

Grinding Uncertainty: Business Model Innovation as a Strategy for Coffee Sector SMEs [†]

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Abstract: The coffee industry, one of the world's most vital commercial value chains, faces severe challenges, especially among its small- and medium-sized enterprises (SMEs) actors. These challenges encompass social, economic, and environmental crises, with climate change being particularly menacing. This perspective article highlights business model innovation (BMI) as a proactive strategic option for SMEs in the coffee industry, providing a roadmap from the field to the coffee cup for navigating these uncertainties. Drawing on recent BMI research within the coffee sector and related fields, the piece explores transferable strategies and potential implementations, with an emphasis on sustainability-oriented BMI. The discussion identifies both potential benefits and challenges of implementing BMI. Ultimately, the article positions BMI as a promising field for both researchers and practitioners, offering sustainable solutions to the multifaceted challenges faced by the coffee industry.

Keywords: business model innovation; strategy; uncertainty; SMEs; sustainability; coffee industry; entrepreneurship

1. Introduction

Globally, coffee production has averaged over 10 million tons and spans more than 11 million hectares [1]. The coffee industry is a global business worth billions, involving many small- and medium-sized enterprises (SMEs) stakeholders, such as farmers, roasters, retailers, coffee shops, grocery stores, and online retailers from over 70 countries, supporting roughly 120 million people's livelihoods [2,3]. As such, the coffee industry is one of the most crucial global commercial value chains. However, it faces significant challenges, especially among its SME actors [4–6]. These challenges include social, economic, and environmental crises, with climate change being particularly threatening [1,3,7].

SMEs are particularly susceptible to risks due to their restricted resources [8]. SMEs depend on their ability to innovate more than larger companies, as they often depend on a single business model (BM) [9]. Lack of resources can be a barrier to investment in innovation. Paradoxically, SMEs tend to be more flexible and quicker to adopt a BM than larger enterprises due to their less rigid corporate structures [10,11]. In addition, they have strong connections with local communities. This facilitates them in building strategic alliances rapidly and utilizing the local stakeholders' expertise to innovate owing to their distinctive connection with the region. SMEs are, therefore, well placed to respond efficiently to any crisis. They can innovate BMs and ultimately emerge stronger [10,12].

2. Theoretical Foundations

2.1. Business Model Innovation

Since its introduction in the 1990s, when it was mainly used by internet entrepreneurs presenting innovative business plans to investors, the term 'business model' has evolved significantly [13,14]. Evolving into a more conceptual tool, BMs such as Nespresso, Xerox, or Airbnb have attracted interest from researchers and practitioners [15,16]. A business



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model explains how an enterprise operates [17]. Osterwalder and Pigneur's (2010) widely recognized business model canvas (BMC), for example, is composed of nine building blocks: key activities, partners and resources (strategic elements), customer segments, relationships and channels (market elements), and costs and revenue streams (financial elements) [18]. More recently, academics have agreed that the business model can be understood as a combination of three independent elements: creating, delivering, and capturing values [19–21]. Research encompasses fields such as strategy, innovation, and entrepreneurship, leading to the emergence of business model innovation (BMI) [22]. Defined by deliberate transformation [21], BMI includes designed changes to key elements or architecture [8], and is differentiated between incremental and radical approaches [23]. The multidisciplinary relevance of BMI has further extended into sustainability and circular economy [24,25]. While a business model is a representation of a company's current business logic, business model innovation is defined as the activity or process of deliberately transforming the core elements of a company and its business logic to achieve operational and strategic progress [26].

2.2. Business Model Innovation as an Entrepreneurial Response Strategy to Crisis

The term 'crisis', originally meaning 'decision' or 'turning point' in Greek, lacks a universally accepted definition [27]. Hermann (1963) identified three key components, further elaborated by scholars like Dutton (1986) and Fink (2002), emphasizing extreme, unexpected events demanding urgent response from an organization [28–30]. Organizational crises are characterized by low-probability, high-impact events, threatening the organization's viability [31]. They are often classified into two primary types: sudden and smoldering. The COVID-19 pandemic, for example, can be seen as a sudden event, while the classification of climate change as either sudden or smoldering is controversial and open to debate [12]. Academics argue that whatever the nature of the crisis, an organization needs to act quickly and decisively. In response to crises, innovation is identified as an entrepreneurial strategy, alongside retrenchment, persevering, and exit [32]. Retrenchment refers to cost-cutting measures in the short term. Persevering refers to maintaining the status quo of business activities, i.e., through debt financing in the medium term. Exit refers to discontinuation. Finally, innovating refers to a company's strategic renewal in response to a crisis in the long term. Opting for innovation is proactive, forward-looking, and provides solutions for capitalizing on emerging opportunities [12]. This approach is particularly beneficial for SMEs, enabling them to navigate effectively through crises. During the COVID-19 pandemic, assessing the crisis's impact on business models (BMs) prompted managers to potentially regard business model innovation (BMI) as a proactive and strategic choice, manifesting the significant importance of innovation in securing organizational resilience [9,12].

3. Literature Research and Analysis

A systematic literature review was conducted to explore how business model innovation in crises is related to and can contribute to SMEs in the coffee value chain [33]. Several scientific databases, including Google Scholar, PubMed, Scopus and Web of Science, were used to search the literature. Data were collected using specific keywords such as business model, business model innovation, coffee, coffee shops, roasters, farmers, smallholders, SME, crisis, and strategy. A total of 52 records were retrieved. These remain after applying a filter to exclude items other than journal articles, such as reports, book chapters, conference proceedings, and articles in a language other than English. The next step was the reading of all titles and abstracts of the relevant articles. Articles that did not fit the theme and objectives of the study were excluded, as were articles that did not clearly relate to the coffee industry or business model innovation. After screening the titles and abstracts, 48 acceptable articles were identified. A total of 18 articles were included after reading the full texts. The apparent scarcity of research may be attributed to the niche status of the domain and its inherent interdisciplinarity. The illustrated economic potential of the coffee

industry and the advances in the body of knowledge on entrepreneurship challenge this status quo.

4. Discussion and Findings

Approximately one-third of studies analyze popular business models of large companies like Nestle (Nescafe, Nespresso), Starbucks, or Illy [15,34–38], highlighting the lack of BMI research on coffee SMEs [39]. Three of the studies focus on smallholders proposing the inclusive business model involving the entire stakeholders as market actors as the way forward [40,41], whereas others promote the Relationship Coffee Model (RCM), where coffee quality is at the core of the relationship between growers and global buyers [42]. Three other studies focus on somewhat larger coffee farmers, coffee plantations, and coffee processors, generally using the Triple-Layer BMC as a tool for designing a more sustainable BM [43–45]. Three more studies analyze very statically the BMs of local coffee shops in India (Café Coffee Day, Bangalore, India), Indonesia (Klinik Kopi, Yogyakarta, Indonesia), and coffee shops in general, relying on business model canvas analysis [39,46,47]. A single study is an investigation of the business model of coffee machine rental companies [48]. Thus, within this small sample of studies, the diversity within the coffee value chain, as well as the need for BMI-related research within coffee SMEs, can be observed.

The findings indicate that recent research on SME innovation, in particular, places a strong emphasis on sustainable business model innovation (SBMI), whether it is trying to develop a sustainable coffee plantation in Java by applying the triple-layer BMC [44] or harvesting coffee by-products by applying the circular BMC [49]. Unfortunately, the articles remain theoretical and lack empirical verification. The aim of SBMI is to capture economic value while preserving or restoring natural, social, and economic capital beyond the boundaries of the organization. Coffee cultivation, in particular, generates by-products in quantities which are potentially dangerous for the environment. A BM that focuses on a circular economy and aims to recover these by-products could provide an interesting solution in terms of environmental, social, and economic sustainability, guaranteeing an additional income stream. BMI could also be a key tool for specialty coffee SMEs in the face of competition from large branded coffee companies [39]. In related fields, several classifications of SBMI have been empirically tested [19]. Lüdeke-Freund et al. propose 45 sustainable business models (BMs), e.g., eco-design, closing the loop, and the green supply chain model could be highly transferable to the coffee sector, with industrial ecology parks sharing knowledge and facilities and closing energy, water and material loops [50].

5. Conclusions

Drawing on the analysis, this article highlights the importance of BMI within the coffee sector, emphasizing the relevance for SMEs. SBMI, in particular, is seen as an opportunity to address environmental and social challenges, and the need for further research that focuses on the practical implementation of these models within SMEs is underlined. The SBMI strategies explored here present a critical pathway for navigating the uncertainties and multifaceted challenges faced by the coffee industry.

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