

The effects of the development of urbanization in China on community group buying in the retail industry

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Abstract

Purpose: The aim of this paper is to delve into the relationship between urbanization in China and the growth of Community Group Buying (CGB) in the retail industry. China has experienced rapid growth in recent years, and this study seeks to identify the factors that allow CGB platforms to effectively mobilize resources.

Design/methodology/approach: Using PRISMA to review relevant literature, this paper establishes the factors that drive the CGB model forward. While urbanization has some impact on the proliferation of CGB programs among consumers, its influence is moderated by various factors, including ongoing movement restrictions and the lingering effects of the pandemic on society and the economy.

Findings: Despite these challenges, urbanization factors that have a causative relationship with CGB can provide CGB platforms with a basis for developing growth programs, particularly in cities that are experiencing economic growth. By analysing the impact of urbanization on CGB, this study presents a more comprehensive understanding of the CGB model and its relationship with urbanization. Additionally, this paper suggests potential avenues for future research and highlights the need for further exploration of the CGB model in the Chinese retail industry.

Research limitations/implications: Due to privacy concerns and competitive interests, CGB platforms may restrict data availability, limiting researchers' ability to study consumer behaviour, transaction volumes, or specific platform practices. Understanding consumer motivations in group buying can be difficult, as behaviours are often influenced by factors like price sensitivity, community engagement, and social dynamics, making it challenging to isolate and analyse specific motivators.

Practical implications: Studying consumer behaviour can enable platforms to gain deeper insights into the demographics and preferences of their users, allowing them to craft more effective marketing and promotional strategies. CGB research can identify the factors that encourage customers to return to a platform, such as exclusive deals, community-focused features, or an easy shopping experience. These insights enable companies to develop loyalty programs and retention strategies that actively engage and retain their customers. Insights from CGB research on social dynamics, like peer influence or the impact of community involvement, can help platforms design features that build a sense of community and trust. This approach promotes stronger group cohesion, higher customer retention, and an overall positive user experience.

Originality/value: CGB research broadens academic understanding of social commerce by examining how social influence, online shopping, and community dynamics interact. Insights into community influence and peer behaviour in CGB contribute to fields like behavioural economics, psychology, and sociology. Additionally, CGB research drives innovation in digital retail by exploring how group purchasing models could transform future shopping experiences. Ultimately, CGB research benefits businesses, informs consumer behaviour, aids policy development, and enriches academic knowledge—helping build a more transparent, efficient, and inclusive digital commerce landscape.

Keywords: Community Group Buying, pandemic, urbanization, e-commerce, Tier-1 cities, lower-tier cities, community group leader

Introduction

Merging at the forefront of e-commerce dynamism in China, Community Group Buying (CGB) has registered a surge in adoption, especially during global health crises. Historically, the inception of CGB in China can be traced back to 2016, concomitant with the proliferation of mobile payment systems, heralding a new era where online grocery shopping was democratized for the populace (He, 2022; Moh, 2018). China's unparalleled mobile penetration rate (Born, 2021; Zipser & Poh, 2022) has further catalysed the growth trajectory of the CGB model, characterized by its competitive price reductions ranging between 20% to 30%. Start-ups such as Xinsheng Youxuan, China Fresh, and Shihui Group epitomize the innovative spirit surrounding CGB (Chubbie Editor et al., 2021). Notwithstanding investor apprehensions pertaining to its sustainability amidst aggressive pricing and market competition around 2018 (Chubbie Editor et al., 2021), CGB has exhibited formidable resilience, particularly amidst increased reliance on online grocery avenues during pandemic-induced lockdowns.

Numerous studies have found a relationship between urbanization and online consumption. Li et al. (2019) found that urbanization had a promoting effect on online consumption. The study also revealed that the improvement in residents' income, regional development level, and transportation convenience had an impact on the level of online consumption. The increase in income is driving the development of online consumption. Molnar et al. (2017) utilized data from the China Family Panel Studies dataset and found that consumption increased by almost 30% for rural dwellers who urbanized and migrant workers, contributing to economic growth. The study also noted that better education and higher income were strong drivers of consumption.

Research in the CGB industry has mainly focused on the factors that affect its growth, with little attention given to the impact of urbanization on this e-commerce trend. This paper aims to investigate the effects of urbanization development in China on the community group buying (CGB) model.

Literature Review

The CGB model is based on social networks, where like-minded consumers from a community integrate small orders - usually fresh and dry grocery items - from each participating household within the community into large orders, led by a community leader. Merchants deliver these orders to a unified pick-up point for consumers to collect, reducing logistics costs (Born, 2021; David, 2022). This B2C e-commerce model not only relies on consumer-led purchases but also on the influence of reseller agents and a group of consumers within the community, merging online and offline commerce as items are physically collected by consumers (Torrington, 2022). A group leader creates and maintains a WeChat Group, updating daily product promotions via a mini app (Born, 2021; He, 2022). Since the pandemic of 2020, CGB has become an increasingly popular social purchasing experience involving a host of new entrant participants

such as agents, resellers, community leaders, and B2B distribution platforms (Torrington, 2022). Leveraging technology, these groups stretch beyond the circle of family and friends and usually comprise 100-500 people within the same vicinity (Born, 2021).

CGB offers the advantage of eliminating middlemen and transferring bulk purchase discounts directly to consumers, making the price more affordable (David, 2022; He, 2022; Vadhera, 2021). A community leader initiates the group purchase, serving as an intermediary between the community group buying platform and consumers, thus lowering logistics costs and inventory pressure, and increasing sales efficiency (David, 2022; Hongru, 2019; Vadhera, 2021). This group leader is motivated by a commission, usually in the region of 10% (sometimes more), offered by the merchant platform (David, 2022; Vadhera, 2021; Hongru, 2019).

According to David (2022), CGB is based on two models: A price-led model that leverages lower prices through bulk purchase discounts, and an agent-led model based on an agent or community leader who is personally known to the consumer and provides some value-added services. Based on Vadhera (2021), this approach has been effective in Tier-2, Tier-3, and lower-tier cities, as well as rural communities that are particularly price-sensitive and operate in close-knit settings. As of the end of 2018, more than half of the users of WeChat community group-buying services in China were in Tier-3 cities and below (Ma, 2021).

China's Urbanization and Consumption Impacts

Development of urbanization in China and its effects on consumption: Urbanization is a phenomenon that refers to the increase in the proportion of a nation's population living in towns and cities. This process is often considered a sign of development, and one of the indicators used to measure the development level of a particular area. The World Bank has reported that approximately half of China's population now lives in cities, which is a significant increase from previous decades. In fact, China's urbanization rate has risen from 16.20% in 1960 to 62.51% in 2021, an impressive increase of 46.31 percentage points in the past 60 years. As a result of this rapid urbanization, China now has 113 cities with over 1 million inhabitants. However, it is worth noting that less than 10% of China's population lives in Tier-1 cities or metropolises, while two-thirds live in lower-tier cities. This indicates that the majority of urbanization in China has occurred in smaller cities, which have become significant engines for spending and fuelling economic growth. In fact, a study by Xing (2017) notes that lower-tier cities account for 59% of the country's GDP and 73% of its population, which is a clear indication of their importance. Looking ahead, it is expected that the trend of rural-to-urban migration will continue in China. In the next 14 years, it is estimated that 166 million people will move from rural to urban areas, with 75% of them heading towards lower-tier cities (Xing, 2017). This is likely to further fuel the growth of these smaller cities and solidify their position as key players in China's urbanization process.

Covid-19 Pandemic Growth Driver of Community Group Buying in China

Movement restrictions, which were implemented across most of China from Tier-1 to lower-tier cities since the pandemic broke out in 2020, led to a rise in online consumption, particularly in CGB (David, 2022; Gao & Li, 2022). The market for grocery purchases in China is estimated to be around RMB11 trillion, while market estimates point to the size of the community group buying (CGB) in excess of RMB500 billion in 2021, with a 5-year compound annual growth rate (CAGR) estimated to reach close to 100% (Born, 2021). Data from Daxue Consulting reveals a rising trend in CGB in China. In 2017, the total number of CGB users in China was 212 million, while the online delivery industry registered 343 million users. These numbers rose to 335 million CGB users in 2018 and 420 million in 2019, surpassing the number of users of online delivery platforms in China. In 2020, driven by the pandemic, CGB users grew faster

than online delivery users, reaching 470 million, while in 2021, there were 646 million users. Alibaba reportedly entered this segment via its own CGB application, Freshippo Youxuan, to counter lower retail sales brought about by the pandemic. The 2022 lockdowns are likely to increase the popularity of group buying activities and attract more consumers from Tier-1 city. The imminent uncertainties around further lockdowns as China pursues its Zero-Covid policy are also likely to drive people to stock up, further facilitating the group buying market (David, 2022).

In the context of urban classification in China, it is important to note that the city tier classification system is not officially sanctioned by the Chinese government. Nevertheless, the National Bureau of Statistics does provide key indicators pertaining to real estate projects across 70 prominent large and medium-sized cities. Within this unofficial classification, there exist four Tier-1 cities, namely Beijing, Shanghai, Guangzhou, and Shenzhen. Subsequently, there are 31 Tier-2 cities and 35 Tier-3 cities (National Bureau of Statistics, 2023). This stratification generally aligns with other classification methodologies that segment cities based on criteria such as GDP, income levels, or population size. This typology has been extensively adopted in academic literature (Liu & Xiong, 2018).

Huang et al. (2021) discovered that the development of community group buying (CGB) in the past two years has been centred around Tier-3 cities. Only in the first half of 2020 did it enter the Tier-1 cities like Beijing, Shanghai, Guangzhou, and Shenzhen. CGB platforms expanded during Covid-19 as it was often the only option for people to shop for groceries (Chubbie et al., 2021; Zipser & Poh, 2021). Research shows that CGB received over RMB10 billion in total investment in 2020, with tech giants like Alibaba, Meituan, Didi, and Pinduoduo leading the foray throughout China, not just in rural areas. According to a study by McKinsey, online penetration of grocery sales in China rose by 15-20 percentage points during the peak of the Covid-19 crisis. McKinsey expects at least 6% of that increase to stick, including consumers in urban areas who participated in the survey.

Community Group Buying and Pricing Structure

One of the key driving factors for CGB is the lower price offered through group discounts. The driving force behind this model is the consumers' ability to obtain desired merchandise at a far lower price than that offered at traditional stores (Hongru, 2019; Vadhera, 2021). The merchandise offered under this model is often generic items that appeal to price-sensitive users who are not brand-conscious (David, 2022; Vadhera, 2021).

CGB is popular in small cities in China and is gaining momentum as Tier-2 and Tier-3 cities develop quickly. Economic growth is improving consumption levels, and social buying groups remain an attractive model for purchases as this group of consumers seeks attractive prices (Gao & Li, 2022). However, the study found that Tier-1 cities were less receptive to social group buying since residents sought high-quality services over lower prices. David (2022) opined that the decline in the Consumer Confidence Index from 26.5 in March to April 2022 was indicative of a pessimistic consumer outlook. Additionally, findings from Bank of China's Q1 survey showed a higher propensity to save. As a result, consumers were likely to seek bargain purchases, driving them towards group buying options (David, 2022).

There is an emerging trend where consumers in lower-tier cities are spending more on luxury items (Lannes & Deng, 2022; Melchers, 2022). However, the lack of physical shops drives purchases online, and e-commerce platforms like Pinduoduo, which support group purchases at discounted prices, are contributing to the growing consumption levels of lower-tier cities (Lannes & Deng, 2022; Melchers, 2022). Consumers in lower-tier cities tend to prefer smaller brands or specialized products and services and are less sophisticated. While premiumization is largely driven by Tier-1 cities, Lannes & Deng (2022) found in a study of China's FMCG market that high-priced items or branded goods sales in Tier-1 cities were mostly from offline

channels. The study pointed to a bigger price drop in lower-tier cities due to increased participation in CGB platforms like Pinduoduo and Kuaishou, which are also trying to penetrate Tier-1 cities.

The Role of Community Leaders in Community Group Buying

Trust plays a significant role in the CGB (Community Group Buying) model, which revolves around a community leader serving as an intermediary between the CGB platform and consumers (David, 2022). The leader's role is central to the transfer of consumer trust in dyadic contexts of social and commercial roles in community group buying, as the leader and buyers live in the same community and communicate frequently online or offline (Ying et al., 2022). This interpersonal relationship often forms the basis for long-term purchases with the leader. In more urbanized areas, it was found that urbanization increases trust towards outsiders (Xu, 2021). However, there are conflicting findings on the effects of urbanization on trust. Some scholars have found that urbanization erodes trust, breaks down social ties, and negatively impacts social cohesion (Wissink & Hazelzet, 2011). Meanwhile, Zhang et al. (2014) found that state-led urbanization initiatives promoted social networks and trust.

A study conducted by Wu et al. (2022) analysed the role interactions of the group-buying leader in relationship quality and purchase decision-making using role theory. The study found that in a group buying context, the dual roles of friend and merchant played by the group leader led to an increased perception of trust and positively impacted participation in the CGB program (Ying et al., 2022). Based on user statistics from the group-buying platform Niwonin, citizens of Chinese lower-tier cities with sufficient purchasing power and a close-knit community made the most community group purchases. In contrast, users in tier-1 cities tended to choose more traditional Chinese e-commerce platforms like Taobao and JD. This is likely because people in high-income cities often do not know their neighbours, which makes it difficult to create groups (David, 2022).

Infrastructure and Network Advancement

Urbanization has led to an improvement in transportation and communication networks, as well as infrastructure, which has increased market accessibility. This includes more efficient delivery systems and faster online connection speeds that have facilitated the growth and proliferation of e-commerce. This, in turn, has made goods more accessible (Melchers, 2022). China's "New Infrastructure" policy, which saw the State Council invest US\$22 billion by 2020 to expand broadband coverage to rural areas, has resulted in 86% of the Chinese population having broadband access as of 2019 (Li & McElveen, 2022). Due to better connectivity, tech giants have been able to access previously dormant markets that required advanced infrastructure and systems. This led to a sales growth of 31% for agriculture products, 70% for fresh food, and 40% for household necessities through the creative innovations of e-commerce platforms (Li & McElveen, 2022).

Government Policies and Regulation

In December 2020 the State Administration for Market Regulation (SAMR) and The Ministry of Commerce of the People's Republic of China (MOFCOM) set up "Nine Prohibitions" for CGB platform businesses: (MOFCOM, 2022)

1. Avoid misusing pricing autonomy through tactics like predatory pricing, price collusion, or selling below cost to undermine competitors.
2. No establishing or implementing monopolistic agreements, such as fixed prices or market partitioning.
3. No predatory pricing, refusal of transactions, or tied selling that abuses market dominance.

4. Declare business concentrations that meet the State Council's standards; undeclared concentrations are forbidden.
5. Prohibit false advertising, misleading propaganda, or damaging competitors' reputations.
6. No exploiting data to unfairly price discriminate against familiar consumers.
7. Avoid using technology to disrupt competition or unfairly restrict platform operators.
8. Protect consumers by not illegally collecting or misusing their personal information.
9. Ensure product integrity; selling counterfeit goods is strictly prohibited.

According to the People's Daily (Lin, et.al., 2022) the administration underscored the salient issues in community group buying, notably predatory pricing and the consequent employment squeeze. It emphasized the urgency of establishing standards for community group buying, segmenting its consumer demographics, and distinguishing its target audience from the patrons of urban fresh markets and smaller vendors.

Methods

The study evaluates the role of urbanization in four key CGB factors: pricing structure, the role of group leaders, infrastructure and network connectivity and government policies and regulation. The author analyses past research studies to determine the effects of urbanization on these factors and how it contributes to the growth of CGB. The investigation uses the PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) methodology (Page et al., 2020). PRISMA uses a four-stage flow chart consisting of identification, screening, eligibility, and inclusion to promote evidence-based and transparent reporting of systematic literature reviews. It is a useful tool for reviewers and editors to improve reporting, but it's not intended to evaluate the quality of studies (de Freitas Netto, S.V., et.al., 2020). The PRISMA approach minimizes biases and increases the accuracy of data analysis (Ktisti, et.al., 2022). Researchers prefer systematic literature reviews because they provide transparent, trustworthy, and reproducible results with less bias.

Findings

To ensure a comprehensive review of literature and to include works from a wide range of disciplines, the research utilized a combination of four databases, namely Scopus, Web of Science, APA, and Google Scholar, during the initial search for relevant publications in the systematic review. These databases were chosen due to their extensive coverage and interdisciplinary content, as reported by Ktisti et al. (2022). The search terms used included "Urbanization in China AND community group buying" and "Effects of urbanization on community group buying in China's retail industry."

During the screening phase of the systematic literature analysis, only peer-reviewed journal papers were considered, and any papers not in the English language were excluded from the study. A total of 67 articles were retrieved from the four databases mentioned above, which were then screened for duplicates. Four duplicate trials were identified and eliminated, bringing the total number of articles to 63.

After eliminating articles that were not relevant to the research question, a total of 13 papers were selected for further analysis (see Table 1 for more details). The research carefully evaluated these papers to address the research objectives and identify any unexplored areas and research gaps. Overall, the combination of databases, the use of specific search terms, and the inclusion of only peer-reviewed journal papers ensured a thorough review of literature on the topic at hand.

Table 1. The selected articles

S/N	Author	Title	Finding	Journal
1	(G. Ma & Leng, 2022)	Evolution game and simulation analysis of community group-buying platforms supervision	Improved genetic algorithm as a product of urbanization ease the logistic of CGB and platforms supervision	Energies
2	(Qiqi, 2022)	Research on the influence of logistics service quality on consumers' repeated purchase willingness under the group-buying mode of agricultural products community	Improved logistics provided through urbanization ease CGB retailing.	Academic Journal of Business and Management
3	(X. Li et al., 2019)	Research on the online consumption effect of China's urbanization under popular aging background	Urbanization accounts for increase in income. Thus, increasing online consumption	Sustainability
4	(Xu, 2021)	Effects of urbanization on trust: Evidence from an experiment in the field	Urbanization has positive effect on in-group and out-group trust	Journal of Economic Psychology
5	(Zhang et al., 2015)	Is social capital eroded by the state-led urbanization in China? A study on indigenous villagers in the urban fringe of Beijing.	Urbanization and Social capital promote economic growth in China	China Economic Review
6	(Wu et al., 2022)	Influence of multi-role interactions in community group buying on consumers' lock-in purchasing intention from a fixed leader based on role theory and trust transfer theory	Interaction among members in the urban determined the trust they have in the leadership of CGB in China	Frontiers in Psychology
7	(He, 2022)	The revolution of traditional market: community group buying	Urbanization help CGB to supply the consumers as timely as possible	Social Development and Media communication
8	(Jiang et al., 2022)	New marketing strategies for online group buying business from a social interaction theory perspective	Perceived trust, benefit and information strategy of CGB have effect on the	Frontier psychology

			functionality of the platforms.	
9	(Wang et al., 2018)	The impacts of transportation infrastructure on sustainable development: emerging trends and challenges	Transportation infrastructure provided through urbanization enhances the performance of CGB and its sustainability.	International Journal of environmental Research and Public Health
10	(Yang et al., 2023)	Digital economy and urban green innovation: Evidence from China's cities.	Provision of incentive to enterprise by the government encourages innovation among which is CGB	Research Square
11	(W. Ma et al., 2023)	China's experience with mobile payments highlights the pros and cons of a cashless society	Urbanization gave birth to enhanced technology which is leveraged upon By CGB for online transaction.	The Conversation
12	(B. Liu et al., 2016)	Contemporary logistics in China	Infrastructural facilities ease the logistics of CGB in China.	Springer Science + Business Media
13	(Huang et al., 2021b)	An analysis of community group buying behaviour of Urban residents based big data.	Small-scale urban residents account for the largest buying from CGB platforms	Mathematical problem in Engineering

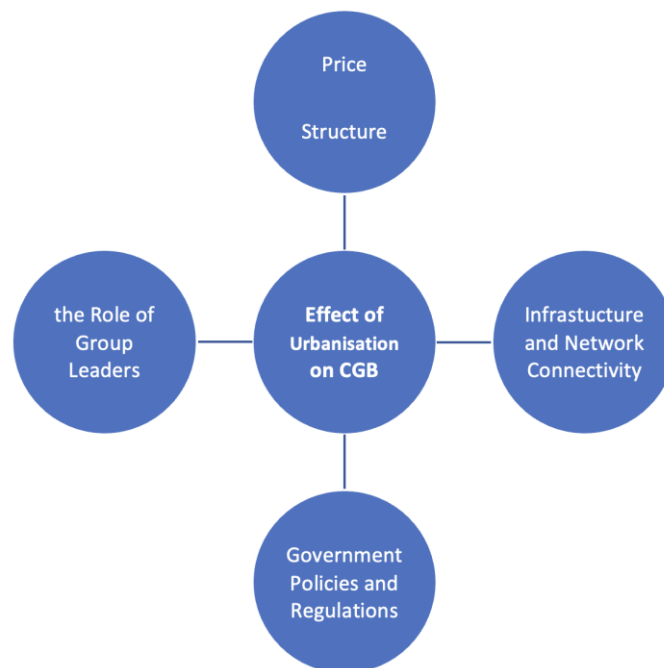


Figure 1: Effects of Urbanization on Community Group Buying

Discussion and Conclusion

Pricing Structure

Urban areas in China generally have a higher cost of living compared to rural areas. This can influence the price structure of community group buying, as suppliers may need to adjust their pricing to account for the higher costs associated with operating in urban areas. Consumers are always looking for lower-priced commodities. According to Krul and Ho (2017), urban communities can benefit from lower-priced farm produce. Community group buying is meant to provide cheaper commodities to final consumers. Prices of commodities in community group buying in urban China are relatively better compared to non-community group purchases (Hongru, 2019; Vadhera, 2021). Urban areas often have a higher density of community group buying options, which can lead to increased competition among suppliers. This competition can drive down prices as suppliers strive to attract customers and gain market share. However, it has been established that most consumers neglect their consumer rights due to the cheap pricing provided by community group buying (G. Ma & Leng, 2022).

Similarly, the influence of urbanization on economies of scale has an impact on the pricing structure in community group buying. Urbanization has led to the concentration of populations in cities, resulting in larger consumer groups in close proximity (Huang et al., 2021). This increased scale allows for bulk purchasing and direct sourcing from suppliers, resulting in cost savings and potentially lower prices for community group buying participants.

Consumers in urban areas who transact virtually often experience glitches when paying, not being supplied, or receiving substandard products that do not measure up to the price. The rate at which suppliers engage in honest dealing can strengthen community group buying (CGB). However, intense price competition has had a negative impact on the financial performance of CGB platforms. Meituan's net profit decreased in 2020 compared to the previous year due to investments in community group buying, prompting companies to explore alternative competitive strategies beyond pricing (Gao & Li, 2022). The C2M (Consumer to Manufacturer) supply chain of CGB enables platforms to offer high-quality and low-cost products to consumers without intermediate fees (He, 2022). Competitive pricing plays a significant role in attracting consumers, and the economies of scale allow CGB platforms to provide diverse goods. According to He (2022), a sophisticated logistics system ensures prompt delivery within 30 hours and minimizes transportation costs, contributing to lower prices for goods provided by CGB platforms.

Urbanization has influenced consumer behavior by creating a demand for shopping solutions that are both time-saving and cost-effective. As urban dwellers face time constraints due to their busy lifestyles, they seek more convenient ways to purchase daily necessities and groceries. Community group buying provides a platform for residents to pool their purchasing power and enjoy bulk discounts, making it an attractive option for cost-conscious urban consumers (Hongru, 2019; Vadhera, 2021) compared to traditional retail models.

The Role of Group Leaders

The role of group leaders in community group buying (CGB) cannot be overstated. In urban areas of China, group leaders play a significant role in supervising the CGB market and preventing shady practices (G. Ma & Leng, 2022). The designated community leader management system is a crucial aspect of the CGB model. Community leaders act as distribution nodes, utilizing social media platforms like WeChat groups to facilitate group purchases (He, 2022). They promote products, gather orders, and organize pick-up sites within their communities, functioning as intermediaries. CGB platforms incentivize community leaders through additional compensation and rewards based on their performance in recruiting new leaders and generating sales (He, 2022).

Research has shown that the trustworthiness of group leaders contributes to the success of CGB. Trust and emotional connections within the community also contribute to consumer purchase behavior on CGB platforms (Jiang et al., 2022). Additionally, community group buying fosters a sense of trust and social connections among participants. These platforms often operate within specific communities or neighborhoods, creating a sense of familiarity and belonging. People tend to trust recommendations and purchases made by their peers within the community, which helps drive participation and repeat business. Urbanization has a stronger positive effect on out-group trust, while its effect on in-group trust is relatively smaller (Xu, 2021). The results suggest that urbanization plays a significant role in shaping trust dynamics within and between different communities.

Infrastructure and Network Connectivity

Government-supported infrastructure and network connectivity in urban parts of China have an effect on community group buying. According to Qiqi (2022), community group buying, as a digital economic forum, has benefited from good network connectivity, which facilitates transactions. Urbanization has made logistics of community group buying easier and promotes consumers' willingness to purchase more via the internet of things (IoT) (Z. Liu et al., 2023). However, an increase of 1% in the aging population leads to a decrease of 3.65 percentage points in online consumption (X. Li et al., 2019). This is attributed to the fact that online consumption requires internet skills, which are less common among elderly individuals. Therefore, as the elderly population grows, it hinders digital connectivity and internet penetration.

Urbanization in China has been accompanied by rapid digitalization and the expansion of internet connectivity (Yang et al., 2023). Reliable internet connections and widespread adoption of smartphones have contributed to the growth of community group buying platforms, enabling convenient online ordering and communication between participants. The proliferation of urbanization has driven the adoption of mobile payment systems in China. Platforms like Alipay and WeChat Pay have become prevalent, facilitating seamless and secure transactions within community group buying networks (W. Ma et al., 2023). Mobile devices such as smartphones, smartwatches, and tablets have significantly enhanced shopping convenience and efficiency by eliminating the need for cash or traditional bank cards. Research in China suggests that mobile payment users generally experience higher satisfaction. However, concerns about accessibility may leave certain communities behind. China leads in mobile payment adoption, with over 87% of internet users utilizing mobile payments (W. Ma et al., 2023). Factors contributing to China's success include high internet usage, a supportive regulatory framework, and government initiatives for a cashless society. Prominent platforms like Alipay and WeChat Pay enable users to rely solely on their mobile devices, offering additional features like ordering taxis and applying for credit cards. While mobile payments offer advantages, addressing accessibility issues is vital for equitable benefits.

Urbanization has driven the growth of e-commerce in China, resulting in the development of efficient last-mile delivery systems (Hu & Chen, 2020; B. Liu et al., 2016). Community group buying platforms offer convenient and efficient shopping experiences for consumers. With the rise of e-commerce and mobile apps, consumers can easily browse and order products from their smartphones. These platforms typically provide doorstep delivery, eliminating the need for consumers to visit physical stores. This convenience factor has made community group buying an attractive option for busy urban residents. Such systems play a crucial role in ensuring timely and reliable delivery of goods to consumers in densely populated urban areas (Viu-Roig et al., 2020). As urbanization continues, there is a growing demand for infrastructure development to support the increasing population and economic activities. Improved transportation networks, including roads, bridges, and public transportation systems, are

essential in facilitating the logistics and delivery processes involved in community group buying (T. Li & Fan, 2018).

The level of urbanization has a positive impact on online consumption. This indicates that as urbanization increases, so does online consumption. This relationship remains consistent regardless of the estimation method used. However, the interaction between urbanization and aging has a negative effect on online consumption. This suggests that population aging inhibits the positive impact of urbanization on online consumption (X. Li et al., 2019). As the elderly population increases, the online consumption effect of urbanization decreases.

Government Policies and Regulation

This article discusses the role of government policies and interventions in shaping social capital during urbanization processes. The regulatory framework surrounding CGB in China is evolving, with authorities attempting to strike a balance between promoting innovation and ensuring fair competition. (Hu, 2021). Top-down urbanization initiatives have had a positive impact on social networks and trust through compensation negotiations and organized mobilization. However, bottom-up urbanization, driven by unregulated construction and migrant influx, has had detrimental effects on social capital (Zhang et al., 2014). To address issues caused by aggressive subsidies and price competition in the market, the government introduced regulations in December 2020. The regulation prohibited selling goods below cost to exclude competitors or monopolize the market. While the regulation restored prices to normal levels, competition on price continued through alternative methods such as sending red packets to customers (Gao & Li, 2022). The effectiveness of these regulations and their impact on the future development of CGB in China warrant further investigation.

Theoretical Implications

The pandemic has drastically changed the way we live, work, and shop. One of the most significant changes is the rapid growth of CGB in urban areas. While the rise of CGB can be attributed to the pandemic, it presents both opportunities and challenges for traditional retail businesses in these areas.

Retailers can take advantage of the trend by partnering with community buying platforms or launching their own group buying programs to reach a larger customer base. This can lead to increased sales and revenue. However, small-scale retailers may face increased competition from CGB platforms, which can offer lower prices and a wider range of products. Traditional retailers need to adapt their strategies to remain competitive in this changing retail landscape. They may need to invest in technology, offer more personalized services, and consider offering group buying options to customers.

The pandemic has also accelerated the examination of urbanization antecedents, including infrastructure and network requirements, that align with government policies. Prolonged and sporadic movement restrictions due to China's Zero Covid policy may have a psychological impact on the spending habits of consumers across income groups. Studies have shown that consumers are more inclined to save than spend, which creates inconsistent findings in the effects of price on the rising wealth of consumers driven by urbanization. Nevertheless, urbanization has increased the spending power of consumers in lower-tier cities, resulting in an emerging appetite for luxury items bought online and via group discounts.

Central to the CGB model is the role of the group leader, who connects the players in the CGB ecosystem based on an inherent trust arising from dyadic roles in the context of social and commercial spheres. However, further research is needed to understand the role of trust, especially towards the group leader, as a result of urbanization. The findings will benefit the growth of the industry, as CGB platforms will be in a better position to develop the necessary leadership traits to recruit group leaders.

Another factor that needs to be considered is the age of the target market. Online platforms are generally popular among mobile users. However, studies indicate that mobile penetration is low among the older population. As China's population is aging, further studies should investigate the penetration of CGB by age. This will contribute to marketing efforts and the creation of CGB platforms that are more user-friendly and age specific.

Overall, while the growth of CGB is driven primarily by the pandemic rather than urbanization-related factors, it presents both opportunities and challenges for traditional retail businesses. As the CGB model continues to evolve, it is essential for retailers to adapt their strategies to remain competitive in this changing retail landscape.

Practical and Social Implications

Studying consumer behaviour can enable platforms to gain deeper insights into the demographics and preferences of their users, allowing them to craft more effective marketing and promotional strategies. CGB research can identify the factors that encourage customers to return to a platform, such as exclusive deals, community-focused features, or an easy shopping experience. These insights enable companies to develop loyalty programs and retention strategies that actively engage and retain their customers. Insights from CGB research on social dynamics, like peer influence or the impact of community involvement, can help platforms design features that build a sense of community and trust. This approach promotes stronger group cohesion, higher customer retention, and an overall positive user experience.

Limitations and Suggestions for Future Research

Privacy concerns and competitive interests among CGB platforms in China can significantly limit the data available for research. Platforms may restrict access to valuable information such as consumer behaviour patterns, transaction volumes, and details about specific platform practices. This data scarcity creates several layers of complexity for researchers attempting to study this rapidly evolving model.

Restricted Access to Consumer Data

Due to privacy regulations and the proprietary nature of customer data, researchers may find it challenging to gain insights into detailed purchasing behaviours, demographic profiles, and interaction patterns on CGB platforms. For instance, data on user demographics, including age, income, and geographic location, is crucial for analysing how different consumer segments engage with community buying. Without this data, it becomes difficult to make generalizations or provide targeted recommendations that accurately reflect consumer motivations across China's diverse regions and cities.

Challenges in Analysing Transaction Volumes and Platform-Specific Practices

Access to transaction volume data and platform-specific practices is often limited, as platforms see these metrics as competitive assets. Without a view into transaction trends, it's challenging to assess the economic impact of CGB on local and national scales or to identify patterns in purchasing behaviour over time.

Complexity in Understanding Consumer Motivations

Consumer motivations in CGB are inherently complex, influenced by a range of factors such as price sensitivity, community engagement, and social dynamics. The group-buying model leverages social networks and communal trust, where consumers may feel encouraged to participate based on the influence of friends, family, or neighbourhood leaders.

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