



Business Model Analysis of Chinese Internet E-commerce Companies: A Comparison Between JD and PDD

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Abstract. Against the backdrop of the rapid development of Chinese e-commerce platforms, different platforms exhibit distinctly different business models. To explore the characteristics of e-commerce business models, this paper draws on existing literature and financial performance analysis to examine JD and PDD across three dimensions: value proposition, value creation, and value capture. Through a review of the financial reports of both companies, this paper finds that JD primarily relies on its self-operated business, while PDD focuses on providing services platform to merchants. This offers insights for emerging e-commerce companies on how to develop by aligning their brand positioning with a suitable business model.

Keywords: Business mode, e-commerce, JD, PDD

1 Introduction

The development of China's e-commerce since the 1990s has undergone three main stages: explosive growth, expansion, and stabilization, leading to the formation of relatively stable giants like JD and PDD. While they are in the same industry, their success primarily stems from differentiated business models. With different e-commerce platforms employing distinct business and profit models, a pressing issue is how emerging platforms can utilize the experience of previous e-commerce companies for their own development.

The research methodology of this paper primarily involves a literature review and financial statement analysis. First, a review and analysis of the literature related to e-commerce platforms was conducted, summarizing the developmental stages and characteristics of China's internet e-commerce industry. It is concluded that the industry has now entered a phase of stable growth, with its concentration primarily in the eastern coastal regions. Subsequently, an analysis of business models was performed, identifying two predominant analytical frameworks: one examines models through the three dimensions of value proposition, value creation, and value capture, while the other utilizes the Business Model Canvas, which is subdivided into nine building blocks. This paper will adopt the former framework for its subsequent analysis. Furthermore, the existing literature on the business models of JD and PDD is synthesized.

In the case study section, this paper analyzes the business models of JD and PDD based on their financial statements, operational data, and corporate visions. The analysis reveals that JD primarily derives its revenue from its self-operated business, whereas PDD relies heavily on advertising fees and commissions from merchants on its third-party platform. The marginal contribution of this paper lies in addressing the gap in existing literature, which primarily focuses on the positioning and business models of e-commerce platforms without integrating actual financial statements and revenue data. It further conducts a detailed analysis of financial data from three dimensions: value proposition, capture, and creation. Based on this analysis, emerging e-commerce platforms should identify their precise business positioning and adopt flexible operations to achieve sustainable and profitable business models.

The rest of this paper is structured as follows. Section II summarizes the relevant literature. Section III provides case study of JD and PDD. Section IV concludes.

2 Literature Review

2.1 Current Landscape of China's E-Commerce

The evolution of China's internet e-commerce is a profound reflection of the convergence between technological change and business model innovation (Tan, 2023)[1]. China's e-commerce origins can be traced to the early 1990s, a period marked by the initiation of informatization efforts and the introduction of the "internet" concept. During this time, entrepreneurs identified commercial opportunities in using the internet to disseminate traditional trade information, leading to the emergence of pioneering e-commerce websites like MeetChina.com and Alibaba.com, which also catalyzed the first wave of new economy entrepreneurs (Lai, 2009)[2]. The sector truly entered the public consciousness in 2003 with Alibaba's launch of Taobao.com, an event that signaled the firm establishment of internet-based e-commerce in China. This period was characterized primarily by small transaction volumes and a public that was still developing an acceptance of online shopping. A critical turning point arrived in 2009 with the establishment of the Alibaba Services Marketplace. This initiative attracted a massive influx of traditional enterprises, capital, and talent into the ecosystem. It concurrently fueled the expansion of the internet user base and the improvement of logistics infrastructure, thereby laying the essential groundwork for the industry's subsequent explosive growth.

Entering the 2010s, China's e-commerce industry entered a phase of rapid development and structural upgrading. The widespread adoption of mobile internet shifted the consumers' attention from PCs to mobile devices. This era witnessed the rise of the B2C model, such as Tmall and JD, steering e-commerce toward a focus on quality, platformization, and globalization (Nie, 2014)[3]. Since 2016, the industry has seen the emergence of further innovations grounded in internet thinking and technology. The concept of "New Retail" (Zhao and Xu, 2017)[4], which integrates innovative technologies to break down boundaries and enable consumers to fulfill their needs anytime and instantly, gained prominence. Simultaneously, novel formats like live-streaming e-commerce and social commerce flourished. A significant development has been the

entry of content platforms like Douyin and Kuaishou into the e-commerce arena, fundamentally reshaping the pathways for traffic acquisition and consumer conversion. Concurrently, technologies such as artificial intelligence and big data have been deeply integrated with supply chains, driving comprehensive digital and intelligent upgrades across the entire e-commerce value chain.

During the early years of rapid internet development, the number of sellers on major platforms like Alibaba, JD, and PDD surged as a massive wave of merchants entered the market. However, these three dominant players have now reached a substantial scale, moving beyond the era of breakneck growth into a stage of steady development. This transition marks a strategic shift from a "traffic acquisition era" to a "customer retention era" (Hu and Chen, 2024)[5].

2.2 Elements of Business Model Analysis

The term "business model" initially emerged within the commercial sector of the internet before being widely adopted by enterprises and organizations across various industries. In today's era of artificial intelligence, informatization, and globalization, the critical importance of the business model has gained universal recognition among both practitioners and scholars in related fields. Some scholars even argue that a superior business model holds greater value than an excellent innovative idea or technology alone. Currently, while there is no single, universally accepted authoritative definition of the term, relevant scholars generally agree that value proposition, value creation, and value capture constitute three distinct yet interconnected core components of a business model (Jiang, 2022)[6].

The value proposition articulates the value that a firm or organization intends to deliver to its customers. Within a business model, it represents the customer's perspective and market demand. Value creation originates from organizational decisions that define a project's structure, enabling decision-makers to allocate or reallocate company resources and leverage value drivers to seize new business opportunities. In essence, value creation operates on the supply side, allowing a firm to exploit opportunities by introducing new products and services to the market. Conversely, value capture addresses the profitability of business activities. To generate profit, a firm must establish a viable profit structure, enabling it to sell goods and services at a price that exceeds the total cost of production. From entrepreneurial and strategic perspectives, the mechanisms of value creation and value capture are complementary within the unified framework of a business model (Schneckenberg et al., 2017)[7].

Beyond the tripartite division of business models into value proposition, value creation, and value capture discussed above, some scholars propose a more granular framework comprising nine essential elements, commonly known as the Business Model Canvas (BMC). These elements are: Value Propositions, Key Activities, Key Resources, Key Partnerships, Customer Segments, Customer Relationships, Channels, Cost Structure, and Revenue Streams (Chai, 2025)[8]. Research by Michalis et al. (2024)[9] indicates that the Business Model Canvas serves as a pivotal tool for crystallizing a company's business model and boasts broad applicability within the field of business management. Phu and Vinh (2024)[10] share a similar view. Their study on

the BMC found that entrepreneurs, business leaders, and managers can leverage this tool to gain deeper insights into their enterprise's operational mechanics and underlying business logic, thereby providing robust support for business model optimization.

2.3 A Comparative Analysis of the JD and PDD Business Models

PDD functions as a C2B (Consumer-to-Business) third-party social e-commerce platform, analogous to a vast online "demand wholesale market" or a "group buying aggregator." Leveraging social marketing tactics such as team purchases and price-cutting campaigns, it rapidly amassed nearly 800 million active users within a few years, becoming the largest e-commerce platform in China by user base by the end of 2020. It successfully targeted lower-tier cities and middle-to-low-income consumer groups, breaking through in the highly competitive "red ocean" of traditional e-commerce to rank among China's top three e-commerce giants (Zhang, 2024)[11].

JD's business structure is organized into several key modules: JD Mall (e-commerce), JD Finance, JD Logistics, and an International Business Division. Its core value proposition is encapsulated in the slogan "Multi-Choice, Fast, Good, and Economical." The company's fundamental competitive advantage lies in its integrated supply chain model, which combines transactions, warehousing, delivery, marketing, and after-sales service into a single ecosystem. Having expanded from an initial focus on 3C products (computers, communication, consumer electronics) to a full range of categories including home appliances, daily necessities, fresh groceries, and apparel, JD fulfills the consumer demand for "one-stop shopping." A key differentiating factor is that, unlike many of its peers, JD established its own logistics company early on. Its self-operated logistics network boasts superior delivery speed and service quality compared to other platforms. It pioneered services like the "211" limited-time delivery (orders placed by 11 am delivered by 11 pm the same day) in cities like Beijing and implemented nationwide service promises such as the "After-Sales 100-Minute Response" (Xu and Zhou, 2021)[12].

3 Case Study

This section takes JD and PDD as examples to discuss the business mode of e-commerce industry.

3.1 Company Profiles

JD Group was established in April 2007. Positioned as a "supply chain-based technology and service enterprise," it is China's largest self-operated e-commerce platform. The company has consistently adhered to its mission of "Technology for a Better Life" and its operational philosophy emphasizing "Cost, Efficiency, Product, Price, and Service." It has cultivated a brand identity centered on being "Customer-Centric" and offering products that are "High-Quality and Affordable." In 2024, JD ranked as China's fourth-largest e-commerce platform by Gross Merchandise Volume (GMV), which

reached RMB 2.9 trillion. JD's core businesses encompass direct product sales, third-party digital marketing services, and logistics services. Its key subsidiaries include JD Logistics, JD Health, JD Property, and JD Industry. While JD's primary operations are concentrated in mainland China, its logistics infrastructure and customer service centers cover almost all counties and districts across the country, with 24/7 customer service hubs located in cities such as Suqian, Wuhan, Chengdu, and Datong. The group maintains subsidiaries in locations like the British Virgin Islands and Hong Kong, and certain business units, such as JD Property, are actively exploring expansion into overseas markets, including Southeast Asia and Europe.

PDD Holdings, established in 2015, is a leading Chinese e-commerce platform whose primary mission is to foster broader participation in the digital economy. It aims to enable local communities and small businesses to benefit from enhanced productivity and new opportunities through its platform. By 2024, PDD had become the second-largest e-commerce platform in China, with its GMV reaching RMB 4.7 trillion. Its core business operations include providing marketing and promotion services for third-party merchants and operating a comprehensive digital e-commerce marketplace. A significant milestone in its global expansion was the launch of its subsidiary, Temu, in the United States in 2022. Temu provides affordable products to consumers worldwide and shares the parent company's core culture and vision. It has rapidly emerged as a fast-growing player in the global e-commerce landscape.

3.2 Financial Sheet Analysis

According to the 2024 annual financial reports of JD and PDD, JD reported revenue of \$163.2 billion and a net profit of \$5.8 billion. In the same year, PDD achieved revenue of \$55.4 billion and a net profit of \$15.8 billion. A striking comparison reveals that while PDD's revenue was approximately one-third of JD's, its net profit was nearly three times higher. This disparity underscores the fundamental differences in their operating models. PDD's model, which relies primarily on platform commissions and marketing service fees, inherently yields higher gross margins. In contrast, JD's revenue is heavily dependent on its self-operated retail business, which incurs significant cost of goods sold, resulting in a lower overall gross margin.

Based on the growth rates of revenue and net profit, as shown in Figure 1, JD, as an industry pioneer, has demonstrated relatively stable financial performance over the past eight years. Its revenue growth has been moderate yet consistent, maintaining an upward trend with annual growth rates fluctuating between 6% and 40%. In contrast, as a later industry giant, PDD has sustained rapid revenue growth, consistently exceeding 35%. In 2024, its revenue growth rate reached 59.04%. This rapid expansion is attributed to the trend of market penetration into lower-tier cities in China's e-commerce landscape, where low prices serve as a key attraction for consumers. Furthermore, given that PDD's revenue is only about one-third of JD's, it possesses significant potential for further growth. Regarding profit growth, both companies experienced a significant negative growth in 2018 but subsequently staged a "bottoming-out rebound," returning to positive growth. However, overall, as reflected in the trends presented in Figure 2, JD's profit growth has shown greater volatility, including a net loss in 2021 due to broader

macroeconomic challenges. In recent years, both companies have exhibited nearly parallel trends in profit growth, entering a phase of stabilization. Comparatively, PDD's net profit performance has been more robust in the post-pandemic period.

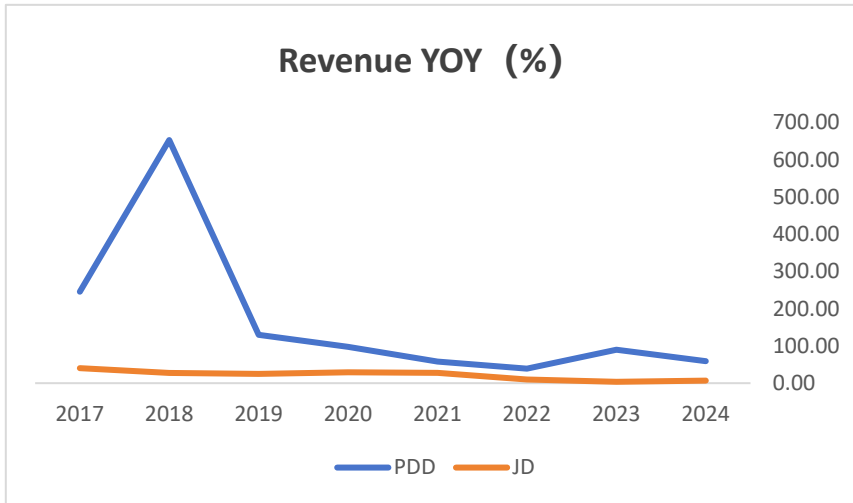


Fig. 1. Revenue Growth Rate of JD & PDD

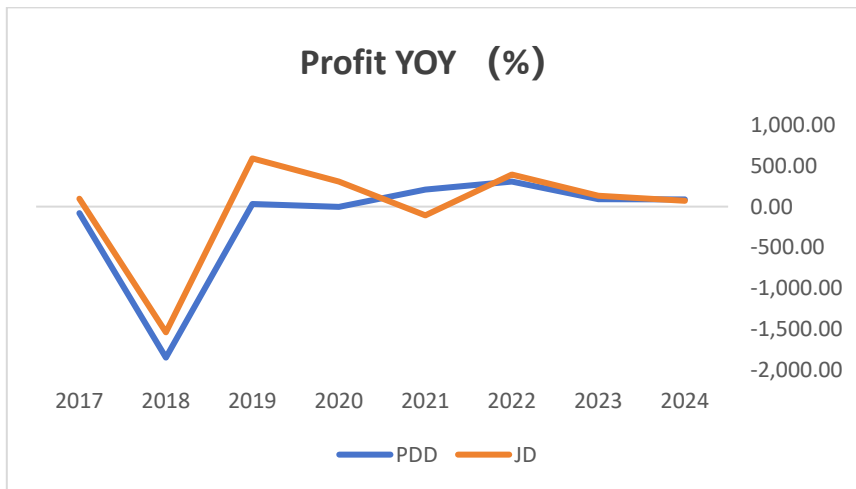


Fig. 2. Profit Growth Rate of JD & PDD

JD's revenue stems predominantly from sales of self-operated products, while PDD's is derived mainly from online marketing services (advertising) and transaction fees from merchants on its platform. As illustrated in Figure 3, which details JD's 2024 revenue breakdown, a significant 80% of its total revenue was generated from product

sales in its self-operated business. Within this segment, sales of appliances and consumer electronics constituted the largest share, accounting for 49% of total revenue. This was followed by daily necessities and general merchandise, which contributed 31%. Acting also as an e-commerce platform hosting numerous third-party merchants, JD earns revenue from online advertising and platform services; however, this segment represents a relatively small portion, at just 8% of the total. Furthermore, JD's self-built logistics network not only enhances its delivery efficiency but also serves as a significant revenue source itself. Logistics and other services provided to third parties accounted for the remaining 12% of revenue.

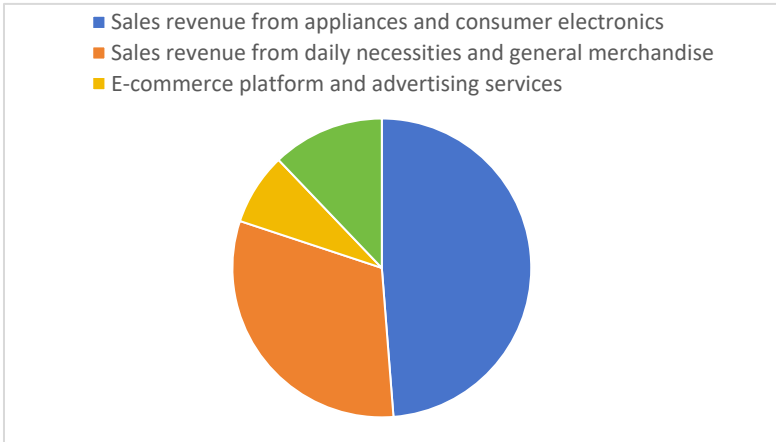


Fig. 3. JD 2024 Revenue Decomposition

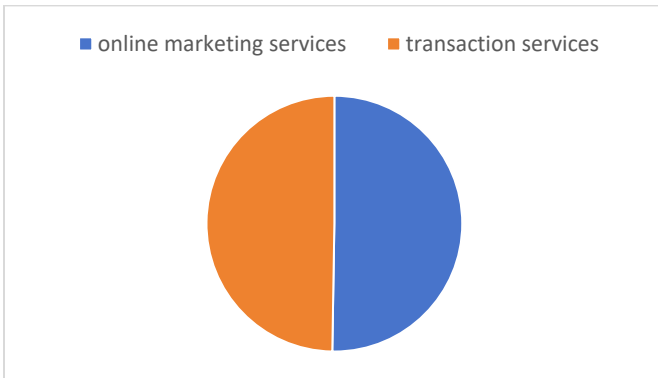


Fig. 4. PDD 2024 Revenue Decomposition

Figure 4 illustrates PDD's revenue structure for 2024. As a third-party e-commerce platform, PDD generates no income from self-operated product sales; its revenue is almost entirely derived from collaborations with merchants on its platform. Specifically, 50% of its total revenue came from Online Marketing Services, which refers to advertising and promotional fees paid by merchants to enhance their visibility on the

platform. The remaining 50% was contributed by Transaction Services, primarily comprising fees associated with the actual transaction processes, such as payment processing fees and platform commissions.

3.3 Business Model Analysis

This section discusses the business models of JD and PDD through the analytical lens of value proposition, value creation, and value capture.

The value proposition fundamentally addresses the question of which customer needs a business aims to fulfill. JD fulfills the consumer demand for high-quality products coupled with rapid and reliable delivery through its online platform. PDD satisfies the desire of small-scale merchants to easily access the internet e-commerce ecosystem, while simultaneously meeting the consumer demand for highly affordable goods.

Value creation primarily concerns the specific goods and services a company provides to its customers. JD, as China's largest self-operated e-commerce platform, delivers value by providing cost-effective products supported by its highly efficient supply chain management. PDD, as a major platform, creates value by realizing its vision of broadening participation in the digital economy. It enables small businesses and agricultural producers to access the vast customer base of internet e-commerce, which was previously difficult for them to reach.

Value capture refers to the mechanism through which a business generates profit. JD employs a relatively diversified profit model, though it remains heavily reliant on its self-operated business. Revenue from this segment constitutes 80% of its total income, with sales of electronic appliances alone accounting for 49% of total revenue. The remainder comes from advertising income on its e-commerce platform and revenue generated by its logistics services. In contrast, PDD's revenue streams are more concentrated. It primarily depends on fees collected from merchants operating on its third-party platform. These are split evenly between online marketing services (promotional income) and transaction services (commissions), with each contributing approximately half of the total revenue.

4 Conclusion

Analysis of the companies' financial reports reveals that the majority of JD's revenue is derived from its self-operated business, which accounts for 80% of its total revenue, while e-commerce platform and advertising services contribute 8%. In contrast, PDD's business model does not include self-operated or logistics activities; its revenue is generated entirely from fees charged to merchants on its third-party platform, reflected in its income statement as commission fees and advertising revenue from merchants. A business model analysis, conducted through the lenses of value proposition, value creation, and value capture and combined with the aforementioned income statement data, demonstrates that JD's strength lies in its highly efficient supply chain management. This enables it to generate revenue from both self-operated product logistics and services provided to third-party merchants. PDD, on the other hand, focuses on digitizing

the lower-tier market, concentrating primarily on fee collection from registered merchants. Based on these findings, this study proposes the following recommendations for e-commerce enterprises:

Suggestion 1: Define a clear business model positioning to address specific customer needs. Whether it is JD, which focuses on self-operated retail, or PDD, which thrives on low-cost products, both have consistently deepened their unique value propositions. By fully leveraging their distinct characteristics and market positioning, they effectively meet customer demands and enhance customer retention.

Suggestion 2: Leverage comparative advantages to achieve sustainable profitability. Current leading e-commerce platforms have each established their own viable business models and core competitive edges. Rather than engaging in destructive market competition, it is crucial to fully exploit these inherent comparative advantages to secure steady and sustainable profits.

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