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## **SHORT PAPER**

### **Consumers' Knowledge Sharing about Sustainable Coffee. A Netnographic Research on an Online Coffee Community of Practice**

Marco Bellotto, Università degli Studi di Trieste  
Patrizia de Luca, Università degli Studi di Trieste

#### **Abstract**

The coffee sector is facing significant environmental sustainability challenges due to climate change and economic-social issues related to the poor living conditions of smallholder farmers. Consumers discuss these topics in their online interaction spaces, sharing stories, opinions, ideas, and personal experiences.

This research aims to explore knowledge and practice shared by consumers in an online Community of Practice (CoP) related to sustainable coffee. Specifically, relevant content is analyzed at different stages of consumer purchasing decision process, in particular, pre-purchase, purchase-consumption, and post-purchase stages. Netnography appears to be an appropriate method to gather insights from consumer interactions in online CoPs. Data were collected by selecting an online coffee forum that meets the criteria of the CoPs. The most relevant conversations about sustainable coffee were analyzed through a thematic analysis using an integrative inductive/deductive interpretative approach. The results show interesting aspects regarding the consumers' purchasing decision process for sustainable coffee. Firstly, relevant insights emerge on how coffee is recognized as sustainable and the main sustainability attributes that affect the purchase choice. Then, various interesting sustainable consumption practices emerge. Finally, in the post-consumption stage, consumers shared advice on disposal practices, often following a circular economy perspective.

This research contributes to the broader understanding of sustainable consumption patterns, focusing on the coffee sector. Organizations can exploit the study to orientate their sustainability communication strategies.

#### **Keywords**

Coffee; consumer decision making-process; sustainable consumption; knowledge sharing; community of practice; netnography

#### **Introduction**

Coffee is one of the world's most traded commodities and consumed beverages (FAO, 2022). At the end of 2024, the global coffee industry is going to be valued at \$102.15 billion, with a projected compound annual growth rate (CAGR) of around 4.28% from 2021 to 2026 (Mordor Intelligence, 2021; World Metrics, 2024). Recent global coffee production and consumption trends reflect a dynamic market shaped by recent

fluctuations in supply and demand. In 2024, coffee production is expected to reach 175.6 million bags, slightly recovering from a 1.4% decrease in 2023 due to climate events and increased production costs. Worldwide, coffee consumption is anticipated to grow moderately in 2024, reaching 178.5 million bags, reflecting a continued rise in demand, particularly in Asia. Around 2.25 billion cups of coffee are globally consumed every day (WorldMetrics, 2024). Due to rising consumption, the market has been facing a supply deficit trend since 2023, when consumption surpassed production by a few million bags (Daily Coffee News, 2023; USDA, 2024). Given the current global situation where coffee consumption exceeds production level due to climate change and production costs, the research object is relevant. It is interesting to understand whether and what sustainability factors consumers value when they buy, consume, and throw away coffee.

This research aims to explore knowledge and practice shared by consumers in an online Community of Practice (Lave & Wenger, 1991) related to sustainable coffee. Specifically, from a consumer marketing perspective, relevant content is analyzed at different stages of the purchasing decision process, particularly pre-purchase, purchase-consumption, and post-purchase stages (Kotler et al., 2014).

Under these premises, the main research questions are the following:

- What relevant content and practices are shared about the pre-purchase phase of sustainable coffee?
- What relevant content and practices are shared about the purchasing/consumption phase of sustainable coffee?
- What relevant content and practices are shared about the post-purchase phase of sustainable coffee?

## **Background**

Global coffee production significantly impacts ecosystems and smallholder farmers' living conditions (FAO, 2022). The main sustainability challenges of the sector regard climate change, biodiversity loss, deforestation, water pollution, waste, and the poor and precarious situation of producers (Bager & Lambin, 2020; Bermudez et al., 2022; Samper & Quiñones-Ruiz, 2017). Unpredictable coffee harvest scenarios and extreme climatic events are rendering some coffee-growing regions no longer suitable (30-50% by 2050) and enhancing coffee pests and diseases (Grüter et al., 2022). The fluctuating coffee market, influenced by environmental issues and price volatility, impacts the economic stability of small-scale farmers.

To date, the notion of sustainable coffee does not have a precise definition shared by all stakeholders. Generally, sustainable coffee "is perceived as an approach that addresses the major ecological, economic, and social impacts of coffee production and trade, seeking to reduce harmful 'externalities' while enhancing long-term benefits for people and the environment" (Rice & McLean 1999, p. 41). However, since no single definition exists, consumers may attach different meanings to sustainable coffee (Grunert et al., 2014; Schmuck et al., 2018).

Consumer awareness of sustainability issues is leading to significant transformations in the coffee sector. Several studies have shown the rise of sustainable coffee consumption, noticing that consumers increasingly seek out products aligned with their

ethical and environmental values (Bartoloni et al., 2022; Global Data, 2020; Samoggia & Riedel, 2018). Consumers discuss these topics in their online interaction spaces, sharing stories, images, experiences, habits, practices, and solutions to recurrent problems. Key attributes influencing consumer decisions include certifications like Fair Trade and Rainforest Alliance, which signal ethical sourcing, environmental stewardship and help differentiate products in a crowded marketplace (Janssen & Langen, 2017; Maciejewski et al., 2019). Coffee is no longer perceived as a commodity but as a specialty product incorporating many characteristics, including sustainability. This transformation can be summarized in three stages, the so-called “three waves of coffee” consumption. (Folmer, 2016; Manzo, 2014). In line with this change in consumer preferences, the literature reveals the emergence of various consumer segments. Connoisseur consumers are coffee experts who perceive consumption as a form of hedonism and symbolism (Bourdieu, 1984; Holt, 1995; Samoggia & Riedel, 2018). On the contrary, mainstream consumers tend to consider consumption as a way to satisfy utilitarian needs (Kumar & Smith, 2017; Papaoikonomou et al., 2016; Quintao et al., 2017). Connoisseur consumers appear more sensitive towards sustainability, paying more attention to the provenience, quality, and ethical attributes of goods (Bartoloni et al., 2021). Several studies examined the potential role of sustainability attributes communication in influencing consumer preferences and driving purchase decisions, with mixed results (Auger et al., 2010; Irwin & Naylor, 2009; Loose & Remaud, 2013; Zepeda et al., 2013). The ethical decision-making literature traditionally focused on rational or cognitive perspectives (Yacout & Vitell, 2018). However, choices may also be taken as a routine or as impulsive emotional responses to particular contexts (Solomon, 1994). Consumers often take mental shortcuts using simplifying choice heuristics when purchasing products or services (Kotler, 2019). The persistent attitude-behavior gap in sustainable purchasing behaviors shows the inefficiency of attitude and value-based behavioral models in explaining this phenomenon (Devinney et al., 2010; Wiederhold & Martinez, 2018).

Psychological processes are crucial to understanding how consumers effectively make their buying decisions. According to Kotler (1965; 2019), the consumer passes through five stages: problem recognition, information search, evaluation of alternatives, purchase decision, and post-purchase behavior. Consumers do not always experience all five stages when buying a product. Researchers are investigating the relevance of sustainable product attributes through each stage of the decision-making and purchase process, with contradictory evidence. Some studies show that consumers consider sustainability attributes as important drivers in purchasing products (Auger et al., 2010; de Medeiros & Ribeiro, 2017; Luo et al., 2017; Rokka & Uusitalo, 2008; Shao et al., 2016; Simpson & Radford, 2014). Conversely, there is evidence that consumers do not prioritize sustainability attributes as purchasing criteria (Momborg et al., 2012; Van Loo et al., 2015).

### **Methodology**

In this scenario, Communities of Practice (CoP) assumes relevance as a context for analyzing the process of collective learning and experience sharing. CoPs are defined as "groups of people who share a concern or a passion for something they do and learn

how to do it better as they interact regularly" (Wenger-Trayner et al., 2015, p. 2). Cops members have a shared domain of interest, behave as a community by discussing and exchanging information, and have a repertoire of shared practices (Wenger-Trayner et al., 2015, p. 2). In this research, it was selected an online community sharing Cops-related criteria, with members sharing an interest in coffee.

In the context of Cops, the qualitative methodology of netnography is appropriate for investigating how consumers share knowledge and practices related to sustainable coffee.

Netnography helps understand people's online rules, experiences, and rituals, enabling a deeper understanding of customer knowledge and practices (Cayla & Arnould, 2014; del Vecchio et al., 2020; Kozinets, 2015). This approach is particularly relevant in studying sustainability, as it captures spontaneous, unsolicited expressions of consumer values and concerns, showing how these factors influence purchase decisions (Heinonen & Medberg, 2018).

The data were collected from an international online coffee forum composed of coffee enthusiasts ("Coffeeforums.com"). This online forum was selected because it proved to satisfy the criteria of CoPs (Lave & Wenger, 1991). Moreover, the forum revealed active participation and content relevance to the topic of sustainable coffee. Relevant conversations were extracted by reviewing nearly 500 threads and selecting 150, obtaining about 1,000 single messages. The selected posts pertained to the ten years from January 2014 to May 2024. Search keywords in the forum included terms such as "sustainable coffee," "ethical sourcing," "Fair Trade," "organic coffee," and "environmental impact" as relevant concepts in the literature.

Once data have been collected, a qualitative data analysis was carried out using an integrative inductive/deductive interpretative approach (Hollebeek et al., 2017). Thematic analysis involves coding the data to capture key themes and patterns, which are then interpreted to provide insights into consumer behaviors and attitudes. This process combined interrelated topics into new, more abstract, higher-order themes (Gioia et al., 2013; Terry et al., 2017; Kozinets, 2020).

The software Atlas.ti was employed to manage and analyze data. The data collection and analysis adhered to the ethical guidelines of the forum.

### **Preliminary results**

Preliminary analysis reveals several key themes related to sustainable coffee consumption. In the problem recognition phase, consumers become aware of the environmental impact of their choices. For sustainable coffee, this often stems from concerns about plastic waste, climate change, or unethical labor practices in the traditional coffee industry. Research shows that ethical and environmental concerns increasingly prompt problem recognition among conscious consumers.

After recognizing the need for a more sustainable choice, consumers seek information about alternatives. Forum conversations highlighted the relevance of labels, certifications (Fair Trade, organic), and other member reviews to verify sustainability claims. Studies indicate that consumers often face challenges during this stage due to greenwashing or a lack of clarity in certifications.

Consumers evaluate the pros and cons of sustainable coffee options compared to conventional ones. They used to balance criteria like price, quality, and taste. They also evaluate the perceived environmental benefits of purchasing the product. The purchase decision is the critical stage in which consumers decide whether to buy the sustainable coffee option. In the case of sustainable coffee, factors like convenience, price sensitivity, and brand loyalty play a significant role. In the post-purchase phase, consumers evaluate their satisfaction with the product and its sustainability claims. Positive experiences, such as the feeling of contributing to environmental conservation, seem to result in brand loyalty. Circular economy practices are suggested and encouraged among consumers.

### **Conclusions and Implications**

This study contributes to the understanding of how consumers engage with sustainability in the context of coffee consumption through online knowledge sharing. The findings suggest that online communities of practice play a significant role in shaping consumer perceptions and behaviors regarding sustainable coffee. These communities empower consumers to make informed decisions that align with their values by providing a space for knowledge exchange. The Kotler 5-stage process approach, applied to sustainable coffee, helps understand how sustainability considerations are integrated into each step of the consumer's decision-making journey. The study underscores the importance of transparency and authenticity in sustainability communications for marketers and policymakers. Companies that are transparent about their sustainability efforts and engage authentically with their customers will likely gain consumer trust and loyalty. Moreover, the growing consumer demand for sustainable coffee highlights the need for industry-wide standards and certifications to provide consumers with clear, reliable information about their purchases' ethical and environmental impact.

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