

Analysis of Amazon's Cross-border E-commerce "Chinaization" Transformation under the COVID-19 According to the E-commerce Supply Chain Model

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Abstract: The COVID-19 had a significant impact on the world economy between 2020 and 2022, and many businesses were hard-hit by this unexpected tragedy. This article will examine Amazon China's predicament in light of COVID-19, including its difficulty to integrate the platform into the Chinese market, the strain on the logistics industry, and the COVID-19's effects on marketing efforts. This article also suggests relevant tactics based on the e-commerce supply chain model, including how to adapt marketing plans to the shifting consumer landscape and how to acquire a competitive edge in logistics. To help readers understand the approach Amazon China should take to the COVID-19, we also provide a discussion on these topics.

Keywords: COVID-19, tactics, e-commerce supply chain

1. Introduction

China now leads the world in cross-border e-commerce, which accounted for around 40% of global e-commerce spending in 2018. China previously ranked first [1]. A new type of trade that mixes e-commerce and cross-border trade is known as cross-border e-commerce. The rapid expansion of the Internet, information technology, and social economy cannot be ignored as the cause of cross-border e-commerce. Platforms such as Alibaba, Made-in-China, Amazon, and eBay were among the first to look at cross-border e-commerce. On the current global market, a top cross-border e-commerce business has not yet materialized.

Cross-border e-commerce is emerging as a new mode of foreign trade development in the context of economic globalization, in addition to China's exports expanding swiftly. According to the China Cross-Border E-Commerce Export E-Commerce Development Report, China's cross-border e-commerce imports and exports totaled RMB 1.98 trillion in 2021, up 15% year over year, with exports accounting for RMB 1.44 trillion, up 24.5% [2]. This demonstrates that cross-border e-commerce exports have kept up a strong growth rate, fully attesting to the market vigor and growth resistance of these exports. According to statistics, there are 33,900 existing cross-border e-commerce-related enterprises in China, and in the past five years, the number of cross-border e-commerce-related enterprise registrations has been rising year on year, with 10,900 new enterprises added in 2021, an increase of 72.20% year on year [1].

Cross-border e-commerce platforms have begun to shift their focus from traditional cross-border trading in goods to digital products as a result of the effects of the digital economy. Trade in digital products and services does not require offline logistics and transportation, and while trading through cross-border e-commerce can save more costs, there are many problems in combining the digital economy with cross-border e-commerce. For example, the protection of intellectual property rights and how customs taxes are applied to the trading of hand-digital products on cross-border e-commerce platforms remains a relatively significant challenge.

Additionally, the effects of the New Guinea epidemic have been felt since 2020 in a variety of societal sectors. Cross-border e-commerce is faced with both opportunities and challenges as a result of the New Guinea outbreak. With its "low risk and high efficiency" attributes, cross-border e-commerce has emerged as a new model for the growth of international trade since the New Crown epidemic first broke out. According to the China National Bureau of Statistics, 2.45 billion import and export declarations were processed using the Customs cross-border e-commerce administration platform in 2020, an increase of 63.3% from the previous year. The New Crown epidemic has enabled cross-border e-commerce to develop more rapidly, while bringing more challenges. According to Li, during the epidemic, many international shipments were blocked and the logistics cycle was extended; workers were not available for many jobs, making the product production cycle and customs clearance cycle longer [3-5]. In addition, many new forms of internet media have emerged in China, such as short videos and live streaming, which have attracted a growing number of consumers and become more integrated into the cross-border e-commerce industry with their intuitive displays and instant interactive experiences.

2. Amazon Analysis

Less than 1% of the market was occupied by Amazon.cn captive e-commerce operation in 2018 after it peaked in 2008. Amazon.cn started to place bets on the cross-border e-commerce business that first appeared in China in 2013 in an effort to uncover new growth spots for high profitability. 2014 saw Amazon.cn first overseas shopping business in the world, followed by the addition of a global shop opening business, which together contribute Amazon.cn cross-border e-commerce business and have become one of Amazon's four major businesses in China. Aside from reading, overseas purchasing is currently Amazon's most promising market in China. Even if growth has slowed, Amazon.cn international sales have currently stabilized in the top 10 of China's cross-border e-commerce sector in terms of market share. While the cross-border business is constantly expanding, this will not be sufficient for Amazon.cn to achieve its objective of becoming one of China's cross-border e-commerce behemoths.

Over 50% of Haitao transactions are made through Amazon, the first and most well-known website in China and the largest online retailer in the world with headquarters in the United States [6-9]. Wang claims that at first, Amazon was a solely online book retailer [10]. Amazon's business now spans a variety of industries, including retail, electronics, digital media, computing services, and others. In 2004, Amazon (Amazon.com) began investigating the Chinese market. That year, it paid \$75 million to acquire Joyo.com, which it later turned into its own significant China branch [7]. In a market where the internet is far more advanced, Amazon has chosen a B2C approach. One of the key benefits of Amazon's B2C retail service model is that it has a solid logistical infrastructure, which provides them an edge when it comes to mailing. Amazon formally debuted its platform services for SMEs on July 6, 2011. Wang discovered that individual vendors could use the platform to promote their goods, take use of its channels for product promotion, and offer Amazon logistical services to other sellers [10]. Through the use of logistics services, Amazon levies fees and collects commissions from each transaction. Next, the SWOT model will be used to analyze the example of Amazon in the Chinese market.

S (strength) Amazon was one of the well-known brands during the dot-com bubble in the years between 1995 and 2000, which gave the company a competitive edge in the online retail market, according to DONICI et al. [3]. This benefit allowed the business to develop a sizable customer base, which enabled global access to the business through a number of different websites, which allowed it to maintain its current market position and grow further. Wu and Gereffi elaborate that Amazon entered the Chinese market in 2004 and that, given that customer trust is the most crucial factor, Amazon earns customers' trust by offering goods from reputable nations of origin and well-known brands that are purchased from all over the world and delivered to clients using efficient logistics, as well as by guaranteeing that the purchasing process is built on wise customer service [7, 11].

W (weakness) Amazon has traditionally been primarily uninterested in other events that are popular on the Internet, concentrating solely on the back office. New business ventures therefore go relatively slowly. This would fail to cater to the needs of young Chinese people and thus lose the youthful market. Additionally, Amazon has very strict platform policies; if a seller account's performance is below par for an extended period of time, Amazon may compel the business to close. A challenging and painful aspect of Amazon operations is that they include more than putting products online; they also have to follow the platform's guidelines for natural traffic as well as conduct paid traffic promotion and conversion. These are not beneficial for small and medium-sized individual shops in China, as the large number of shops in Amazon is strongly competitive and SMEs cannot adapt quickly.

O (opportunity) In order to assist cross-border e-commerce flourish and attain a better degree of development, China has recently started a number of initiatives. The government has also built comprehensive cross-border e-commerce pilot zones, hosted cross-border e-commerce fairs, and established cross-border e-commerce return warehouses to stimulate the development of cross-border e-commerce in addition to a number of other regulations. All these measures and policies can facilitate the growth of Amazon in China.

According to data from Baidu.com, searches for the term "cross-border e-commerce" rose by 20% in 2020 compared to 2019 and by 53% when conducted on mobile devices. In the last year, searches for "how to buy products from abroad during the pandemic" have climbed by 206%. This suggests that Chinese consumers have a high need for cross-border e-commerce, which would help Amazon's expansion.

T (threat) Amazon has many threats in the Chinese market. First of all, Wu and Gereffi [11] claim that the huge number of local e-commerce companies in China is different from Amazon's mid-to-high-end approach, as they started with a price war, focusing on low-price strategies to quickly capture the market. Amazon was thus left behind. To cause matters worse, in recent years, Amazon has not been able to catch up with the mid-to-high end of the market, given the general trend of consumer upgrading. Local e-commerce businesses are highly aware with the dynamics of the Chinese market, and they have very adaptable tactics for engaging in price wars, offline wars, marketing wars, and the creation of new business models. For example, they have launched selected e-merchants in the lifestyle category such as Taobao. Chinese customers are challenging for Amazon's logistical services to serve. Chinese online shoppers have received comprehensive training from logistics firms like Shunfeng and Jingdong, and lightning-fast logistics with same-day or even one-hour delivery has become necessary [9].

3. The Dilemma of Amazon.cn

3.1. Platform

According to Li et al., cross-border e-commerce platforms give buyers access to information on items, payments, logistics, etc. and sellers a large market [6]. It is at the center of everything and is in charge

of allocating resources throughout the entire system. According to Petro et al.'s survey of multinational corporations, 71% of the respondents saw website localization as a crucial component of a successful online worldwide expansion driving force [8]. Additionally, the study found that 76% of corporate executives and nearly 70% of business owners agree that localizing websites is essential to attracting clients from abroad and ensuring their pleasure. Companies must therefore develop localized international websites in order to access global online markets.

In terms of basic web design, the Amazon.cn website, which targets Chinese consumers, shares much of the same material and formatting as the Western Amazon.com website. Amazon should take Chinese customers' demands into account, despite their popularity in the west. Chinese online shoppers, however, have conflicting desires; they favor more information and hedonistic website design while still wishing to buy in a setting akin to that of customers in affluent nations [7]. For example, Taobao has become an entertainment and pastime website, there are most women will browse Taobao when they are bored, their purpose is firstly to shop, and secondly to buy. Amazon must therefore strike a compromise between serving Chinese customers' worldwide wants and serving their needs that are peculiar to China. Amazon, on the other hand, has a sexually cool style throughout its website, forcing the main image to have a white background. Amazon's aim may be to better highlight the product and not let too many other factors affect the product and affect the consumer's shopping experience. However, this is a poor visual experience for the consumer.

In terms of communication between buyers and sellers, compared to Taobao, a local Chinese e-commerce company, Amazon website communication lacks immediacy. When shopping on Taobao, one can always contact customer service with any questions and basically get a very quick response. However, when shopping on Amazon, communication with the seller is difficult and has to be done via email, which lacks immediacy. When a customer doesn't understand a product and wants to shoot it quickly, there may be a time lag in getting a reply, and when the seller replies, the customer may lose the desire to spend money. In addition, email communication is not very popular in China and people prefer to use live chat apps, resulting in a time gap and inconvenience between buyers and sellers.

3.2. Logistics

For cross-border e-commerce, there are now two important shipping options to Amazon: FBA and prime membership services. Du et al. claim that the effectiveness of logistics, storage, distribution, and other processes is considerably improved, and the rate of product delivery errors is decreased, thanks to Amazon's FBA logistics' active use of the Internet and big data technologies [4]. Second, Amazon FBA logistics can manage inventory, significantly reduce storage expenses, raise the amount of capital involved in the turnover cycle, and also significantly reduce inventory space [4]. Additionally, Amazon launched a premium service that is highly expensive in terms of logistics. Prime boosts their revenues, but it is not logistically advantageous. Amazon loses at least \$1 billion per year on Prime related shipping costs [11].

However, the Chinese maritime industry has had several shortcomings before COVID-19. The Chinese shipping market is divided into numerous tiny businesses that strongly fight on price, frequently at the expense of timeliness and package services. Wu and Gereffi also note that the train system in China prioritizes passengers over freight and that the country's highway infrastructure is less extensive than that of the US but still reaches into rural areas [11]. Many people who live in rural areas lack official addresses. Additionally, China is very short on warehouse space. It does not have contemporary pick-and-pack methods or computerized tracking in its warehouses.

After Covid-19 spreads across the globe, countries all around the world have taken precautions to restrict the epidemic by implementing quarantines and putting a stop to fatalities. China in particular has been very vigilant in the prevention and control of COVID-19 and has been strict in managing

logistics during COVID-19. Because COVID-19 has been found to live on objects, most Amazon Logistics employees were unable to return to work right away. Even if some of them were, they ran the danger of getting sick at work. Logistics would be unable to operate effectively as a result. Furthermore, if an epidemic is present where the cargo is being made, the goods will be quarantined at the FBA center and distributed until the quarantine has been removed. Time delays could come from this. Due to a lack of shipping capacity, Amazon cross-border shipments may thus be prohibited at any time, and some cross-border orders may be at danger of being canceled by default.

3.3. Marketing

The O2O marketing model and big data analytics marketing are the two main components of Amazon's marketing strategy, according to Du et al. [4]. Amazon uses a distinct O2O marketing approach during the external process, according to Du et al. [4]. O2O, which stands for "Online and Offline," refers to the fusion of an online push with an offline service. As an example, offline bookstores, as a core revenue activity, embody a form of offline service. The O2O approach leverages the internet platform to draw customers and display the relevant information; following that, Amazon recommends to customers the closest brick-and-mortar bookstores [4]. The combination of internet and offline marketing dramatically increases sales.

The expense and risk of offline services will rise due to the global COVID-19 explosion in 2020 and people's preference for online shopping. In China, the government will also compel individuals to stay indoors, which will result in ineffective O2O marketing methods that will cost businesses a lot of money. Additionally, labor and logistics are no longer able to afford to deliver all goods on schedule due to the enormous growth of the market for emergency supplies. Emergency supplies and self-selling items are now prioritized in Amazon's sales strategy, delaying the delivery of other items from third parties [4]. Due to this, third party vendors suffer enormous losses in addition to losing their most devoted clients.

The old O2O marketing strategy does not seem to cater to the Chinese market compared to the B2B marketing strategy used by local Chinese e-commerce company Alibaba which can be a successful transaction between two parties online and avoid the risk of contagion COVID-19. Therefore, how Amazon innovates its own O2O marketing strategy is a huge breakthrough point because marketing is a very important step in the Chinese market.

4. Applications Based on Supply Chain Management

4.1. E-commerce Supply Chain

E-commerce has assimilated into peoples' daily lives as a result of the quick growth of information technology. Li et al. discovered that as e-commerce has grown, the conventional supply chain management model has experienced creative new adjustments and the user experience has improved [5]. Retailers, suppliers, and factories no longer operate as independent entities but rather as a cooperative group in traditional supply chain interactions. Additionally, it is crucial to concentrate on the supply chain's sustainability. But the so-called bullwhip effect is a serious drawback of the conventional supply chain. When demand information is distorted, it can have an exaggerated effect upstream in the supply chain [5]. The bullwhip effect, according to Li et al. [6], is caused by demand forecasting more directly than inventory management, bulk orders, lead times, or price volatility.

Connected technologies and e-commerce now provide more adaptable ways to avoid the disruptive bullwhip effect by more accurately forecasting demand [5]. Big data can turn numbers into information, giving forward-thinking contemporary organizations a competitive advantage. Online merchants may gather vital data using big data, like the kinds of goods clients normally purchase, how frequently they shop online, and their interest in specials and advertising.

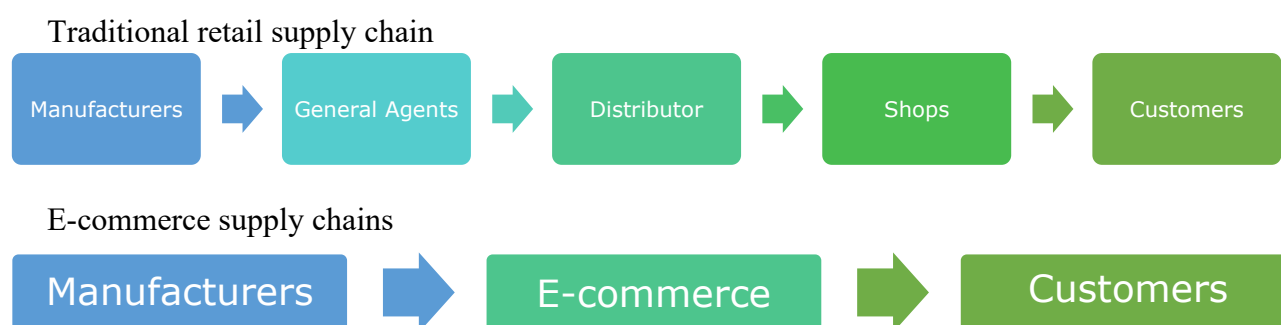


Figure 1: Traditional retail supply chain and e-commerce supply chain.

Additionally, data analysis can be used to gain more specific references to specific customers. Retailers may now better understand their consumer base and consequently, their output, thanks to all of this information. Furthermore, the old chain with too many links at all levels in the middle is improved by this new type of supply chain, known as the e-commerce supply chain. It also lowers distribution costs and modifies the zero-supply relationship (between retailer and supplier) and zero-customer distance (between retail e-merchant and customer). Based on this, e-commerce has enhanced the mechanism for information flow, making it simpler and faster to transfer information while lowering the openness of information in the market, which is somewhat more equitable for both businesses and customers.

4.2. Suggestions for Strategy Adjustment

Not rushing is the first and possibly most crucial step in addressing the problems China is currently experiencing as a result of the Amazon epidemic. Second, localization is a crucial step for the Chinese market.

Amazon might think about collaborating with Chinese local logistics for logistics. Chinese customers will have more faith in local logistics providers as they are more familiar with the country's fundamentals. Second, local logistics businesses in China can engage with the appropriate authorities more easily since they are better familiar with government laws on epidemic prevention and control. Cainiao Network is one of the more well-known logistics firms in China today. Alibaba founded the Cainiao Network logistics enterprise in collaboration with four other significant Chinese courier firms. The Cainiao network, which serves 2,800 districts and counties in China and 224 nations and territories worldwide, can transport 47 million items every day [11]. Contrary to Amazon, Cainiao Network runs a logistics data platform that employs technology and data insights to enhance the capabilities of its delivery partners. Another way that Cainiao Network and Amazon Prime differ is that Cainiao Network does not offer a special reduced membership program, which makes it less successful at attracting repeat consumers. However, Wu and Gereffi find that it requires less financial investment to provide fast delivery [11, 12]. Then, if Amazon collaborates with the Cainiao network and maintains its own prime membership service, it may be able to secure customer loyalty, reduce costs, and draw in clients who might not otherwise do business with Amazon because of its logistics.

According to their marketing plan, Amazon might be able to enter the B2B industry. The e-commerce supply chain can be useful in a variety of surprising ways. Amazon can shorten the cycle time by properly utilizing the e-commerce supply chain. The accuracy of the platform's forecasting of items is considerably increased by the automation of the supply chain and the ongoing close coordination across platforms, not only for the mutual profit of both sides of the transaction but also, and more importantly, for customer pleasure. Additionally, Amazon has the ability to somewhat lower the company's inventory. In addition, for the O2O marketing tactics that Amazon frequently employs. Companies may be able to update their offline shops to offline unmanned shops, with face

recognition technology and real-time monitoring of items to ensure sales. The presence of unmanned shops not only reduces human contact and COVID-19 transmission to a certain extent, but also showcases emerging technologies. These new sales model also arouses curiosity and thus increases the sales profit of the company.

5. Conclusion

This article first analyses the current situation and prospects of China's cross-border e-commerce industry, as well as the opportunities and challenges encountered during the impact of the epidemic. It then introduces and analyses Amazon, a huge e-commerce group, and uses the SWOT model to summarise its strengths, weaknesses, opportunities and threats. The paper then analyses the difficulties faced by Amazon China during the epidemic from the perspectives of platform, logistics and marketing. At the same time, we compare Amazon with local Chinese e-commerce companies and find that Amazon is at a disadvantage. The e-commerce supply chain model is used to analyse Amazon's strategies for achieving profit growth and seizing the opportunities presented by the epidemic. According to the analysis in this article, Amazon China was impressed by the economic winter brought about by the epidemic and needed to capitalise on the trend of people in China preferring to shop online as a result of the new crown pneumonia. As a result, Amazon needs to worry about the impact of competitors and offline retailers in China's local e-commerce industry. This paper can help Amazon China to improve its competitiveness by analysing its dilemma and suggesting corresponding strategies. Consumers, third-party sellers and employees can decide whether to continue to choose Amazon based on its epidemic performance and foreseeable short-term growth prospects.

References

- [1] AgencyChina.: *Chinese cross-border E-commerce overview* (2018).
- [2] *China Cross-Border E-Commerce Export E-Commerce Development Report* (2022)
- [3] DONICI, A. N., Maha, A., Ignat, I., & MAHA, L. G.: *E-Commerce across United States of America: Amazon. com. Economy Transdisciplinarity Cognition*, 15(1) (2012).
- [4] Du, J., Xu, J., Zeng, X., & Zhu, L.: *Amazon's Strategic Shift in the Face of the COVID-19. In 2022 2nd International Conference on Enterprise Management and Economic Development (ICEMED 2022)*, 1019-1028(2022).
- [5] Li, J., Zhang, J., Qu, F., & Zhao, Y.: *The Influencing Factors Model of Cross-Border E-commerce Development: A Theoretical Analysis. In WHICEB*, 74 (2018).
- [6] Li, L., Chi, T., Hao, T., & Yu, T.: *Customer demand analysis of the electronic commerce supply chain using Big Data. Annals of Operations Research* 268(1), 113-128 (2018).
- [7] Liu, C., & Hong, J.: *Strategies and service innovations of haitao business in the Chinese market: A comparative case study of Amazon. cn vs Gmarket. co. kr. Asia Pacific Journal of Innovation and Entrepreneurship* 10(1), 101-121 (2016).
- [8] Petro, B., G. Muddyman, J. Prichard, K. Schweigerdt, and N. Singh.: *Strategic Role of Localization in MNE, Paper presented at the meeting of the Applied Business Research Conference, Honolulu, HI, (2007).*
- [9] Sumner-Rivers, R.: *Amazon's Prime Ambition. Parcelhero Industry Report. (2015)*
- [10] Wang, T.: *Discussion on business models of Alibaba and Amazon in three operating directions. Frontiers*, 2(4) (2021).
- [11] Wu, X. and Gereffi, G.: *Amazon and Alibaba: Internet Governance, Business Models, and Internationalization Strategies. In: van Tulder, R., Verbeke, A. and Piscitello, L. (Ed.) International Business in the Information and Digital Age, Progress in International Business Research*, pp. 327-356. Emerald Publishing Limited, Bingley (2018).
- [12] Zhu, W., Mou, J., & Benyoucef, M.: *Exploring purchase intention in cross-border E-commerce: A three stage model. Journal of Retailing and Consumer Services*, 51, 320-330 (2019).