

Extending the Business Model Canvas for Informal Markets: Insights from Street Vendors in Delhi, India

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Abstract

This study examines how street vendors operating in Delhi's informal vegetable markets organize and sustain their businesses using an adapted version of the Business Model Canvas (BMC). While the BMC has been widely used in formal entrepreneurship contexts, its application to informal economies remains underexplored. Drawing on ten in-depth interviews with vendors, we identify how each BMC component is reframed in response to resource scarcity, regulatory ambiguity, and social embeddedness. Vendors define value propositions around affordability, proximity, and familiarity, while customer segmentation and relationships are shaped by personal trust and local knowledge. Revenue strategies reflect real-time price flexibility, and cost structures include unofficial fees and logistical improvisations. We contrast these findings with BMC use in formal enterprises and suggest modifications for theorizing informal business models. Our analysis contributes to the literature by offering a contextualized understanding of business modeling under informality, and by bridging gaps between entrepreneurial frameworks and survival-driven micro-enterprises in the Global South.

Keywords: Informal Economy, Street Vendors, Business Model Canvas, Informal Entrepreneurship, Subsistence Markets, Urban Informality Delhi, Micro-Enterprises, Base of the Pyramid (BoP), Qualitative Research

1. Introduction

Informal markets employ more than sixty per cent of the global labour force and as much as ninety per cent in many large cities of the Global South, yet they operate outside formal contracts, taxation and regulatory protection, relying instead on fluid social norms and spatial negotiation (ILO, 2018; Chen, 2012). Distinct from formal firms—where scale efficiencies, institutional finance and written agreements dominate—street-vendor businesses are built on liquidity, relational trust and rapid inventory turnover, a mode of “System D” entrepreneurship that underpins a multi-trillion-dollar shadow economy (Neuwirth, 2011). These contextual differences suggest that analytical tools developed for growth-oriented, compliance-bound enterprises may mis-specify how value is created, delivered and captured in informal settings.

Among tools that help identify and classify value creation in enterprises, the Business Model Canvas (BMC) remains the most widely adopted because its nine interlocking blocks summarise value proposition, market interface and cost-revenue logic on a single page (Osterwalder and Pigneur, 2010). Alternative schemata—including the Lean Canvas (Maurya, 2012), the Mission Model Canvas (Strategyzer, 2020) and the Value-Proposition Canvas—either narrow scope to product/market fit or incorporate mission metrics that complicate rapid ideation. Systematic reviews confirm that, despite

criticisms of static logic and oversimplification, the BMC's visual simplicity and common language make it the "dominant design" for comparative research and practitioner training (Coes, 2014). Its adaptability is further evidenced by bottom-of-the-pyramid extensions that embed affordability and community co-creation into each block (Ver Loren van Themaat et al., 2013).

Despite a growing body of research on bottom-of-the-pyramid and informal entrepreneurship, few studies have systematically applied the Business Model Canvas (BMC) to understand how informal street vendors structure their business logic. Existing literature often describes survival strategies—such as pricing improvisation, social trust-building, and informal territorial governance—but stops short of analysing how these practices map onto each of the nine BMC components (Viswanathan et al., 2010; Roever and Skinner, 2016). Where the BMC is used, it typically serves as a loose visual aid rather than a core analytic tool, and studies often overlook the unique constraints of street vending, including perishability, spatial mobility, and the absence of formal property rights or digital infrastructure (Mehta and Pathak, 2022; Cardeal et al., 2022). This study addresses that gap by empirically grounding each BMC block in the lived experiences of Delhi's vegetable vendors and proposing context-specific adaptations to better reflect how business is conducted under informality.

The present study therefore sets out to re-specify the Business Model Canvas for urban street vending in India. Guided by the question "*How do the nine BMC blocks manifest when formal assets and institutions are absent?*" we analyse twelve in-depth, Hindi-language interviews with vegetable vendors from three Delhi markets. Interviews were transcribed, translated and thematically coded; emergent categories were then mapped deductively onto the canonical BMC to surface points of fit, stretch and omission.

The study makes three concise contributions. First, it extends business-model scholarship by showing how mobility, peer governance and relational pricing replace several formal-market assumptions embedded in the original canvas. Second, it offers an Informal Business Model Canvas that practitioners and NGOs can use to diagnose and support micro-enterprises without imposing inappropriate formal-sector metrics. Third, it responds to recent calls for context-sensitive modelling of informal economies, providing a bridge between descriptive vendor studies and mainstream business-model theory.

The article first provides a literature review of business model canvas and its application to the informal sector. Second, the methodology of the articles is outlined. Third, the findings are presented. Fourth, the article discusses the theoretical and practical implications of the research and outlines the limitations and future research directions of the paper.

2. Literature Review

The Business Model Canvas (BMC) is a one-page framework introduced by Osterwalder and Pigneur (2010) for describing how an organization creates, delivers, and captures value. This tool distills a business model into nine interrelated components: value propositions, customer segments, customer relationships, channels, key activities, key resources, key partners, cost structure, and revenue streams. The BMC has become a foundational template in entrepreneurship research and practice due to its simplicity and versatility in mapping business logic. In traditional contexts, new and established ventures alike have used the BMC to articulate their strategy and operations on a single page, facilitating discussions among entrepreneurs, investors, and advisors. Researchers have also adopted the BMC as an analytical lens to compare business models across firms or industries. However, informal markets, micro-enterprises, and Base-of-the-Pyramid (BoP) contexts present unique challenges that have led scholars to adapt or critique

the traditional BMC when applying it in these environments (Coes, 2014; Osterwalder & Pigneur, 2010; Prahalad, 2004).

Past research has produced alternative versions of the BMC to better fit different purposes. One prominent variant is the Lean Canvas, proposed by Ash Maurya as a startup-focused adaptation of the BMC. The Lean Canvas replaces or reframes several of the original nine blocks to emphasize problem-solving and early-stage validation. For example, it introduces blocks for “Problem”, “Solution”, “Key Metrics”, and “Unfair Advantage,” while de-emphasizing formal customer segments and partnerships. This lean model is tailored to entrepreneurs searching for a viable model under conditions of uncertainty. It encourages identifying a compelling problem and solution fit, and it assesses whether a startup has an unfair advantage to differentiate itself. By focusing on hypothesis testing (e.g. through customer development and MVPs), the Lean Canvas aligns with the Lean Startup methodology. In contrast to the original BMC’s broad view (which serves entrepreneurs, managers, investors alike), the Lean Canvas is “problem-focused” and geared purely toward startup founders. Scholars note that each approach has its limitations: the traditional BMC lacks explicit treatment of performance metrics or how the model evolves over time, whereas the Lean Canvas may not guide entrepreneurs on what to do if their initial solution or hypothesis proves incorrect. These trade-offs reflect differing assumptions – the BMC assumes a somewhat stable operation (thus omitting dynamic feedback or competition explicitly), and the Lean Canvas assumes fluid iteration but sacrifices detail in areas like long-term customer relationship building.

Another notable adaptation is the Mission Model Canvas, introduced by Blank and Osterwalder for mission-driven and social organizations. This evolved when asking how to use the BMC “when the metrics of success ... are not revenue” (Blank, 2016). In nonprofit, government, or BoP social enterprise contexts, the goal is often mission impact rather than profit. The Mission Model Canvas accordingly reframes certain blocks: for instance, “Customer Segments” become Beneficiaries, “Value Proposition” may be recast as Mission Achievement, and metrics focus on mission impact or social value instead of revenue streams. It also adds elements like Buy-in/Support and Deployment to address stakeholder engagement and implementation channels in non-commercial settings. By adapting terminology, this framework preserves the logic of the canvas while acknowledging that value in social ventures includes social outcomes, and funding may come from donations or grants rather than sales. Early discussions of this model (Blank, 2016) argued that traditional BMC blocks such as customer relationships and revenue needed to be rethought for organizations that measure success in terms of lives improved or policy outcomes. Similarly, Sparviero (2019) proposed a Social Enterprise Model Canvas (SEMC) to resolve what he calls the “mission measurement paradox.” The SEMC adds or modifies building blocks to include social value, stakeholder involvement, and impact measures, providing an analytical tool to prevent mission drift in social enterprises.

A body of academic research has specifically explored applying the BMC in resource-constrained markets, such as low-income communities, informal urban economies, and BoP segments. Scholars often find that while the BMC’s core logic is useful for structuring analysis, certain contextual adaptations are necessary. For example, Ver Loren van Themaat et al. (2013) developed a tailored framework for designing business models at the BoP. They started with Osterwalder and Pigneur’s canvas and “slightly adapted [it] to target the BoP more effectively”. One adaptation was integrating the BoP-specific 4A’s – availability, affordability, acceptability, awareness – as critical design criteria for each canvas element. The rationale is that any venture serving poor or informal markets must pass these 4A tests: offerings must be affordable and accessible to the poor, culturally acceptable, and customers must be aware of them. They also

combined the canvas with Kim and Mauborgne's Blue Ocean Strategy sequence (utility → price → cost → adoption) to systematically reduce failure risk in BoP innovation. This approach illustrates how academic work has extended the BMC by embedding BoP principles: a venture must not only have a coherent internal model but also meet external constraints of extreme affordability and infrastructure gaps. Empirical studies have applied the BMC (or variations of it) to understand micro-businesses in the informal economy. For instance, Mukherjee (2021) examined the business models of women-owned microenterprises in the urban informal sector in India. Through interviews with 63 women entrepreneurs, she mapped their "business canvas" and found that key partnerships, resource improvisation, customer orientation, and sales tactics emerged as central to their models. This aligns with broader findings in informal entrepreneurship literature, which indicate that street-level businesses such as market vendors or small informal retailers rely heavily on family networks and personalized customer relationships to survive in resource-constrained contexts (Ault & Spicer, 2014; Williams & Shahid, 2016). The study also challenges the assumption that informal micro-entrepreneurship is purely necessity-driven; participants cited motivations ranging from supplemental income and self-recognition to opportunity pursuit, demonstrating how personal agency shapes business model choices. By capturing these qualitative dynamics through the BMC lens, Mukherjee's work illustrates the canvas's utility for analyzing informal strategy. However, it also implicitly suggests that certain canvas elements (e.g., formal accounting or IP resources) are underdeveloped in survivalist enterprises, while others (e.g., community support or trust-based value delivery) play a disproportionately large role.

Notably, many studies in the informal economy do not use the BMC explicitly but instead adopt institutional, cultural, or behavioral lenses. Webb et al. (2013), for example, framed micro-entrepreneurship as a response to institutional voids, where informal actors engage in entrepreneurial behavior outside formal regulatory systems. Such approaches, while rich in socio-institutional analysis, often lack a systematic treatment of business design. Indeed, street businesses may not intentionally design their models around the nine BMC blocks; rather, their practices evolve organically in response to constraints. Nevertheless, recent scholarship has attempted to bridge this gap by adapting the BMC as a comparative research tool. Dumalanède and Payaud (2018), for instance, applied a modified "social enterprise model canvas" to a solar energy venture in Burkina Faso. Their framework emphasized how a business could create mission-driven value for low-income customers, highlighting the relevance of socially oriented adaptations of the BMC for BoP contexts. Similarly, Joyce and Paquin (2016) proposed the Triple Layered Business Model Canvas to include environmental and social impacts, expanding the traditional model to suit sustainability-focused ventures.

Critiques of the BMC, particularly in relation to BoP and informal entrepreneurship, have become increasingly common in academic discourse. One major critique is the BMC's static nature—it offers a snapshot of a business model but does not account for competitive dynamics or temporal change (Coes, 2014). Informal markets are highly volatile, with customer loyalties and competitive tactics shifting rapidly, yet the BMC does not include mechanisms for tracking evolution over time. Relatedly, the BMC lacks attention to external context. In BoP settings, factors such as infrastructure gaps, informal regulatory norms, or community-level trust can critically influence business viability (London & Hart, 2004; George et al., 2016). These elements are absent from the BMC's internal logic, prompting calls for researchers to pair it with ecosystem tools like stakeholder mapping or PESTEL analysis to address environmental factors.

Another critique centers on the profit-centric orientation of the original BMC. Osterwalder and Pigneur (2010) conceptualized the model for commercial enterprises, assuming that value is primarily economic. However, ventures in the informal or social enterprise space often prioritize mission impact or community outcomes over revenue maximization. Scholars such as Blank (2016) and Sparviero (2019) have responded by developing the Mission Model Canvas and the Social Enterprise Model Canvas, respectively. These adaptations recast traditional blocks—"customer segments" become beneficiaries, and "value proposition" becomes mission fulfillment—while emphasizing metrics such as social return and stakeholder buy-in. Such redefinitions help embed social value in the structure of the business model itself. For example, Sparviero's SEMC explicitly accounts for stakeholder involvement, governance, and social capital, seeking to prevent mission drift and maintain alignment with community needs.

Additionally, the BMC has been critiqued for oversimplifying business dynamics, especially in informal contexts. The model's appeal lies in its clarity, but this can also obscure the depth of relational and cultural complexity inherent in micro-enterprise. For instance, identifying a supplier or community elder as a "key partner" does not capture the emotional labor, long-standing personal ties, or embedded norms of reciprocity that govern such relationships (Meagher, 2013). Similarly, revenue streams in informal settings may include non-monetary forms of exchange, such as barter or communal goodwill, which the traditional canvas is not designed to accommodate. Scholars like Viswanathan et al. (2008) and Karnani (2007) have argued for frameworks that better reflect relational value creation in informal or subsistence marketplaces. Despite these limitations, the literature agrees that the BMC remains a useful heuristic for structuring analysis. Its value lies in prompting systematic thinking about value propositions, customer segments, and delivery mechanisms—even in slums, rural villages, or street markets. Consequently, researchers often adapt or supplement the BMC with other frameworks. For instance, Ver Loren van Themaat et al. (2013) proposed a BMC for BoP ventures that incorporates the 4A framework—availability, affordability, acceptability, and awareness—as criteria for evaluating each BMC component. This ensures that any offering designed for low-income consumers meets practical constraints and cultural relevance. Others have combined the BMC with SWOT analysis to capture risks and external pressures specific to micro-enterprises in emerging economies (Chege & Wang, 2020).

In summary, the Business Model Canvas has been flexibly extended from its origins in traditional entrepreneurship to serve researchers and practitioners in informal and BoP settings. Foundational work by Osterwalder and Pigneur (2010) established a versatile model, while subsequent adaptations—including the Lean Canvas, Mission Model Canvas, and SEMC—have addressed its shortcomings in early-stage, social, or poverty-oriented enterprises. Studies such as Mukherjee (2021), Dumalanède and Payaud (2018), and Ver Loren van Themaat et al. (2013) demonstrate how adapted canvases can capture the nuances of low-resource entrepreneurship. While critiques persist regarding its static nature, internal focus, and profit bias, the BMC remains a widely accepted tool when appropriately contextualized. Future research can further refine these adaptations, integrating social metrics and indigenous knowledge to build inclusive and context-sensitive models of value creation.

3. Methodology

This study employed a qualitative, exploratory research design to examine how street vendors operating within the informal economy conceptualize and enact their business models. Given the scarcity of empirical work linking informal micro-enterprise practices with structured frameworks such as the Business Model Canvas (BMC), a qualitative approach was deemed appropriate for capturing nuanced,

context-specific insights (Creswell & Poth, 2018). The research adopts an interpretivist paradigm, aiming to construct meaning from the lived experiences of street vendors rather than test predefined hypotheses (Denzin & Lincoln, 2018).

The sample consisted of 10 street vendors selling vegetables in various neighborhoods and markets across Delhi. Participants were selected using purposive sampling, a method suitable for identifying information-rich cases in qualitative inquiry (Palinkas et al., 2015). The selection criteria included: (a) the vendor must have operated in the same location or area for at least one year, (b) the vendor must be directly involved in both purchasing and selling produce, and (c) the vendor must rely primarily on street vending as their source of livelihood. Care was taken to include both stationary and mobile vendors to capture a range of spatial and operational strategies.

Data were collected between February and April 2024] through semi-structured, in-depth interviews conducted in Hindi, the respondents' preferred language. The interview protocol was informed by existing business model literature (Osterwalder & Pigneur, 2010; Viswanathan et al., 2010) and covered topics aligned with the nine components of the BMC: value proposition, customer segments, channels, customer relationships, key activities, key resources, key partnerships, cost structure, and revenue streams. Probes were included to explore contextual elements unique to informal markets, such as mobility, trust-based relationships, and daily cash flow challenges. Interviews lasted between 45 and 75 minutes and were conducted at the vendors' places of business to ensure naturalistic engagement.

All interviews were audio-recorded with consent, transcribed verbatim, and translated from Hindi to English for analysis. To preserve meaning during translation, back-translation techniques and member checks were employed for selected transcripts (Kvale & Brinkmann, 2009). Participants were briefed about their rights, including confidentiality and voluntary withdrawal.

The translated transcripts were analysed using thematic analysis, following Braun and Clarke's (2006) six-phase process: familiarization, coding, theme development, review, definition, and write-up. An initial inductive coding phase was conducted to allow patterns and concepts to emerge directly from the data. These were then deductively mapped onto the nine blocks of the traditional Business Model Canvas to examine alignment, divergence, and potential reconfigurations. A cross-case matrix was constructed to identify similarities and differences across vendors, and within-case narratives were used to retain contextual richness (Yin, 2018). NVivo software was used to assist in data management and coding consistency.

To enhance the trustworthiness of the findings, the study incorporated multiple strategies: peer debriefing, audit trails, and triangulation through field notes and vendor observation. Credibility and dependability were ensured by maintaining a detailed reflexive journal and reviewing emergent themes with two qualitative research experts.

4. Findings

Drawing from ten in-depth interviews with street vendors in Delhi, this section presents the everyday practices that structure their business models. Applying the Business Model Canvas (Osterwalder & Pigneur, 2010) as an organizing framework, we document how each block of the canvas functions under conditions of informality, resource scarcity, and urban negotiation. The rich data collected from vendors reveals a nuanced picture of informal business logic as described in the following paragraphs.

4.1 Customer Segments and Channels: Vendors' Day in the Informal Markets

A central challenge facing vendors in Delhi's informal vegetable markets is securing and retaining consi-

stent customer bases in highly volatile urban environments. Vendors adapt to this challenge by embedding themselves deeply in the social and spatial fabric of neighborhoods. Their customer segments are not defined by data analytics or demographics but by familiarity, proximity, and routines.

Laxminarayan, a hybrid vendor operating for 11 years, shared how his day begins at 3 a.m., when he travels to Azadpur or Okhla Mandi to procure stock. While Azadpur offers more favorable prices, its distance and high transport costs make it viable only for those with sufficient margins. Vendors like Deepak and Arjun, for instance, rely on Okhla to minimize logistics costs, even if it means slightly reduced profit.

Stationary vendors such as Rajveer and Rambabu build their businesses around daily repeat customers, often in residential areas, where trust and regularity are paramount. Mobile vendors, like Durga, follow a flexible pattern—servicing office-goers in the morning and households in the afternoon—allowing them to tap into varied demand points throughout the day. This segmentation by time, place, and familiarity forms the heart of vendor strategy.

The channel of customer access is exclusively physical. There is no digital presence, and marketing is vocal or visual. Strategic locations—market gates, street corners—are considered valuable distribution nodes. Rajveer emphasized the importance of “holding ground” at a spot close to the main road, which generates consistent traffic.

4.2 Value Proposition and Revenue Streams: Practical Utility and Dynamic Pricing

The value proposition of these vendors is grounded not in innovation or uniqueness but in consistent, responsive service. Durga explained that his ability to sell “even Rs 10 worth of vegetables with a smile” keeps customers coming back. Sitaram Jassa, with decades of experience, focuses on predictability and trust. His customers know what to expect and rely on him during peak hours.

The weekly markets illustrate a distinct revenue and pricing logic. Vendors like Arjun bulk-sell specific vegetables—onions, potatoes—setting high morning prices and reducing them throughout the day to ensure inventory liquidation. This dynamic pricing helps vendors hit their breakeven point early and convert remaining inventory into profit.

Revenue is almost entirely cash-based, though mobile payment adoption is emerging slowly. Prices are often personalized—veteran customers receive better deals, and pricing is adjusted throughout the day based on perishability and urgency. Ram, for example, reported that he slashes prices post-8 p.m. to ensure nothing goes to waste.

4.3 Key Partnerships and Resources: Cartels, Transport, and Family Labor

A critical, if opaque, dimension of vendor operations is their relationship with wholesalers. Deepak observed that prices are effectively fixed at the mandi—“everyone quotes the same rate,” he explained—due to informal cartels. These family-run networks dominate the sale of specific produce (e.g., onions, tomatoes), setting non-negotiable prices and charging vendors a percentage-based “shop fee” on top of purchases.

Transportation and labor form the backbone of vendors’ key resources. Self-suppliers like Nirbhay and Ram favor autonomy over convenience, while older vendors like Sitaram hire porters or rely on collaborative arrangements. Coolie charges (Rs 60–100 per bag) and vehicle rental (Rs 250–600) comprise the largest daily outflows after inventory purchase.

Family members often pitch in with operations—either helping with sourcing, display, or sales. Vendors emphasized that intimate knowledge of local conditions (weather, customer preferences) and mandi trends

form intangible but critical resources. Arjun, for instance, highlighted how "knowing what to buy and when" makes or breaks a day's success.

4.4 Cost Structure: High Variability and Informal Payments

Costs in the informal sector defy fixed categorization. Laxminarayan reported daily expenses of Rs 3000–4000 on inventory and Rs 550 on transport. These recurring costs are compounded by unofficial payments to MCD and police. Though vendors like Rajveer refrained from disclosing exact sums, they noted that paying off officials was a de facto cost of doing business. More opaque are the new shop charges imposed by wholesalers, particularly in Okhla. Previously fixed at Rs 50–60, these fees now range between 10%–40% of purchase value. Deepak expressed frustration: "They say it's for shop maintenance, but no one knows why it's increased." Some vendors also incur additional costs when sourcing from Azadpur, where sealed produce bundles must be opened for quality inspection—incurring fees that penalize due diligence.

4.5 Customer Relationships: Informal Loyalty and Social Reciprocity

Vendors rely heavily on interpersonal rapport. Regulars are greeted by name, offered better rates, or given extra produce. Flexible payments and verbal credit are extended to trusted customers. Arjun described how "talking to people, asking about their day" was as important as selling vegetables.

This relational dynamic is rooted in mutual dependency. Vendors offer convenience and flexibility; customers offer repeat business and word-of-mouth promotion. Hull & Rothenberg (2008) describe this as social embeddedness—a dynamic clearly visible across the vendors surveyed.

4.6 Societal Barriers and Structural Injustices

The informal status of street vending exposes vendors to systemic issues. Many, like Rambabu and Arjun, began working before age 10 and now actively discourage their children from doing the same. Sitaram proudly reported that his children had escaped the cycle—one now works in a multinational company. However, challenges persist. Goods spoilage due to lack of cold storage or unsold inventory was cited by every vendor. MSP (Minimum Support Price) does not apply to vegetables, which are excluded from India's Public Distribution System. This leaves pricing entirely to wholesale market dynamics. A recurring frustration was the ambiguity around shop charges. Vendors suspect that market administrators benefit personally from rising charges, but no one can confirm this. Some, like Laxminarayan, believe the entry of unauthorized wholesalers is the root cause.

In summary, all nine blocks of the Business Model Canvas are observable in the daily lives of Delhi's street vendors—but each is uniquely shaped by the logic of informality. Customer segmentation, value creation, and revenue generation are tightly linked to social proximity, perishability, and micro-fluctuations in supply and demand. Partnerships, cost structures, and infrastructure challenges reveal a parallel economy—resilient, adaptive, and governed by informal but deeply embedded norms.

Table 1: Business Model Canvas: Informal vs. Formal Market Comparison

BMC Component	Informal Market Street Vendors (Delhi)	Formal Market Enterprises
Customer Segments	Based on routine familiarity and proximity; informal relational targeting	Segmented using market research, demographics, and psychographics
Value Proposition	Daily convenience, small quantity access, trust-based interactions	Product uniqueness, branding, service guarantees

Channels	Face-to-face, vocal promotion, static or mobile cart presence	Physical stores, e-commerce, multi-channel marketing
Customer Relationships	Built through familiarity, trust, verbal credit, and reciprocity	CRM systems, loyalty programs, after-sales service
Revenue Streams	Cash-based sales; dynamic pricing based on perishability and time of day	Fixed pricing, subscription models, diversified revenue streams
Key Resources	Social ties, carts, personal labor, family assistance, mandi access	Capital, digital infrastructure, IP rights, human resources
Key Activities	Procurement, cart setup, negotiation, vocal selling, route planning	Product development, logistics, advertising, administration
Key Partnerships	Peer vendors, mandi agents, local transporters; informal norms	Supply chains, vendors, financial partners, strategic alliances
Cost Structure	Daily inventory, transport, informal payments (police/MCD), cart upkeep	Fixed overheads, payroll, rent, marketing, compliance costs

Discussion

This study set out to address a critical research gap: the absence of a formalized Business Model Canvas (BMC) framework adapted specifically to the context of informal markets. While the original BMC (Osterwalder & Pigneur, 2010) has found wide application in formal and startup ecosystems, and variants such as the Lean Canvas (Maurya, 2012) and Mission Model Canvas (Blank, 2016) have adapted it for startups and social ventures, few empirical efforts have explored how the BMC operates in resource-constrained, informal environments. By drawing on interviews with Delhi's street vendors, this study provides an empirically grounded, component-wise elaboration of the BMC as it functions within informal market dynamics—contributing both to the extension of the BMC framework and to the literature on micro-entrepreneurship at the Base of the Pyramid (BoP).

Our findings complicate the dominant understanding of customer segmentation within the BMC literature, which often relies on data-driven demographic or psychographic profiling (Kotler & Keller, 2016). Informal vendors, by contrast, segment customers through embodied experience—proximity, daily routine, and affective familiarity. This adds nuance to Viswanathan et al.'s (2008) framework of relational exchanges in low-literacy markets and suggests the need for a broader conceptualization of segmentation in BoP contexts, one that prioritizes social embeddedness over abstraction. Similarly, the exclusive reliance on physical, vocal, and spatially embedded channels—whether through a fixed stall or mobile pushcart—contrasts sharply with the multi-channel, often digital pathways emphasized in formal business models (Chaffey, 2015). Our study empirically affirms Roever and Skinner's (2016) arguments that street vendors negotiate access to urban space as both a livelihood strategy and a distribution tactic, expanding the definition of “channels” in the BMC to include informal claims over urban geography.

The logic of value creation in the informal economy differs significantly from the innovation- and branding-driven propositions common in formal markets (Teece, 2010). For Delhi's vendors, value is

relational, not transactional—it is constructed through responsiveness, flexibility, and accessibility. This reaffirms Chikweche and Fletcher’s (2011) findings that BoP consumers value small-quantity purchasing and informal service attributes over formal guarantees. The study extends this literature by showing how value is continually co-produced between vendor and customer across time and space, a nuance that traditional BMC frameworks often overlook. Revenue streams, similarly, are emergent rather than pre-designed. Vendors employ flexible pricing strategies responsive to perishability, time-of-day, and individual customer relationships—supporting Dholakia and Talukdar’s (2004) argument that pricing in low-income markets reflects an embedded, real-time knowledge of local demand. This challenges the BMC’s static portrayal of revenue models and calls for a dynamic, socially mediated conception of revenue generation in informal contexts.

Formal models of customer relationship management emphasize CRM systems and loyalty programs (Payne & Frow, 2005), while social enterprise models introduce concepts like beneficiary engagement (Blank, 2016). Our findings build on and diverge from this literature by showing that informal vendors manage customer relationships through a mix of affective labor, verbal credit, and community reciprocity. These strategies are not only resilient but deeply rooted in trust-based norms, echoing Hull and Rothenberg’s (2008) concept of social embeddedness. This reinforces the need to expand the BMC’s treatment of customer relationships to account for low-tech, high-trust environments where transactions are underwritten by personal reputation rather than legal enforceability.

Prior literature emphasizes financial, technological, and human capital as critical resources in formal markets (Barney, 1991), while adaptations for social enterprises incorporate intangible resources such as mission legitimacy (Sparviero, 2019). In contrast, informal vendors draw on resources like family labor, tacit local knowledge, and social networks—findings that support Baker and Nelson’s (2005) bricolage perspective. The centrality of informal cartels and peer alliances further illustrates that “partnerships” in informal markets function through horizontal, trust-based mechanisms rather than contractual agreements (Meagher, 2013). These insights call for a reconceptualization of the “Key Partnerships” block in the BMC to include unwritten, informal associations that nonetheless play a critical role in operational continuity. In formal enterprises, key activities are often structured around product development, branding, and back-office operations (Osterwalder & Pigneur, 2010). Informal vendors, however, operate through high-frequency, cyclical activities such as procurement, setup, vocal marketing, and negotiation. These activities occur in compressed time frames and under volatile external conditions—contributing to a temporal theory of entrepreneurial action in informal markets. This echoes the idea that entrepreneurial labor in BoP settings is continuous and adaptive rather than episodic and strategic (Mukherjee, 2021). Our findings thus augment the BMC literature by proposing that key activities in informal markets should be conceptualized as daily navigational acts rather than strategic plans.

In formal BMC models, cost structures are predictable and often categorized as fixed or variable overheads (Osterwalder et al., 2005). Informal markets resist such categorization. The presence of hidden costs—like bribes, fluctuating shop charges, or variable transportation expenses—reflects an unpredictable environment governed as much by informal institutions as by market logic. This validates earlier critiques (Coes, 2014) that the BMC underrepresents external institutional constraints and confirms that in BoP settings, cost structures must be understood as politically and socially embedded.

Together, these findings address the key research gap: the lack of a tailored BMC for informal markets. While previous studies have examined BoP business models (Ver Loren van Themaat et al., 2013), micro-entrepreneurship (Mukherjee, 2021), or social ventures (Blank, 2016; Sparviero, 2019), few have applied

the full BMC framework empirically to a set of informal vendors with the granularity offered here. By mapping vendor practices onto each canvas block and showing how these practices deviate from, adapt, or reinterpret formal logics, this study contributes a grounded, vendor-centric business model framework. It shows that each BMC component remains analytically useful—but only if redefined in light of informality, embeddedness, and urban constraint.

Finally, this study advances the idea that the BMC is not a fixed template but a flexible schema that requires contextual adaptation. We propose that future research and practice in informal economies adopt a revised BMC that explicitly incorporates variables such as social trust, spatial positioning, temporal cycles, and informal institutional costs. Doing so not only makes the BMC more analytically precise but also enhances its utility for policymakers, NGOs, and financial institutions working with the urban poor. In this way, the canvas becomes not just a managerial tool, but a bridge between formal entrepreneurship theory and the everyday realities of survivalist enterprise.

Practical Implications

The findings from this study offer significant practical implications for those designing policies, programs, or interventions aimed at supporting informal entrepreneurs. While tools like the Business Model Canvas have traditionally informed formal business planning, this research illustrates how each component can be reinterpreted to align with the lived realities of street vendors. For example, rather than designing customer engagement strategies around CRM systems or loyalty apps, support initiatives should focus on strengthening trust-based relationships, such as through neighborhood events, co-branded signage, or verbal credit systems managed within communities. Similarly, instead of pushing formalized pricing models, development actors should recognize and support dynamic, perishability-based pricing practices already used by vendors—perhaps by building awareness campaigns that normalize such variation among consumers or piloting inventory-sharing cooperatives to minimize late-day losses.

Infrastructure interventions, too, need to reflect the cost structure realities surfaced in this research. Given that transport, informal payments, and volatile supplier charges form the bulk of vendor expenses, urban planning solutions could prioritize secure vending zones with negotiated protections from harassment, or subsidized last-mile transport solutions during peak mandi hours. Additionally, recognizing the role of informal partnerships—whether with fellow vendors, transporters, or market agents—can help design cooperative procurement models or rotating storage access, instead of relying on conventional supplier-buyer frameworks. These approaches are not only more viable but also more resonant with how informal economies currently operate.

Finally, entrepreneurship development programs and financial inclusion efforts should adapt their outreach models to reflect the embedded business logic of street vendors. Training curricula can incorporate informal business strategies—like route planning based on footfall rhythms, voice-based selling, and micro-negotiation techniques—instead of relying solely on formal marketing or accounting skills. Financial products can be tailored around daily cash cycles and verbal credit norms, with flexibility built in for inventory-linked lending. By grounding support in the actual practices of informal entrepreneurs rather than assuming formal templates, these initiatives are more likely to be effective.

Limitations & Future Research Directions

This study provides a contextualized adaptation of the Business Model Canvas (BMC) for street vendors in Delhi, offering grounded insights into how informal micro-entrepreneurs navigate resource scarcity,

customer relations, and infrastructural barriers. However, several limitations constrain the generalizability and scope of these findings, opening promising directions for future research.

First, the sample comprises ten vendors within a specific urban context. While this enabled a deep qualitative understanding, informal markets are highly heterogeneous across geographies, shaped by local politics, enforcement patterns, and community norms (Rangan & Lee, 2022; Brown et al., 2023). Urban street vending in Delhi, for instance, differs markedly from practices in smaller towns or peri-urban areas. Future research could adopt a comparative design—across cities, regions, or even countries in the Global South—to examine how informal business models are shaped by spatial and regulatory variation.

Second, although the BMC offered a helpful organizing structure, its origin in formal, often tech-oriented entrepreneurship (Osterwalder & Pigneur, 2010) means that some informal practices do not map neatly onto its categories. Prior scholars (Coes, 2014; Sparviero, 2019) have critiqued this mismatch, and recent work (Lanzolla et al., 2023) highlights how informal ventures operate under hybrid logics of survival, social embeddedness, and community reciprocity—dimensions underrepresented in the original canvas. Future work could extend these contributions by proposing new or hybrid frameworks tailored to informality—perhaps drawing from relational entrepreneurship (Daskalaki, 2020) or informal institutional theory (Webb et al., 2020).

Third, this research offers a static snapshot of business models in operation. Informal enterprises are often adaptive, evolving in response to seasonal change, inflation, health shocks, or police crackdowns (Naudé & Nagler, 2022). A longitudinal approach would offer deeper insight into how vendors revise or reconfigure specific BMC blocks—such as revenue models or partnerships—over time. Studies like Lu et al. (2022) and Amin et al. (2023) have demonstrated the utility of temporal and crisis-responsive frameworks in tracking informal sector adaptations during disruptions like COVID-19 and climate-related events.

Fourth, this study primarily relies on self-reported data through interviews. While the depth and honesty of vendor narratives were evident, such data can underrepresent power dynamics, unspoken dependencies, or illicit transactions. Future work could integrate participant observation, financial diaries (Banerjee & Duflo, 2011), or even community-based participatory methods (Creswell & Poth, 2023) to access less-visible aspects of informal enterprise—such as gendered labor contributions, informal credit chains, or intergenerational skill transfer.

Fifth, this study focuses on individual vendors without embedding them in the larger institutional ecosystem—wholesalers, market associations, municipal enforcement, or digital intermediaries. Research on platformization (Cutolo & Kenney, 2021) and digital inclusion (Chatterjee et al., 2023) suggests that the rise of hyperlocal apps and fintech is reshaping how informal workers engage with markets. Future research might explore whether and how street vendors are being integrated—or excluded—from these transformations, and what implications this holds for business model design.

Finally, the notion of “value” in informal markets deserves deeper exploration. As demonstrated in this study, vendors generate value not only through economic exchange but via trust, flexibility, credit, and social proximity. These relational forms of value creation are echoed in emerging literature on inclusive innovation (George et al., 2022) and community-led enterprise (Ansari et al., 2021). Future research could bring these lenses into closer dialogue with business model frameworks, contributing to a broader rethinking of what counts as “success” in informal entrepreneurship—particularly in low-income or vulnerable communities.

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