

E-commerce and online retail in the digital economy in China

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Abstract: China's ascent as an economic powerhouse has been accompanied by a remarkable digital revolution, placing the country at the forefront of the global digital economy. This paper takes a closer look at the intricate landscape of E-commerce and Online Retail in China, uncovering its growth, innovations, and implications for businesses, consumers, and policymakers. It explores the distinctive features of China's digital economy, which have propelled it to a leadership position in E-commerce worldwide. The paper explores the driving factors behind China's E-commerce success, including the pivotal roles played by digital platforms, mobile commerce, and data analytics. Additionally, it scrutinizes the profound impacts of E-commerce on traditional retail, consumer behavior, and employment patterns.

Keywords: digital economy, e-commerce, online platform, online retail

JEL Classification: G32, G33, C35

1 Introduction

In today's contemporary era, we find ourselves in the midst of a technological revolution and digital transformation that profoundly influences the perspectives and behaviors of individuals and businesses. As consumers increasingly embrace digitalization, enterprises are compelled to adapt, enhance their technological capabilities, and foster innovation to thrive in this digital age, all with the primary objective of expanding their customer base (Hess et al. 2016; Matt et al. 2014).

Electronic commerce, known as e-commerce, has opened up a plethora of new avenues for interaction between the business sector and consumers. It facilitates seamless communication, collaboration, and the buying and selling of products and services (Barnes and Vidgen, 2002). Through diverse online sales channels, including websites, online marketplaces, and search engines, e-commerce empowers market participants to compare, select, and securely acquire a wide array of products and services. Typically, businesses initiate their online presence by providing comprehensive information about their operations and consumer-oriented offerings, thereby complementing their traditional sales channels (Turban et al, 2017; Daimler, 2017).

The emergence of China's e-commerce market represents a pivotal moment in the country's economic landscape. In the year 2021, the digital economy made a substantial contribution, accounting for nearly 40 percent of China's GDP—an achievement of remarkable proportions. Particularly noteworthy is that over a quarter of China's retail sales for physical goods occurred in the online sphere, surpassing the global average of 18.8 percent. Additionally, the e-commerce sector played a pivotal role in generating more than 67 million job opportunities (Wang et al., 2022). This transformative shift has been facilitated by online platforms such as Alibaba, Pinduoduo and Meituan, which have enabled countless customers to conveniently purchase products online with doorstep delivery. Alibaba is a global conglomerate with a significant footprint in the field of e-commerce. The company oversees and operates several prominent platforms, including Taobao, Tmall, and Alibaba.com (Xu and Li, 2022; Li and Ma, 2021).

Even in the face of the challenges posed by the COVID-19 pandemic, China maintained its leadership position in the e-commerce landscape, surpassing the United States by an impressive margin of over \$400 billion in revenue. Currently, China boasts the world's largest population of digital buyers, totaling nearly 850 million individuals. Recent years have witnessed the incorporation of new features like live streaming and rapid delivery into China's e-commerce landscape, significantly enhancing the overall customer experience (Liao et al., 2022).

Important Research Problems/Questions Identified: What are the evolving patterns of consumer behavior in response to the digitalization of markets, and what factors shape their online purchasing decisions? How are businesses innovating and adapting to the digital age to attract and retain customers effectively?

This paper contributes to a comprehensive understanding of the multifaceted impact of e-commerce on China's economy and society. It distinguishes itself by shedding light on both the successes and potential areas for improvement in China's unique e-commerce landscape, especially in comparison to global markets.

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The motivation behind this paper is to provide valuable insights into how e-commerce has become a driving force in China's economic growth and transformation (Zhang et al., 2005). It seeks to explore the various dimensions of this digital revolution and its implications, informing stakeholders, policymakers, and businesses about the challenges and opportunities presented by the ever-evolving e-commerce ecosystem.

2 Methods:

The paper employs a mixed-methods approach, combining both qualitative and quantitative data sources, to investigate China's e-commerce and online retail landscape in the digital economy comprehensively. The primary data sources utilized are secondary, including industry publications, and specific market research reports pertaining to the Chinese e-commerce sector. These sources offer valuable statistical data and market insights, making them suitable for achieving the research objectives.

Quantitative data obtained from these sources undergo basic descriptive statistical analysis to highlight essential statistics and trends within the Chinese e-commerce sector. Due to the paper's limited scope, qualitative data are not included in this analysis. Instead, the focus is on providing a concise yet informative overview of key trends and developments.

The chosen research methods align with the study's objectives, aiming to deliver a succinct yet comprehensive understanding of the Chinese e-commerce landscape within the constraints of a 6-page paper.

It's essential to emphasize that the descriptive approach is employed to offer readers a holistic understanding of the topic's various dimensions, specifically the impact of e-commerce on China's economy and society. This approach enhances accessibility, making the research findings understandable to a broader audience, including policymakers and business leaders without expertise in statistics or econometrics.

However, it's crucial to note that the descriptive approach does not replace statistical, econometric, or modeling techniques. Instead, it complements them and can serve as a foundation for future research endeavors, enabling more in-depth investigations, hypothesis testing, and predictive modeling.

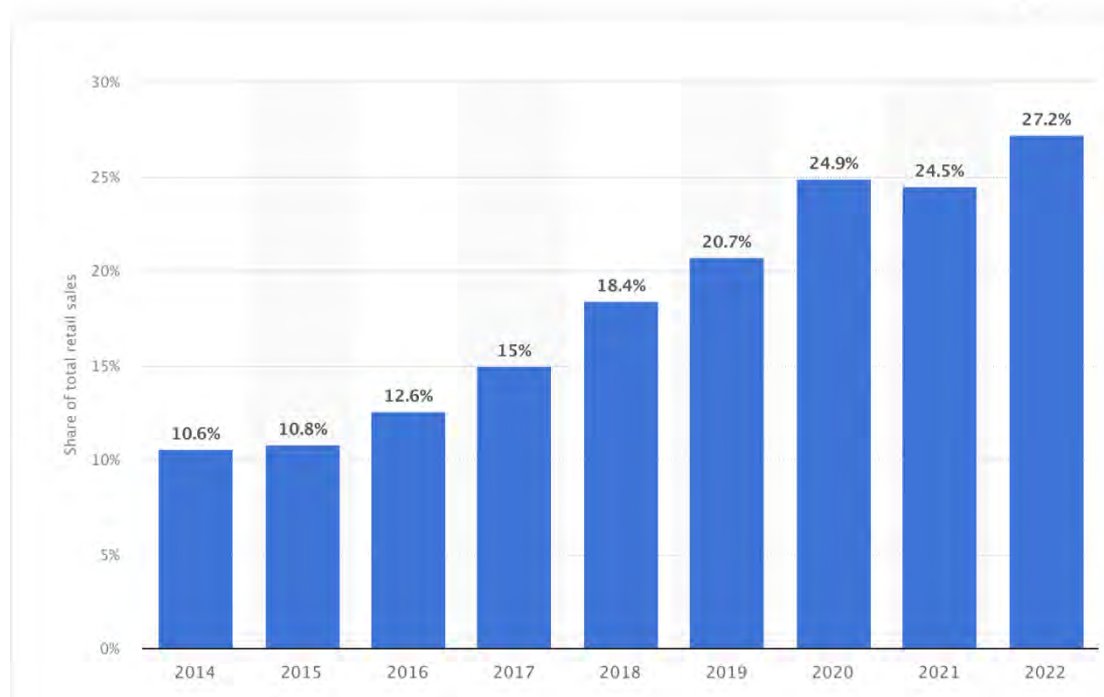
Considering the paper's limited scope, the reliance on secondary data sources is a pragmatic choice. These sources provide access to a wealth of pre-existing information and data, streamlining the research process and offering a broad view of the subject matter.

Acknowledging the limitations associated with secondary data sources, such as potential biases and data gaps, is essential. Additionally, the focus on existing data constrained the exploration of deeper qualitative aspects of the topic, which could be a potential avenue for future research.

3 Results:

In 2022, online sales accounted for approximately 27.2 percent of China's total retail sales, marking a notable increase from the 24.5 percent recorded in 2021 (see Figure 1). This growth signifies a significant expansion of the e-commerce retail sector, more than doubling its share compared to the figures from 2016. It's worth noting that China retained its position as the largest online retail market globally during this period (Statista Search Department, 2022)

Figure 1 E-commerce share of retail sales in goods China 2014-2022



Source: Statista, 2023

3.1 Effects of e-commerce on consumers and businesses

Over the past decade, there has been a remarkable surge in the demand for online shopping opportunities in China. The number of online shoppers in the country has experienced exponential growth, rising from less than 34 million in 2006 to an impressive 466 million users a decade later. This substantial increase has been a driving force behind the rapid expansion of China's e-commerce sector. As of 2022, the digital buyer penetration rate in China reached nearly 59 percent (Liu et al., 2008).

China has consistently held its position as the world's second-largest e-tailing market, following the United States. In 2022, the gross merchandise volume (GMV) of online shopping in China reached approximately 13.79 trillion Yuan. Moreover, B2C e-commerce sales in China were projected to exceed 1.3 trillion U.S. dollars by that time. Tmall, operated by Alibaba Group, emerged as the largest B2C e-commerce retailer in China in terms of GMV, recording a transaction volume of approximately 6.6 trillion yuan in 2020. Meanwhile, the GMV of Taobao, a leading C2C online retail platform also operated by Alibaba Group, had nearly reached 3.4 trillion yuan in the same year (Yang et al., 2021).

China has become a global leader in mobile payments, with over 50% of its population using platforms like Alipay and WeChat Pay. This digital payment trend has not only benefited urban areas but also reached rural residents and small businesses, stimulating economic growth and improving access to financial services. Alipay and WeChat Pay, owned by Ant Financial and Tencent Holdings, respectively, are projected to maintain their dominance, with an expected user base of nearly 2.5 billion. Their success is attributed to integration with social platforms, offering a seamless user experience and solidifying China's position as the global leader in proximity mobile payments (Refer to figure 2).

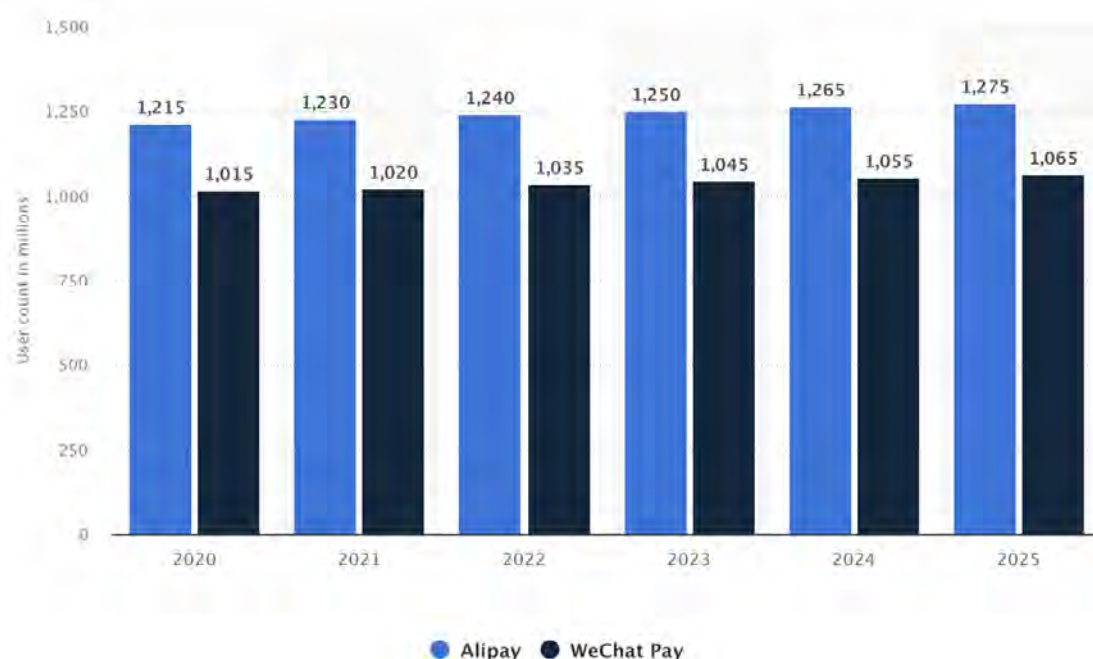
Alipay's immense size and market share bring together a diverse array of participants. The ecosystem of this digital platform includes small and micro enterprises, individual consumers, and financial institutions. Remarkably, users on the Alipay platform can assume dual roles as both consumers and merchants, blurring the lines between traditional roles in the digital marketplace. This multifaceted nature of Alipay's user base underscores its significance as a comprehensive and inclusive digital platform (Alipay, 2009).

When Alipay was initially established in 2004, its primary goal was to establish a financial bridge and facilitate a streamlined, standardized payment system between merchants and consumers on Taobao, one of China's largest and most popular online shopping websites, operated by the Alibaba Group. The initial connection to Alipay was made by merchants who operated within the Taobao marketplace. To reach the vast number of active consumers within the Alibaba ecosystem, merchants were required to adopt and utilize Alipay as their payment solution (Zhu, X. 2016, 17).

Alipay, with 400 million users, is hugely popular in China due to its seamless integration into the digital lifestyles of Chinese citizens. Rapid urbanization, widespread smartphone access, low data costs, and active social media usage have

made mobile payments a convenient and widely accepted method. E-commerce giants like Alibaba have already built large customer bases, setting the stage for Alibaba's mobile payment system's success in Chinese society (Zhu, X. 2016, 17).

Figure 2 Number of users of Alipay and WeChat Pay in China in 2020, with forecasts from 2021 to 2025 (in millions)



Source: Statista, 2023

3.2 E-commerce and stock market

Alibaba, traded as "BABA" on the NYSE, had a market capitalization of about \$560 billion in September 2021. However, by October 2023, it had significantly dropped to around \$216 billion. This decline is attributed to various market factors, including stock price fluctuations, economic conditions, and investor sentiment (Alibaba, 2023). Please note that financial figures can change rapidly, and it's advisable to refer to current sources for the latest data on Alibaba's market capitalization and performance (See figure 3).

Figure 3 Alibaba Group Market Cap on NYSE



Source: Nasdaq

It appears that Alibaba Group's stock performance on the Hong Kong Stock Exchange (HKSE) has followed a similar trend to its performance on international stock markets, with a decrease in market capitalization in 2023 compared to previous years (Hong Kong Exchanges and Clearing Limited, 2023). This parallel trend suggests that Alibaba's stock is experiencing similar challenges or market dynamics in both domestic and international markets (See figure 4).

Figure 4 Alibaba Group Market Cap on HKSE



Source: HKEX

4 Conclusion:

In the dynamic landscape of the Chinese digital economy, the remarkable growth of e-commerce and online retail stands as a testament to the nation's unparalleled transformation. Over the past decade, China has witnessed an explosive surge in online shopping, with a substantial increase in the number of digital buyers. This rapid adoption of e-commerce has led to a significant rise in its share of total retail sales, marking China as the world's largest online retail market.

The year 2022 showcased the continued dominance of China's e-commerce sector, with impressive figures in gross merchandise volume (GMV) and B2C e-commerce sales. Tmall and Taobao, both operated by Alibaba Group, emerged as leaders in the B2C and C2C segments, underscoring the influence of digital platforms in shaping consumer behavior and retail dynamics.

As China maintains its position as a global e-commerce powerhouse, it does so amid evolving consumer preferences, innovative technologies, and dynamic market competition. The digital economy's transformative impact on retail, employment, and consumer lifestyles is undeniable.

In closing, China's ascent in the digital economy is emblematic of its commitment to innovation, adaptation, and the relentless pursuit of progress. The nation's e-commerce journey serves as a remarkable case study in how a digital revolution can reshape industries and redefine the consumer experience. It is a testament to the enduring power of innovation in the digital age, and it paves the way for further exploration into the ever-evolving landscape of the Chinese digital economy.

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