

The Impact of JD.com's Business Model Innovation on Corporate Performance in the Context of ESG

Haoyu Wan^{1,a,*}

¹*Eberly College of Science, Pennsylvania State University, State College, United States*
a. HAO2126211@maricopa.edu

**corresponding author*

Abstract: This study aims to explore the impact of ESG factors on the overall development of JD.com in depth by analyzing the annual report and ESG report released by JD.com. The author studied JD.com's annual and ESG reports of specific years in detail, extracted data and information about ESG indicators (such as energy conservation and emission reduction initiatives in environmental aspects, employee welfare and community relations in social aspects, etc.), and made a comprehensive analysis. In terms of environment, this paper found that JD.com not only built energy-saving and environmentally friendly logistics parks, but also continuously optimized the structure of diversified employees, and continued to increase employees' salaries. After the implementation of ESG, JD.com's profitability has been greatly improved, leading the industry, winning many awards at home and abroad, and being recognized by investors. To sum up, ESG factors play a crucial role in the overall development of JD.com, which has a broad and positive impact on many aspects of its cost control, brand building, talent management, and financial performance.

Keywords: JD.com, ESG, investment, carbon-neutral.

1. Introduction

ESG stands for environmental, social, and governance. ESG investing refers to a company's performance on these responsibility standards and standards for potential investments. Environmental criteria gauge how a company safeguards the environment. Social criteria examine how a company manages relationships with employees, suppliers, customers, and communities. Governance measures a company's leadership, executive pay, audits, internal controls, and shareholder rights [1]. The first proposal of ESG was in 2004, and it has been developed for 20 years [2]. It is usually used as a financial technique by investors to evaluate corporate behavior and companies' future performance since ESG elaborates on companies' current strategies for the environment, society, and management.

JD.com, Inc.(JD) is one of the Chinese leading e-commerce platforms, founded in 1998. JD focused on electronics and home appliances sales at the beginning time. With the development of JD and domestic e-commerce, JD started to develop its business to all consumptions like furniture, clothing, food, and so on. One of the most significant reasons why JD survives and is strong is that JD built its own logistics network. Compared with other e-commerce companies, JD hosts the strongest logistics network, and it is the only e-commerce platform that provides "Same-day delivery" service. In addition, Chinese consumers consider JD as a specialist company in electronics sales

unlike Taobao and Pinduoduo, which means that the average transaction value of JD is above the average level in the e-commerce industry. JD went public on the New York Stock Exchange (NYSE) on May 22, 2014.

The importance of ESG is evident in the whole investment market. Inflows into sustainable funds rose from \$5 billion in 2018 to more than \$50 billion in 2020, and it reached about \$70 billion in 2021. In the first quarter of 2022, these funds rose to \$87 billion of net new money [3]. There are about 90 percent of S&P 500 companies and 70 percent of Russell 1000 companies ESG reports published until 2022. Investors have embraced ESG as a method of evaluating companies. As a publicly traded company in the United States stock market, ESG will benefit JD to obtain better expectations and confidence from investors.

This article will evaluate how JD developed itself under the ESG strategy through research on JD development and competition in the Chinese e-commerce industry based on ESG reports published by JD, historical stock prices, and reports about JD from global financial institutions. More specifically, this article will elaborate on JD's strategy on environment, society, and governance in recent years including financial data and non-financial data.

2. Overview and Business Model Innovation of JD

Four stages conclude the development of JD.com. The first stage is the inception phase, which spans from 1998 to 2007. JD was founded in 1998, but it became an e-commerce company in 2004. JD.com as an online platform multimedia network officially changed its name to Jingdong Mall in 2007, gradually building a full line of 3C (Computers, Communication devices, and Consumer electronics). JD started to build a logistics system to serve its own retail business in the same year.

The second stage is the booming phase from 2008 to 2011. JD raised \$21 million and launched ultra-fast delivery to serve door-to-door delivery, which drove a significant sales revenue increase. JD Mall's monthly sales exceeded 300 million yuan in June 2009, which was the same as the whole year's sales in 2007. In 2010, JD Mall's book sales were launched online, which meant that JD was transforming into a comprehensive online retailer. In 2011, JD obtained 15 billion investments in financing.

The third stage is the capitalization & strategic layout phase, developing from 2012 to 2016. JD began to pursue specialization and scale for economic benefits, such as the construction of Asia's NO.1 automated operation center. This construction made JD become one of the global benchmarks in logistics' customer timeliness and service standards. JD has gradually expanded its strength and influence through acquisitions, investments, and strategic cooperation since 2012. In October 2013, JD Financial Group was formally established and began to operate independently. The first supply chain financial product, "Jingbaobei", was launched by JD Financial Group. JD went public on the New York Stock Exchange (NYSE) on May 22, 2014. JD established six major business divisions: 3C Division, Home Appliances Division, Consumer Products Division, Clothing and Home Furnishing Division, Fresh Food Division, and New Channel Division in the next year.

The final stage until now is the layout of the entire industry chain. JD Logistics Group was officially established in 2017(Logistics Group was listed on the Hong Kong Stock Exchange (HKEX) on May 28, 2021). JD Finance was officially spun off from JD Group and renamed JD Digital Technology Group in 2018. Its subsidiaries include JD Finance, JD City, JD Agriculture, JD Media, and JD Shaodongjia. In March 2019, JD's retail group was formally established. Along with its ventures in insurance, logistics real estate, cloud computing, AI, and international markets, JD has developed a comprehensive layout. It has transitioned from being solely a "retailer" to a "retailer plus retail infrastructure service provider." On June 18th, 2020, JD.com finished its IPO on HKEX as JD's second IPO after NYSE, raising approximately \$3 billion in funding [4].

3. Specific Practice of JD’s Business Model Innovation under ESG Background

3.1. Environmental Protection

JD under the ESG framework applied many policies and new technology in terms of environmental protection. JD actively responds to the national “carbon peak” and “carbon neutral” strategies and the 1.5-degree Celsius temperature control of the Paris Agreement, and integrates climate change issues into the Group’s governance system to the International Standard on Sustainable Disclosure for Financial Reporting (IFRS S2) Climate-Related Disclosure and the Working Group on Climate-Related Financial Disclosure (TCFD) framework [5]. JD established carbon-neutral logistics ports in Yibin, Sichuan Province, and Beiliu, Guangxi Province in 2023. These constructions will be beneficial for the whole society to accelerate the process toward carbon neutrality. According to data provided by JD ESG annual report, there were 8290 self-operated electric vehicles put into service in highway conveyance spanning principal arteries and final transport phases in 2023, and the vehicle number was 2872 in 2022. This action leads to a typical diminishment of 35,200 tons of CO2 equivalent per year. In addition, JD established the Supply Chain Emission Management Platform (SCEMP) which is a carbon emission-focused energy management network. In JD’s logistic park, JD built a comprehensive carbon monitoring, reporting, and verification (MRV) system throughout the park’s entire life cycle. Moreover, packaging plays a crucial impact on the environment. JD implemented sustainable packaging materials, which continuously improved operations related to recycled packaging and drove the advancement of green packaging practices. By incorporating the concept of sustainability into all processes, JD has developed a packaging carbon emissions plan and promoted green packaging initiatives through four main pathways: reduce, reuse, recycle, and decompose. As shown in table 1, JD is committed to promoting the recycling of environmentally friendly packaging materials. Table 2 shows that JD is making supply-side innovations to expand the market for used appliances year by year. In 2023, this certification reduced the utilization of secondary packaging by more than 800 million pieces [6].

Table 1: Plastic Packaging Material Recycling

Index	Year 2022	Year 2023
Recyclable plastic packaging	6404.55 tons	80001.02 tons
Recycled materials in plastic packaging	1151.28 tons	15000 tons
Compostable plastic packaging	5253.27 tons	8067.89 tons

Table 2: Recycle Used Electrical Appliances:

Index	Year 2022	Year 2023
Household appliance	5615000	12494900
3C	9073332300	10779511400

3.2. Innovation Practice in Social Responsibility

JD practices the principle of diversity, equity, and inclusion (DEI), clearly stipulates the requirements of civilized behavior of employees, and resolutely opposes and prohibits any form of discrimination, harassment, or misconduct based on gender, age, ethnicity, region, religion, physical condition. JD regularly monitors and evaluates the gender pay difference of employees, implements the principle of equal pay for equal work, sets up 400 employee service hotline and bigear@jd.com to receive complaints and reports of workplace sexual harassment, clearly regulates the handling principles,

handling time, handling division and procedures of workplace sexual harassment cases, and giving different punishment. The company is committed to building a diverse workplace culture, and regularly conducts anti-workplace sexual harassment training every year, including the behavior and specific manifestations of workplace sexual harassment, action guidelines and action initiatives for workplace sexual harassment. Such training has covered all employees of JD in 2023. There were 4067 disabled employees and 32888 ethnic minorities, with a median gender gap of 2.3% and a median gender bonus gap of 0.2%. Since February 1st, 2024, more than 20000 JD customer service employees (almost are female) service employees achieved an annual average salary increase of more than 30%, highlighting JD's recognition and encouragement of customer service employees' hard work [5].

4. The Impact of JD's Business Innovation on Corporate Performance by ESG

4.1. Financial Performance

After the application of the ESG evaluation method, JD not only leads the world in financial performance but also has received numerous international awards. It has been listed on the Fortune Global 500 list for 8 consecutive years and ranked 52nd in the world by 2023. In the same year, it is selected in the Dow Jones Sustainability World Index for the first time and the only retail industry "Best Progress" Award in the S&P Global Sustainability Yearbook 2024. The financial growth of JD is rapid. The net revenues are 1.0847 trillion RMB in 2023, and up 3.7% year-on-year. According to data provided by JD's annual report, the Compound Annual Growth Rate (CAGR) of the net revenues from 2020 to 2023, which is the year applied ESG system, is 13.4% which is quite compatible as an e-commerce dominant company [7]. At the same time, the CAGR of the income from operations is 28.2%. Based on a report on the global e-commerce market, the market size is projected to reach \$7.385 trillion by 2025 from \$5.545 trillion in 2022 at a CAGR of 10% from 2022 to 2025 [8]. As an international e-commerce company, JD has kept a high growth rate of net revenue and income from operations, and its logistic system costs high as a tough competitive barrier. In 2023, JD Logistics achieved a total revenue of 166.6 billion, representing a year-on-year growth of 21.3% [6]. The application of ESG benefits JD admitted by global investors.

4.2. Non-Financial Performance Analysis

JD is always trying to provide job opportunities for society as many as possible. It expanded its high-quality employment scale with over 450,000 employees, and 350000 in-house delivery personnel by the end of 2023. In addition, JD improves employee welfare followed by the ESG indication. In 2023, JD Logistics' human resources expenditures (including its own employees and external personnel) reached 82.1 billion RMB, and the frontline employee compensation and benefit expenditures reached 55.3 billion RMB, a year-on-year growth rate of 23.9%. On environmental performance, JD has an excellent response to its investors. By the end of 2023, JD had 17 Asia NO.1 smart industrial parks, 2 sorting centers, 2 bulky warehouses, and 1 logistics park that were equipped with rooftop photovoltaic systems, with a total installed capacity of 114.48 MW, and a total of 8290 self-operated new energy vehicles were used in trunk and terminal transportation. It was awarded by many organizations to admire JD's performance on ESG governance. It obtained "The 2023 ESG Governance Award" from The Honk Kong Institute of Certified Public Accountants, "the 2023 Best Employer Award" by Maimai Recruitment, "Dual Carbon Actors Conference-2023 Dual Carbon Innovators" by Southern Weekend, "The 2023 World IoT Enterprise" and "The 2023 World IoT Project" by World Internet of Things Convention [6].

5. Conclusion

As a leading e-commerce platform in China, JD has achieved significant corporate development and social responsibility fulfillment through continuous business model innovation like Logistics system with technology and ESG strategy implementation since its establishment in 1998. In terms of environmental protection, JD has actively responded to the national “dual carbon” strategy, significantly reducing carbon emissions and promoting the practice of green packaging by establishing carbon-neutral logistics parks, increasing the use of electric vehicles, and establishing supply chain emission management platforms. In terms of social responsibility, JD pays attention to employee care, implements the policy of diversity, equality, and inclusion, and improves the salary and welfare of employees, especially the salary of customer service staff, which reflects the importance of employees. In terms of governance, JD has won the trust of investors by strengthening internal controls and improving transparency. The implementation of the ESG strategy has not only improved JD’s financial performance, enabling it to rise in the global 500 ranking, but also enhanced its non-financial performance, such as providing job opportunities and improving employee benefits. JD’s ESG practices have had a positive impact on corporate performance, demonstrating its social responsibility and sustainability capabilities as an industry leader. However, the cost on pushing recycling packaging materials and improving employees’ benefits challenges JD’s cash flow and investment strategy at the same time. Global investors may consider ESG as an important method to evaluate companies, but the operation of companies is fundamental. As an international company, JD chooses ESG as its strategy for international development and the market will provide the answer in the future.

References

- [1] Lee, L.E. (2021) *Pension Funds and Sustainable Investment: Challenges and Opportunities*. Wharton Pension Research Council Working Paper, Oxford University Press.
- [2] Li, T.T., Wang, K., Sueyoshi, T., Wang, D. D. (2021) *ESG: Research Progress and Future Prospects*. *Sustainability*, 13(21), 11663.
- [3] Pérez, L., Hunt, V., Samandari, H., Nuttall, R., Biniek, K. (2022) *Does ESG Really Matter—and Why?* *McKinsey Quarterly*. McKinsey & Company.
- [4] Zheng, K., Zhang, Z., Song, B. (2020) *E-commerce Logistics Distribution Mode in Big-data Context: a Case Analysis of Jd. Com*. *Industrial Marketing Management*, 86(1), 154-162.
- [5] JD.com, Inc. (2024) *Jingdong Group 2023 Environmental, Social and Governance Report*.
- [6] JD Logistics, Inc. (2024) *Environmental, Social and Governance Report*.
- [7] JD.com Inc. (2024) *Annual Report-United States Securities and Exchange Commission*.
- [8] Zenkina E.V. (2022) *About Current Trends in Global E-commerce*. *Beneficium*, (1 (42)), 68-73.