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Electric Coffee Cart Innovation in Denpasar City and Gianyar Regency as a Response to Changing Consumer Behavior

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Abstract
Purpose: This study aimed to analyze electric coffee cart innovation in Bali as a micro-enterprise model that integrated mobility, operational efficiency, and social media-based marketing within the context of increasing price sensitivity and shifting consumer behavior.
Research methods: The research adopted a qualitative descriptive approach using a comparative case study in Denpasar City and Gianyar Regency. It relied on secondary data derived from media reports, digital content, and a synthesis of domestic mobile coffee studies alongside recent international literature on food trucks, street food consumption, and electric micromobility.
Results and discussion: The findings identified six key drivers of purchase decisions, perceived price fairness resulting from lower cost structures, location-based convenience, product quality and menu variety comparable to coffee shops, eco-friendly innovation image, digital exposure through TikTok and Instagram, and operational consistency supported by centralized production systems.
Implication: The study contributed by proposing a Stimulus–Organism–Response framework that integrated technological innovation, consumer perception, and competitive dynamics, offering managerial insights and policy implications for MSMEs in tourism-driven public spaces.

Keywords: Bali, electric coffee cart innovation, purchase decision, perceived value

Abstrak
Tujuan: Studi ini bertujuan untuk menganalisis inovasi gerobak kopi listrik di Bali sebagai model usaha mikro yang mengintegrasikan mobilitas, efisiensi operasional, dan pemasaran berbasis media sosial dalam konteks meningkatnya sensitivitas harga dan pergeseran perilaku konsumen.
Metode penelitian: Penelitian ini mengadopsi pendekatan deskriptif kualitatif menggunakan studi kasus komparatif di Kota Denpasar dan Kabupaten Gianyar. Penelitian ini mengandalkan data sekunder yang diperoleh dari laporan media, konten digital, dan sintesis studi kopi bergerak domestik bersama dengan literatur internasional terkini tentang food truck, konsumsi makanan jalanan, dan mikromobilitas listrik.
Hasil dan pembahasan: Temuan mengidentifikasi enam pendorong utama keputusan pembelian, yaitu persepsi keadilan harga yang dihasilkan dari struktur biaya yang lebih rendah, kenyamanan berbasis lokasi, kualitas produk dan variasi menu yang sebanding dengan kedai kopi, citra inovasi ramah lingkungan, paparan digital melalui TikTok dan Instagram, dan konsistensi operasional yang didukung oleh sistem produksi terpusat.
Implikasi: Studi ini berkontribusi dengan mengusulkan kerangka Stimulus–Organisme–Respons yang mengintegrasikan inovasi teknologi, persepsi konsumen, dan dinamika persaingan, menawarkan wawasan manajerial dan implikasi kebijakan untuk UMKM di ruang publik yang digerakkan oleh pariwisata.

Kata kunci: Bali, inovasi gerobak kopi elektrik, keputusan pembelian, nilai yang dirasakan

INTRODUCTION

Coffee had evolved from merely a caffeinated beverage into an integral part of urban lifestyle, social interaction, and a symbol of productivity in modern society. It had become embedded in the daily routines of many individuals. Coffee consumption was no longer associated solely with caffeine intake but was closely linked to lifestyle identity, work-related activities, and social spaces. This transformation had stimulated the rapid growth of coffee shops, including in Bali, which combined local consumers and international tourists within the same consumption ecosystem. However, the expansion of coffee shops had often been accompanied by rising beverage prices, particularly in tourist areas and high-traffic public spaces. This condition had increased price sensitivity among certain consumer segments and encouraged the search for more affordable alternatives. In Bali, the proliferation of coffee shops had been particularly evident in tourism-driven and public activity centers such as Denpasar City and Gianyar Regency.

Academically, research on mobile coffee businesses in Indonesia has developed within several dominant clusters. For instance, Maulida *et al*. (2025) found that consumer behavior and the marketing mix significantly influenced purchase decisions. Similarly, Fadhilla and Pratiwi (2025) confirmed that taste, price, and product variety affected repurchase intention. In line with these findings, Raihan *et al*. (2025) also demonstrated the dominance of price and quality factors in shaping purchase decisions. Furthermore, in terms of communication, Guterres *et al*. (2025) proved that digital marketing and word of mouth strengthened brand awareness. In addition, Kurniasih *et al*. (2025) added that cultural, social, personal, and psychological factors influenced students' purchase decisions. Moreover, Siregar *et al*. (2025) concluded that mobile coffee businesses were financially feasible. Nevertheless, despite these contributions, most of these studies examined marketing variables in isolation and, therefore, have not integrated mobility-based technological innovation into consumer behavior models.

International literature also provides a comparative perspective. For example, Lichy *et al*. (2022) explained that mobility in food truck models reduced overhead costs and increased business adaptability. In addition, Bai *et al*. (2024) and Tacardon *et al*. (2023) showed that utilitarian and hedonic values strengthened purchase intention in street food consumption contexts. Moreover, Bretones *et al*. (2023) and Alka *et al*. (2024) emphasized the potential of electric micromobility as a flexible and cost-efficient urban entrepreneurial solution. Meanwhile, Bertossi (2024) highlighted the urgency of sustainability within the vending sector, while Alimin *et al*. (2021) discussed cart design innovation as a visual differentiation strategy. However, despite these contributions, no prior study has comprehensively linked electric micromobility, coffee consumption behavior, digital exposure, and tourism-driven public space contexts within a unified conceptual framework.

The phenomenon of electric coffee carts in Bali did not merely offer lower prices than conventional coffee shops but also transformed cost management and consumer reach strategies. Coverage at Pantai Sindhu reported prices starting from IDR 8,000 with a maximum of IDR 13,000, emphasizing portability and the absence of gasoline usage as key reasons for adopting electric carts. The same report noted an eight-hour charging duration and a travel range of approximately 15 kilometers on a full battery, indicating that energy efficiency had become part of the operational logic (Putri, 2024).

Mobility patterns placed carts at high-demand points such as SMAN 1 Denpasar and Pantai Sindhu, while eliminating rental costs allowed prices to remain low without reducing quality, with production increasing during weekends (Dewi, 2024).

On a larger scale, NusaBali reported fleet replication and centralized production systems to maintain quality control, with approximately 150 cups sold per cart daily and total sales reaching 500–600 cups under normal conditions, increasing to 700–800 cups during peak activity periods. Prices ranged between IDR 8,000 and IDR 15,000 (May, 2026) In terms of communication, social proof emerged through digital exposure. Detik Bali reported that consumers discovered the carts via TikTok before visiting physically, strengthening pre-visit awareness (Putri, 2024) IDN Times positioned electric coffee carts as a consumption trend in Denpasar by referencing Instagram accounts and recommended parking spots, demonstrating that social media had become part of visibility and route strategies (Kartikaningrum, 2024). These findings aligned with mobile coffee marketing literature emphasizing price, variety, and taste as determinants of purchase decisions and repurchase intention (Fauziah & Pratiwi, 2025; Maulida *et al*., 2025), as well as the influence of digital marketing and word of mouth on brand awareness (Guterres *et al*., 2025). However, prior literature rarely mapped the integrated relationship between electric cart innovation attributes, digital exposure, perceived value, trust, and purchase decisions within tourism-driven public space contexts such as Denpasar and its surrounding areas.

Based on these conditions, two primary research gaps were identified. First, an empirical gap existed because Bali represented a unique demand structure combining local residents, students, workers, and tourists within public spaces such as beaches, pedestrian corridors, and heritage areas. This context had not been extensively examined in mobile coffee research. Second, a conceptual gap remained, as most studies tested marketing variables separately without integrating electric cart innovation and digital exposure as simultaneous stimuli influencing utilitarian value, hedonic value, and purchase decisions.

This study therefore pursued three objectives. First, it synthesized domestic and international literature regarding factors influencing purchase decisions in mobile coffee businesses. Second, it analyzed the characteristics of electric coffee cart innovation in Denpasar and Gianyar based on secondary data from media reports and digital content. Third, it constructed a state-of-the-art discussion and proposed an integrated conceptual framework linking electric cart innovation attributes and digital exposure to perceived value and purchase decisions.

RESEARCH METHODS

This article uses a descriptive qualitative approach with a comparative case study strategy in Denpasar and Gianyar. The focus is on the phenomenon of electric coffee cart innovation and its relationship to changes in consumer behavior. This design is appropriate for understanding the context, business actors' narratives, and purchasing decision mechanisms in dynamic consumption situations. Data sources include three groups. First, online media coverage containing operational facts such as prices, menus, opening hours, rationale for innovation, and consumer responses. Second, digital content from TikTok and Instagram platforms representing consumer discovery pathways and brand communication strategies. Third, national scientific articles relevant to mobile coffee, as well as international scientific articles from the

past five years relevant to food trucks, street food, electric micromobility, and sustainability in the vending sector, were collected. Denpasar and Gianyar were chosen because they have different and complementary demand characteristics. Denpasar has a high density of daily work, school, and public space activities, so demand tends to be stable on weekdays. Gianyar has a flow of cultural tourism and destination-related consumption points, so demand can be influenced by the tourist season and tourist mobility patterns. This combination helps to understand how the electric coffee cart innovation negotiates these two demand structures. This article utilizes secondary data and therefore does not present statistical measurements of psychological variables. However, triangulation of sources and literature synthesis allow this article to produce a clear conceptual mapping, novelty, and a further research agenda based on empirical testing. The data is presented narratively.

RESULTS AND DISCUSSION

Literature Synthesis of Coffee Purchasing Decisions

Changes in coffee consumption patterns over the past decade have shown a shift from simply a need for caffeine to an integral part of urban lifestyles and social spaces. This transformation has driven the growth of coffee shops in various cities, including Bali. However, amid rising prices and competition from modern coffee shops, the mobile coffee model has persisted and even innovated. The emergence of electric coffee carts in Denpasar and Gianyar demonstrates a new adaptation that combines operational efficiency, public space mobility, and digital exposure. This section reviews relevant literature to build the conceptual foundation of this research. The literature review focuses on five main clusters. First, theories of consumer behavior and purchasing decisions in the context of mobile coffee. Second, the concept of perceived value, encompassing utilitarian and hedonic values. Third, micro-mobility innovation and entrepreneurship based on light electric vehicles. Fourth, the role of digital exposure and social proof in shaping awareness and trial. Fifth, the Stimulus–Organism–Response model as an integrative framework to explain the relationship between innovation attributes and purchasing decisions.

Tabel 1. Literature Synthesis

No	Author (Year)	Context	Method	Key Findings
1	(Maulida *et al.*, 2025)	Consumer behavior & marketing mix	Quantitative	Influence purchase decision
2	(Fauziah & Pratiwi, 2025)	Repurchase intention	Quantitative	Taste & price affect repurchase
3	(Guterres *et al.*, 2025)	Digital marketing	Quantitative	Digital & WOM increase awareness

4	(Kurniasih *et al*., 2025)	Student purchase decision	Quantitative	Cultural & psychological factors matter
5	(Siregar *et al*., 2025)	Business feasibility	Financial analysis	Business feasible
6	(Lichy *et al*., 2022)	Food truck innovation	Conceptual	Mobility improves adaptability
7	(Tacardon *et al*., 2023)	Street food intention	Machine learning	Perceived value drives intention
8	(Bai *et al*., 2024)	Utilitarian & hedonic value	SEM	Values influence intention
9	(Bretones *et al*., 2023)	Micro mobility adoption	Review	Adoption depends on regulation
10	(Bertossi, 2024)	Food vending sustainability	Review	Circular economy potential
11	(Alka *et al*., 2024)	Micro mobility entrepreneurship	SLR	Innovation opportunity
12	(Alimin *et al*., 2021)	Container booth design	Descriptive	Better branding
13	(Kevin & Dewayani, 2024)	Website ordering system	System dev	Improves efficiency
14	(Kurniawan & Madiistriyatno, 2023)	Marketing strategy	Analysis	Differentiation important
15	(Boettcher, 2023)	Coffee brand positioning	Strategic study	Strong identity needed
16	(Heying, 2010)	Artisan economy	Economic analysis	Community-based model
17	(Koua, 2020)	Street beverage hygiene	Survey	Hygiene affects quality
18	(Raihan *et al*., 2025)	Purchase decision	Quantitative	Price & quality matter

(Source: literature review, 2026)

Previous studies on mobile coffee businesses have predominantly focused on consumer behavior, marketing mix variables, and business feasibility. For instance, Maulida *et al*. (2025) found that consumer behavior and the marketing mix significantly influenced purchase decisions, emphasizing price, promotion, and product attributes as key determinants. Similarly, Fauziah and Pratiwi (2025) demonstrated that taste, price,

and product variation affected repurchase intention. In addition, Raihan *et al*. (2025) confirmed that price and quality were dominant factors shaping purchase decisions. Overall, this body of literature has concentrated on traditional marketing determinants and, therefore, has not incorporated technological innovation as a behavioral stimulus..

In terms of marketing communication and brand positioning, Guterres *et al*. (2025) showed that digital marketing and word of mouth significantly increased brand awareness in mobile coffee businesses. Furthermore, Kurniawan and Madiistriyatno (2023) highlighted the importance of differentiation strategies in facing competitive markets, while Boettcher (2023) emphasized brand identity and community engagement as critical positioning strategies. However, these studies did not integrate physical mobility as a differentiation element. Consequently, the role of electric mobility as a green innovation strategy has remained largely unexplored.

Regarding psychological and social determinants of purchase decisions, (Kurniasih *et al*., 2025) found that cultural, social, personal, and psychological factors influenced students' decisions to purchase mobile coffee. (Bai *et al*., 2024) demonstrated that utilitarian and hedonic values significantly affected street food purchase intentions, while (Tacardon *et al*., 2023), using a machine learning ensemble model, identified perceived value and perceived quality as primary predictors of consumption intention. Although these findings expanded understanding of consumption motivation, they did not examine technological mobility innovation as a new consumption stimulus. Electric coffee carts potentially enhanced both utilitarian value through efficiency and accessibility, and hedonic value through novelty and eco-friendly symbolism.

From an innovation and entrepreneurship perspective, Lichy *et al*. (2022) argued that mobility and low operational overhead increased business adaptability in food truck models. Moreover, Alka *et al*. (2024) concluded that micro-mobility solutions created new entrepreneurial opportunities, while Bretones *et al*. (2023) reported that electric micro-mobility adoption depended on infrastructure, regulation, and risk perception. In addition, Bertossi (2024) suggested that the vending sector had strong potential within circular economy frameworks. Despite these contributions, prior studies did not specifically investigate the integration of electric micro-mobility within informal beverage sectors such as mobile coffee businesses. In terms of design and operational systems, Alimin *et al*. (2021) found that container booths improved branding visibility and spatial organization, yet they lacked flexibility compared to traditional carts. Furthermore, Kevin and Dewayani (2024) developed a web-based ordering system that improved operational efficiency but did not integrate mobility innovation. Finally, Siregar *et al*. (2025) concluded that mobile coffee businesses were financially feasible; however, their feasibility analysis did not include electric vehicle investment costs, battery maintenance, or energy efficiency considerations.

Literature on mobile coffee shops indicates that purchasing decisions are influenced by a combination of economic, psychological, social, technological, and spatial factors. In domestic studies, price consistently emerges as the primary determinant. For instance, Maulida *et al*. (2025) found that consumer behavior and the marketing mix significantly influence purchasing decisions. Similarly, Fauziah and Pratiwi (2025), as well as Raihan *et al*. (2025), emphasized that price and taste quality are dominant factors in shaping repurchase intentions and purchase decisions. These findings suggest that perceived fairness is determined not only by the nominal price but also by the lower operational cost structure compared to conventional coffee shops. As

a result, consumers perceive the product as offering higher value for money. In addition, Siregar *et al*. (2025) noted that the mobile coffee shop model has a financially efficient operational cost structure, which allows prices to remain competitive without sacrificing profitability.

Besides price, convenience, or ease of access, is an important driver in the context of business mobility. International literature on food trucks indicates that mobility allows businesses to align locations with demand points and reduce operational costs (Lichy *et al*., 2022). Street food studies also confirm that proximity and ease of access influence consumption intentions (Tacardon *et al*., 2023). In the context of mobile coffee shops, the cart's proximity to schools, tourist areas, and public spaces creates utilitarian value in the form of time efficiency and ease of transactions. This spatial dimension is relatively rarely explored in depth in domestic research.

The dimensions of taste quality and product variety remain fundamental to purchasing decisions. (Fauziah & Pratiwi, 2025) showed that taste and menu variety significantly influence repurchase intentions, while (Raihan *et al*., 2025) emphasized the importance of quality as a factor shaping purchasing decisions. International literature extends these findings by positioning perceived quality as part of the utilitarian and hedonic values that influence purchase intentions (Bai *et al*., 2024). This means that even with a cart-based business model, consumers still demand taste standards equivalent to those found in coffee shops to encourage repeat purchase decisions.

Psychological and social factors also play a significant role. Kurniasih *et al*. (2025) showed that cultural, social, personal, and psychological aspects influence students' decisions to purchase from mobile coffee shops. Furthermore, from a communication perspective, Guterres *et al*. (2025) demonstrated that digital marketing and word of mouth strengthen brand awareness. Exposure to digital content creates social proof that accelerates trial and builds trust. Therefore, purchasing decisions are not solely rational but are also influenced by lifestyle symbols and community influence.

The dimensions of technological innovation and sustainability are beginning to emerge in international literature. (Bretones *et al*., 2023) explain that electric micromobility is considered flexible and cost-effective, while (Alka *et al*., 2024)highlight entrepreneurial opportunities in micromobility solutions. (Bertossi, 2024) emphasize the urgency of sustainability in the retail sector, while (Alimin *et al*., 2021) demonstrate that design innovation can enhance a business's visual differentiation. However, Indonesian literature is still limited in linking technological innovation, such as the use of electric carts, with the formation of perceived value and purchasing decisions.

A literature synthesis identified six key drivers of mobile coffee purchasing decisions, perceived reasonable price, location-based convenience, taste quality and menu variety, psychological and social factors, digital exposure and social proof, and technological innovations that shape a modern and sustainable image. Although these dimensions have been discussed separately in various studies, no study has integrated all these factors into a coherent conceptual framework, particularly in the context of Bali, with its dynamic public tourism space and intense coffee shop competition. This gap serves as the basis for developing an integrated conceptual framework in this study.

Comparative Case Analysis of Denpasar and Gianyar

The descriptive qualitative approach used in this study utilizes secondary data sourced from national and local media coverage, digital content on Instagram, TikTok, and YouTube, and a synthesis of academic literature on mobile coffee shops, street food, and micromobility. This strategy allows for a comparative analysis between Denpasar and Gianyar by examining the representation of the phenomenon in public spaces while connecting it with scientific findings on consumer behavior and micro-enterprise innovation.

In Denpasar, a Detik Bali report highlighted an electric coffee cart on Sindhu Beach, with prices starting at IDR 8,000 and the most expensive menu item costing IDR 13,000. The article explains that the cart is powered by electricity without gasoline, requires approximately eight hours of charging, and has a range of approximately 15 kilometers on a full battery. This information suggests a change in operational cost structure that has the potential to reduce fuel costs and improve business efficiency. These findings align with research by (Siregar *et al*., 2025) which states that a low cost structure is one of the advantages of the mobile coffee shop model compared to conventional coffee shops. NusaBali News also noted that a single cart can sell around 150 cups per day, while the entire fleet can reach 700–800 cups under certain conditions. This data suggests that the combination of affordable prices and strategic locations can generate high sales volumes. From a consumer behavior perspective, this situation reinforces the perception of price fairness, as described by (Maulida *et al*., 2025) and (Raihan *et al*., 2025), where price and quality are dominant factors in purchasing decisions.

Local media outlets such as Radar Bali and IDN Times added that electric carts are often parked in front of schools, on pedestrian paths, and in coastal areas. This pattern suggests the use of proximity as a convenience strategy. International literature on food trucks emphasizes that mobility allows businesses to align locations with demand points and reduce operational costs (Lichy *et al*., 2022). (Tacardon *et al*., 2023) also showed that ease of access is a predictor of street food consumption intentions. Thus, the spatial dimension plays a significant role in shaping purchasing decisions. Instagram and TikTok content depict customer queues, social interactions, and the unique visuals of electric carts. A TikTok video depicting the experience of buying coffee at Sindhu Beach demonstrates how discovery occurs through digital platforms before a physical transaction takes place. This supports the findings of (Guterres *et al*., 2025) that digital marketing and word of mouth increase brand awareness and accelerate trial. For younger generations, digital exposure is the initial stimulus that influences purchasing decisions.

In Gianyar, public spaces are structurally intertwined with tourism corridors, cultural venues, and pedestrian-oriented environments such as art markets, temple surroundings, and heritage streets. This spatial configuration creates concentrated consumption nodes where both tourists and local residents converge throughout the day. Electric coffee carts strategically position themselves along pedestrian paths and near high-traffic attractions, allowing vendors to capitalize on continuous foot movement rather than relying on fixed storefront visibility. Mobility therefore becomes a dynamic market-entry strategy, enabling vendors to adjust routes based on temporal demand patterns, ceremonial events, peak tourist hours, and weekend crowd density. From a micromobility perspective, (Bretones *et al*., 2023) emphasize that light electric

vehicles are often perceived as flexible, low-emission, and operationally efficient, particularly in urban environments with dense pedestrian activity. (Alka *et al*., 2024) further argue that micromobility solutions expand entrepreneurial opportunities by lowering entry barriers and reducing dependence on permanent infrastructure. In the context of Gianyar, these characteristics translate into practical advantages: reduced fuel dependency, minimal noise, smoother navigation in pedestrian zones, and alignment with the sustainability-oriented image of Bali's tourism landscape.

Taste quality and menu variety remain key drivers of purchasing decisions in both regions. IDN Times reported that coffee carts in Denpasar are as delicious as cafes. This aligns with the findings of (Fauziah & Pratiwi, 2025), who showed that taste and product variety influence repeat purchase intentions. (Bai *et al*., 2024) emphasize that perceived quality influences purchase intentions through utilitarian and hedonic values. This means that technological innovation does not replace taste quality, but rather strengthens it in a competitive context. Sustainability is also beginning to emerge as a symbolic value. The use of gasoline-free electric carts creates an environmentally friendly image. (Bertossi, 2024) emphasizes the importance of integrating sustainability into the sales sector, while (Koua, 2020) highlight the importance of hygienic and standardized operational practices. In the environmentally sensitive context of Bali, this image can enhance perceived value in the eyes of consumers.

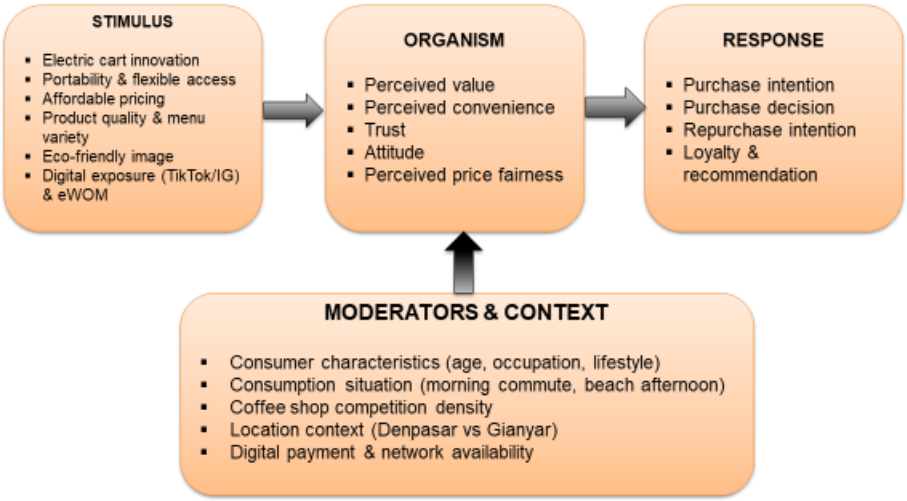
The centralized production system mentioned in media reports indicates an effort to maintain taste consistency across multiple fleets. This is linked to trust and repeat purchases. Studies by (Siregar *et al*, 2025) and (Kurniawan & Madiistriyatno, 2023) emphasize that quality control and differentiation strategies are important factors in the sustainability of mobile coffee businesses. A comparative analysis shows that Denpasar and Gianyar share three key similarities: affordability, location flexibility, and digital empowerment. However, Denpasar is more influenced by the activities of local residents and students, while Gianyar is more influenced by the influx of tourists. This combination suggests that the innovation of electric carts is an adaptive response to the dynamics of different public spaces, yet produces similar consumption behavior patterns. The integration of cost efficiency, spatial mobility, digital exposure, product quality, and innovative imagery creates a more complex purchasing decision-making mechanism than the conventional mobile coffee shop model.

State of the Art and Stimulus–Organism–Response Conceptual Framework

The state of the art in mobile coffee research remains largely fragmented across studies on pricing strategy, marketing mix, digital promotion, and purchase decision factors, with limited integration of technological innovation and spatial mobility within a unified explanatory model. Existing Indonesian studies primarily examine marketing determinants and consumer behavior in isolation, while international literature on food trucks, street food consumption, and electric micromobility emphasizes mobility efficiency, perceived value, and entrepreneurial adaptation without specifically addressing the competitive dynamics between mobile vendors and coffee shops in tourism-driven contexts. Consequently, there is a conceptual gap in explaining how innovation attributes of electric coffee carts and digital exposure jointly influence consumer perceptions and purchasing behavior. To address this gap, this study adopts the Stimulus–Organism–Response (S-O-R) framework as an integrative lens to map how innovation-based stimuli and digital signals shape perceived value and trust, which

subsequently drive purchase decisions within the public space economy of Denpasar and Gianyar.

Figure 1
Conceptual Framework:
Electric Coffee Cart Innovation and Consumer Behavior



The presented conceptual framework demonstrates that electric cart innovation is positioned as a key stimulus triggering consumers' psychological evaluation processes before generating purchase decisions and loyalty. Current research on mobile coffee shops in Indonesia remains fragmented. Most studies focus solely on the marketing mix, price, taste quality, or digital promotions. (Maulida et al., 2025) state that consumer behavior and the marketing mix influence purchasing decisions, while (Fauziah & Pratiwi, 2025) show that taste, price, and product variety influence repurchase intentions. (Guterres et al., 2025) add that digital marketing and word of mouth strengthen brand awareness. However, this literature has not systematically integrated electric cart technological innovation as a structural factor that changes operational models and consumer perceptions.

In the empirical context of Denpasar, a report by Detik Bali noted prices ranging from IDR 8,000 to IDR 13,000, and the use of electric carts without gasoline, with a charging time of approximately eight hours and a range of approximately 15 kilometers (Putri, 2024). NusaBali reports that a single cart can sell around 150 cups per day, and the total fleet can reach 700–800 cups under certain conditions (May, 2026). This data suggests that electric innovation is not merely a visual differentiation, but rather a change in cost structure and operational efficiency that enables the combination of low prices and high volume. This reinforces the stimulus pathway, from affordable pricing to perceived price fairness and perceived value at the organizational level.

Beyond the price dimension, the stimulus within this framework also encompasses portability and flexible access. Local media outlets such as Radar Bali and IDN Times describe electric carts parked in front of schools, on pedestrian paths, and in busy beach areas. International literature on food trucks emphasizes that mobility allows businesses to adapt their locations to demand dynamics and reduce overhead costs (Lichy et al., 2022). (Tacardon et al., 2023) also show that ease of

access and proximity influence street food consumption intentions. Thus, mobility attributes logically influence perceptions of convenience within the organizational component.

The next stimulus relates to an environmentally friendly and innovative image. The use of light electric vehicles in Bali's environmentally sensitive public spaces can strengthen a modern and eco-friendly brand perception. Bretones et al. (2023) explained that light electric vehicles are perceived as flexible and cost-effective in urban contexts, while Alka et al. (2024) highlighted the role of micromobility in creating new entrepreneurial opportunities. Consequently, these attributes provide symbolic differentiation compared to conventional carts and have the potential to influence consumer attitudes and trust.

Furthermore, digital exposure and electronic word of mouth provide additional stimuli that accelerate the discovery process. Content on TikTok, Instagram, and YouTube showcases queues of customers and consumption experiences at Sindhu Beach and other locations. This exposure generates social proof before a physical visit occurs. Guterres et al. (2025) emphasized that digital marketing and word of mouth increase brand popularity and awareness. Within the S-O-R framework, digital exposure functions as an external stimulus that shapes internal perceptions and evaluations before purchase intentions are formed.

At the organism level, the framework maps five key variables, namely perceived value, perceived convenience, trust, attitude, and perceived price fairness. The integration of these variables reflects the convergence of utilitarian and hedonic value literature. Bai et al. (2024) demonstrated that utilitarian and hedonic values influence purchase intentions in street food contexts. In this model, affordability and convenience represent utilitarian value, whereas innovative image and digital exposure contribute to hedonic value and foster positive attitudes toward the brand.

The response stage in the framework includes purchase intention, purchase decision, repurchase intention, and loyalty and recommendation. This sequence is consistent with the logic of consumer behavior, where exposure to a stimulus shapes intention, intention triggers an actual decision, and consumption experience determines repeat purchase and recommendation. Studies by (Fauziah & Pratiwi, 2025) on repeat purchase intention and (Raihan et al., 2025) on purchase decision factors support the importance of distinguishing between intention and actual decision in behavioral analysis.

The moderating and contextual elements within the framework provide strong empirical contributions. Consumer characteristics, consumption situations, the density of coffee shop competition, the location context of Denpasar versus Gianyar, and the availability of digital payments influence the strength of the relationships between variables. In Denpasar, local residents and students are more dominant, while in Gianyar, tourist influx and cultural activities are the main contextual factors. This difference explains why the same stimulus can elicit different response intensities.

Conceptually, the framework's main contribution lies in integrating micro-technological innovation, consumer behavior, and the dynamics of tourist public spaces into a single explanatory model. Domestic literature has primarily examined marketing variables separately, while international literature on food trucks and micromobility addresses innovation and mobility without specifically linking them to mobile coffee purchasing decisions in a tourist context like Bali. By using the Stimulus–Organism–Response model, this study bridges these two streams of literature. Therefore, the

cutting-edge of this article lies in mapping the causal mechanisms more comprehensively. The innovation of electric carts and digital exposure is not only understood as a marketing strategy, but also as a structural stimulus that changes consumer perceptions of value, convenience, trust, and attitudes, which ultimately shape purchasing decisions and loyalty in the Denpasar and Gianyar mobile coffee ecosystem.

CONCLUSSION

This study identified six primary drivers influencing purchase decisions in the context of electric coffee carts in Denpasar and Gianyar. First, perceived price fairness emerged from a lower cost structure compared to conventional coffee shops. Second, perceived convenience was shaped by proximity to activity hubs frequented by residents and tourists. Third, product quality and menu variety played a critical role in meeting consumer expectations comparable to café standards. Fourth, the innovative and eco-friendly image associated with electric carts contributed to positive consumer perceptions. Fifth, digital exposure through TikTok and Instagram accelerated awareness and trial behavior. Sixth, operational consistency supported by centralized production systems strengthened trust and repurchase intention. These findings demonstrated that electric cart innovation functioned not only as a technical modification but also as a structural stimulus influencing perceived value, trust, and purchasing behavior within the Stimulus–Organism–Response framework.

The implications of this research were significant for the Indonesian tourism and hospitality sector, particularly in Bali as a public-space-driven and mobility-oriented destination. The electric coffee cart model represented a micro-level innovation that responded to coffee shop competition, increasing price sensitivity, and shifting consumer behavior toward flexible and accessible consumption. For small and medium enterprises, the findings highlighted the importance of integrating operational efficiency, technological differentiation, and digital amplification within a single business model. For policymakers, the results suggested the need to consider spatial regulation, micro-entrepreneurial support, and sustainable energy transition strategies at the small-business level. For the broader hospitality sector, the study indicated that consumption experiences were no longer confined to fixed café spaces but increasingly extended into mobile and adaptive public-space settings.

Despite its contributions, this study had several limitations. First, it relied on secondary data derived from media reports and digital content rather than primary consumer surveys or in-depth interviews. Second, the analysis was limited to two regions in Bali and did not include comparative cases from other Indonesian cities. Third, the proposed conceptual framework had not yet been empirically tested using quantitative modeling to measure the strength of relationships among variables. Future research was therefore encouraged to conduct empirical testing using quantitative or mixed-method approaches, explore longitudinal patterns of loyalty formation, and compare similar mobile coffee models in other tourism cities such as Yogyakarta or Bandung to enhance generalizability and theoretical refinement.

REFERENCES

Alimin, N. N., Samantha, F., Mulyadi, M., & Faizin, A. (2021). A Study On The Use Of Shipping Container Booth As A Substitution Of Street Vendors Cart. *Widyakala: Journal of*

Pembangunan Jaya University, *8*, 59. https://doi.org/10.36262/widyakala.v8i0.427

Alka, T. A., Sreenivasan, A., & Suresh, M. (2024). Wheel of change: A systematic literature review on innovation and entrepreneurship in micro mobility solutions. *Transport Economics and Management*, *2*, 154–168. https://doi.org/10.1016/j.team.2024.06.004

Bai, L., Wu, J., Sha, Y., & Gong, S. (2024). Perceived utilitarian and hedonic values: Understanding Chinese consumers' street food purchase intentions. *International Journal of Gastronomy and Food Science*, *38*. https://doi.org/10.1016/j.ijgfs.2024.101046

Bertossi, A. (2024). Pathways towards food sector sustainability: the case of vending. *Agricultural and Food Economics*, *12*(1). https://doi.org/10.1186/s40100-024-00305-x

Boettcher, K. (2023). From Bikes to Brews: Creating a Coffee Brand That Stands Out from the Competition. https://conservancy.umn.edu/bitstreams/99880011-dd37-42c0-ad22-7f29eb5889dc/download.

Bretones, A., Marquet, O., Daher, C., Hidalgo, L., Nieuwenhuijsen, M., Miralles-Guasch, C., & Mueller, N. (2023). Public Health-Led Insights on Electric Micro-mobility Adoption and Use: a Scoping Review. *Journal of Urban Health*, *100*(3), 612–626. https://doi.org/10.1007/s11524-023-00731-0

Dewi, N. M. A. R. (2024). *Unik, Gerobak Listrik Jadi Tempat Berjualan Kopi Kekinian, Sering Mangkal di depan SMA N 1 Denpasar dan Pantai Sindhu. https://radarbali.jawapos.com/denpasar/704862410/unik-gerobak-listrik-jadi-tempat-berjualan-kopi-kekinian-sering-mangkal-di-depan-sma-n-1-denpasar-dan-pantai-sindhu?page=3*.

Fauziah, F. Y., & Pratiwi, A. (2025). Pengaruh Cita Rasa, Harga dan Variasi Produk Terhadap Minat Beli Ulang Kopi Keliling Cuphi Kopi di Kota Surakarta. PENG: Jurnal Ekonomi Dan Manajemen, 3(1), 843-857 https://doi.org/10.62710/5yw7ng36.

Guterres, F. X., Budianto, K. D., & Adianto, I. A. (2025). Pengaruh Digital dan Word of Mouth Marketing Terhadap Popularitas Brand Awareness pada Bisnis Kopi Keliling di Surabaya. Al Qodiri: Jurnal Pendidikan, Sosial Dan Keagamaan, 23(1), 1-15. https://doi.org/10.53515/qodiri.2025.23.1.1-15

Heying, C. H. (2010). Brew to bikes: Portland's artisan economy. http://archives.pdx.edu/ds/psu/9027.

Kartikaningrum, N. I. (2024). 5 Kopi Gerobak di Denpasar, gak Kalah Nikmat dari Kafe. https://bali.idntimes.com/food/dining-guide/5-kopi-gerobak-di-denpasar-gak-kalah-nikmat-dari-kafe-00-vthpp-kfj3xj.

Kevin, & Dewayani, E. (2024). Sistem Pemesanan Kopi Keliling Berbasis Website. *Jurnal Sistem Informasi Galuh*, *2*(2), 83–92. https://doi.org/10.25157/jsig.v2i2.3969

Koua, A., Naka, T., René, K. A., Fataoulaye, O. T., Nadège, K. N., Adjehi, D., & Sébastien, N. (2020). Practices and attitudes assessment of street vendors of hot beverages made of coffee, tea, milk or cocoa with coffee carts. Journal of Food Security, 8(2), 43-51. https://doi.org/10.12691/jfs-8-2-2.

Kurniasih, N., Elmanora, & Faesal, M. (2025). Pengambilan Keputusan Pembelian Kopi Keliling Pada Mahasiswa Ditinjau Dari Aspek Budaya, Sosial, Pribadi, Dan Psikologis. *Jurnal Pendidikan Dan Perhotelan (JPP)*, *5*(2), 135–147. https://doi.org/10.21009/jppv5i2.07

Kurniawan, E., & Madiistriyatno, H. (2023). Strategi Pemasaran Kopi Stralink (Kopi Keliling) di Wilayah Jabodebatabek Menghadapi Persaingan di Era Globalilasi. *Jurnal Cahaya Mandalika*, *3*(2), 1350–1356.

Lichy, J., Dutot, V., & Kachour, M. (2022). When technology leads social business: Food truck innovation. *Technological Forecasting and Social Change*, *181*. https://doi.org/10.1016/j.techfore.2022.121775

Maulida, D. L., Leilasariyanti, Y., Hariputra, A., & Ramadhani, M. (2025). Pengaruh Perilaku Konsumen Dan Bauran Pemasaran Terhadap Keputusan Pembelian Konsumen Kopi Keliling Di Jawa Timur (The Influence of Consumer Behavior and Marketing Mix on The Purchase Decisions of Mobile Coffee Consumers in East Java). *Jurnal Ilmiah Sosio Agribis*, *25*(1), 119. https://doi.org/10.30742/jisa25120254456

May. (2026). *Dari Gerobak Listrik Keliling, "Sruuput Kopi" Tebus 800 Cup Sehari. https://www.nusabali.com/berita/213604/dari-gerobak-listrik-keliling-sruuput-kopi-tembus-800-cup-sehari*.

Putri, N. M. L. K. (2024). *Kopi Gerobak Listrik di Pantai Sindhu, Harga Mulai Rp 8 Ribu*. https://www.detik.com/bali/kuliner/d-7438778/kopi-gerobak-listrik-di-pantai-sindhu-harga-mulai-rp-8-ribu

Raihan, M., Darnetti, D., & Alfikri, A. (2025). *Analisis Faktor Yang Memengaruhi Keputusan Pembelian Kopi Keliling (Studi Kasus Kopi Keliling Ajoe Kecamatan Harau, Kabupaten Lima Puluh Kota)*.

Siregar, M. G., Sundari, A. P., Elsa, N., & Perwito, P. (2025). Studi Kelayakan Bisnis "Kopi Keliling". Jurnal Bisnis dan Manajemen (JURBISMAN), 3(1), 37-50. https://doi.org/10.61930/jurbisman.v3i1.995.

Tacardon, E. R., Ong, A. K. S., & Gumasing, M. J. J. (2023). Why are street foods consumed? A machine learning ensemble approach to assess consumption intention of street foods. *Future Foods*, *8*. https://doi.org/10.1016/j.fufo.2023.100261