

# The development of e-commerce in China during the COVID-19 pandemic on the example of the textile industry

Deng Junzhi,

Lomonosov Moscow State University (China)

---

Reference to this paper should be made as follows: **Deng, Junzhi.** (2021). The development of e-commerce in China during the COVID-19 pandemic on the example of the textile industry. *BRICS Journal of Economics*, 2(3), 54–69. <https://doi.org/10.38050/2712-7508-2021-3-3>

---

## Abstract

The purpose of this paper is to analyze the current situation with e-commerce in China's textile industry and new business models during the COVID-19 epidemic. The author studied the vital problems of the Chinese textile industry from the point of view of electronic commerce. In order to solve research problems, the method of qualitative content analysis was used to classify and summarize the research situation. Data sources include the latest academic papers, industry analytical reports of securities research institutions, reports of consulting companies (Boston Consulting Group, McKinsey & Company, etc.), as well as government and organization documents (ITMF, United Nations, etc.). Based on the research process, it can be concluded that during the COVID-19 period up to the middle of 2021, China's textile industry experienced four stages, having switched from traditional e-commerce to interested e-commerce. Innovation and digital transformation seem to be necessary conditions for China's textile industry to overcome the negative impact of the COVID-19 pandemic. Finally, the author puts forward a long-term development trends of the textile industry after the COVID-19 epidemic.

**Keywords:** e-commerce, COVID-19, textile industry in China.

**JEL:** L81, O12, O33.

## Introduction

In recent years, China has made good progress in the field of fashion and textiles, strengthening its role as the preferred supplier in major markets and maintaining proper coherence with other WTO members (Gail Taylor, 2004).

China is still the base of textile production in the world. Although the value of Vietnamese textiles has been growing rapidly in recent years, the total volume of Vietnamese textiles export is still relatively small. In 2019, Vietnam's textile exports accounted for 27.5%

of China's textile exports. In other words, the volume of textile exports from China is four times the volume of exports from Vietnam. Thus, in absolute quantitative terms, China remains the main base of textile production worldwide.

COVID-19 first attacked China in late December 2019. The virus is highly contagious and transmitted by airborne droplets and aerosols (Howard et al., 2021). In order to control the pandemic of COVID-19, governments of various countries recommend maintaining social distance and wearing personal protective equipment, and in some cases, they also impose restrictions on commercial and social activities (CDC, 2020).

The global COVID-19 epidemic has had the following important impact on the textile industry.

Firstly, the disruption of the global textile supply chain has led to many complicated problems. When China, the world's most significant textiles and clothing manufacturer, was hit by COVID-19 for the first time, a strict blockade led to a delay in manufacturing supply chain. Such delays are particularly challenging for the industry because most fashionable products are seasonal. Then, when the virus was detected in most countries around the world in March, the cancellation or delay of large orders affected suppliers in China, Bangladesh and India (ITMF, 2020). Even the textile industry, which later resumed its business in China or South Korea, is still facing multiple problems.

Secondly, the COVID-19 pandemic has seriously disrupted the market of textile. According to a report by the International Federation of Textile Manufacturers (ITMF), during the period from May 20 to June 8, 2020, average number of orders and expected turnover decreased by 42% and 32%, respectively (ITMF, 2020).

Executives predict that fashion garments sales in the United States could fall by more than 50% this year due to the COVID-19 pandemic (Freeman, 2020). Moreover, according to industry practitioners and researchers, the pandemic will have a long-term impact on the industry (Lu, 2020).

2020 is a far-reaching year for the textile industry. The COVID-19 pandemic has put pressure and created challenges for the sales terminals of the industry and operational capabilities of companies. And at the same time, it has accelerated the process of reforming and optimizing the entire industry. Being one of the typical traditional industries, the textile industry has experienced a long process of innovation, destroyed its business and revived its vitality in the face of new opportunities (Ju & Yang, 2021).

## **1. Review of the literature on e-commerce in textiles**

E-commerce is a process in which consumers purchase goods and services via the Internet. Information about goods and services is published on an Internet platform, and customers can get it from there (Wienclaw, 2008).

Panigrahi and Joshi (2016) define e-commerce as the use of electronic communications and digital information processing technologies in commercial transactions to create, change and redefine value creation relationships between organizations, as well as between organizations and individuals.

Since the advent of the Internet and e-commerce in the mid-1990s, a lot of research have been conducted on the impact of e-commerce on a company's operating model and on the changes that it will make to the overall structure of the global economy (Hodge & Cagle, 2004).

E-commerce can become the leading way of improving the efficiency of daily business transactions, while the Internet is a new way to communicate with customers and suppliers. Since 1998, the Chinese government has attached great importance to the development of e-commerce, providing high-level guidance and creating a better environment for e-commerce.

The article "E-commerce in production: Some experiences" by Dignum (2002) classifies services that e-commerce provides to customers. These categories include customer and supplier management models, sales support and online catalog models. For example, the customer management model relies on the use of information received from customers to improve their relationship with the company. Companies can use the Internet to obtain information about their products and transactions from customers, which allows them to better serve customers and helps in building closer relationships with them.

Rogers (1995), Nelson and Shaw (2003) studied innovation factors in the past. In their research, the innovative attributes of e-commerce include comparative advantages, compatibility, and ease of use. A comparative advantage refers to whether companies believe that e-commerce will give them an advantage over previous business methods. Compatibility here evaluates whether these companies regard e-commerce systems as compatible with their current business processes.

Lin (2008) found that, compared to previous generations of technological innovation, E-commerce has new features, so the impact of innovative features is worthy of attention, but it has not been fully recognized in the research of e-commerce application.

According to Thatcher and Oster (2002), government policy is a key factor that encourages enterprises to adopt B2B e-commerce.

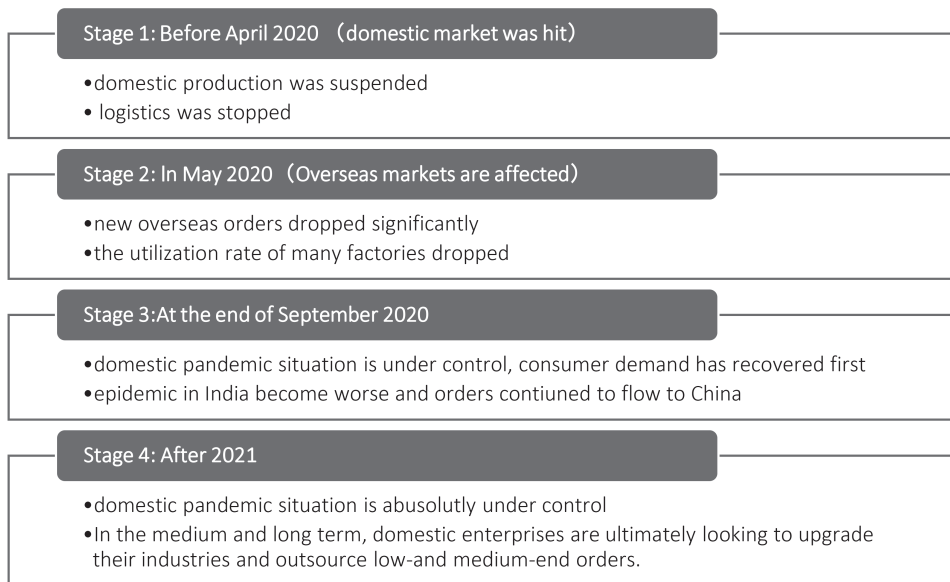
Hodge and Cagle (2004) divided e-commerce models into the following types: procurement model, ownership model, service-based model, customer relationship management model, interaction model, revenue model, and supply chain model. E-commerce plays a vital role in the current situation in the textile and garment industry, and supply chains are implementing a variety of e-commerce applications. (Panigrahi & Joshi, 2016) Like most other industries, the textile industry uses a combination of the above e-commerce models.

Zeng and Xu (2010) also pointed out four advantages of popularizing e-commerce in textile industry: significantly reducing the cost of building a logistics system; reducing the intermediate link between garment manufacturing and retail; reducing the turnover; reducing the inventory; and increasing transaction efficiency. Enterprises can directly obtain customers' approval through customer information, as well as internet-based market research and analysis, carry out promotion, quickly adapt to market changes, and meet individual consumer demand. E-commerce makes clothing enterprises ready for integration into the international market, destroys the monopoly and price barriers.

In a word, implementing information management and network marketing will bring unlimited business opportunities for the long-term development of Chinese textile enterprises. This is due to the fact that e-commerce in textile industry has become one of the basic forms of textile market.

## 2. Situation in the Chinese textile industry during the COVID-19 pandemic

Throughout the COVID-19 epidemic, China's textile industry has gone through four stages.



Source: compiled by the author.

**Figure 1.** Four stages the textile industry in China has gone through during the COVID-19 pandemic

*Stage 1:* Until April 2020, domestic production was suspended, and logistics was temporarily stopped. In addition, orders in the domestic market were postponed or reduced. As a result, the impact of a sharp decline in new orders was felt, and this to some extent affected the scale of the industry's revenues.

*Stage 2:* Due to the ongoing spread of the pandemic abroad, the number of new foreign orders dropped sharply. After the initial orders were processed in May 2020, the utilization rate of many factories fell sharply.

*Stage 3:* The epidemic situation in China was brought under control, and consumer demand took a leading role in recovery. However, with demand recovering, the recruitment situation in the entire textile and garment industry chain was not ideal, which also caused some shortage of production capacity. At the end of September 2020, it turned out that

orders affected by the Indian pandemic continued to arrive in China. At that time, this part of the orders was delivered in small quantities. However, if the work on the prevention of the pandemic in India continues, more orders are likely to be received in China.

*Stage 4:* The Indian pandemic broke out twice in 2021 and spread to East Asia and South Asia. India's low-end manufacturing orders were the first to return to China, bringing short-term benefits to this industry. In the medium and long term, domestic enterprises are finally striving to modernize and outsource low-end orders. However, the return of orders will not have a long-term influence on domestic enterprises.

The textile manufacturing industry is strongly influenced by the prices of commodities, such as cotton and oil. Like the manufacturing industry, it has a certain periodicity and is mainly export-oriented. Therefore, it has a significant impact on labor force, fixed assets, production efficiency, production scale, exchange rate, and environmental protection policies. The manufacturing enterprises are mostly engaged in export, and their core competitiveness is mainly manifested in technological research and development capabilities, supply chain management capability, energy production, scale effect, and so on.

The pandemic has driven the rise of new retail formats in terms of channel, and the structural migration of traffic has led to changes in channels. As a result, the Internet has become a stable and sustainable consumer environment, and at the same time, it has accelerated the process of innovation and optimization of offline channels.

As far as demand is concerned, due to the COVID-19 vaccination schedule, the probability and severity of its further outbreak in Europe and the United States are expected to decrease, and the expectation of a recovery in demand is gradually being verified.

As for supply, in 2020, the total value of textiles and garments exports was about \$291.222 billion, an increase of 7.24% year-on-year, of which the export of textile yarns, fabrics and products increased by 11.67% in December, which was mainly due to the effective control of the epidemic situation in China since March 2020, and the fact that domestic textile enterprises resumed work and fulfilled export orders before the Spring Festival. The growth in the export of epidemic prevention products (masks, etc.) led to a considerable growth of exports. However, due to the spread of the pandemic abroad, consumer demand for foreign clothing was weak. From January to May 2021, the textile and clothing export totaled approximately US\$ 112.7 billion, which is 17.19% more than in 2020, and 13.16% more than in the corresponding period of 2019. Thanks to the orderly introduction of the vaccine, the growth in exports of clothing and clothing accessories was 48.15% year-on-year in 2020, which is 10.40% more than in 2019.

As for the supply chain, the brand characteristics of the mass apparel segment determine the core competitive advantage of the supply chain, and the importance of supply chain flexibility is further highlighted under the pressure of the pandemic. The parent company builds on the previous supply chain experience, creates and follows up positive innovations, strengthens consumer insight, transfers end-user data to the

product development department (C2M<sup>1</sup>), and relies on a fast counter-supply chain to replenish goods in time, so as to grasp the market demand and fundamentally improve the health and effectiveness of operations.

### 3. Traditional e-commerce vs. interested e-commerce in China

The wide popularity of the Internet has driven a rapid growth of online consumption. In recent years, China's Internet industry has been developing rapidly. The number of Internet users and the level of Internet penetration have increased, creating an extensive user base for online shopping. According to the China Internet Network Information Center, by the end of 2020, the number of Internet users in China reached 989 million, representing a year-on-year increase of 9.40%, and the number of online shopping users reached 782 million, representing a year-on-year increase of 10.16% and accounting for 79.10% of online users. Online shopping has become an essential way of consumption for Chinese consumers. The huge number of online consumers led to an increase in the scale of online retail. According to the National Bureau of Statistics, online retail sales of physical goods in China reached 9.76 trillion yuan in 2020, an increase of 14.49% year-on-year. Online retail sales of physical goods accounted for 24.90% of the total retail sales of social consumer goods, an increase of 4.20 percentage points year-on-year (Mi & Zuo, 2021).

The main traditional e-commerce platforms in China are Taobao (the e-commerce platform of Alibaba), JD.COM, and Pinduoduo. In 2020, the "second outbreak" of live stream e-commerce became a new growth point, and live stream became a "new infrastructure" for e-commerce, merchants, brands, etc. Affected by the COVID-19 pandemic, live streaming of goods reached a new height. Taobao, JD.COM, Kwai and TikTok, as well as many offline merchants, joined the group, accelerating the development of live streaming.

The pandemic has replaced offline with online, further promoting the development of the e-commerce model. The importance of e-commerce channels skyrocketed, and the normalization of new retail helped sales, marketing and operation. At the early stage of the epidemic, when offline traffic broke into the online market, various channels, such as live streaming of online celebrities, micro-store applets and APP, continued to expand, and Internet content marketing, such as KOL promotion and social media soft text promotion, became the norm.<sup>2</sup>

During the COVID-19 pandemic, live e-commerce providers continued to expand the online consumption space and became an important support for online consumption. E-commerce, as a commercial application of live streaming, means that the presenter

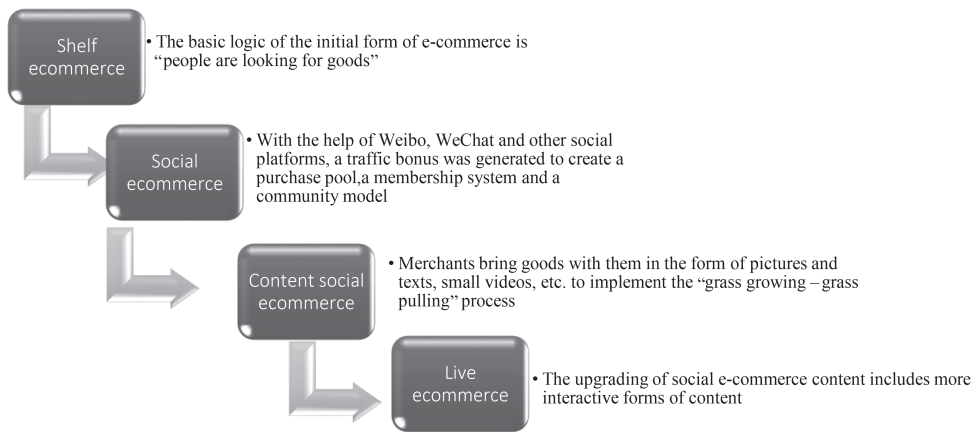
<sup>1</sup> C2M: Customer-to-Manufacturer. C2M mode refers to users directly connecting with manufacturers, i.e. consumers directly connecting with factories, emphasizing the connection between manufacturing and consumers.

<sup>2</sup> <https://www.businessoffashion.com/articles/news-analysis/the-state-of-fashion-2020-coronavirus-update-download-the-report>

introduces, demonstrates and promotes goods or services for the sake of concluding a transaction, and communicates and interacts with consumers using real-time audio and video.

As an innovation in online consumption, live e-commerce providers began to activate users’ consumer perception<sup>3</sup> by “strongly recommend” and real-time interaction, effectively meeting the diverse needs of consumers, increasing the purchase conversion rate and user experience, and became an important support for online consumption (Ju & Yang, 2021).

According to the data of China Internet Network Information Center, by the end of 2020, the number of online live stream users in China reached 617 million, an increase of 10.19% year-on-year, of which the number of online live stream users was 388 million, an increase of 46.42% year-on-year. Furthermore, consumers buying goods online in real time accounted for 66.2% of the total number of users of online trading in real time, and for 17.8% of the online real-time consumers live online purchases accounted for more than 30% of their online shopping consumption (CNNIC, 2021).



Source: compiled by the author.

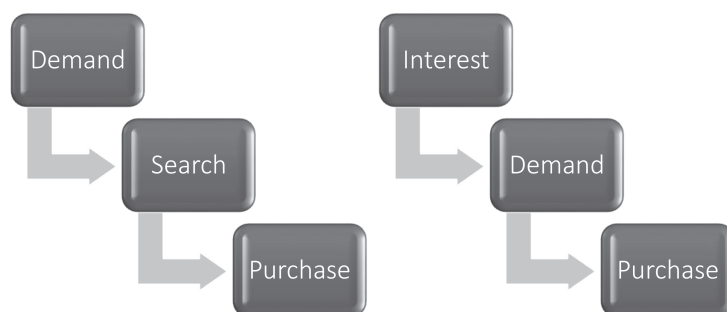
**Figure 2.** Development of the e-commerce model in China’s textile industry

The difference between traditional e-commerce and interested e-commerce can be summarized by the slogans “people are looking for goods” and “goods are looking for people.” The traditional e-commerce model refers to the “people are looking for goods” slogan, and its typical way is “demand-search-purchase.” First, consumers form a certain demand, then they go to an e-commerce platform to search for it and select preferred goods and businesses in the shelf-like scene, in order to develop the habit of shopping online. This method is characterized by a long chain of making purchasing decisions and low level of connection between merchants and consumers. At the same time, the model

<sup>3</sup> Consumer perception — a process by which consumers sense a marketing stimulus, and organize, interpret, and provide meaning to it.



of interested e-commerce refers to the “goods are looking for people” slogan. Its typical way is “interest-demand-purchase.” The platform first aggregates traffic and accurately recommends short commercial videos and live content to stimulate user interest. In this case, users can make quick purchasing decisions. After purchasing high-quality goods, users will settle down and become fans of the anchor, which will lead to repeated purchases (Mi & Zuo, 2021).



*Source:* compiled by the author.

**Figure 3.** The typical ways of traditional (left) and interested (right) e-commerce

To sum up, Taobao (Alibaba) live streaming is mainly aimed at young and middle-aged women with good financial resources and relatively high consumption level. TikTok’s live streaming is targeted at a wide range of audiences, including young and middle-aged women with good financial resources, as well as other young people, such as university students and young professionals. The geographical distribution of Tik Tok live streaming users is also relatively wide, and demographic factors have a great influence on the number of users. Tik Tok live streaming has a wider target audience and broader geographical distribution, which can provide an increment of new channels for the development of live e-commerce (Lin, 2021).

Live streaming of e-commerce is developing explosively, and the market scale is expected to exceed 100 billion yuan. In 2019, Li Jiaqi, the head anchor of a phenomenal TV show, used the catchphrase “OMG, buy it” to become popular throughout the network. In 2020, the social isolation caused by the COVID-19 pandemic led to the rapid development of live e-commerce.

#### **4. Business logic of live e-commerce (interested e-commerce)**

Against the background of the COVID-19 pandemic, TikTok has taken advantage of live e-commerce.

TikTok e-commerce clearly defines the platform of “interested e-commerce.” On April 8, 2021, at the first e-commerce ecological conference, the president of Tik Tok e-commerce, Kang Zeyu, first explained the concept of “interested e-commerce,” which represents



an e-commerce based on people’s desire for a better life, satisfying users’ potential interest in shopping and improving the quality of life of consumers.

According to a survey conducted by TikTok e-commerce, consumers do not have a specific purchase plan before shopping, but they get excited by products when browsing through them. TikTok defines this model as “e-commerce with interest,” and it is estimated that the transaction volume of e-commerce with interest will reach 9.5 trillion yuan in 2023, which will serve as a platform for the positioning and development of TikTok’s e-business. The recommended technology links the product content to potential customers. Compared to traditional channels, such as e-commerce and offline shopping, TikTok e-commerce providers connect high-quality product content with many interested users through recommendation technologies, which stimulates new experiences and new user consumption requirements and brings a new volume of business to sellers.

On the one hand, short TikTok videos and live streaming integrate commercial information into real and vivid content scenes, which enhances the wealth of commodity information, fully displays the sales points and the history of product brands and maximally stimulate consumer interest in consumption. On the other hand, recommendation technology can provide positive feedback from users, purchase and repeated purchase of content and commodities, so that the content of commodities can be recommended to a larger number of users with the same interests, thus promoting discovery of a product and its consumption.



Source: compiled by the author.

**Figure 4.** The essence of e-commerce at TikTok

Being the owner of a huge user base and an advanced intelligent recommendation algorithm, TikTok started to develop an e-commerce business. In March 2018, TikTok began providing shopping channels for accounts with millions of fans and added a link to the Taobao page in the shopping cart function. In December of the same year, TikTok delivered the goods for Tmall Shuang 12 e-commerce festival, resulting in as many as 1.2 million transactions. After the success of this small test, TikTok accelerated the speed of goods delivery. In April 2019, TikTok launched e-commerce applets, such as “Xiaomi Mall” and “JD. COM Haowu Street,” further expanding TikTok’s e-commerce business.

Affected by the pandemic, live e-commerce is taking advantage of TikTok and the e-commerce ecosystem is rapidly developing. On April 1, 2020, Luo Yonghao’s live stream on TikTok platform resulted in more than 110 million RMB trading volume in three hours. Many stars and celebrities, such as Luo Yonghao, started bringing goods

to TikTok for live streaming. The consumption of TikTok's content-based sketches skyrocketed. TikTok is increasingly feeling the benefits of e-commerce industry. On June 18, 2020, ByteDance announced the establishment of an e-commerce department, which allowed to begin competing with Taobao, JD.COM and other platforms in the field of e-commerce in the "short video, live broadcast+e-commerce" model. In August 2020, the total turnover of TikTok Wonderful Fair exceeded 8 billion yuan, and the first platform significantly contributed to its success. On October 9, 2020, TikTok Live officially terminated its cooperation with third-party e-commerce platforms, having completed a full closed loop "direct-broadcast — commerce." In January 2021, the turnover of the TikTok New Year Festival reached 20.8 billion yuan, and merchants, talents, service providers and institutions were formed beforehand. The capabilities of products, services and data of e-commerce has stood the comprehensive test. According to the statistics of Capital state,<sup>4</sup> in 2020, the total volume of TikTok e-commerce transactions exceeded RMB500 billion. The annual turnover target for 2021 will be raised to RMB1,000 billion (CNNIC, 2021).

Clothing best matches the characteristics of e-commerce in TikTok, among which women's clothing has the highest sales volume. From the consumer point of view, TikTok e-commerce users are mostly women, and more than half of them live in large cities. Young people born in 1980s and 1990s are in absolute majority, which makes them the main group of clothing consumers. Judging by the product characteristics, clothing commodities are characterized by high gross profit. However, the overall commission rate of live streaming in TikTok is about 20%. In order to ensure the attractiveness of products, consumers are provided with certain discounts or coupons for the live stream. The higher cost of delivering goods requires that the gross profit from the goods reaches a certain level. In addition, TikTok's e-commerce company can promote all kinds of products with short video/live streams and simulate product usage scenarios.

## 5. Innovations in China's textile industry during COVID-19 pandemic

The "stay at home" mode introduced during the pandemic changed consumers' shopping habits, and the demand for online consumption increased significantly.

The development of the MCN market segment, such as live streaming, also affected the purchasing habits of consumers, which are now different from traditional retail.

The fixed costs of network franchisees are distinctly lower than those of traditional companies. E-commerce companies communicate directly with customers, avoiding the development and maintenance of offline channels. The "stay at home" mode, which lasted for 1–2 months during the Spring Festival in 2020, also accelerated the process of transformation of retail trade.

<sup>4</sup> Capital state — a high-tech enterprise engaged in financial science and technology services (www.ChinaIPO.com).

The size of the market of China's live video industry increased from RMB6.4 billion in 2015 to RMB108.2 billion in 2019, with a cumulative annual growth rate of 103.0%.<sup>5</sup> It is estimated that from 2019 to 2024, driven by the diverse and high-quality content of live video platforms, as well as greater audience readiness and purchasing power, the market volume will grow at a cumulative annual growth rate of 23.4% and reach 310.1 billion yuan by 2024.

The COVID-19 pandemic accelerated the adjustment process of offline stores, and digital tools improved the quality and efficiency of operations.

1. The offline channel of the industry entered a period of adjusting the store structure before the pandemic. During the pandemic, offline terminals were seriously affected. Different brands took advantage of the situation to accelerate its adjustment by closing low-efficiency small stores and opening large high-quality stores. At the same time, big data at the operation side helps to accurately depict the portrait of users, and technologies allow offline stores to make reasonable decisions, reduce load and improve efficiency.

2. With the increasing importance of DTC (data transmission channels), the share of direct sales channels is on the rise. At the same time, the brand company rationally organized online sales and effectively eliminated inventory.

3. Digitalization of sales reconstructs people, goods and markets at the consumer level and transforms them at the enterprise level, using data processing tools to optimize consumption scenarios and increase sales efficiency.

4. Digitalization of marketing: comprehensive data contacts are distributed online and offline, and after that data analysis is used to obtain information about demand, accurate marketing and optimized experience.

5. Digital logistics forms means to build the whole process of intelligent logistics operation, intelligently dispatch external transportation and improve the efficiency of goods delivery.

6. Digital production establishes a structured product group model, flexibly adjusts each product's production schedule and creates flexible supply chain capabilities.

7. Purchasing digitalization integrates internal and external high-quality supply resources, forecasts purchasing demand based on data analysis and establishes e-commerce whole-process procurement (Mi & Zuo, 2021).

Alibaba Rhino Intelligent Manufacturing is one of the most successful innovative enterprises in the textile field. An unmanned vehicle of Ali's own design transports materials back and forth along the mapped track, and the self-developed web system transports various fabrics in an orderly manner. A mechanical hand is responsible for most transmission work, and numerically controlled drawing replaces manual drawing. Workers are responsible for the operation of the machines and meticulous work, in which each of them is good, for example, for writing notes and reviews that can be performed using a tablet computer. "From this reporter's description, we can find that the assembly lines and equipment of most Rhino Factories are intelligent and highly automated, which not only reduces the labor cost but also improves the transportation efficiency and the

<sup>5</sup> RMB is an alternative name for the yuan (from the Chinese Ren Min Bi — the national currency).

stability of the products produced. Unlike the traditional manufacturing plants, which can only place large quantities of single-item orders at a time, the core capability of “Rhino” lies in customization on demand, starting with 100 pieces and delivery within 7 days at the earliest. This may be the first case when the speed of production in textile industry is approaching the speed of production in the fresh food industry. In the workshop of Rhino Intelligence, an assembly line can produce many different products at the same time, such as shirts, hoodies, and down jackets. According to the employees of Rhino Intelligent Manufacturing, more than a dozen orders can be launched simultaneously within the new manufacturing model. These orders are small, the styles are seasonal and ready-for-sale. Thanks to the C2M ordering model and automated production lines, the Rhino plant can reduce supply chain time by 70% and reduce inventory holding costs by 30%. Although individual designers do not have the ability to build a supply chain platform equal to ZARA’s, but adhering to this model, everyone can have a fast-response supply chain (Zhao, 2021).

## 6. The rise of China’s domestic textile brand

The reformed China’s economy is growing rapidly. In 2010, China’s GDP surpassed Japan, and China became the world’s second largest economy after the United States. Against the background of the rise of the great powers, national self-confidence gradually increased, which also deepened the patriotic feelings of the Chinese people and their confidence in supporting domestic products. At the same time, the content of social media was biased towards the national original and traditional culture, which had a subtle influence on consumers’ minds.

The return of traditional culture and the increasing public recognition of culture have gradually triggered the emergence of a new trend of domestic products. Great cultural variety TV shows, such as Chinese Poetry Conference, National Treasure and Upped New, Old Palace are very popular in China. The number of Chinese-made films in the annual TOP 10 list of cinemas increased significantly. The degree of foreign input to the cultural circle was greatly reduced, while the search for “Chinese-style” costumes significantly increased.

However, with the creation of new media, new channels, such as Sina Weibo, Xiaohongshu and TikTok, appeared, and the communication mode changed from “one-way graphic” to “interactive video live streaming” with more diverse communication channels and presentation methods, and the degree of information transparency was growing day by day. The idea that “China is a global manufacturing factory, and Chinese brands can make good products” began to spread widely. A new generation of consumer groups emerged, which has a stronger national self-confidence and pride and whose growth experience had witnessed China’s economic take-off and the rise of national brands. At the same time, compared to their parents, the new generation of consumers has a higher average education level, better material living conditions and a higher level of Internet penetration. Instead of aiming for “big brands,” they pay more attention to experience,

individuality, and differentiation. Their perception of new things and brands is also higher, which lays a spiritual foundation for the rise of Chinese goods (Yu et al., 2021).

In the medium and long term, rapid economic growth will bring cultural and institutional self-confidence, while media content will tilt towards domestic and traditional culture, which will gradually lead to a new trend of national consumption.

Shopping malls began to favor local brands, making up for the lack of offline channels of local brands, and the rapid growth of e-commerce is also helping local brands to catch up with foreign ones. Changes in the media and the rejuvenation of consumers laid a solid foundation for consumers to give preference to domestic products. The local brand itself is also created based on refined internal skills and fashion innovation, which paves the way for brand evolution.

## 7. Future trends of e-commerce development

According to the “Southeast Asia E-commerce Report 2020” released by Google, e-commerce has become the largest industry in Southeast Asia, with an increase of 63% in 2020.

McKinsey survey showed that more than 50% of European and American consumers expressed their willingness to continue adhering to their online shopping habits. According to data from the Ministry of Commerce, in 2020, the total sales of e-commerce in the United States reached US\$ 759.47 billion, an increase of 31.73% compared with US\$ 576.53 billion in 2019.<sup>6</sup> ByteDance is developing a foreign cross-border e-commerce business named “Fuxiang Haigou,” which includes products of well-known brands from more than a dozen countries. Ctrip Global Shopping platform, which specializes in outbound shopping services, was upgraded from the original “online mall” mode to “cross-border shopping,” providing online booking platforms and cross-border direct mail services. Thanks to technologies, the use of cross-border e-commerce will become a strategic choice for enterprises in the future. This will accelerate organizational changes and product upgrade of enterprises and ensure a leading position in the future.

In the future, the scale of the rural market will continue to expand. On the one hand, consumers from the cities of the first and second tiers are beginning to stratify, and the share of consumers pursuing the best price-quality ratio is significantly increasing. On the other hand, thanks to the comprehensive popularization of mobile communication equipment and the increasing development of infrastructure construction, China’s neglected rural market is gradually showing its importance.

In 2020, the Ministry of Commerce continued to promote the comprehensive demonstration of e-commerce in rural areas and created an “upgraded version” of the comprehensive demonstration. E-commerce platforms, such as Taobao and JD.COM noticed a huge empty space in the rural market and the demand for consumption classification in the markets of the first and second levels. Taobao restarted

---

<sup>6</sup> <https://www.oberlo.com/statistics/us-ecommerce-sales>

Juhuasuan and JD.COM launched Jingxi. Both e-commerce giants received fruitful results in the rural market. In the future, live e-commerce will be upgraded. Major e-commerce platforms and live broadcast platforms will continue to increase investment in live e-commerce, and the increased competition will also directly promote the comprehensive upgrading of live e-commerce.

Live e-commerce partially entered the stage of refined operation, and e-commerce presenters are also developing in the direction of professionalism and specialization. In terms of content, platforms, such as TikTok, evolved from simple short videos to medium and long videos, attracting a large number of teams with long videos. In terms of the model, the real-time e-commerce ecosystem was upgraded from original video promoting goods to “video+live streaming.” The short video transmission cycle became longer, which is more suitable for promoting product advertising. Live streaming pays attention to the real-time sales transformation. As for the brand, “video+live streaming” allow better integration of the product and the effect.

In terms of technology, AR/VR, artificial intelligence and other technologies are expected to improve the shopping experience. Alibaba’s Rhino Intelligent Manufacturing, relying on Big Data, stepped into the manufacturing industry and developed C2M manufacturing, realizing the goal of promoting innovation, reducing costs and filling the deficit, opening a new model of manufacturing industry. It is possible to predict that the future business will be consumer-centric, driven by big data, digital and intelligent. Online giants and corporate giants will focus on building a joint fast and flexible supply chain to facilitate deep integration of online and offline channels. Intelligent enterprises, intelligent markets and intelligent sellers will become the main force of the future commercial development, and end-to-end high-efficiency and accurate matching of new businesses will become a reality.

## Conclusions

COVID-19 is a “black swan” event. The global medical system and the world economy are facing serious challenges. While people are fighting the epidemic, big changes are taking place in their lifestyles and ideas, and the crisis implies new business opportunities. After the beginning of the epidemic, social isolation and homestay mode changed the consumer habits of global consumers, but the e-commerce economy has developed rapidly due to the epidemic. As a global factory, China’s textile industry is one of the foundations of people’s livelihood. The rapid growth of e-commerce in China’s textile industry after the beginning of the COVID-19 pandemic became a general trend and provided development experience to other countries around the world.

Changing consumption patterns are forcing fashion companies to adjust their strategies. As more and more countries cancel lockdown orders and retail stores gradually reopen, consumers are coming to terms with the reality that they have to live with COVID-19. New consumption patterns are observed in both the wholesale and retail sectors (Berg et al., 2020).

The author of this research conducted a comprehensive study on the e-commerce industry, analyzed the development of China's e-commerce during the COVID-19 pandemic, compared and analyzed the differences between traditional e-commerce and interested e-commerce in China's textile industry, put forward the business logic of interested e-commerce, outlined the innovative behavior of the textile industry during the COVID-19 period, and found that domestic textile brands began to grow during the epidemic.

It can be concluded that during the COVID-19 period, up to the middle of 2021, China's textile industry went through four stages that changed it from traditional e-commerce to interested e-commerce. Innovation and digital transformation seem to be necessary conditions for China's textile industry to overcome the negative impact of the COVID-19 pandemic. In conclusion, the author proposed a long-term trend of the development of the textile industry after the COVID-19 epidemic.

## References

- Dignum, F. (2002). E-commerce in production: Some experiences. *Integrated Manufacturing Systems*, 13(5), 283–294.
- Hodge, G., & Cagle, C. (2004). Business-to-business models: Classification and textile industry implications. *AUTEX Research Journal*, 4(4), 211–227.
- Ju, H., & Yang, Y. (2021). Opportunities in the test of textile and clothing — analysis of 2020 Annual Report and 2021q1 Quarterly Report (in Chinese).
- Kraemer, K. L., Dedrick, J., Melville, N. P., & Zhu, K. (Eds.). (2006). *Global e-commerce: Impacts of national environment and policy*. Cambridge University Press.
- Lau, T. W., Hui, C. L., Ng, S. F., Moon, K. L., & Taylor, G. (2008). An implication of e-commerce in textile and clothing industries: A relational Online Analytical Processing (OLAP) approach. *International Journal of Information Technology and Management*, 7(3), 231. <https://doi.org/10.1504/ijitm.2008.017603>
- Lin, H. F. (2008). Empirically testing innovation characteristics and organizational learning capabilities in e-business implementation success. *Internet Research*, 18(1), 60–78.
- Lin, X. (2021). *Textile and apparel industry trends in June: The industry continues to recover, bullish on the performance of sports and textile manufacturing leader Q2*. 20210701, Galaxy Securities Report (in Chinese).
- Lu, S. (2020). *2020 fashion industry benchmarking study*. United Nation Fashion Industry Association. [http://www.usfashionindustry.com/pdf\\_files/20200731-fashion-industry-benchmarking-study.pdf](http://www.usfashionindustry.com/pdf_files/20200731-fashion-industry-benchmarking-study.pdf)
- Majumdar, A., Shaw, M., & Sinha, S. K. (2020). COVID-19 debunks the myth of socially sustainable supply chain: A case of the clothing industry in South Asian countries. *Sustainable Production and Consumption*, 24, 150–155.
- Mi, H., & Zuo, Q. (2021). *TikTok's e-commerce industry has a vast development space in the future, and clothing brands are expected to rely on TikTok's e-commerce industry to achieve breakthrough*. 20210606, GF Securities Report (in Chinese).
- Nelson, M. L. (2003). *The adoption and diffusion of interorganizational system standards and process innovations*. University of Illinois at Urbana-Champaign.
- Ouyang, F., & Li, Y. (2005, August). The actuality, questions and countermeasures of Electronic Commerce application in SMEs: A survey in the East of Guangdong Province, China. In *Proceedings of the 7th international conference on Electronic commerce* (pp. 114–118).



- Panigrahi, C. M. A., & Joshi, V. (2016). Application of e-commerce in Indian textile industry. *International Journal on Textile Engineering and Processes*, 2(2).
- Wienclaw, R. A. (2008). *B2B business models*. EBSCO Res. Starters (pp. 1–6). <https://www.ebscohost.com/uploads/imported/thisTopic-dbTopic-1074.pdf>
- Taylor, G. (2004). China textile trade. *Journal of Fashion Marketing and Management: An International Journal*, 8(2), 136–140.
- Thatcher, S. M., Foster, W., & Zhu, L. (2006). B2B e-commerce adoption decisions in Taiwan: The interaction of cultural and other institutional factors. *Electronic Commerce Research and Applications*, 5(2), 92–104.
- Yu, X., Ma, R., & Lei, Y. (2021). *The medium-term investment strategy of textile and garment industry in 2021: Rising with momentum*. 20210614, Changjiang Securities Report (in Chinese).
- Zarocostas, J. (2021). *COVID-19 crisis triggering huge losses in textile, apparel sector*. Today's Digital Daily, September 17. <https://wwd.com/business-news/government-trade/covid-19-crisis-triggering-huge-losses-in-textile-apparel-sector-1203566328/>
- Zeng, C., & Xu, D. (2010). Views on the development of e-commerce of Chinese clothing industry. *International Journal of Business and Management*, 5(8), 215.
- Zhao, L., & Kim, K. (2021). Responding to the COVID-19 Pandemic: Practices and strategies of the global clothing and textile value chain. *Clothing and Textiles Research Journal*, 39(2), 157–172. <https://doi.org/10.1177/0887302x21994207>
- Zhao, S. (2021). *Semi-annual strategic intelligent manufacturing leading trend in textile and clothing industry 2021, domestic brands welcome new opportunities*. 20210615, Xingye Securities Report (in Chinese).