areas (Miles et al., 2020). Throughout the coding process, our initial theoretical codebook was enriched with new, frequently appearing concepts, which the research team discussed before adding to a 'free codes' group. Initially, two of the authors performed the coding procedure. Each author first reviewed the same sample of papers and codified data using ATLAS.ti 9 and then validated the coherence and consistency of the coding to ensure the accuracy and reliability of the data (Nolan & Garavan, 2016). This first phase of coding the same sample of papers helped ensure coding integrity.

We conducted a three-step coding process to systematically examine the relationship between rationales and multilevel mechanisms. This process involved both deductive and inductive reasoning and was performed using ATLAS.ti 9 (Appendix C displays the final code book). The first step concerned the identification of dominant rationales in each paper: To identify the rationale behind each case of BMI, we applied a deductive approach based on Singer's (1994) nine rationales. Two authors jointly reviewed an initial sample of papers to align their understanding of the rationale definitions and ensure consistency in coding (Appendix D provides definitions and example verbatim for each rationale). The authors then proceeded to code the full corpus individually. In line with Saldaña's (2021) guidelines for qualitative coding, a final recoding cycle was conducted to improve consistency, avoid over-interpretation, and capture any potentially missed text segments. For example, the article by Best et al. (2021) was coded as rational commitment because the BMI served a non-financial, mission-driven goal. Representative quotes include the following: 'achievement of social mission', 'how superior social value can be delivered', and 'creation of social value'. The second step focused on identifying the three multilevel mechanisms (value creation, value delivery, and value capture). This inductive

coding allowed us to trace how BMI operates through mechanisms beyond the firm level. Although BMI mechanisms are well established in the literature, we identified and classified multilevel mechanisms inductively based on how they were described in each article. This was necessary because literature often uses various terminologies, which required interpretive work to map corpus evidence onto the multilevel mechanism categories. In the Best et al. (2021) article, for instance, statements such as 'SPO networks identified that operating within a value network demanded changes to the value propositions' and 'improved workplace equality and diversity simultaneously created social value through heightened opportunities for social inclusion' were coded as value creation at the network and societal levels. Similarly, the quote 'value networks as a way of delivering superior value' was coded as value delivery at the societal level.

The third step was to generate a co-occurrence table in ATLAS.ti 9 using the 'Co-Oc Table' tool that cross-tabulated BMI rationales and multilevel mechanisms. Each cell in the table contained the number of times that a specific rationale co-occurred with a given multilevel mechanisms combination. This table allowed us to identify which rationales were most consistently associated with particular mechanisms across levels. For example, frequent co-occurrences of rational sympathy with value creation and delivery at the network level, combined with value capture at the organizational level, indicated a coherent pattern associated with that rationale. Conversely, rational commitment showed frequent co-occurrences with creation and delivery at societal and network levels. Based on these patterns, we conducted an interpretation process by filtering out rationales with low co-occurrence frequencies. For the remaining rationales, we examined the dominant combinations of mechanisms across levels to identify BMI architectures. An architecture was identified when a particular rationale exhibited the recurrence association of a specific configuration of value creation, delivery, and capture multilevel mechanisms. Through this process, we identified three prevalent BMI architectures: rational sympathy based, rational commitment based, and rational egoism based.

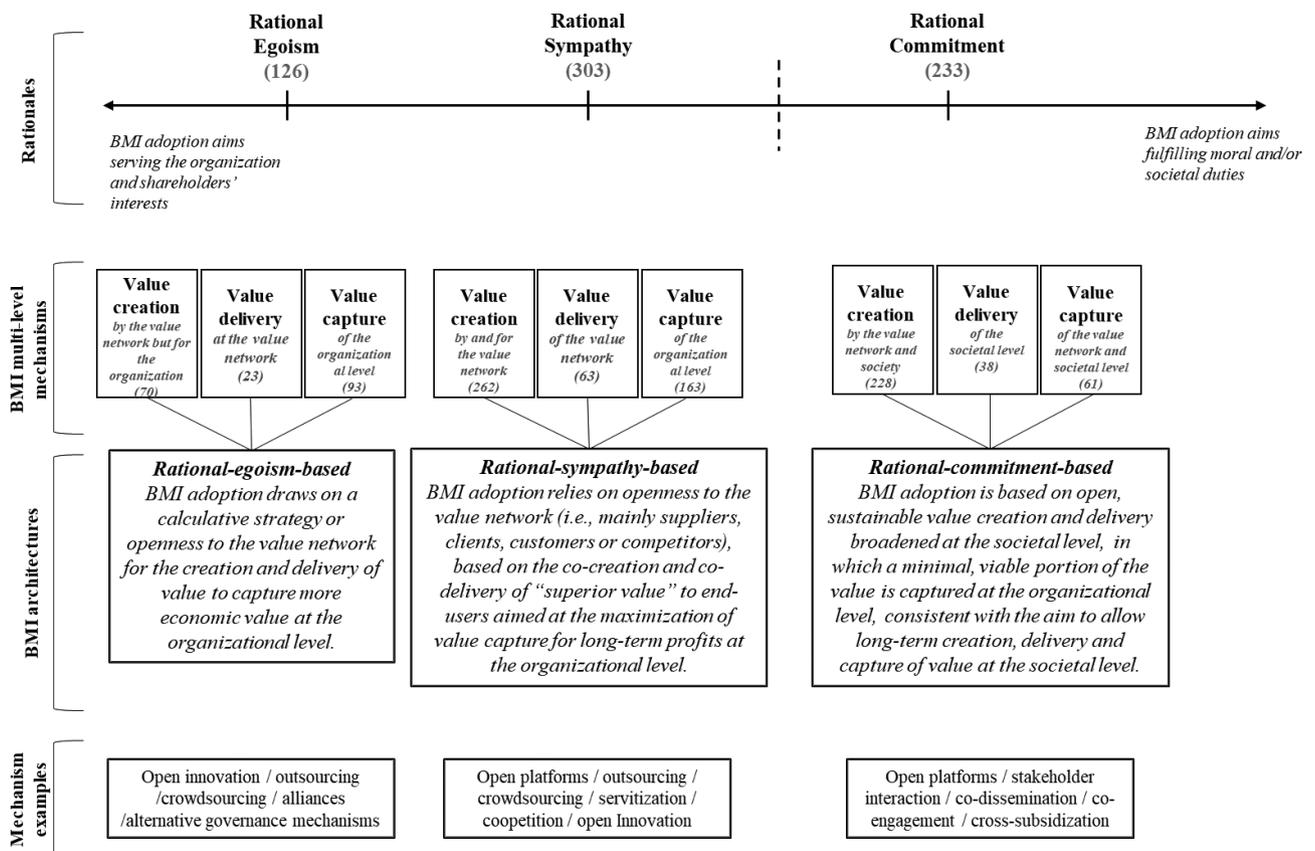
**Findings**

Building on the Singer (1994) framework (see Figure 1), our analysis revealed the presence of all nine rationales across the corpus. Examination of their co-occurrence patterns with multilevel mechanisms allowed us to delineate three distinct BMI architectures, each associated with a dominant rationale: rational sympathy, rational commitment, and rational egoism. Figure 4 depicts three BMI architectures that result from distinct configurations of multilevel mechanisms shaped by different managerial rationales. While rationales ensure coherence across levels, they do not, by themselves, form the BMI architecture.

**Rational sympathy-based architecture**

The most prevalent BMI architecture is shaped by a rational sympathy rationale. This rationale reflects a moral orientation

whereby there exists a perceived responsibility to address broader social and environmental challenges. This aligns with general stakeholder theory in strategic management, which sees it as rational to consider the interests of others that pose legitimate constraints (Ansoff, 1965). By serving the interests of stakeholders, the 'sympathy' form of extended rationality constitutes a cautious and pragmatic means of achieving long-term egoistic goals (Singer, 1994). Applied to BMI adoption, this rational sympathy serves as the underlying logic that shapes and aligns multilevel mechanisms into a coherent BMI architecture. This rational sympathy-based architecture manifests as a calculative BMI strategy of openness to value networks (including stakeholders, such as suppliers, clients, customers, or competitors), aimed at cocreating and co-delivering 'superior value' to end users (Best et al., 2021; Burström et al., 2021; Rossignoli & Lionzo, 2018; Sousa-Zomer & Cauchick-Miguel, 2018; To et al., 2020). This architecture ultimately seeks to maximize value capture for long-term profit



**Figure 4.** Three main BMI rationales and associated architectures of multilevel mechanisms.

Source: Own elaboration.

Notes: Figure 4 illustrates three BMI architectures that emerge from distinct patterns of multilevel mechanisms shaped by different rationales. Rationales bring coherence to mechanisms across levels but do not themselves define BMI architectures. BMI architectures emerge from the interaction between cognitive metalogics (rationales) and multilevel mechanisms. (The numbers in brackets correspond to the frequency of occurrences associated with each rational and multilevel mechanism. It is important to note that a single paper may demonstrate several rationales.) BMI, business model innovation.

at the organizational level (Agarwal et al., 2021; Matzler et al., 2013; Reficco et al., 2021; Shomali & Pinkse, 2016; Singer, 1994; Yang et al., 2018). A network's engagement in value cocreation and co-delivery represents the 'means', as referred to by moral philosophy, whereas the 'end' is to maximize long-term profits through value capture (Singer, 1994).

In this architecture, firms cocreate and deliver value by building strong networks, mainly with suppliers, customers, clients, and even competitors from different industries (Best et al., 2022; Brock et al., 2019; Fjeldstad & Snow, 2018; Jensen et al., 2019; Rachinger et al., 2019; Short et al., 2014; Wu et al., 2013). However, the value created by and for the networks is largely captured at the organizational level. For instance, the use of open platforms (Brock et al., 2019; Fehrer et al., 2018; Gebauer et al., 2020; Kukkamalla et al., 2021; Rask & Günzel-Jensen, 2020) creates value for the ecosystem, but it is primarily the organization that captures the benefits. Outsourcing (Abrahamsson et al., 2019; Ritter & Schanz, 2019; Sjödin et al., 2020) involves other actors across the supply chains, but firms orchestrate, control, and then capture most of the value created. Other mechanisms that we found in this architecture are crowdsourcing (Bagheri et al., 2020; Rayna & Striukova, 2016), servitization (Kamalaldin et al., 2020; Müller et al., 2018; Simonsson & Agarwal, 2021; Visnjic et al., 2016), coopetition (Best et al., 2022; Carraresi & Bröring, 2021), and open innovation (Yderfält & Roxenhall, 2017). All of these mechanisms are cocreating value within the networks, but much of that value is actually captured by the firm itself.

As an example of the value created by the networks and captured at the organization level, manufacturing and software firms have pursued service market strategies to achieve differentiation in increasingly commoditized product markets and to increase their financial performance at the organizational level. For instance, industrial manufacturers such as Caterpillar and Atlas Copco offer maintenance and monitoring services for their equipment. The most advanced stage of this shift to services is an outcome-based market strategy, whereby the firm guarantees the outcome that the customer requires. In the end, by guaranteeing the results that the customer is seeking, firms take on the risks and uncertainties formerly shouldered by customers. However, from the firm's perspective, this creates value by securing long-term revenue streams (Visnjic et al., 2018). Similarly, Short et al. (2014) described how the British Sugar company embarked on an incremental process of innovation to deliver efficiency and develop new tomato product lines to enhance the company's competitive position in the market and capture value at the organizational level.

Paradoxically, though the long-term result of mechanisms embedded in the rational sympathy-based BMI architecture is to capture more value at the organizational level, most organizations that open their BMs to cocreating and co-delivering value with their value networks face the significant risk

that this shift will not provide the expected value. Weissbrod and Bocken (2017) identify tensions among consumers, suppliers, and firms with regard to profit maximization, especially when firms rely on servitization and coopetition (Best et al., 2022), in which value network partners are likely pursuing their own economic and profit maximization interests in the short term through value co-creation and co-delivery mechanisms (Baber et al., 2019). This pursuit can result in interorganizational tensions related to the sharing of captured value. With this in mind, previous research recommends that firms seeking to innovate their BMs on the basis of such mechanisms also implement contractual governance to ensure fairer distribution of the captured value, in order to better capture value at the organizational level in the long term (Bouncken et al., 2016b; Hofmann, 2019; Kamalaldin et al., 2020; Lehtimäki et al., 2020).

### **Rational commitment-based architecture**

The second most prevalent BMI architecture relies on rational commitment rationale. This BMI architecture is aligned with Sen's conception (Sen, 1977), which involves overriding (but rational) commitment to a nonfinancial cause (Singer, 1994), closely connected with one's morals, and often expressed as a form of altruism. This corresponds to the special ethos of a not-for-profit organization. In the context of BMI, this architecture can be conceptualized as an open and sustainability-oriented approach to value creation and delivery, extended to the societal level (engagement of various external stakeholders such as citizens, communities, and Non-Governmental Organizations (NGOs), in addition to traditional value network partners). A minimal, viable portion of value must be captured at the organizational level, consistent with the aim of enabling long-term creation, delivery, and capture of value at the social level. In contrast with the means of the rational sympathy-based architecture, the 'means' of rational commitment-based architecture represents the capture of a viable portion of value at the organizational level (to cover costs associated with conducting sustainable activities), and the 'end' is the engagement of external stakeholders at the societal level in the sustainable conduct of business activities for long-term value creation, delivery, and capture at the societal level (Barth et al., 2021; De Silva et al., 2021; Kuckertz et al., 2019; McDonald et al., 2021; Ritter & Schanz, 2019; Siebold, 2021; Singer, 1994).

Most of the mechanisms used in this architecture are value discovery through open innovation (Angeli & Jaiswal, 2016; De Silva et al., 2021) or stakeholder interaction (Fobbe & Hilletoft, 2021; Hofmann, 2019; Klein et al., 2021); these mechanisms are used to identify societal needs with stakeholders for co-formulating sustainable value propositions. Other mechanisms that are frequently associated with rational commitment are co-dissemination (or contamination) and co-engagement of social

objectives with value networks (Best et al., 2022; Fobbe & Hilletoft, 2021), as well as cross-subsidization, consisting of increasing service and product prices for the wealthiest consumers to lower them for the poorest (Angeli & Jaiswal, 2016). For instance, Björklund et al. (2020) suggest that the value created by value networks of donors, volunteers, and public or private partners can help local communities (i.e., create value for society). In addition to generating goods or services with the help of donors and volunteers, organizations may collaborate with public and private partners, according to shared social goals, to generate collaborative solutions to social problems (Layrisse et al., 2021; Nussholz, 2018; Shakeel et al., 2020; Siebold, 2021). In the rational commitment-based architecture, some authors have identified several ways of implementing cross-subsidization in circular economy models, particularly through modular technological architectures and platform openness. In this context, cross-side network effects are built due to complementors that can provide circular and resource-efficient solutions for users (e.g., Konietzko et al., 2020). Furthermore, Gebauer et al. (2017) identify specific BMs in the base-of-the-pyramid market and highlight the collaborative, complex, and inclusive elements used to provide goods and services. Consistent with the creation of value for society, these firms deliver value mainly at the societal level. Siebold (2021) also argues that organizations can integrate beneficiaries as a part of their workforces during the value delivery process. In such cases, the value delivery mechanism at the societal level considers recipients to be not only beneficiaries but also active partners. Organizations may also use their competitors for BMI in the value delivery mechanism by learning how to enhance service quality in providing goods and services for end users. Best et al. (2021) illustrated this architecture by using multiple case studies. They found that by collaborating with each other, social purpose organization networks (ISN and SE2) increased their market share and could deliver superior social value, leading to greater economic value and enhanced social impact by improving welfare reform, enhancing social inclusion and justice, and aiding workplace diversity.

Interestingly, in this BMI architecture, digital platforms in sustainability transitions can provide a distinct and effective way to implement a fundamental change in how firms create, deliver, and capture value (e.g., Bharadwaj et al., 2013; Blackburn et al., 2023; Ciulli et al., 2020; Sjödin et al., 2021). By facilitating collaboration and contribution, digital platforms change BM revenue streams to provide environmental improvements through the implementation of circular BMs (e.g., Acquier et al., 2017; Pinkse et al., 2023). Similarly, sustainable transitions enable organizations to create social and environmental value for customers, as well as for a wider set of stakeholders (Pinkse et al., 2023; Schaltegger et al., 2016) consistent with the aim of facilitating long-term creation, delivery, and capture of value at the network and societal level (see Figure 4).

However, in this rational commitment architecture, firms tend to capture the value they create mainly at the organizational level and, to a lesser extent, at the societal level. This approach prioritizes the economic viability of the organization over its economic profitability (Geissdoerfer et al., 2018) while providing a focus on ethical action (Best et al., 2021). This demonstrates that (1) firms primarily capture value for the sake of viability, as a means to ensure they maintain or expand their social impact, and (2) the value they create can ultimately be captured at the societal level. Kuckertz et al. (2019) provide empirical evidence that ecological startups exploit ecological opportunities not only to maximize profit but also to create and capture economic, ecological, and social value by integrating these values within their BM. One major issue found within a rational commitment-based architecture is the risk of mission drift (Best et al., 2021) or the inversion of BM means and ends (switching from a social purpose model based on financial viability to a profitability-oriented model based on social activities). From a moral philosophy perspective, such mission drift indicates the adoption of a rational sympathy-based BMI architecture, characterized by a traditional calculative rationale that focuses on individual or organizational interests (Singer, 1994).

### **Rational egoism-based architecture**

This architecture, grounded in rational egoism rationale, emphasizes pursuing organizational self-interest and aligns with the normative theory of shareholder value (Alchian & Demsetz, 1973; Friedman, 1970; Jensen & Meckling, 1979). When managerial incentives and reward systems are properly aligned, the pursuit of self-interest by individuals and the creation of value by firms are considered ethically equivalent in both their rationale and moral justification (Singer, 1994). Similar to rational sympathy-based architecture, this architecture relies on its openness to value networks as a means of creating and delivering value, employing the same strategic mechanisms and pursuing the same goal of organizational profit maximization (Singer, 1994). However, it focuses more narrowly on short-term profits maximization and cost reduction by leveraging transactional relationships with value networks in the development of products and services (Abrahamsson et al., 2019; Agarwal et al., 2021; Baber et al., 2019; Günzel & Holm, 2013; Schneckenberg et al., 2017; Sorri et al., 2019). Although firms with rational egoism-based architecture use value networks opportunistically as a 'means' of enhancing the creation and delivery of value, their 'ends' tend to restrict economic value capture almost exclusively to the organizational level and to serve the short-term economic interests of shareholders, as expressed in profitability. In contrast, BMI adoption following rational egoism-based architecture results in the configuration of several mechanisms across levels. Thus, the mechanisms of value creation are used by the value network, either for the

network or the organization (i.e., shareholder value creation). Accordingly, most types of mechanisms in this architecture do not differ from those we identify in the rational sympathy-based architecture, in that value is mainly created, delivered, and captured through outsourcing (Abrahamsson et al., 2019), open innovation (Bagheri et al., 2020; Brock et al., 2019), and crowdsourcing (Bagheri et al., 2020; Brock et al., 2019). A prime example of rational egoism-based architecture can be found in the fast fashion model; the Spanish retailer Zara completely changed their BM to maintain a competitive advantage in an industry of ever-shrinking margins. They changed their retailing activities to ensure a faster turning inventory and to cut down on the need for excessive markdowns. To do that, they modified how Zara interacts with its suppliers to accommodate Zara's new supply chain methods. Zara is now one of the most profitable clothing retailers in the world (e.g., Sorescu et al., 2011).

Compared to architecture based on rational sympathy rationales, this egoism-based architecture is distinct because of the modes of governance used to create and deliver value at the value network level and to capture more organizational value (Bashir & Farooq, 2019). Some authors propose that firms transform the value created at the value network level to obtain economic advantages in their own economic interests (e.g., Baber et al., 2019; Björkdahl, 2009). Other studies identify more specific governance mechanisms that aim to derive a competitive advantage from external transaction efficiency and cost reduction (Abrahamsson et al., 2019). For example, for the purpose of optimizing and reducing costs and increasing profits, firms may outsource activities to the network to create value, use supplier integration, or implement resource planning (Rodriguez et al., 2020). In this way, they gradually become involved in value networks and new types of partnerships, accumulating new know-how and converting innovations into profitable new BMs. Rational egoism companies are also likely to rely on governance arrangements, such as establishing short-term alliances to maximize organizational value capture by bargaining with alliance members (Bouncken et al., 2016a). In this governance mechanism, used mainly by incumbent firms aiming to secure monopolistic positions in their markets (Sabatier et al., 2012), partners rapidly find themselves in conflict due to the misalignment of appropriation of value, resulting in quick ruptures of such alliances (Bouncken et al., 2016a).

Across the three BMI architectures identified, managerial rationales play a structuring role by aligning BMI mechanisms across levels into coherent and distinctive BMI architectures. These architectures are not mere aggregations of mechanisms, but coherent configurations guided by underlying rationales. The rationale acts as the 'glue' that holds together mechanisms operating at different levels, ensuring internal coherence and providing unifying logic to the architecture as a whole.

## Research avenues

Our preceding identification and analysis of the main BMI architectures encourages us to propose three promising research avenues for addressing current literature gaps on BMI adoption, which can be studied by complementing our multi-level framework with strategy and moral philosophy (Singer, 1994).

### **Qualifying the alignment of value creation, delivery, and capture mechanisms in BMI**

Many of the articles we analyzed in our systematic literature review emphasize the lack of a 'holistic' perspective on BMI (e.g., Reinhardt et al., 2019). Scholars thus call for the joint consideration of value creation and value capture mechanisms and of the process that enables their alignment (Foss & Saebi, 2018; Sjödin et al., 2020). Social and sustainable BMI (SBMI) literature particularly highlights this gap, asserting that value creation and capture mechanisms must be cohesively designed to ensure both the pursuit of a social and/or environmental mission and the organization's financial viability (Best et al., 2021; De Silva et al., 2021; Fobbe & Hilletoth, 2021; Velter et al., 2020). Although recent research has contributed by identifying organizational tensions between potentially misaligned value creation and capture mechanisms in social and hybrid BMI (Best et al., 2021; Ileanachor et al., 2021; Klein et al., 2021), much work remains to be done in understanding how this alignment can be qualified and achieved (Sjödin et al., 2020).

Our framework, which draws on Singer's (1994) approach, offers a new integrative lens to examine multilevel (mis)alignment between value creation, delivery, and capture mechanisms according to the different managerial rationales. Researchers could build on our framework to identify whether the value creation, delivery, and capture mechanisms implemented with BMI are consistent with one of the three main BMI architectures we identify (rational egoism, rational sympathy, and rational commitment). Misalignments become apparent when multilevel mechanisms draw from different types of architectures (e.g., value creation mechanisms belong to rational commitment-based architecture, but value capture mechanisms belong to rational egoism-based architecture).

### **Managing tensions in BMI collaborative adoption**

A growing number of organizations collaboratively use BMI to cocreate and co-deliver value within their value networks (mainly composed of clients, suppliers, competitors, and customers), in an effort to capture more organizational value (Visnjic et al., 2018) and/or enhance added value for end users (Sorescu et al., 2011; Wirtz & Daiser, 2018). However,

interorganizational tensions hamper the pursuit of such objectives (Best et al., 2021, 2022; Bouncken et al., 2016b; Brock et al., 2019; Solaimani et al., 2018; Visnjic et al., 2018). Some authors thus call for research to refine the types of responses that organizations can use to avoid such barriers and implement more durable external partnerships through BMI collaborative adoption (Best et al., 2021; Bouncken et al., 2016b; Fehrer et al., 2018; Solaimani et al., 2018; To et al., 2020; Velter et al., 2020).

We propose that research into cases of collective or collaborative BMI adoption by organizations and their network partners (Best et al., 2021, 2022) could apply our conceptual framework (which adopts Singer's [1994] rationales) to qualify the types of alignments required among partners and check for potential tensions. This can be done by identifying the BMI architectures of the different actors in the partner network in order to identify alignments as well as potential tensions in cases where the rationales between the firm and its partners are not aligned. This approach would help researchers frame alignment tensions, such as those between profit-driven (rational egoism or rational sympathy) and mission-driven (rational commitment) BMI (Best et al., 2021). Scholars could study the types and levels of responses to tensions found within networks, based on the rationales employed by actors engaged in the same collective BMI.

### **Dynamics of rationale change in BMI and effects on value creation, delivery, and capture mechanisms**

Many of the papers we analyzed consider changes in BM 'logic', which is 'a re-conceptualizing of the purpose of the firm and the value creating logic' (Bocken et al., 2014, p. 43), to be a crucial characteristic of BMI (e.g., Björklund et al., 2020; Bosbach et al., 2020; Hanafizadeh et al., 2021; Rask & Günzel-Jensen, 2020; Sabatier et al., 2012; Schneider et al., 2013; Yang et al., 2017). Accordingly, several scholars call for more dynamic views of BMI that can provide a clear picture of the external and internal elements that lead to BM logic change and the impact these elements have on value creation, delivery, and capture mechanisms at different stages of the BMI process (Best et al., 2021; Fehrer et al., 2018; Gebauer et al., 2020; Hoßbach et al., 2016; Kastalli & Van Looy, 2013; Schneckenberg et al., 2019).

Because each rationale corresponds to a 'metalogue' (Spiess-Knafl et al., 2015, p. 114) that entails the ends and aims of BMI, research that adopts a dynamic, process-driven perspective on BMI could use our framework to identify the main rationale that dominates each phase of BMI (adoption, development, and leveraging) and thereby determine the extent to which the BM logic evolves throughout the overall process. In line with Best et al. (2021), we anticipate there may be differing

effects on value creation, delivery, and capture mechanisms during the adoption, development, and leveraging phases, depending on the extent of BM change. For example, during adoption phases, cognitive changes may primarily affect value creation mechanisms; during development phases, structural changes could reshape value delivery systems; and during leveraging phases, strategic changes may impact value capture mechanisms. Similarly, our multilevel framework could help researchers refine their analyses of rationale changes and the effects on multilevel mechanisms, by providing an in-depth understanding of how rationale changes unfold and influence core BMI components over time.

Beyond these avenues, we also encourage researchers to empirically examine and apply the proposed framework across diverse organizational and institutional contexts. Both qualitative and quantitative studies – particularly multi-case designs – can examine how rationales align with multilevel mechanisms. Such research could further expand understanding of underrepresented rationales (e.g., expressive, deliberative, and systemic rationality, as well as contractarianism, utilitarianism, and deontology) and underexplored mechanisms. While the examples discussed in this paper serve primarily as illustrative cases to clarify theoretical reasoning, future empirical validation remains necessary to test and refine the proposed framework.

### **Implications and conclusion**

With our systematic review of 79 papers, spanning a period of 21 years, we contribute to BMI literature in two main ways. First, by distinguishing between rationales and multilevel mechanisms, we provide BM scholars with a more precise and unified framework to better understand how organizations design their BMI. Specifically, we identify and characterize three coherent BMI architectures that emerged from the interaction between cognitive metalogics (rationales) and multilevel mechanisms: (1) rational sympathy-based (cocreating and co-delivering 'superior' value to end users with the help of value networks to capture long-term profits at the organizational level through open platforms, outsourcing, crowdsourcing, servitization, coopetition, and open innovation), (2) rational commitment-based (creating and delivering sustainable value with the network and society to enable long-term creation, delivery, and capture of value at the societal level through the mechanisms of open innovation, stakeholder interaction, co-dissemination, co-engagement, and cross-subsidization), and (3) rational egoism-based (calculative openness to the value network for the creation and delivery of value to capture more organizational value through the mechanisms of open innovation, outsourcing, crowdsourcing, alliances, and alternative governance). Future studies can use this conceptual framework to improve consistency in the BMI core construct of architecture; it also can reduce the fragmentation of research efforts that

continue to present new mechanisms associated with BMI without considering the global rationales that connect them (Foss & Saebi, 2018; Massa et al., 2017; Wirtz et al., 2016).

Second, because the rationales we identify are at the core of the cognitive schemas that lead to reconfiguration of value creation, delivery, and capture mechanisms (Martins et al., 2015), our framework helps connect previous research to current developments in the field (Foss & Saebi, 2017). It complements and extends central approaches in strategic management such as the dynamic capabilities and effectuation perspectives. In relation to the dynamic capabilities view (Teece, 2007, 2010), we introduce a cognitive layer that explains how managers shape and align value creation, delivery, and capture mechanisms. While dynamic capabilities emphasize the behavioral and organizational processes through which firms adapt to changing environments, our model highlights the cognitive metalogics – managerial rationales – that bring coherence to these processes across levels. The dynamic interplay between rationales and multilevel mechanisms also resonates with the dynamic capabilities perspective, particularly in how shifts in rationales shape firms' capabilities to sense opportunities, seize them through new architectures, and reconfigure their value mechanisms over time. In relation to effectuation (Sarasvathy, 2001; Sarasvathy & Dew, 2005), our framework shares a concern for the cognitive foundations of decision-making under uncertainty but extends it by articulating distinct rationales – rational egoism, sympathy, and commitment – and linking them to the design of coherent BMI architectures. By articulating these bridges, we demonstrate that the strategy-as-moral-philosophy lens does not stand apart from mainstream strategy debates but rather enriches them by adding a cognitive-ethical dimension that deepens our understanding of BMI adoption.

Second, by suggesting original research avenues based on our multilevel framework, which acknowledges the relevance of 'strategy as moral philosophy' (Singer, 1994), we propose strategies for bridging three main gaps related to BMI: (1) qualifying value creation, delivery, and the alignment of capture mechanisms in BMI; (2) managing tensions in collective BMI; and (3) depicting the dynamics of BM rationale changes in BMI and the effects those changes have on value creation, delivery, and capture mechanisms.

At the managerial level, our research can help organizations respond to the vast challenge of generating sustainable value at the organizational, value network, and societal levels by modeling their new BM mechanisms into more cohesive architectures. By drawing on our framework, organizations can examine their strategy alignments with core BMI components by identifying where value is created, delivered, and captured across levels, and thereby reveal possible tensions within or between mechanisms. More specifically, to make our framework more actionable for managers, we developed a decision matrix (available in Appendix E) that translates the link between BMI

rationales and managerial levers into a practical tool for both diagnosis and planning. The matrix cross-tabulates the three dominant rationales with the mechanisms of value creation, delivery, and capture, enabling decision-makers to evaluate the internal coherence of their current BMI architecture and to anticipate potential transitions toward alternative configurations. The diagonal of the matrix highlights the configurations where each rationale is fully aligned with its corresponding mechanisms, representing coherent BMI architectures. Deviations from this diagonal reveal misalignments between the guiding rationale and the mechanisms of value creation, delivery, and capture, indicating architectures that managers should avoid. Any misalignment between the underlying rationale and these mechanisms may hinder the effectiveness of BMI adoption and degrade overall value outcomes.

Beyond its diagnostic role, the decision matrix also offers a dynamic perspective by helping managers visualize and orchestrate the adjustments required when shifting between rationales or BMI architectures, thereby maintaining strategic coherence over time. It enables managers to assess strategic-operational alignment and evaluate transition efforts between BMI architectures; it also differs from established BMI tools (e.g., Osterwalder & Pigneur, 2010; Rayna & Striukova, 2016) by functioning as a diagnostic alignment tool. For instance, our decision matrix in Appendix E illustrates the extent of the adjustments involved in shifting from a rational egoism-based architecture to a rational sympathy-based architecture. Such a shift implies not only a cognitive reorientation at the managerial level but also substantial reconfiguration of value creation, delivery, and capture mechanisms – both within the organization and across the value network.

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## Appendices

### Appendix A. Presentation of the 79 papers of the corpus

| Authors                        | Title   | Journal   | Publication date | Main rationales identified during the coding process |
|--------------------------------|---|---|------------------|--|
| <b>Abrahamsson et al.</b>      | Business model innovation of international new ventures: An empirical study in a Swedish context  | <i>Journal of International Entrepreneurship</i>            | 2019             | Rational egoism                                      |
| <b>Agarwal et al.</b>          | Evolution of the Indian LPG industry: Exploring conditions for public sector business model innovation  | <i>Research Policy</i>                                      | 2021             | Rational sympathy<br>Rational commitment             |
| <b>Angeli &amp; Jaiswal</b>    | Business model innovation for inclusive health care delivery at the bottom of the pyramid   | <i>Organization &amp; Environment</i>                       | 2016             | Rational commitment                                  |
| <b>Baber et al.</b>            | Effectuation logic in digital business model transformation: Insights from Japanese high-tech innovators  | <i>Journal of Small Business and Enterprise Development</i> | 2019             | Rational egoism                                      |
| <b>Bagheri et al.</b>          | Using the crowd for business model innovation: The case of Digikala   | <i>R&amp;D Management</i>                                   | 2020             | Rational egoism                                      |
| <b>Barth et al.</b>            | Unpacking sustainable business models in the Swedish agricultural sector – the challenges of technological, social and organisational innovation  | <i>Journal of Cleaner Production</i>                        | 2021             | Rational commitment<br>Utilitarianism                |
| <b>Bashir &amp; Farooq</b>     | The synergetic effect of knowledge management and business model innovation on firm competence: A systematic review                               | <i>International Journal of Innovation Science</i>          | 2019             | Rational egoism                                      |
| <b>Best et al.</b>             | Business model innovation within SPOs: Exploring the antecedents and mechanisms facilitating multi-level value co-creation within a value-network | <i>Journal of Business Research</i>                         | 2022             | Rational commitment                                  |
| <b>Best et al.</b>             | Mission or margin? Using dynamic capabilities to manage tensions in social purpose organisations' business model innovation                       | <i>Journal of Business Research</i>                         | 2021             | Rational sympathy<br>Rational commitment             |
| <b>Björkdahl</b>               | Technology cross-fertilization and the business model: The case of integrating ICTs in mechanical engineering products                            | <i>Research Policy</i>                                      | 2009             | Rational egoism<br>Rational sympathy                 |
| <b>Björklund et al.</b>        | Expanding entrepreneurial solution spaces in times of crisis: Business model experimentation amongst packaged food and beverage ventures          | <i>Journal of Business Venturing Insights</i>               | 2020             | Rational commitment<br>Systematic rationality        |
| <b>Bocken et al.</b>           | A literature and practice review to develop sustainable business model archetypes   | <i>Journal of Cleaner Production</i>                        | 2014             | Rational sympathy                                    |
| <b>Bosbach et al.</b>          | More can be better: Operating multiple business models in a corporate portfolio   | <i>Journal of Business Strategy</i>                         | 2020             | Rational egoism                                      |
| <b>Bouncken &amp; Fredrich</b> | Business model innovation in alliances: Successful configurations   | <i>Journal of Business Research</i>                         | 2016             | Rational egoism<br>Rational sympathy                 |
| <b>Bouncken &amp; Fredrich</b> | Good fences make good neighbors? Directions and safeguards in alliances on business model innovation  | <i>Journal of Business Research</i>                         | 2016             | Rational egoism                                      |
| <b>Brock et al.</b>            | Light the way for smart cities: Lessons from Philips Lighting   | <i>Technological Forecasting and Social Change</i>          | 2019             | Rational sympathy                                    |
| <b>Burström et al.</b>         | AI-enabled business-model innovation and transformation in industrial ecosystems: A framework, model and outline for further research             | <i>Journal of Business Research</i>                         | 2021             | Rational egoism<br>Rational sympathy                 |
| <b>Carraresi &amp; Bröring</b> | How does business model redesign foster resilience in emerging circular value chains?   | <i>Journal of Cleaner Production</i>                        | 2021             | Rational sympathy                                    |

(Continued)

**Appendix A (Continued).** Presentation of the 79 papers of the corpus

| Authors                        | Title  | Journal   | Publication date | Main rationales identified during the coding process                                       |
|--------------------------------|--|---|------------------|--|
| <b>De Silva et al.</b>         | Business model innovation by international social purpose organizations: The role of dynamic capabilities                            | <i>Journal of Business Research</i>                   | 2021             | Rational commitment  |
| <b>Dopfer et al.</b>           | Adapt and strive: How ventures under resource constraints create value through business model adaptations                            | <i>Creativity and Innovation Management</i>           | 2017             | Rational egoism<br>Rational sympathy   |
| <b>Ernst et al.</b>            | The art museum as lab to re-calibrate values towards sustainable development   | <i>Journal of Cleaner Production</i>                  | 2016             | Deliberative rationality   |
| <b>Fehrer et al.</b>           | A systemic logic for platform business models  | <i>Journal of Service Management</i>                  | 2018             | Rational sympathy  |
| <b>Fjeldstad &amp; Snow</b>    | Business models and organization design  | <i>Long Range Planning</i>                            | 2018             | Rational sympathy  |
| <b>Fobbe &amp; Hilletofth</b>  | The role of stakeholder interaction in sustainable business models. A systematic literature review                                   | <i>Journal of Cleaner Production</i>                  | 2021             | Rational commitment<br>Deliberative rationality  |
| <b>Foss &amp; Saebi</b>        | Business models and business model innovation: Between wicked and paradigmatic problems  | <i>Long Range Planning</i>                            | 2018             | Expressive rationality<br>Systematic rationality   |
| <b>Gebauer et al.</b>          | How to convert digital offerings into revenue enhancement – Conceptualizing business model dynamics through explorative case studies | <i>Industrial Marketing Management</i>                | 2020             | Rational sympathy  |
| <b>Gebauer et al.</b>          | Business model innovations for overcoming barriers in the base-of-the-pyramid market   | <i>Industry and Innovation</i>                        | 2017             | Rational commitment  |
| <b>Grieco</b>                  | Innovating the innovated: Business model innovation process in sharing economy companies   | <i>Creativity and Innovation Management</i>           | 2021             | Rational egoism<br>Rational sympathy   |
| <b>Günzel &amp; Holm</b>       | One size does not fit all – understanding the front-end and back-end of business model innovation                                    | <i>International Journal of Innovation Management</i> | 2013             | Rational egoism  |
| <b>Hanafizadeh et al.</b>      | Business model innovation driven by the internet of things technology, in internet service providers' business context               | <i>Information Systems and e-Business Management</i>  | 2021             | Systematic rationality   |
| <b>Hofmann</b>                 | Circular business models: Business approach as driver or obstructer of sustainability transitions?                                   | <i>Journal of Cleaner Production</i>                  | 2019             | Rational sympathy  |
| <b>Hoßbach et al.</b>          | The unfolding of value sources during online business model transformation   | <i>Journal of Business Models</i>                     | 2016             | Rational egoism<br>Rational sympathy   |
| <b>Iheanachor et al.</b>       | Business model innovation at the bottom of the pyramid – A case of mobile money agents   | <i>Journal of Business Research</i>                   | 2021             | Rational sympathy  |
| <b>Jensen et al.</b>           | Creating sustainable value through remanufacturing: Three industry cases   | <i>Journal of Cleaner Production</i>                  | 2019             | Rational sympathy  |
| <b>Kamalaldin et al.</b>       | Transforming provider-customer relationships in digital servitization: A relational view on digitalization                           | <i>Industrial Marketing Management</i>                | 2020             | Rational egoism<br>Rational sympathy<br>Deliberative rationality                           |
| <b>Kastalli &amp; Van Looy</b> | Servitization: Disentangling the impact of service business model innovation on manufacturing firm performance                       | <i>Journal of Operations Management</i>               | 2013             | Rational egoism  |
| <b>Klein et al.</b>            | How to stay on the road? A business model perspective on mission drift in social purpose organizations                               | <i>Journal of Business Research</i>                   | 2021             | Rational commitment<br>Deliberative rationality  |
| <b>Kuckertz et al.</b>         | Responding to the greatest challenges? Value creation in ecological startups   | <i>Journal of Cleaner Production</i>                  | 2019             | Rational sympathy<br>Rational commitment   |
| <b>Kukkamalla et al.</b>       | The new BMW: Business model innovation transforms an automotive leader   | <i>Journal of Business Strategy</i>                   | 2021             | Rational egoism<br>Rational sympathy<br>Deliberative rationality<br>Systematic rationality |

(Continued)

**Appendix A (Continued).** Presentation of the 79 papers of the corpus

| Authors                         | Title  | Journal   | Publication date | Main rationales identified during the coding process        |
|---------------------------------|--|---|------------------|---|
| <b>Kullak et al.</b>            | Enhancing value creation in social purpose organizations: Business models that leverage networks                                       | <i>Journal of Business Research</i>                         | 2021             | Systematic rationality                                      |
| <b>Layrisse et al.</b>          | What social enterprises can learn from the freemium business model   | <i>Academia Revista Latinoamericana de Administración</i>   | 2021             | Rational commitment<br>Utilitarianism                       |
| <b>Lehtimäki et al.</b>         | Strategic decisions related to circular business model in a forerunner company: Challenges due to path dependency and lock-in          | <i>South Asian Journal of Business and Management Cases</i> | 2020             | Rational sympathy   |
| <b>Matzler et al.</b>           | Business model innovation: Coffee triumphs for Nespresso   | <i>Journal of Business Strategy</i>                         | 2013             | Rational sympathy<br>Expressive rationality                 |
| <b>McDonald et al.</b>          | Nonprofit business model innovation as a response to existential environmental threats: Performing arts in the United States           | <i>Journal of Business Research</i>                         | 2021             | Rational commitment   |
| <b>Müller et al.</b>            | Fortune favors the prepared: How SMEs approach business model innovations in Industry 4.0  | <i>Technological Forecasting and Social Change</i>          | 2018             | Rational sympathy   |
| <b>Mütterlein &amp; Kunz</b>    | Innovate alone or with others? Influence of entrepreneurial orientation and alliance orientation on media business model innovation    | <i>Journal of Media Business Studies</i>                    | 2017             | Expressive rationality                                      |
| <b>Nußholz</b>                  | A circular business model mapping tool for creating value from prolonged product lifetime and closed material loops                    | <i>Journal of Cleaner Production</i>                        | 2018             | Rational sympathy<br>Rational commitment<br>Utilitarianism  |
| <b>Rachinger et al.</b>         | Digitalization and its influence on business model innovation  | <i>Journal of Manufacturing Technology Management</i>       | 2019             | Rational sympathy<br>Systematic rationality                 |
| <b>Rask &amp; Günzel-Jensen</b> | Business model design and performance in nascent markets   | <i>Management Decision</i>                                  | 2020             | Rational egoism<br>Rational sympathy                        |
| <b>Rayna and Striukova</b>      | From rapid prototyping to home fabrication: How 3D printing is changing business model innovation                                      | <i>Technological Forecasting and Social Change</i>          | 2016             | Rational sympathy   |
| <b>Reficco et al.</b>           | From donation-based NPO to social enterprise: A journey of transformation through business-model innovation                            | <i>Journal of Business Research</i>                         | 2021             | Rational sympathy<br>Expressive rationality                 |
| <b>Reinhardt et al.</b>         | Towards sustainable business models for electric vehicle battery second use: A critical review   | <i>Journal of Environmental Management</i>                  | 2019             | Rational sympathy<br>Deliberative rationality               |
| <b>Ritter &amp; Schanz</b>      | The sharing economy: A comprehensive business model framework  | <i>Journal of Cleaner Production</i>                        | 2019             | Rational egoism<br>Rational sympathy<br>Rational commitment |
| <b>Rodriguez et al.</b>         | Enterprise resource planning and business model innovation: Process, evolution and outcome   | <i>European Journal of Innovation Management</i>            | 2020             | Rational egoism<br>Rational sympathy                        |
| <b>Rosignoli &amp; Lionzo</b>   | Network impact on business models for sustainability: Case study in the energy sector  | <i>Journal of Cleaner Production</i>                        | 2018             | Rational sympathy   |
| <b>Sabatier et al.</b>          | When technological discontinuities and disruptive business models challenge dominant industry logics: Insights from the drugs industry | <i>Technological Forecasting and Social Change</i>          | 2012             | Rational sympathy   |
| <b>Schneckenberg et al.</b>     | Business model innovation and decision making: Uncovering mechanisms for coping with uncertainty                                       | <i>R&amp;D Management</i>                                   | 2017             | Rational egoism<br>Systematic rationality                   |
| <b>Schneider et al.</b>         | Business model innovation in the aviation industry   | <i>International Journal of Product Development</i>         | 2013             | Rational sympathy<br>Systematic rationality                 |
| <b>Shakeel et al.</b>           | Anatomy of sustainable business model innovation   | <i>Journal of Cleaner Production</i>                        | 2020             | Rational sympathy<br>Rational commitment                    |

(Continued)

**Appendix A (Continued).** Presentation of the 79 papers of the corpus

| Authors                                  | Title   | Journal   | Publication date | Main rationales identified during the coding process        |
|--|---|---|------------------|---|
| <b>Shomali &amp; Pinkse</b>              | The consequences of smart grids for the business model of electricity firms   | <i>Journal of Cleaner Production</i>                  | 2016             | Rational sympathy   |
| <b>Short et al.</b>                      | From refining sugar to growing tomatoes: Industrial ecology and business model evolution  | <i>Journal of Industrial Ecology</i>                  | 2014             | Rational sympathy   |
| <b>Siebold</b>                           | Reference points for business model innovation in social purpose organizations: A stakeholder perspective                                     | <i>Journal of Business Research</i>                   | 2021             | Rational commitment   |
| <b>Simonsson &amp; Agarwal</b>           | Perception of value delivered in digital servitization  | <i>Industrial Marketing Management</i>                | 2021             | Rational sympathy   |
| <b>Sjödin et al.</b>                     | Value creation and value capture alignment in business model innovation: A process view on outcome-based business models                      | <i>Journal of Product Innovation Management</i>       | 2020             | Rational sympathy   |
| <b>Sorescu et al.</b>                    | Innovations in retail business models   | <i>Journal of Retailing</i>                           | 2011             | Rational sympathy<br>Rational egoism                        |
| <b>Sorri et al.</b>                      | Business model innovation with platform canvas  | <i>Journal of Business Models</i>                     | 2019             | Rational egoism   |
| <b>Sousa-Zomer &amp; Cauchick-Miguel</b> | Sustainable business models as an innovation strategy in the water sector: An empirical investigation of a sustainable product-service system | <i>Journal of Cleaner Production</i>                  | 2018             | Rational sympathy   |
| <b>To et al.</b>                         | The logic of innovative value proposition: A schema for characterizing and predicting business model evolution                                | <i>Journal of Business Research</i>                   | 2020             | Rational egoism<br>Rational sympathy<br>Rational commitment |
| <b>Velter et al.</b>                     | Sustainable business model innovation: The role of boundary work for multi-stakeholder alignment  | <i>Journal of Cleaner Production</i>                  | 2020             | Deliberative rationality                                    |
| <b>Visnjic et al.</b>                    | The path to outcome delivery: Interplay of service market strategy and open business models   | <i>Technovation</i>                                   | 2018             | Rational sympathy   |
| <b>Visnjic et al.</b>                    | Only the brave: Product innovation, service business model innovation, and their impact on performance  | <i>Journal of Product Innovation Management</i>       | 2016             | Rational egoism<br>Rational sympathy                        |
| <b>Weerawardena et al.</b>               | Business model innovation in social purpose organizations: Conceptualizing dual social-economic value creation                                | <i>Journal of Business Research</i>                   | 2021             | Rational commitment<br>Systematic rationality               |
| <b>Weissbrod and Bocken</b>              | Developing sustainable business experimentation capability – A case study   | <i>Journal of Cleaner Production</i>                  | 2017             | Rational sympathy<br>Rational commitment                    |
| <b>Wirtz &amp; Daiser</b>                | Business model development: A customer-oriented perspective   | <i>Journal of Business Models</i>                     | 2018             | Rational sympathy   |
| <b>Wlömert &amp; Papies</b>              | International heterogeneity in the associations of new business models and broadband Internet with music revenue and piracy                   | <i>International Journal of Research in Marketing</i> | 2019             | Systematic rationality                                      |
| <b>Wu et al.</b>                         | Customer knowledge management and IT-enabled business model innovation: A conceptual framework and a case study from China                    | <i>European Management Journal</i>                    | 2013             | Rational sympathy   |
| <b>Yang et al.</b>                       | Value uncaptured perspective for sustainable business model innovation  | <i>Journal of Cleaner Production</i>                  | 2017             | Rational sympathy<br>Rational commitment                    |
| <b>Yang et al.</b>                       | Product-service systems business models for circular supply chains  | <i>Production Planning &amp; Control</i>              | 2018             | Rational sympathy   |
| <b>Yderfält &amp; Roxenhall</b>          | Real estate business model innovation and the impact of ego network structure   | <i>Management Research Review</i>                     | 2017             | Rational sympathy   |

Source: Own elaboration.

**Appendix B.** Overview of academic journals included in the corpus

| Journal  | Number of publications | Chartered Association of Business Schools (CABS) Ranking in 2021 |
|--|------------------------|--|
| Academia Revista Latinoamericana de Administración   | 1                      | 1  |
| Creativity and Innovation Management                 | 2                      | 2  |
| European Journal of Innovation Management            | 1                      | 1  |
| European Management Journal                          | 1                      | 2  |
| Industrial Marketing Management                      | 3                      | 3  |
| Industry and Innovation                              | 1                      | 3  |
| Information Systems and e-Business Management        | 1                      | 2  |
| International Journal of Innovation Management       | 1                      | 2  |
| International Journal of Innovation Science          | 1                      | 1  |
| International Journal of Product Development         | 1                      | 1  |
| International Journal of Research in Marketing       | 1                      | 4  |
| Journal of Business Models                           | 3                      | 1  |
| Journal of Business Research                         | 14                     | 3  |
| Journal of Business Strategy                         | 3                      | 1  |
| Journal of Business Venturing Insights               | 1                      | 2  |
| Journal of Cleaner Production                        | 17                     | 2  |
| Journal of Environmental Management                  | 1                      | 3  |
| Journal of Industrial Ecology                        | 1                      | 2  |
| Journal of International Entrepreneurship            | 1                      | 1  |
| Journal of Manufacturing Technology Management       | 1                      | 1  |
| Journal of Media Business Studies                    | 1                      | 1  |
| Journal of Operations Management                     | 1                      | 4*   |
| Journal of Product Innovation Management             | 2                      | 4  |
| Journal of Retailing                                 | 1                      | 4  |
| Journal of Service Management                        | 1                      | 2  |
| Journal of Small Business and Enterprise Development | 1                      | 2  |
| Long Range Planning                                  | 2                      | 3  |
| Management Decision                                  | 1                      | 2  |
| Management Research Review                           | 1                      | 1  |
| Organization & Environment                           | 1                      | 3  |
| Production Planning & Control                        | 1                      | 3  |
| R&D Management                                       | 2                      | 3  |
| Research Policy                                      | 2                      | 4*   |
| South Asian Journal of Business and Management Cases | 1                      | 1  |
| Technological Forecasting and Social Change          | 4                      | 3  |
| Technovation   | 1                      | 3  |

Source: Own elaboration.

## Appendix C. Final codebook

| Code group                     | Code ID                           | Definition and code source   | Code source  |
|--------------------------------|-----------------------------------|--|--|
| Definitions of BM/BMI concepts | I00.BM_definition                 | Given definition of BM   | deductive (Teece, 2010)  |
|                                | I01.BMI_definition                | Given definition of BMI  | deductive (Foss & Saebi, 2017)   |
|                                | I02.value_creat_definition        | Given definition of value creation   | deductive (Teece, 2010)  |
|                                | I03.value_deliv_definition        | Given definition of value delivery   | deductive (Teece, 2010)  |
|                                | I04.value_capt_definition         | Given definition of value capture  | deductive (Teece, 2010)  |
|                                | I11.BMI_rat_egoism                | Rationale underlying BMI is rational egoism: BMI supports shareholder value creation for achieving self-interests only                                       | deductive (Singer, 1994)   |
|                                | I12.BMI_rat_sympath               | Rationale underlying BMI is rational sympathy: BMI constrains to serve stakeholders interests for achieving self-interests                                   | deductive (Singer, 1994)   |
|                                | I13.BMI_rat_commit                | Rationale underlying BMI is rational commitment: BMI consists of the firm's voluntary commitment to a non-financial cause                                    | deductive (Singer, 1994)   |
|                                | I14.BMI_rat_delib                 | Rationale underlying BMI is deliberative rationality: BMI consists of deliberating on goals in order to engage in a political dialogue with stakeholders     | deductive (Singer, 1994)   |
|                                | BMI rationales                    | I15.BMI_rat_express  | Rationale underlying BMI is expressive rationality: BMI is formulated to achieve an individual or organizational sense of autonomy |
| I16.BMI_rat_systemic           |                                   | Rationale underlying BMI is systemic rationality: BMI emerged over time as a function of the historical organization's experience and capabilities           | deductive (Singer, 1994)   |
| I21.BMI_eth_utilit             |                                   | Rationale underlying BMI is utilitarianism: use of social cost-benefit analysis to choose BMI strategy (achieving the greatest good for the greatest number) | deductive (Singer, 1994)   |
| I22.BMI_eth_contract           |                                   | Rationale underlying BMI is contractarianism: BMI is based on concerns of fairness and justice   | deductive (Singer, 1994)   |
| I23.BMI_eth_deont              |                                   | Rationale underlying BMI is deontology: moral duties are deliberately integrated into BMI strategy   | deductive (Singer, 1994)   |
| 210.value_archi_change         |                                   | BMI consists of a change of value architecture   | deductive (Foss & Saebi, 2017)   |
| 211.value_creat_change         |                                   | BMI consists of a change of value creation mechanism   | deductive (Foss & Saebi, 2017)   |
| 212.value_deliv_change         |                                   | BMI consists of a change of value delivery mechanism   | deductive (Foss & Saebi, 2017)   |
| 213.value_capt_change          |                                   | BMI consists of a change of value capture mechanism  | deductive (Foss & Saebi, 2017)   |
| BMI multilevel mechanisms      |                                   | 221a.value_creat_lev_indiv_by  | With the BMI, value is created by an individual  |
|                                | 221b.value_creat_lev_indiv_for    | With the BMI, value is created for an individual   | deductive (Lepak et al., 2007)   |
|                                | 222a.value_creat_lev_org_by       | With the BMI, value is created by the focal organization   | deductive (Lepak et al., 2007)   |
|                                | 222b.value_creat_lev_org_for      | With the BMI, value is created for an organization   | deductive (Lepak et al., 2007)   |
|                                | 223a.value_creat_lev_vnetwork_by  | With the BMI, value is created by the value network (external partners involved in direct relationships with the focal firm)                                 | deductive (Bocken et al., 2013)  |
|                                | 223b.value_creat_lev_vnetwork_for | With the BMI, value is created for the value network (external partners involved in direct relationships with the focal firm)                                | deductive (Bocken et al., 2013)  |
|                                | 224a.value_creat_lev_soc_by       | With the BMI, value is created by members of the society/institutions  | deductive (Lepak et al., 2007)   |
|                                | 224b.value_creat_lev_soc_for      | With the BMI, value is created for members of the society/institutions   | deductive (Lepak et al., 2007)   |
|                                | 231.value_deliv_lev_indiv         | BMI enables value delivery at the individual level   | deductive (Lepak et al., 2007; Teece, 2010)  |
|                                | 232.value_deliv_lev_org           | BMI enables value delivery at the organizational level   | deductive (Lepak et al., 2007; Teece, 2010)  |

(Continued)

**Appendix C (Continued).** Final codebook

| Code group       | Code ID                      | Definition and code source   | Code source  |
|------------------|------------------------------|--|--|
|                  | 233.value_deliv_lev_vnetwork | BMI enables value delivery at the value network level (external partners involved in direct relationships with the focal firm) | deductive (Bocken et al., 2013)  |
|                  | 234.value_deliv_lev_soc      | BMI enables value delivery at the societal level   | deductive (Lepak et al., 2007; Teece, 2010)  |
|                  | 241.value_capt_lev_indiv     | BMI enables value capture at the individual level  | deductive (Lepak et al., 2007)   |
|                  | 242.value_capt_lev_org       | BMI enables value capture at the organizational level  | deductive (Lepak et al., 2007)   |
|                  | 243.value_capt_lev_vnetwork  | BMI enables value capture at the value network level   | deductive (Bocken et al., 2013)  |
|                  | 244.value_capt_lev_soc       | BMI enables value capture at the societal level  | deductive (Lepak et al., 2007)   |
|                  | 251.value_destr_lev_indiv    | BMI leads to value destruction at the individual level   | deductive (Bocken et al., 2007)  |
|                  | 252.value_destr_lev_org      | BMI leads to value destruction at the organizational level   | deductive (Bocken et al., 2013)  |
|                  | 253.value_destr_lev_vnetwork | BMI leads to value destruction at the value network level  | deductive (Bocken et al., 2013)  |
|                  | 254.value_destr_lev_soc      | BMI leads to value destruction at the societal level   | deductive (Bocken et al., 2013)  |
|                  | value_logic_change           | BMI implies a change of logic for creating, delivering, and/or capturing value (new BM purpose)                                | inductive: often mentioned by authors as a new way of thinking about the purpose of business activities and associated mechanisms, eventually resulting in BMI |
| Added free codes |                              |  |  |
|                  | value_creat_tension          | BMI implies tensions in value creation mechanisms  | inductive: often mentioned by authors when value creation mechanisms are driven by conflicting purposes (e.g., serving both a financial and social cause)      |

Source: Own elaboration.

**Appendix D.** Example of quotes per rationales from the coding following Singer's (1994) definitions

| Rationales               | Code ID             | Definition   | Quotes  |
|--------------------------|---------------------|--|---|
| Rational egoism          | I11.BMI_rat_egoism  | Rationale underlying BMI is rational egoism: BMI supports shareholder value creation for achieving self-interests only                                   | 'The firm later transformed its Value Network <b>in order to gain intended advantages:</b> it simplified the network by bringing firms and products in-house as it developed and expanded the product packages acquired earlier in its history . . . <b>This causal logic move was intended to add customers and raise revenue.'</b> (Baber, 2019)  |
| Rational sympathy        | I12.BMI_rat_sympath | Rationale underlying BMI is rational sympathy: BMI constrains to serve stakeholders interests for achieving self-interests                               | 'Companies can follow a <b>"hardware plus" logic to add customer value to physical products through digital features.</b> Customers purchase or activate these features during the usage period, in order to expand product capabilities. Digital offerings such as software applications can be sold to customers through licenses, for example with different functionality-level options, valid for a fixed period of time. In this context, many companies use subscription models which charge customers on a recurring basis. <b>In so-called freemium models, companies sell offerings with selected free digital capabilities, anticipating that some customers will upgrade to fee-based premium features.'</b> (Gebauer, 2020)  |
| Rational commitment      | I13.BMI_rat_commit  | Rationale underlying BMI is rational commitment: BMI consists of the firm's voluntary commitment to a nonfinancial cause                                 | 'In principle, <b>the process of BMI can be regarded as sustainable when a new BM reduces the negative effects of a firm's previous one on the environment/society</b> (Spieth et al., 2018), <b>or has a positive impact by addressing any environmental/social issues</b> (Dobson et al., 2018; Inigo et al., 2017). Yet, <b>in both cases, the new BM should preserve the economic viability of the organisation</b> (Geissdoerfer et al., 2018).' (De Silva, 2021)<br><br><b>'In transforming a business model through BMI, SPOs would seek to enhance their long-term fitness</b> (Schoemaker et al., 2018). BMI would enable the SPOs to operate within a network and consequently transform from service-driven enterprises to environment-focused enterprises by bringing new and adapted services into a newly managed environment (Schoemaker et al., 2018). <b>Through the application of shared learning, the network would develop and adapt to environmental changes and align stakeholder interests by deleting, compartmentalizing, aggregating, or integrating them</b> (Pratt & Foreman, 2000). As stakeholders become more behaviorally integrated, a shared focus would offer the best chance of managing the tension of dual mission focus. Ambidexterity can enable the simultaneous creation of economic and social value vital to economic sustainability.' (Best et al., 2022) |
| Deliberative rationality | I14.BMI_rat_delib   | Rationale underlying BMI is deliberative rationality: BMI consists of deliberating on goals in order to engage in a political dialogue with stakeholders | <b>'The starting point of business model innovation is a differentiated and innovative positioning on the market, "an organized system for finding a window in the mind" of the customer.</b> The idea of positioning focuses on the rational or emotional benefits that a buyer will receive by using the product or service. It must be unique and sustainable. Very few companies succeed in positioning themselves sustainably and distinctively. As Ries and Trout outline, companies with a lack of differentiation become interchangeable and mere substitutes. Substitutes are only a small step away from being a commodity, which may intertwine them in irrevocably ruinous price competition. <b>We can summarize the role of the positioning in a business model as follows: Without effective differentiation, there is no positioning. Without positioning, there is no uniqueness. Uniqueness ultimately drives the odds of a business model innovation.'</b> (Matzler et al., 2013)  |
| Expressive rationality   | I15.BMI_rat_express | Rationale underlying BMI is expressive rationality: BMI is formulated to achieve an individual or organizational sense of autonomy                       |   |

(Continued)

**Appendix D (Continued).** Example of quotes per rationales from the coding following Singer's (1994) definitions

| Rationales             | Code ID              | Definition   | Quotes   |
|------------------------|----------------------|--|--|
| Systematic rationality | I16.BMI_rat_systemic | Rationale underlying BMI is systemic rationality: BMI emerged over time as a function of the historical organization's experience and capabilities           | 'Finally, <b>examining the experimentation pathways, we noticed that collaborative business model experiments and experimenting with prosocial help enhanced networked or ecosystem capabilities for further experiments in novel value creation and capture.</b> For example, David's roastery initiated a crisis-branded coffee, using portions of the profits to purchase gift cards from local small cafes and restaurants, which were then randomly included in the customer webstore orders. Through this response, the roastery added value to private customers and built its business-to-business clientele: "If [the cafes and restaurants are] not our existing clients, it should be pretty easy to get back to them again after things normalize a little, and say: "hey, we were in touch a few months ago . . . and ask about how things are with their coffee, and there's potential clientele considering the future. We're leaving a positive memory." Similarly, Leo's snacks gave product giveaways to restaurants (Fig. 5). Rather than representing lasting changes to value offerings, value creation architecture or revenue model of the ventures as such, these experiments led to changes in the resources and capabilities that could be leveraged for subsequent business model innovation even when the experiments tended to be incremental. <b>Interestingly, such effects could be seen even in cases where the original experiment was not aimed at the venture business model at all!</b> (Björklund, 2020) |
| Utilitarianism         | I21.BMI_eth_utilit   | Rationale underlying BMI is utilitarianism: use of social cost-benefit analysis to choose BMI strategy (achieving the greatest good for the greatest number) | ' <b>To address the needs of a broader set of stakeholders namely beneficiaries'</b> (Weerawardena et al., 2021), innovation becomes a core capability to expand SPOs in sale or scope and thus increase social impact. One the one hand, <b>such innovation aims to expand in scale to benefit a greater number of beneficiaries and, on the other hand, it aims to expand in scope to provide greater benefits to existing beneficiaries</b> (Ebrahim & Rangan, 2014).' (Siebold, 2021)  |
| Contractarianism       | I22.BMI_eth_contract | Rationale underlying BMI is contractarianism: BMI is based on concerns of fairness and justice   | 'In this study, we particularly examine how business model innovations can <b>enable the delivery of inclusive health care.</b> To define inclusive health care we draw on the concept of "inclusiveness," which points to "the development and implementation of new ideas <b>which aspire to create opportunities that enhance social and economic wellbeing for disenfranchised members of society"</b> (George et al., 2012). Business models adopting market-based approach – as opposed to corporate social responsibility strategies – are crucial to ensure viability, scaling up, and hence, continuity of the supply of the welfare-enhancing product and service. <b>Inclusive health care – rather than only affordable – promotes health service delivery that is not only financially but also socially and culturally acceptable to BoP patients.</b> ' (Angeli & Jaiswal, 2016)  |
| Deontology             | I23.BMI_eth_deont    | Rationale underlying BMI is deontology: moral duties are deliberately integrated into BMI strategy   | ' <b>Sharing</b> is understood as a third distribution mechanism, next to market exchange and gift giving, that supports social bonding amongst participants and is defined by <b>non-reciprocal, pro-social and altruistic characteristics.</b> Pro-social is understood as <b>socially interested in others, guided by an altruistic mindset that not only cares about one's own utility but takes into account the utility of others</b> (Arnould & Rose, 2016). Whereas the characteristic of non-reciprocal behaviors is only present if attendees are not calculating a non-monetary or monetary debt.' (Ritter & Schanz, 2019)  |

Source: Own elaboration.

**Appendix E.** A rationale alignment tool to guide strategic decision-making for BMI adoption

|   |                | Rational Egoism  | Rational Sympathy   | Rational Commitment  |
|---|----------------|--|---|--|
| <b>Rational-egoism-based BMI architecture</b>     | <b>Create</b>  | Aligned<br>Leverage networks opportunistically to advance firm-centric objectives              | Misaligned<br>Prioritize firm-centric goals that undermine trust and hinder strong partnerships     | Misaligned<br>Exclude social and nonmarket actors, limiting societal impact                            |
|   | <b>Deliver</b> | Focus on efficient co-delivery mechanisms that enhance firm performance                        | Provide limited incentives for mutual coordination  | Fail to enable value delivery at the societal level  |
|   | <b>Capture</b> | Maximize short-term value appropriation at the firm level                                      | Pursue short-term value capture that conflicts with long-term profit                                | Seek short-term value capture incompatible with reinvestment or minimal value retention                |
| <b>Rational-sympathy-based BMI architecture</b>   | <b>Create</b>  | Misaligned<br>Allow opportunistic behavior that limits trust-building and joint value creation | Aligned<br>Build strong partnerships with key stakeholders to cocreate superior value for end users | Misaligned<br>Integrate societal actors insufficiently, hindering value creation at the societal level |
|   | <b>Deliver</b> | Bias co-delivery mechanisms toward one-sided outcomes  | Coordinate delivery jointly to maximize value for end users   | Restrict delivery mechanisms to market-based actors only   |
|   | <b>Capture</b> | Capture long-term value conflicting with short-term profit orientation                         | Optimize long-term value capture at the firm level  | Align value capture too closely with firm profit conflicting with societal commitments                 |
| <b>Rational-commitment-based BMI architecture</b> | <b>Create</b>  | Misaligned<br>Apply opportunistic strategies lacking legitimacy with societal actors           | Misaligned<br>Engage key stakeholders partially, underleveraging societal scope                     | Aligned<br>Expand networks to communities, NGOs, and citizens alongside economic partners              |
|   | <b>Deliver</b> | Misalign broader delivery mechanisms with firm-centric objectives                              | Generate tension between co-delivery and broader societal or environmental goals                    | Co-deliver to generate social and environmental value  |
|   | <b>Capture</b> | Capture minimal value inconsistent with short-term profit orientation                          | Capture minimal value inconsistent with long-term profit orientation                                | Capture minimal viable value to reinvest in long-term societal commitments                             |

Source: Own elaboration