

The Commercial Ecology and Social Mechanisms of Shops in Guangzhou's Urban Villages: A Literature Review and Empirical Survey

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Abstract. This paper investigates the business operations of shops in Guangzhou's urban villages, aiming to clarify how grassroots commerce interacts with urban renewal. Urban villages, as transitional spaces, accommodate dense clusters of small retailers that sustain affordable services and migrant livelihoods, yet their survival strategies remain underexplored. Recent research has shifted from viewing urban villages mainly as governance problems to acknowledging their economic and social roles. Studies emphasize spatial restructuring, long-tail economic dynamics, and institutional change, showing how shop operations are embedded in broader urban transformation. Nonetheless, gaps remain. Existing studies focus heavily on macro policies, with limited attention to micro-level practices. They also lack longitudinal depth and rarely connect shop operations to issues such as social stratification perceptions or customer base positioning. This study addresses these gaps through a field survey of shop operations in Guangzhou, documenting operating conditions, business models, and client targeting. Findings reveal that shop resilience depends on both regulatory frameworks and community hierarchies, highlighting the importance of inclusive renewal strategies. Looking ahead, shop operations in urban villages are expected to evolve from informal survival units toward more formalized and digitally integrated enterprises, playing a vital role in Guangzhou's pursuit of sustainable and high-quality development.

Keywords: Guangzhou Urban Villages, Business Operation Survey, Shop Operations, Social Stratification Perceptions, Customer Base Positioning.

1. Introduction

During urbanization, urban villages emerge as a distinct product of the urban-rural dual structure. These are villages located within urban built-up areas that have lost, or essentially lost, their arable land, and operate under villager self-governance and a rural collective ownership system. This definition also encompasses built-up areas where collective land has been converted to state ownership but retains inefficient land use patterns. Based on the definition by Professor Ye Yumin's team at Renmin University of China (characterized by "a migrant population exceeding 30% and built-up land exceeding 40%"), Guangzhou currently has 425 urban villages. These exhibit a pronounced "population inversion" phenomenon and are primarily concentrated in five major clusters: the Pudong-Zengxi Area, the Haizhu-Fanxi Area, the Tianhe Corridor, the Baiyun District, and the Huadu Central-North Area. This distribution reflects diverse development types:

Lifestyle-Service Urban Villages (Tianhe Corridor): Feature high population density, a large proportion of floating population, and a concentration of young residents.

Production-Service Urban Villages (Baiyun District): Attract significant numbers of university graduates and white-collar workers employed outside the immediate area.

Large Manufacturing Urban Villages (Pudong-Zengxi & Huadu Central-North): Dominated by automotive and electronics industries, forming a distinct three-tier concentric structure of "old village - rental housing clusters - industrial zones".

SME Manufacturing Urban Villages (Haizhu-Fanxi): Exhibit characteristics of both formal and informal economies.



These variations lead to significant divergence in public service demands across urban village types. Lifestyle-service villages, despite proximity to core commercial districts, suffer from inadequate public service facilities. Conversely, manufacturing-oriented villages, located on the periphery, often possess more community activity spaces. This situation raises critical issues concerning the efficient allocation of public resources, meeting differentiated demands, and avoiding institutional exclusion stemming from "wholesale demolition and reconstruction" policies.

The unique geographic and social attributes of urban villages foster a distinctive commercial ecology. This self-organizing system of shop operations relies on low-cost spaces and caters primarily to the floating population. Ranging from corner convenience stores and family-run eateries to mobile vendors and small-scale workshops, these businesses, though fragmented, grow organically around residents' daily needs. This commercial ecology is shaped by the interplay of multiple factors: policy and regulation, economic conditions, community planning, demographic shifts (e.g., the proportion of young renters vs. family households), and individual business strategies (e.g., product selection, market sensitivity). Recent urban village regeneration policies in Guangzhou reshape commercial spaces, economic fluctuations directly impact shop profitability, and demographic changes drive operational adjustments.

Beyond their economic role in creating jobs and absorbing migrants, these commercial activities function as vital social spaces for community interaction and serve as vessels for preserving local cultural practices and skills. Their implicit value for economic growth, social integration, and cultural heritage preservation within urban villages necessitates quantitative research to clearly define their role in urban development.

A deep analysis of the internal structure and operational mechanisms of businesses within urban villages serves a dual purpose. Theoretically, it addresses a gap in traditional urban commercial theory regarding informal commercial spaces, offering a new paradigm for understanding the spontaneous growth logic of "alleyway economies." It also enriches empirical studies on microeconomic agent behavior by examining the decision-making of small entrepreneurs in rent-sensitive, highly competitive environments. Practically, the research findings can translate into precise commercial planning guidelines: introducing shared workspaces in lifestyle-service villages, developing industry-chain supporting shops in manufacturing villages, enhancing business efficiency while strengthening community cohesion. This knowledge assists policymakers in reserving transition spaces for micro-enterprises and allocating public services based on commercial density, thereby preventing disruptions to residents' livelihoods during regeneration. Ultimately, it promotes the evolution of urban villages—while preserving their inclusive character—towards a sustainable "industry-city integration" path. This offers a Guangzhou model of "renovation, rehabilitation, and selective demolition" (留改拆) for urban renewal, achieving a win-win scenario encompassing economic efficiency, social equity, and cultural preservation.

2. Literature Review

2.1. Spatial Reconstruction Driven by Long Tail Economy: Empirical Observation on Industrial Urban Villages of Kanglu Area in Guangzhou (Deng Maoying)

Deng Maoying and her team investigates the transformation of the Kanglu area in Guangzhou through the lens of the long-tail economy, highlighting how numerous small-scale enterprises collectively sustain the vitality of urban villages. Rather than relying on a few dominant industries, these settlements accommodate a wide array of niche businesses—ranging from garment workshops and food stalls to logistics services—that meet diverse and fragmented consumer demands. Deng argues that this dispersion of commercial activity generates a stabilizing effect: even if individual businesses have limited profitability, their aggregate contributions foster resilience and adaptability in the face of economic and policy shocks.

A key insight of Deng's study is that spatial restructuring in industry-oriented urban villages is inseparable from the organization of these commercial networks. The "long-tail effect" demonstrates that enterprises with modest turnover gain significance when embedded in dense clusters, creating cumulative value greater than the sum of individual outputs. For instance, the concentration of textile workshops not only attracts raw material suppliers but also generates demand for transport, catering, and financial services, thereby reinforcing the ecosystem that sustains both production and everyday consumption. This layered interdependence explains why such villages persist even when confronted with redevelopment pressures or the encroachment of formal retail complexes.

Deng further illustrates that the success of these long-tail economies depends heavily on the informal but highly adaptive nature of urban village space. Narrow alleyways, subdivided housing, and multi-functional shopfronts allow entrepreneurs to minimize costs and flexibly reconfigure their business models. These spatial characteristics, while often deemed "disorderly" in planning discourse, provide precisely the low-barrier entry points that enable migrant workers and low-income residents to establish livelihoods. The resilience of the long-tail economy thus derives not only from market diversity but also from the malleability of the physical and social environment.

For the present research, Deng's framework underscores the importance of moving beyond conventional efficiency-based evaluations of shop operations. A focus solely on turnover or profit margins risks overlooking the structural contribution of micro-retailers to urban resilience. By demonstrating how countless small-scale actors together sustain the affordability, diversity, and adaptability of Guangzhou's urban villages, the long-tail perspective invites a reconsideration of redevelopment strategies. Specifically, it suggests that policies privileging large-scale commercial complexes may inadvertently erode the very foundations of urban vitality. This theoretical lens therefore provides an indispensable basis for analyzing how shop operations function as both economic engines and mechanisms of social integration in Guangzhou's urban villages.

2.2. On the Social Foundations of Urban Village Redevelopment: A Study of Guangzhou's Urban Villages (Lan Yuyun)

In *On the Social Foundations of Urban Village Redevelopment: A Study of Guangzhou's Urban Villages*, Lan Yuyun shifts the research focus from the micro-community to the meso-policy level. Through comparative research across 23 urban villages, she constructs an analytical framework of "social foundation constraints - redevelopment dilemmas - policy pathways." The study identifies three rigid constraints facing urban village redevelopment: At the housing market level, 2019 data showed that Guangzhou's urban villages accommodated 52% of the floating population's housing needs, while government-subsidized rental housing could only meet 7% of the demand, making the irreplaceability of low-cost housing a fundamental constraint. At the stakeholder level, village collectives generated stable annual rental income of 2.8 billion RMB from properties, involving asset redistribution for 1.3 million original villagers, necessitating redevelopment plans to balance diverse interests. At the economic ecology level, the 87,000 micro and small enterprises (MSEs) within urban villages created 2.13 million jobs; excessive demolition risked triggering regional employment shocks. Based on this analysis, the study proposes repositioning urban villages as "urban low-rent communities," suggesting retaining 30%-50% of original structures for affordable rental housing during redevelopment and enabling market-oriented operation of collective assets through "legal incorporation of village collective organizations."

The breakthrough of this research lies in transcending the traditional physical-spatial perspective of urban planning by integrating social structure and economic ecology as core variables in redevelopment decision-making, providing a key to understanding demolition resistance and social stability risks. Its policy recommendations were partially incorporated into the *Guangzhou Three-Year Action Plan for Urban Village Redevelopment*, contributing to the implementation of the "micro-regeneration + rental retention" pilot project in Kangle Village, Haizhu District. However, the study suffers from theoretical and methodological limitations: Theoretically, it inadequately analyzes the interplay between "floating population housing demand," "village collective interest mechanisms,"

and "survivalist economy," failing to explain why similar policies elicited significantly different responses across urban villages. Methodologically, relying primarily on qualitative interviews resulted in a lack of quantitative analysis on key variables such as changes in housing costs for the floating population pre- and post-redevelopment, and the migration paths of MSEs. This constrained the policy feasibility assessment to the normative level. For instance, the recommendation for "legal incorporation of village collectives" overlooked the functional limitations imposed by current laws on villagers' self-governing organizations, leading to collective asset supervision loopholes in pilot projects and exposing a disconnect between theoretical design and institutional reality.

2.3. Research on Micro-Regeneration Planning Strategies for Guangzhou's Urban Villages (Zhang Yu)

Zhang Yu's research on Guangzhou's urban village micro-regeneration builds upon theories like organic renewal and urban acupuncture to formulate a strategic system of "gradual repair - cultural activation - industrial upgrading." By analyzing the spatial and social characteristics of 272 urban villages (138 located in central urban areas), the study proposes six strategies, including infrastructure gap-filling, categorized conservation of historical buildings, and cultivation of humanistic vitality. Examples include Yongqingfang on Enning Road preserving the arcade (qilou) fabric through "repairing the old as the old" and revitalizing the community by introducing Cantonese opera cultural experiences; and Nanpu Village in Panyu leveraging its rosewood industry to create a "one-street-one-park" model, promoting industrial diversification. Theoretically, the study pioneered the integration of multi-disciplinary theories and established principles like "people-oriented, step-by-step advancement." However, it inadequately argued the adaptability of strategies to different urban village types (e.g., commerce-oriented vs. industry-oriented) and lacked research on the application of digital technologies.

Micro-regeneration practices are exemplified by projects like Yongqingfang, Nanpu Village, and Pantang Wuyue, demonstrating differentiated pathways: Yongqingfang achieved a 92% resident participation rate through a "co-creation" model, tripling tourist traffic post-regeneration; Nanpu Village saw a 30% increase in commercial vitality after introducing the rosewood industry, though its suburban context limits its transferability to high-density central urban villages (e.g., Shipai Village). The research validated the effectiveness of "small-scale interventions triggering systemic upgrades" but lacked long-term tracking of post-regeneration impacts like rent increases and social structural changes. Furthermore, insufficient cross-regional comparative analysis failed to clarify the differences between the Guangzhou model and approaches in cities like Shenzhen and Shanghai. Future research needs to deepen typological studies, strengthen digital governance and community self-governance mechanism innovation, and propel micro-regeneration from "single-point demonstration" towards "systemic renewal."

2.4. The Change Mechanism of Urban Renewal Policy and System and its Enlightenment from the Perspective of Multi-Source Flow Theory (Wan Chengwei and Ye Yumin)

Wan Chengwei and Ye Yumin employs the multiple streams theory to analyze urban village renewal in Guangzhou, illustrating that policy change is rarely a straightforward or linear process. Instead, it emerges when three streams—problem recognition, policy proposals, and political opportunities—converge. In this framework, renewal initiatives are not simply top-down strategies but contingent processes shaped by timing, negotiation, and the interplay of diverse actors. When socio-economic tensions such as overcrowding, safety hazards, or land-use inefficiencies align with feasible policy solutions and the political will of municipal authorities, a "policy window" opens that makes renewal possible.

Wan emphasizes that institutional design plays a decisive role in determining the outcomes of these renewal efforts. Compensation schemes for displaced residents and shopkeepers, the allocation of land-use rights, and the models of redevelopment adopted—whether market-driven, government-led, or public-private partnerships—profoundly influence whose interests are prioritized. In many cases,

shops in urban villages are the most vulnerable stakeholders, as they lack the bargaining power of landowners or large developers. Their displacement is not merely a by-product of modernization but a structural consequence of institutional arrangements that privilege formalized development over informal economies.

Moreover, Wan's analysis highlights how policy instruments evolve in response to political pressures. For instance, stricter land-use regulations may be introduced to control unplanned commercial expansion, yet these same regulations often undercut the flexibility that enables small businesses to thrive. Similarly, redevelopment models framed around "high-quality urbanization" tend to favor large-scale retail complexes, thereby marginalizing the micro-retailers who sustain the affordability and diversity of the local market. These dynamics illustrate how institutional change can simultaneously generate opportunities for modernization while exacerbating inequalities in commercial survival.

For the purposes of the present study, Wan's framework provides an indispensable macro-level lens that links the everyday operation of small shops to the broader governance environment. Shopkeepers' adaptive strategies—whether relocating, diversifying, or informalizing—cannot be fully understood without acknowledging how they are conditioned by shifting policies and regulatory practices. By situating microeconomic behavior within institutional dynamics, multiple streams theory helps explain not only why renewal processes unfold unevenly but also why grassroots commercial actors often experience them as disruptive and uncertain. This perspective strengthens the analytical bridge between governance debates and the lived realities of urban village commerce in Guangzhou.

3. Data Collection Methods

This study primarily employs three research methods: literature review, field investigation, and questionnaire survey.

3.1. Literature Review

The literature review method involves systematically collecting, organizing, and analyzing academic literature (including journal articles, policy documents, statistical data, etc.) to extract theoretical frameworks, empirical data, and practical experience relevant to the research. Its core lies in synthesizing and critically evaluating existing scholarship to provide theoretical foundations, methodological references, and entry points for research inquiry.

This method was applied in all four literature reviews conducted for this study:

In "*Spatial Restructuring Driven by the Long-tail Economy: Observations on the Industrial-type Urban Village in the Kanglu Area of Guangzhou*" (Deng Maoying), the focus was on how diversified consumer demand reshapes the spatial and industrial structure of urban villages. The review highlighted the role of micro-entrepreneurship and digital commerce in sustaining local business ecosystems, while noting a research gap: insufficient attention to the uneven spatial benefits of such restructuring for small shops in different locations.

In "*On the Social Basis of Urban Village Redevelopment: A Case Study of Guangzhou's Urban Villages*" (Lan Yuyun), the foundational role of the "low-cost commercial ecology" for shop sustainability was extracted. This serves as a basis for analyzing the operational resilience of shops in Guangzhou's urban villages. Concurrently, the review noted an unresolved issue: variations in the implementation of similar policies across different urban villages (e.g., core vs. peripheral areas), which can be used to compare shop operation models across different locations.

In "*Research on Micro-Regeneration Planning Strategies for Guangzhou's Urban Villages*" (Zhang Yu), the experience of "activating shops through culture" (e.g., the regional characteristics of arcade-style commerce) was incorporated to explore pathways for integrating cultural elements with shop business types. Furthermore, a research gap was identified: existing strategies fail to address the shop

upgrade needs in high-density, centrally located urban villages (e.g., Shi Pai Village), suggesting a direction for typological research.

Finally, in "*The Change Mechanism of Urban Renewal Policy and System and its Enlightenment from the Perspective of Multi-Source Flow Theory*" (Wan Chengwei & Ye Yumin), multiple streams theory was applied to show how Guangzhou's urban village renewal policies emerge from the convergence of social problems, policy proposals, and political opportunities. The review also highlighted a research gap: insufficient attention has been paid to how these shifting policy frameworks shape the survival and adaptation strategies of small shops in urban villages.

3.2. Field Investigation

Field investigation involves the researcher's direct engagement within the actual context of the study subjects, utilizing direct observation, structured or unstructured interviews, and questionnaire surveys to collect primary data. Its core characteristic is the acquisition of micro-level behaviors, spatial features, and social relationships—often inadequately captured in documentary sources—through "in-situ" observation and interaction, thereby providing empirical support and vivid case studies for the research.

This study conducted field investigations in Liede Village and Yangji Village. Observations of street-level shops, combined with geographical positioning, revealed distinct operational characteristics in each village, enabling targeted analysis based on these differences. Furthermore, field visits were undertaken to distribute questionnaires to shop owners, employees, and customers, supplemented by brief interviews with selected shop owners and employees.

3.3. Questionnaire Survey

The questionnaire survey method entails designing standardized questionnaire instruments to systematically collect data on research subjects' attitudes, behaviors, perceptions, and background information. Analysis, whether quantitative or qualitative, is then used to uncover patterns within the phenomena. Its core characteristic is the standardization and replicability of data collection achieved through structured questions (primarily closed-ended, supplemented by open-ended), making it suitable for large-scale samples or cross-regional studies, particularly within social sciences such as sociology, economics, and management.

This study employed one questionnaire specifically targeting shop owners to investigate the actual situation. The 32-item questionnaire provided a detailed understanding of shops within urban villages. It was divided into four main sections: Personal Basic Information, Shop Basic Information, Shop Operational Status, and Subjective Attitudes.

Questionnaires were collected through two primary channels:

Online Collection: Questionnaire links or QR codes were distributed via WeChat to owners' and residents' groups within urban villages, accompanied by an explanation of the research purpose to solicit participation.

Offline Collection: Questionnaires were distributed on-site during field visits to urban villages. Shop owners, employees, and customers were invited to scan QR codes to complete the survey. For specific target groups, the survey purpose and instructions were explained in person, and questionnaires were collected immediately to ensure a high response rate and quality of responses. To enhance participation, small incentives (e.g., snacks, cash tokens) were offered.

Questionnaires collected via these two methods each constituted approximately 50% of the total sample. Offline distribution focused primarily on Liede and Yangji villages. The online distribution extended to include more geographically remote urban villages, such as those in Baiyun Shitan and Fangcun.

4. Research Findings

This study employed a questionnaire survey to collect monthly revenue data (unit: CNY 10,000) from 62 individual businesses located in typical urban villages in Guangzhou. The sample comprised 31 female shop owners (with 30 valid samples after removing 1 outlier) and 31 male shop owners (with 27 valid samples after removing outliers).

4.1. Univariate Analysis

This study conducted univariate analysis, treating shop owner gender as the independent variable and monthly revenue as the dependent variable.

Table 1 Comparison of Revenue Statistics of Shop Owners of Different Genders (Unit: 10000 yuan)

Statistical Indicators	Female shop owner (n=30)	Male shop owner (n=27)	Absolute value of difference	Discrepancy Rate(%)
Mean(M)	8.035	9.811	+1.776	+22.1
Median(Mdn)	4.5	7.0	+2.5	+55.6
Standard Deviation(SD)	8.405	9.188	+0.783	+9.3
Minimum	0.25	0.10	-0.15	-60.0
Maximum	≤30*	40	+10	+33.3
Skewness	1.719	3.784	+2.065	+120.2
Coefficient Of Variation	1.046	0.936	-0.110	-10.5

The data revealed that both groups exhibited a significant right-skewed distribution (skewness > 1), indicating that the revenue of most shops was below the mean. This reflects a common phenomenon among micro and small businesses in urban villages: "a minority of high-revenue shops elevate the overall average." The key distinction was that the degree of right-skewness was significantly greater for males (Z-score difference = 4.42, $p < 0.001$). Secondly, the female distribution was relatively concentrated (kurtosis = 2.31), while the male distribution was flatter (kurtosis = 14.72), suggesting more complex internal revenue stratification within the male group.

4.2. Bivariate Analysis

Data were collected via questionnaire from 58 shop owners in Guangzhou's urban villages. Core variables are defined as follows:

Dependent Variable (Y): Monthly operating revenue (CNY 10,000; continuous variable).

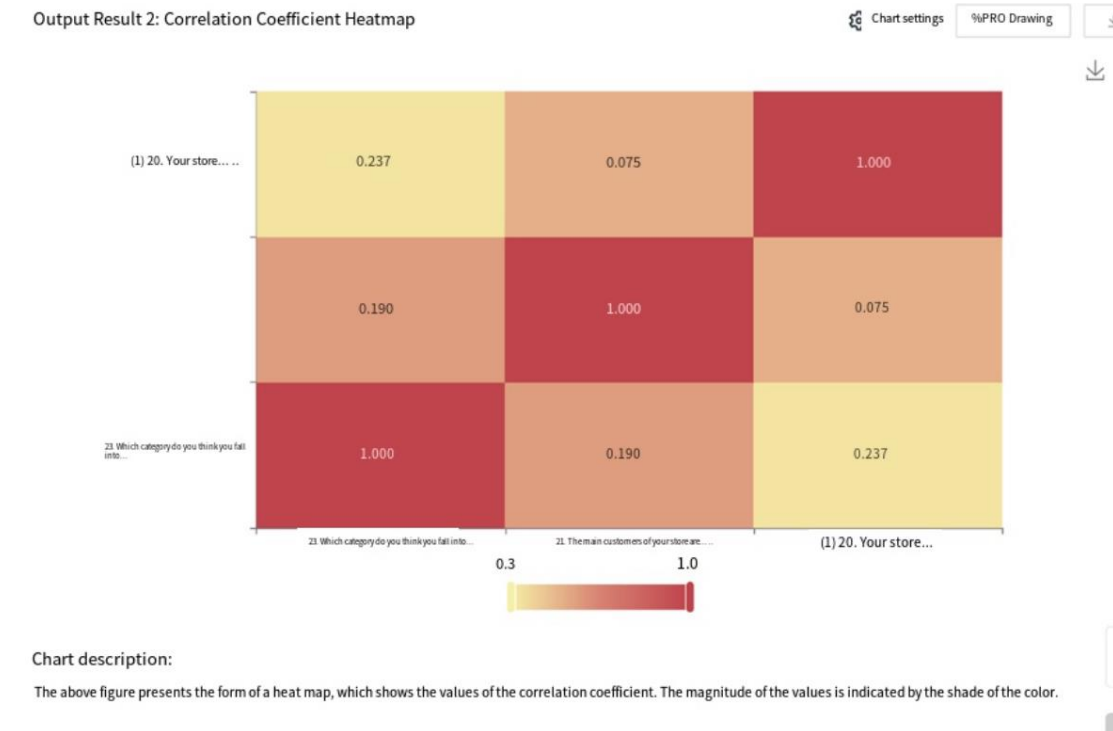
Independent Variable 1: Perceived social class (ordinal categorical; hypothesized scale: 1 = Lower class, 2 = Lower-middle class, 3 = Middle class, 4 = Upper-middle class, 5 = Upper class).

Independent Variable 2: Primary customer base (nominal categorical; e.g., migrant workers, local residents, office workers/white-collar employees).

Table 2 Correlation Coefficient Table

	23. Which social class do you think you belong to	21. What is the main customer group of your store?	(1)20. What is the approximate monthly revenue of your store in tens of thousands of yuan?
23. Which social class do you think you belong to	1(0.000***)	0.19(0.156)	-0.237(0.076*)
21. What is the main customer group of your store?	0.19(0.156)	1(0.000***)	0.075(0.580)
(1)20. What is the approximate monthly revenue of your store in tens of thousands of yuan?	-0.237(0.076*)	0.075(0.580)	1(0.000***)
Note: ***, **, * represent significance levels of 1%, 5%, and 10%, respectively			

Table 3 Thermal map of correlation coefficient



1. Analytical Methods and Results:

Pearson correlation analysis was employed to preliminarily explore linear associations between variables.

Results Analysis:

Perceived Social Class: 50% of shop owners (29 individuals) self-identified as "lower-middle class," while 22.4% (13 individuals) identified as "middle class." The combined proportion identifying as "lower class," "upper-middle class," or "upper class" was less than 30%. This reflects a widespread sense of class modesty among urban village shop owners, potentially stemming from small business scale and intense competition, leading to a lower self-assessment of social status.

Primary Customer Base: Migrant workers constituted the largest customer segment (45.2%, 28 shops), followed by local residents (29.0%, 18 shops), and office workers/white-collar employees (16.1%, 10 shops). Other customer groups accounted for 9.7% (6 shops). This distribution aligns closely with the "concentration of floating populations" characteristic of urban villages.

Monthly Revenue: The mean monthly revenue was CNY 82,000 (standard deviation = CNY 57,000), with a range from CNY 15,000 to CNY 220,000. This indicates significant income differentiation: shops range from those adopting a "high-volume, low-margin" strategy near industrial zones to "boutique retail" establishments catering to white-collar workers.

2. Bivariate Correlation Analysis Results:

Analysis of the correlation coefficient matrix (Table 1) and heatmap (Figure 1) yielded the following core findings:

(1) Perceived Social Class (X1X1) and Revenue (Y):

A marginally negative association was observed ($r = -0.237$, $p = 0.076$ *, significant at the 10% level). This suggests that shop owners who perceive themselves as belonging to a *higher* social class tend to report *lower* monthly operating revenue (statistically approaching significance).

Potential Explanations:

Cognitive Bias Effect: Higher-earning owners may experience "relative deprivation" by comparing themselves to peers (e.g., larger neighboring shops), leading them to underestimate their actual class position.

Industry Attribute Moderation: Owners self-identifying as "upper-middle class" are more likely to operate in "socially respectable but niche" sectors (e.g., cultural-creative goods, light meals). However, the consumption capacity within urban villages may struggle to support high premiums, resulting in lower actual revenue. Conversely, owners perceiving themselves as "lower-middle class" often focus on essential-need industries (e.g., fresh produce, hardware), achieving stable income through "high-volume, low-margin" strategies.

(2) Primary Customer Base (X2X2) and Revenue (Y):

No statistically significant association was found ($r=0.075$, $p=0.580 > 0.05$).

Potential Explanations:

Complementary Consumer Patterns: The distinct profit models associated with different customer segments may counterbalance each other. Migrant worker clientele typically involves "high volume, low price," local residents offer "stable repeat purchases," and white-collar customers contribute "high unit value but lower traffic." These complementary patterns may be difficult to capture through simple linear correlation.

Insufficient Sample Heterogeneity: The broad categorization of customer groups (e.g., "migrant workers" not subdivided into blue-collar/white-collar) or high customer overlap within urban villages (e.g., a single shop serving both residents and migrant workers) could dilute the measurable impact of any single customer group on revenue.

5. Summary and Conclusions

This study investigated shop operations within Guangzhou's urban villages by employing a multi-method approach. Specifically, this approach included a literature review, field visits to core areas such as Liede Village and Yangji Village, and quantitative analysis of 62 shop owner questionnaires, which yielded 58 valid responses. Through this process, the research progressively uncovered the mechanisms linking operator characteristics, customer targeting strategies, and revenue.

Key empirical findings emerged: notably, a near-balanced gender structure exists among shop owners, with nearly half self-identifying as "lower-middle class." Furthermore, the primary customer base was identified as migrant workers, constituting 45.2% of clientele. While the average monthly revenue reached CNY 82,000, the substantial standard deviation of CNY 57,000 clearly reflects significant income differentiation among shops. Importantly, data analysis revealed a marginally negative correlation between shop owners' perceived social class and their revenue ($r = -0.237$, $p = 0.076$). Conversely, the linear impact of customer base targeting on revenue did not reach statistical significance.

Regarding research innovations, this study offers three key contributions. First, it pioneers the introduction of the subjective dimension—"shop owner perceived social class"—into urban village commerce research, thereby revealing a distinct misalignment between subjective perception and objective income. Consequently, this addresses a critical theoretical gap concerning the "economic status - social identity" interaction. Second, by integrating quantitative statistics with qualitative insights, the study constructs a novel composite analytical model of "subjective perception - customer targeting strategy - operational performance," which provides a new framework for deciphering the urban village commercial ecosystem. Finally, focusing on the inherent "low-cost survival" characteristic of urban village commerce, the research utilizes micro-level data to empirically validate an understanding of the self-organizing logic operating within these informal commercial spaces.

Based on these findings, several policy implications arise. Policymakers should, therefore, consider preserving designated "low-cost commercial transition zones" for owners of essential goods/services, while simultaneously drawing inspiration from successful integration models like Yongqing Fang's "culture + commerce" approach. Additionally, scientifically planning supporting industrial chain shops based on customer demographics and accordingly establishing a dynamic "customer group - business type" matching mechanism is recommended. Moreover, enhancing shop owners' customer identification skills through targeted training programs, coupled with promoting rental cost stabilization via models like the Pearl River Village (Zhujiang Village) collective asset approach, warrants attention.

For future research directions, three promising avenues are suggested. One direction involves exploring mediating mechanisms, specifically investigating whether perceived social class indirectly influences revenue through mediating factors like "industry choice," potentially employing mediation analysis within a more comprehensive causal model. Another direction entails refining customer segmentation by moving beyond broad categories to finer distinctions, such as between blue-collar workers and new urban residents, in order to capture underlying consumption differences more accurately. A third direction focuses on assessing the impact of digital transformation, systematically examining the influence of digital technologies, inspired by Shi Pai Village's e-commerce transition, on customer reach efficiency.

However, while this study provides valuable insights into core urban villages, it is important to acknowledge its limitations. Primarily, the sample size remains modest. Moreover, the research did not include peripheral areas—such as manufacturing-intensive villages in Huadu North-Central or large industrial zones in East Panyu/West Zengcheng. This omission consequently limits the analysis of "industrial-supporting shops" and "low-cost survival business types," thereby affecting the generalizability of conclusions across the full spectrum of urban village types. Therefore, future research should aim to expand sample coverage across Guangzhou's five major administrative districts. Utilizing Structural Equation Modeling (SEM) to integrate multidimensional variables, combined with big data analytics to quantify real-time links between customer consumption behavior and revenue, would ultimately offer more targeted theoretical support and practical pathways for the sustainable development of urban village commerce.

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