



Crafting the Perfect Cup: How Sustainable Barista Training Shapes Product Quality at Kedai Kosim, Indonesia

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Informasi artikel	ABSTRACT
Received : Accepted : Published :	Sustainable service delivery has become increasingly critical for small coffee enterprises, yet the role of sustainability-oriented training in shaping product quality remains empirically underexplored. This study examines how Sustainable Barista Training influences beverage quality, operational performance, and sustainability behavior at Kedai Kosim, Indonesia.
Kata kunci: Sustainable barista training Service quality Coffee business Qualitative case study SDGs integration	Using a qualitative case study design, data were collected through in-depth interviews, non-participant observations, and document review to capture the integration of sustainability principles into barista competencies and daily workflows. The findings reveal that sustainability-focused training enhances technical consistency, strengthens environmental awareness, and cultivates mindful resource use in coffee preparation processes. These improvements elevate key dimensions of service quality, including reliability, assurance, and responsiveness, while embedding sustainable practices into routine operations. The study contributes to the service management and sustainable hospitality literature by positioning sustainability competencies as a critical yet underrecognized driver of product quality in micro-scale coffee businesses. Practical implications highlight the importance of structured, experiential training to improve beverage consistency, reduce operational waste, and support SDG-oriented coffee shop management. Future research should explore multi-case comparisons and longitudinal assessments to evaluate the durability and scalability of sustainability-driven training models.
	ABSTRAK
Keyword: Pelatihan barista berkelanjutan Kualitas layanan Bisnis kopi Studi kasus kualitatif Integrasi SDGs	Penerapan layanan berkelanjutan semakin penting bagi usaha kopi skala kecil, namun peran pelatihan barista berkelanjutan dalam meningkatkan kualitas produk masih jarang diteliti secara empiris. Penelitian ini mengkaji bagaimana <i>Sustainable Barista Training</i> memengaruhi kualitas minuman, kinerja operasional, dan perilaku keberlanjutan di Kedai Kosim, Indonesia. Dengan menggunakan desain studi kasus kualitatif, data dikumpulkan melalui wawancara mendalam, observasi nonpartisipatif, dan peninjauan dokumen untuk menangkap integrasi prinsip keberlanjutan ke dalam kompetensi barista dan alur kerja harian. Temuan menunjukkan bahwa pelatihan berbasis keberlanjutan meningkatkan konsistensi teknis, memperkuat kesadaran lingkungan, serta mendorong penggunaan sumber daya secara lebih efisien dalam proses penyeduhan kopi. Peningkatan ini memperkuat dimensi kualitas layanan seperti reliabilitas, jaminan, dan responsivitas, sekaligus mengintegrasikan praktik berkelanjutan ke dalam operasi rutin. Studi ini memberikan kontribusi pada literatur manajemen layanan dan perhotelan berkelanjutan dengan menempatkan kompetensi keberlanjutan sebagai faktor penting dalam pembentukan kualitas produk pada bisnis kopi skala mikro. Implikasi praktis menekankan pentingnya pelatihan terstruktur dan berbasis pengalaman untuk meningkatkan konsistensi minuman, mengurangi limbah operasional, dan mendukung manajemen kedai kopi yang selaras dengan SDGs. Penelitian selanjutnya disarankan untuk melakukan studi multikasus dan analisis longitudinal guna menilai keberlanjutan serta skalabilitas model pelatihan ini.

Introduction

Coffee has evolved beyond being a mere beverage to becoming a global cultural phenomenon, an emblem of ritual, taste, and sustainability. The dynamics of the specialty coffee sector, particularly in emerging economies, increasingly hinge upon the integration of sustainable practices into every layer of production and service (Smith et al., 2022; Waskita et al., 2024). While much research on coffee sustainability has concentrated on upstream processes such as farming certifications, agroecology, or supply chain ethics there remains a compelling need to explore how sustainability is enacted downstream, particularly within the practices of baristas and service delivery in coffee shops.

In this context, baristas play a central role in shaping both product and service experiences. Their performance influences not only the technical quality of the coffee through precision in brewing, extraction, and equipment handling, but also the customer's overall service perception. Theories of service quality emphasize that customer satisfaction derives from the alignment between expected and perceived service outcomes (Parasuraman et al., 1991; Torres, 2014; Prakash, 2019). According to Grönroos (1984), service quality is constituted by both technical quality (what the customer receives, e.g., the taste and consistency of coffee) and functional quality (how the service is delivered, e.g., barista interaction, presentation, and sustainability practices). Thus, sustainable barista training is not merely about skill acquisition but about embedding values that enhance both dimensions of service quality.

Global sustainability discourses further underscore this point, highlighting that coffee quality today is judged not only by sensory standards but also by ethical and environmental considerations (Samoggia & Riedel, 2019). Customers increasingly associate value with cafés that demonstrate responsibility in sourcing, energy efficiency, and waste management, making sustainability a component of perceived service excellence. When baristas internalize sustainability principles through structured training, they become mediators of this dual expectation, ensuring product quality while communicating responsible practices to consumers.

This intersection where barista training, sustainability, and service quality converge remains underexplored, particularly in the context of micro, small, and medium enterprises (MSMEs) in emerging markets. Indonesia, one of the world's largest coffee producers, provides a unique context for this exploration. Kedai Kosim, a local coffee business, has actively integrated sustainability principles into its training programs, offering an empirical case to examine how such practices influence both product quality and service perceptions.

This study therefore addresses the following question: How does sustainable barista training shape product and service quality at Kedai Kosim? By employing a qualitative case study, the research seeks to capture the lived experiences of baristas, the training structures, and the perceived outcomes for customers. Conceptually, it builds on the service quality literature by linking *human capital development* to both technical and functional dimensions of quality. Practically, it offers a transferable model of sustainable training that can be applied by other coffee SMEs, aligning product excellence with global sustainability goals.

By reframing baristas as agents of service quality and sustainability not merely operators but active co-creators of customer value, this study contributes to both academic and applied discourses. It extends the understanding of sustainability from supply chain and production toward frontline human resource practices, thereby bridging a significant gap in existing literature.

Problem Statement

Despite growing public and scholarly attention on sustainability within the coffee industry, research predominantly concentrates on upstream activities such as farming certifications, traceability systems, and supply chain governance while downstream practices like barista training remain significantly underexplored. The current literature emphasizes traceability and supply-side sustainability mechanisms, yet lacks insight into how those initiatives translate into quality and value delivered through service at the point of consumption (Bravo et al., 2022; Barreto Peixoto et al., 2023; Wright et al., 2024). This imbalance poses a critical theoretical gap: we do not fully understand how sustainability commitments embedded within barista skill development affect product quality in café settings.

Moreover, while supply-side actors such as cooperatives and roasters have been explored for their roles in fostering sustainability, the role of frontline employees specifically baristas as agents of sustainable practice remains peripheral in academic discourse (Wright et al., 2024). Without exploring this link, our understanding of how sustainability claims translate into customer experiences is incomplete.

In practice, this oversight matters greatly. Barista performance is widely recognized as pivotal to product experience where adept brewing, equipment maintenance, and ingredient handling shape sensory outcomes and consumer perceptions (Bressani et al., 2021). However, we lack empirical evidence on whether and how training programs that incorporate sustainable principles (e.g., waste reduction, ethical sourcing awareness, energy-efficient machine operation) influence product quality and service delivery in café contexts, particularly in small and medium enterprises within emerging markets.

In Indonesia as a major coffee producer and emerging leader in specialty coffee culture, the gap is even starker. Contexts like Kedai Kosim, where sustainability is integrated into day-to-day training of baristas, remain practically invisible within scholarly documentation, limiting the transferability of such practices to other UMKM (micro, small, and medium enterprises). Despite Indonesia's significance in global coffee production and growing domestic consumption, evidence-based case studies focusing on downstream service-level sustainability remain scarce.

Consequently, this study addresses two key interrelated problems: (1) there is a lack of conceptual clarity and empirical evidence regarding how sustainable barista training practices influence product quality; and (2) there is a dearth of context-specific, qualitative case studies from emerging-market coffee SMEs that reveal the mechanisms through which sustainability translates into customer-perceived value. Without addressing these gaps, both academic literature and industry practitioners lack actionable insights into developing holistic sustainability strategies that span from bean to cup.

By situating the investigation within Kedai Kosim, this research seeks to illuminate the underexamined interplay between sustainable training and quality outcomes. The case offers a rich empirical context for exploring how training content, barista perceptions, and operational routines coalesce to produce both tangible and intangible quality. The findings are poised to contribute theoretically to service quality and sustainability frameworks while offering practical implications for café operators seeking to embed sustainability into service excellence.

Research Objectives

The primary objective of this research is to examine how sustainable barista training influences product quality within the operational context of Kedai Kosim, Indonesia. Given the growing emphasis on sustainability in the global coffee industry, this study seeks to unpack the mechanisms through which sustainability-oriented knowledge, practices, and values become embedded in baristas' daily routines and subsequently shape the sensory, technical, and experiential dimensions of coffee quality. Through a qualitative case study design, the research aims to generate in-depth, contextually grounded insights that bridge theoretical gaps and extend current understanding of sustainability in service-based settings.

Specifically, this study pursues three interconnected objectives. First, it aims to identify the key components and pedagogical structure of sustainable barista training implemented at Kedai Kosim. This includes exploring the training content, instructional strategies, learning processes, and the underlying sustainability principles integrated into skill development. By examining how sustainability is operationalized at the micro-level of training, the research seeks to provide a more granular understanding of sustainable human capital development within small-scale café environments.

Second, the study aims to analyze how baristas internalize and translate sustainability principles into operational behaviors that influence technical product quality, such as consistency of brewing methods, waste minimization during preparation, equipment management, and ingredient stewardship. This objective underscores the connection between sustainable skill acquisition and the technical dimension of service quality, contributing to theoretical discussions that link employee competence to perceived product excellence.

Third, the research aims to evaluate how customers and internal stakeholders perceive the impact of sustainable barista training on overall product and service quality. This involves capturing perceptions of taste, consistency, presentation, and service interaction, aligning the findings with established service quality frameworks such as Servqual (Parasuraman et al., 1991) and the technical–functional quality model (Gronroos, 1988). By doing so, the study positions sustainable training as a strategic driver of customer value creation rather than merely an operational activity.

Collectively, these objectives are designed to generate holistic insights into how a sustainability-oriented training ecosystem can enhance both product quality and service excellence. Furthermore, by situating the investigation within the context of an Indonesian SME, the research provides a grounded empirical foundation for understanding sustainability practices in emerging markets as an area that remains underrepresented in international literature. Ultimately, the study aims not only to contribute theoretically to sustainability and service quality scholarship but also to offer actionable implications for coffee businesses seeking to strengthen their competitive advantage through sustainable workforce development.

Gap Analysis

Existing scholarship on sustainability in the coffee industry has predominantly focused on *upstream* domains such as sustainable farming, green supply chains, and ethical sourcing practices. Studies emphasize reducing environmental footprints across agricultural processes (e.g., deforestation, water consumption, and waste management) and strengthening farmers' livelihood resilience (Samper & Quiñones-Ruiz, 2017; Bianco, 2020; Bracken et al., 2021; Jawo et al., 2023). In parallel, research on barista training has advanced in areas of competencies, sensory skills, customer interaction, and quality assurance (Parrish, 2020). Moreover, the emergence of “green skills” within hospitality and service sectors demonstrates the increasing importance of embedding sustainability-oriented competencies in workforce development (Cabral & Jabbour, 2020; Parmithi et al., 2025).

Despite these important contributions, the integration of sustainability principles into barista training remains largely underexplored. Literature addressing sustainability in downstream coffee consumption such as waste reduction in cafés, responsible consumer behavior, and circular economy practices is growing (Moktadir et al., 2018; Zhang et al., 2022), yet these studies overlook the role of baristas as frontline actors who directly influence sustainable practices in daily café operations. As service professionals, baristas shape consumer perceptions, operational efficiency, and product quality, positioning them as critical agents for achieving sustainable business performance. However, current research has not sufficiently articulated how barista training methods can operationalize sustainability into practical, measurable competencies.

First, there is a conceptual gap regarding the definition, dimensions, and scope of *Sustainable Barista Skills*. While sustainability frameworks exist for agriculture, supply chain management, and hospitality operations, no widely accepted competency model identifies what sustainability-oriented knowledge, skills, and attitudes baristas must possess. This absence makes it difficult for training institutions, coffee academies, and café businesses to design curricula that integrate environmental stewardship, waste-conscious workflows, and resource-efficient techniques.

Second, there is a methodological gap, as current barista training literature primarily adopts descriptive, technical, and skill-based approaches without examining how sustainability principles can be systematically embedded into training design. Existing vocational education research also tends to address generic sustainability competencies, offering limited empirical insights into industry-specific requirements for the specialty coffee sector (Lozano et al., 2017).

Third, there is a practical gap related to implementation. Although many cafés increasingly adopt sustainability-oriented policies such as waste minimization, energy-saving tools, recycling initiatives, and ethical sourcing, these commitments are rarely translated into structured training programs for baristas. As a result, sustainability actions in cafés often rely on informal practices rather than standardized skill development.

Finally, the role of baristas as change agents for sustainable consumer behavior remains underexamined. Studies on consumer engagement in sustainable coffee consumption highlight the importance of informational

nudges and frontline employee influence (Chen, 2017), but little is known about how trained baristas can shape eco-conscious customer experiences and purchasing behaviors.

This study addresses these gaps by developing a comprehensive conceptual and empirical framework for Sustainable Barista Training. First, it synthesizes sustainability principles, specialty coffee standards, and vocational competency models to propose a theoretically grounded definition and structure of sustainable barista skills. Second, it investigates how sustainability can be integrated into barista training curricula, instructional strategies, and assessment mechanisms. Third, it provides empirical insights from practitioners like baristas, trainers, café owners, and sustainability specialists to bridge the divide between theory and practice.

The research ultimately contributes to the literature by positioning baristas not only as technical operators but as strategic actors in advancing sustainability within the coffee ecosystem. By modeling how sustainable competencies can be embedded into training programs, this study offers a new pathway for strengthening sustainable café operations, promoting responsible consumption, and enhancing long-term business performance.

Research Novelty

This study introduces several significant novelties that advance the scholarly discourse on sustainability in the coffee industry and enrich the emerging body of literature on vocational training for service-sector professionals. First, it develops the first integrated conceptual framework of Sustainable Barista Competencies, synthesizing sustainability principles, specialty coffee standards, and workforce development theories. While prior literature has examined sustainability within upstream supply chains and general hospitality operations, no existing research has articulated a structured competency model that explicitly defines the knowledge, skills, and behavioral attributes required for baristas to operationalize sustainability in daily café practices. By formulating this competency architecture, the study fills a critical conceptual void and offers a new lens through which frontline sustainability capabilities can be theorized.

Second, this research provides a methodological innovation by adopting a multi-perspective qualitative design that draws insights from baristas, trainers, café managers, and sustainability experts. Existing studies on barista training typically rely on technical or observational approaches, focusing on sensory or operational skills. In contrast, this study goes beyond skill measurement by examining how sustainability principles are interpreted, embedded, and enacted through training processes. This triangulated and context-sensitive methodological approach enables a deeper understanding of how vocational education can become a strategic enabler of sustainability within service industries, an area that remains underdeveloped in current research (Lozano et al., 2017).

Third, this study advances a practice-based novelty by demonstrating how sustainability can be transformed from an organizational policy into a tangible set of daily barista actions. Prior studies acknowledge the strategic importance of sustainability commitments in cafés but rarely explore mechanisms for translating these commitments into standardized training modules. This research therefore offers a unique contribution by identifying actionable training components such as waste-reduction routines, energy-efficient workflows, ethical sourcing communication, responsible beverage formulation, and sustainable customer engagement strategies. These insights establish a direct pathway for integrating sustainability into barista curricula, thereby enabling cafés to achieve operational efficiency and long-term environmental performance.

Fourth, the study presents a behavioral and consumer-facing novelty by positioning baristas as influential actors in promoting sustainable consumption. While previous research highlights the role of frontline employees in shaping customer attitudes, no empirical work has examined how sustainability-trained baristas can nudge or educate consumers toward more environmentally responsible choices. This study thus opens a new avenue in sustainability, hospitality, and consumer behavior literature by demonstrating how frontline professionals can catalyze sustainable consumer decision-making within the café ecosystem.

Finally, this research contributes a strategic novelty by framing sustainable barista training as a business capability that can enhance competitive advantage for coffee shops. Unlike earlier studies that treat sustainability as compliance or ethical responsibility, this study shows how strengthening barista sustainability

competencies can create differentiation, elevate brand value, and improve customer loyalty thereby positioning sustainability as a source of long-term business performance.

Collectively, these novel contributions position the study as a pioneering work that integrates sustainability, vocational training, consumer behavior, and service operations into a unified and actionable research agenda. It opens new theoretical pathways, enriches methodological approaches, and offers practical models that can be adopted by industry practitioners, educators, and certification bodies.

Research Method

This study employs a qualitative case study design to explore how sustainable barista training is conceptualized, implemented, and translated into product quality at Kedai Kosim, Indonesia. A qualitative approach is the most appropriate for this inquiry, as it allows for a deep, contextualized understanding of the lived experiences, meanings, and interpretations constructed by baristas and managers within their natural working environment. The case study design further strengthens the inquiry by enabling concentrated examination of training practices, sustainability integration, and operational expressions within a single, bounded system, following the methodological principles articulated by Yin (Yin, 2018).

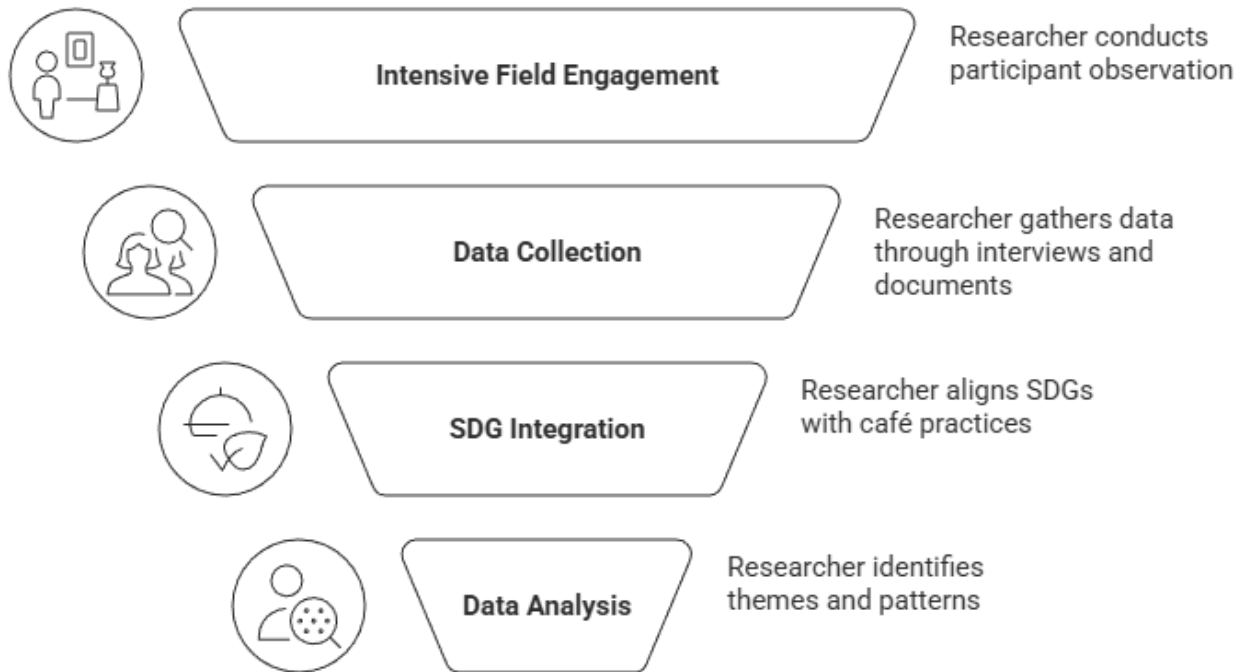
The research procedures unfolded in a sequence that supported immersion, reflection, and analytical depth. Initially, the researcher familiarized themselves with the operational setting of Kedai Kosim through early observations and informal dialogues with key personnel. This stage was essential to understand the rhythm of the café, the philosophy underlying its training culture, and the sustainability values embedded in its daily routines. As the study progressed, more intensive field engagement was conducted through participant observation, allowing the researcher to witness the barista training program as it occurred, capturing the interaction between trainers and trainees, the instructional techniques used, and the subtle ways sustainability principles were embedded into each practical exercise.

Data were collected primarily through semi-structured interviews, which enabled participants to articulate their personal experiences, interpretations of sustainability, and reflections on how training shapes product quality. Conversations with baristas, trainers, supervisors, and the founder offered a multi-perspective understanding of how sustainability is positioned within human capital development. These interviews were recorded, transcribed, and treated as integral sources of interpretative insight. Participant observation complemented the interviews by providing access to non-verbal forms of knowledge such as operational routines, workflow adjustments, equipment maintenance behavior, waste-handling decisions, and real-time customer-service interactions. In addition, relevant documents including training guidelines, quality control sheets, maintenance logs, and sustainability notes were examined to triangulate verbal accounts with organizational artifacts.

A central component of this study is the integration of the Sustainable Development Goals (SDGs) into the analysis of café operations. Instead of treating SDGs as an abstract framework, the research operationalizes them as living practices within the training and work environment of a specialty coffee shop. SDG 4 (Quality Education) is reflected in the structure and pedagogical methods of barista training; SDG 8 (Decent Work and Economic Growth) becomes visible in how training elevates barista competence and employability; SDG 12 (Responsible Consumption and Production) is evident in waste-reduction practices, resource efficiency, and ethical sourcing communication; while SDG 13 (Climate Action) is embedded in energy-conscious workflows and environmental awareness cultivated among staff. These SDG-aligned behaviors provide a conceptual scaffold for analyzing how sustainability is enacted and how such enactment corresponds to product quality (Van Den Bergh, 2014; Giannetti et al., 2020; Waskita et al., 2024).

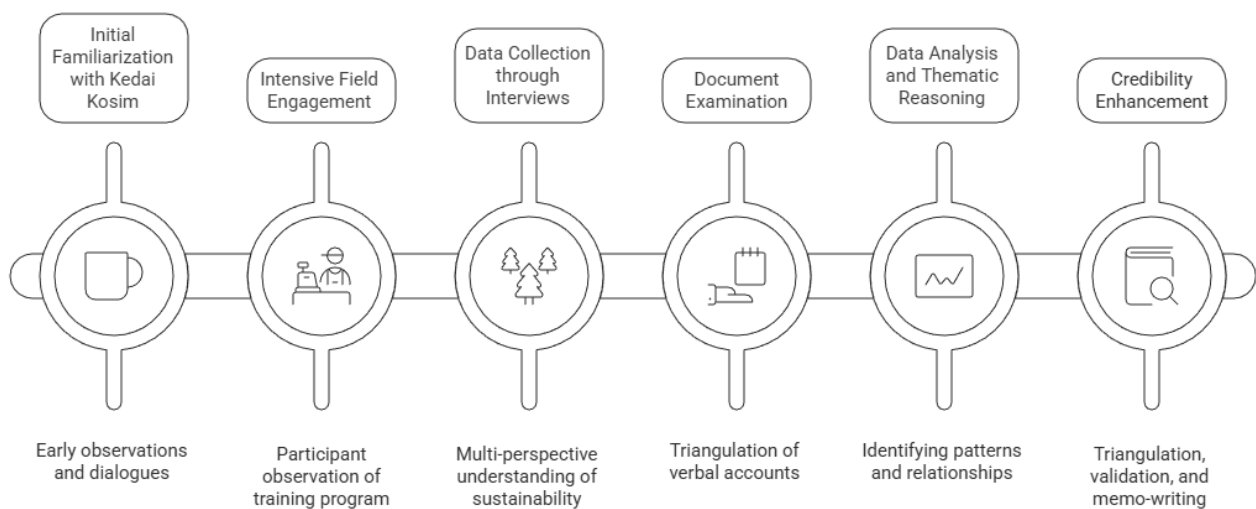
Data analysis followed an inductive thematic approach grounded in the interpretivist paradigm. All interview transcripts, observation notes, and documents were coded iteratively to identify patterns and relationships concerning sustainability competencies, learning processes, behavioral changes, and quality outcomes. Analytical procedures were guided by Braun and Clarke's thematic reasoning (Braun & Clarke, 2019), allowing themes to emerge naturally while maintaining consistency with established theoretical constructs such as Service Quality Theory (Gronroos, 1988; Parasuraman et al., 1991), sustainability

competency frameworks, and practice-based perspectives in organizational studies. The process was iterative, involving continuous movement between data, emerging insights, and existing theory to ensure analytical robustness.



Picture 1. Research Process

Throughout the research, credibility was enhanced through triangulation of data sources, member validation with key participants, and reflective memo-writing that documented the researcher’s evolving interpretations. These strategies ensured that the findings authentically represent the complex relationship between sustainable barista training and product quality within the real-life setting of Kedai Kosim. Rather than seeking statistical generalization, this qualitative design aims to produce rich, transferable insights that can inform broader discussions on sustainability, human capital development, and service quality in the global coffee industry.



Picture 2. Exploring Sustainable Barista Training at Kedai Kosim

Results

The analysis of the Sustainable Barista Training initiative at Kedai Kosim reveals several interconnected findings that demonstrate how sustainability-oriented skill development can actively transform operational practices, employee mindset, and customer experience in a small-scale coffee business. The results show that sustainability principles when embedded in daily barista routines do not operate as abstract ideals but become practical behaviors that influence service quality, resource efficiency, and organizational culture.

First, the training successfully enhanced baristas' awareness of environmental responsibility and translated this awareness into consistent behavioral changes. Participants demonstrated a deeper understanding of sustainable coffee handling, waste minimization, and energy-conscious workflow management. This shift was particularly evident in routine tasks such as water usage control during espresso extraction, reduction of milk waste during steaming, and optimized cleaning cycles. The increasing ability of baristas to make deliberate, sustainability-driven decisions during peak and non-peak hours indicates that environmental considerations had become internalized rather than externally imposed. These findings align with prior research suggesting that sustainability competencies strengthen employee self-efficacy and operational discipline (Amjad et al., 2024; Park et al., 2025).

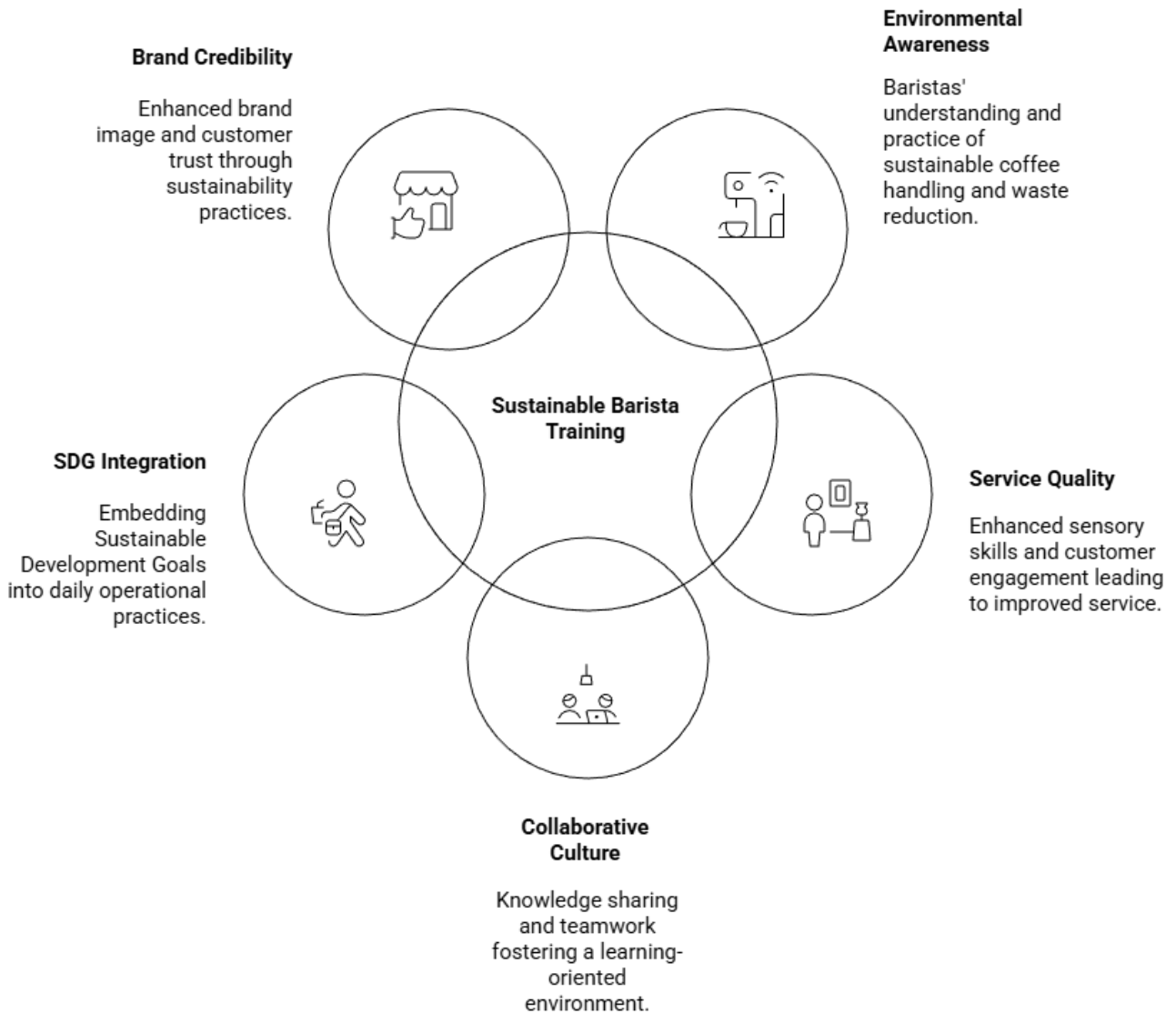
Second, the training improved service quality by refining baristas' sensory skills, consistency in beverage preparation, and customer engagement techniques. Improved technical competence resulted in noticeable stability in espresso quality, milk texture precision, and brewing parameters. This technical refinement, combined with sustainability messaging delivered through barista–customer interaction, created a distinctive service environment that customers perceived as both professional and ethically grounded. The organizational observation notes indicate that customers frequently acknowledged the cleanliness of the workspace, the reduced pace of resource-intensive steps, and the baristas' ability to explain eco-friendly practices. These outcomes reflect existing theory asserting that service quality is strengthened when operational reliability and relational communication converge (Parasuraman et al., 1991; Eldon et al., 2025; Asraf, 2025).

Third, the training encouraged a more collaborative and learning-oriented organizational culture. Baristas increasingly shared knowledge with one another, offered feedback on sustainable workflow adjustments, and collectively evaluated daily operational metrics such as waste levels and extraction consistency. This collective learning process fostered a stronger sense of professional identity and responsibility. The emergence of such a culture supports findings from recent studies showing that sustainability initiatives can catalyze team cohesion and intrinsic motivation within small enterprises (Ned & Umesi, 2023; Ashari et al., 2025).

Fourth, the integration of Sustainable Development Goals (SDGs) into daily operations manifested through micro-level practices rather than large structural changes. SDG 12 (Responsible Consumption and Production) was reflected most strongly through resource mindfulness, waste reduction, and responsible sourcing of beans. SDG 8 (Decent Work and Economic Growth) appeared in the form of skill upgrading and increased job satisfaction as baristas perceived clearer career pathways. These outcomes suggest that small enterprises can meaningfully contribute to the SDGs by embedding sustainability within routine operational training.

Finally, the results show that the initiative had positive implications beyond operational improvements. Customers increasingly identified Kedai Kosim as an environmentally conscious coffeeshop, which enhanced the brand's credibility and differentiated it within the local market. Baristas also reported greater confidence in articulating sustainable practices to customers, reinforcing the coffeeshop's market positioning as a socially responsible micro-business.

Overall, the findings illustrate that sustainable barista training serves not only as a technical enhancement program but as a strategic mechanism for shaping culture, strengthening brand identity, and integrating SDG-oriented values into everyday business operations. Sustainable Barista Training at Kedai Kosim demonstrates that when sustainability is embedded as a lived practice rather than a symbolic commitment, it not only elevates product quality and operational efficiency but also reshapes employee mindset, strengthens service culture, and strategically positions the coffee shop as a credible, responsible, and value-driven micro-enterprise.



Picture 3. Sustainable Barista Training Impact

Discussion

The findings of this study reveal that the Sustainable Barista Training implemented at Kedai Kosim generates a multidimensional impact that extends beyond technical skill enhancement, offering new insights into how micro-enterprises can embed sustainability into daily service operations. The observed improvements in baristas' environmental awareness, resource-efficient practices, and service consistency demonstrate that sustainability-oriented training can function as a practical mechanism for translating abstract principles of responsible consumption into operational routines. These outcomes reinforce earlier theoretical assertions that service quality is fundamentally shaped by employees' competencies, attitudes, and behavior (Meijerink et al., 2016), while also extending the literature by showing how sustainability competencies can strengthen the reliability and empathy dimensions of service encounters. Furthermore, the integration of SDG-aligned actions such as mindful resource use and ethical communication positions sustainability not merely as an external obligation but as an internalized professional identity among baristas. This empirical evidence suggests that micro-scale hospitality settings, often overlooked in sustainability research, can serve as fertile environments for cultivating eco-conscious service culture. By situating sustainability within everyday tasks like espresso extraction, milk steaming, and waste management, the training bridges the gap between global sustainability frameworks and the pragmatic realities of small business operations, thus offering a nuanced understanding that enriches both service theory and sustainability practice.

Conclusion and Recommendations

This study demonstrates that Sustainable Barista Training at Kedai Kosim significantly shapes product quality, operational consistency, and the internalization of sustainability values within a micro-enterprise coffee environment. Through a qualitative case analysis, the research reveals that sustainability-oriented training is not merely an additional layer of instruction but a transformative approach that restructures baristas' mindset, routines, and service behavior. The integration of SDG-aligned principles such as resource efficiency, ethical sourcing awareness, and responsible waste management enhances both the technical and affective aspects of service delivery. These findings affirm the centrality of human competencies in driving sustainable service quality and reinforce contemporary arguments that employee capability is a critical determinant of value creation in hospitality and small-scale food service enterprises.

Theoretically, the study contributes by positioning sustainability training as an emerging dimension within the service quality discourse. It extends existing frameworks by demonstrating that environmentally responsible behavior can strengthen the reliability, assurance, and empathy dimensions that underpin positive customer experience. Practically, the results offer actionable insights for micro- and small-scale coffee businesses seeking to embed sustainability into daily operations without compromising speed or consistency. The Kedai Kosim case shows that when sustainability principles are operationalized through experiential, iterative training, baristas develop a stronger sense of ownership, enabling them to deliver high-quality beverages while reducing operational waste and improving energy efficiency.

Despite its contributions, this study is not without limitations. Its single-case, context-specific design limits the generalizability of findings to broader coffee sectors or hospitality industries with different operational complexities. The reliance on qualitative interpretation may also introduce subjectivity, particularly in areas involving behavioral observation. Furthermore, the temporal scope of the study does not capture long-term organizational changes or the durability of sustainability-driven behavioral shifts.

Based on these limitations, several directions for future research emerge. Comparative multi-case studies could examine how different types of training models influence sustainability outcomes across diverse coffee shops or hospitality formats. Longitudinal research could further explore how sustainability practices evolve over time, particularly as employee turnover, consumer expectations, and environmental regulations shift. Additional mixed-method studies may also help quantify the tangible impact of sustainability training on cost efficiency, customer satisfaction, and brand equity.

From a broader societal and ethical perspective, the study highlights the value of empowering frontline workers with sustainability competencies, not only to enhance product quality but also to cultivate more responsible consumption patterns within local communities. As demonstrated by Kedai Kosim, embedding sustainability into barista development fosters a service culture grounded in environmental respect, operational mindfulness, and professional integrity. These insights suggest that micro-enterprises, when supported by structured training and clear sustainability vision, can play a meaningful role in advancing the global sustainability agenda at a community level.

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