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China supply chain management

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Abstract

The relevance of the topic of the article is due to the fact that logistics plays a leading role in the global economy. In a globally competitive environment, the decisive success factors are a high level of flexibility in relation to the heterogeneous needs of customers, cost efficiency, delivery accuracy, and the ability to provide a range of quality services. In this regard, supply chain management has become increasingly important in recent years. Supply chain management means managing the global flow (materials, goods, services) and ensuring the effective integration and coordination of suppliers, manufacturers, logistics, traders and consumers. In logistics, a digital revolution is taking place, the speed of which is accelerating due to the epidemic that has arisen in the world. It is digitalization that is the factor that opens up new opportunities in logistics: acceleration, change, restructuring of the business model, provision of an expanded range of services. Supply chain innovation should focus on improving the quality and efficiency of development, and it is necessary to build an intelligent supply chain system with big data support, network sharing, and intelligent collaboration. In the competitive struggle, the critical success factors at present are the service of delivery and low costs for the implementation of work in the chain of creation of material goods and values as a whole. To achieve this, it is necessary to quickly synchronize the work of all participants in the chain and continuously focus the value chain on the needs of consumers.

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Keywords

Supply chain management, delivery service, low costs, competition, logistics.

Introduction

Supply chain management is the organization, planning, control and execution of the flow of goods, from design and procurement through production and distribution to the final consumer in accordance with market requirements for cost efficiency [Harrington, Esseling, Van Niemwegen, 2021].

Information systems are designed to automate and manage all stages of the organization's supply and to control the entire movement of goods in the organization.

The Supply Chain Management system allows you to significantly better meet the demand for the organization's products and significantly reduce the cost of logistics and procurement. Supply chain management covers the entire cycle of purchasing raw materials, production and distribution of goods. Supply chain management plays a very important role, especially in growing organizations where profit depends on the effectiveness of this process.

Key advantages of the stream [ibid.]:

- develops relationships and customer service, makes them better;
- reduced transport and storage costs;
- productivity becomes higher, business functions are optimized;
- direct, indirect, production and fixed costs become lower;
- improves the mechanisms for the delivery of goods with the least delays in terms of time;
- organizes the delivery of the required volume to the required time and place;
- shows companies how to adapt to ongoing shocks in the economies of countries, ever-increasing expectations from consumers and tightening requirements due to globalization.

Supply chain management in logistics is an indispensable process, without which it will be impossible to arrange timely delivery, organize large quantities and reduce costs. An organization's rating will never rise if it is constantly associated with a frivolous, non-punctual, not keeping promises on time. And if you do not establish logistics lines, then raw materials will not appear on time and the product will not be produced. Everything will work as it should. Therefore, it is so important to build everything and create a working mechanism [Ivanov, 2021].

As the Chinese economy grows, more and more income is channeled into the purchase of goods and services. D.com is one of the largest B2C retailers in China. On the company's website you can buy everything you need: from electronics to food. Unlike competitor Alibaba, JD is still more focused on the domestic market.

JD was founded in 1998 in Beijing and initially specialized in the sale of optical media and electronics. The first online sales on the platform took place in 2004. In 2014, JD.com became the first Chinese online trading platform to list on the NASDAQ. In 2018, Google Corporation announced its intention to invest \$550 million in JD. The purpose of the deal was to develop retail infrastructure in Southeast Asia.

JD has established a leading e-commerce platform in China with 500 million annual active customers. In addition to e-commerce, JD has created what is arguably the most reliable logistics platform in the world and has started a technological revolution in all trade.

China has the largest concentration of people on earth and the economy is growing rapidly. Geographic Coverage JD supports almost all counties and districts in China with over 1,000 warehouses. JD.com's growth has been phenomenal, reaching \$100 billion in revenue in fiscal 2020. Many investors have been focused on FAANG. As China's economy grows stronger and the purchasing power of its citizens rises, the company is expanding its engagement across the country [Ivanov, 2018].

JD provides a trusted e-commerce platform that allows local and international brands to connect

with consumers in China. The company's customers enjoy the luxury of next day delivery and benefit from JD's nationwide logistics network that delivers goods and next day delivery to its customers. JD's cross-border platform allows brands from all over the world to enter the consumer market in China, even if they do not have a physical presence in China.

JD.com has partnered with some of the world's most recognizable brands, expanding the range of products on its platform:

Louis Vuitton and JD have launched an innovative partnership that brings together Louis Vuitton customers to make luxury shopping on JD.com even more convenient.

JD has also launched a new partnership with John Lobb, a luxury footwear and boot brand that is part of the Hermes Group. John Lobb has launched its flagship stores on JD.com.

Other luxury brands such as Marni, the Italian luxury brand, have adopted a customized one-stop solution from JD. In addition to launching its flagship stores on JD.com, Marni also provides them with marketing services, technology, and supply chain management. This all-in-one package from JD.com allows its 500 million customers to buy directly from Marni, with products delivered through JD Logistics.

In addition to traditional retail, JD Home has partnered with many top national mobile phone brands including Honor, Xiaomi, OPPO, OnePlus and Realme to collaborate on innovative omnichannel marketing initiatives including retail chains [Bowersox, Kloss, 2021].

JD Home has achieved National Key Account (NKA) status with many major mobile phone brands, supporting their multi-channel retail channels and the ability to shop offline. JD dominates the retail market and faces limited competition. JD has built a huge moat around its business and it's hard for rivals to compete with them. JD operates 32 "Asia No. 1" logistics parks, which are among the largest and most automated smart order fulfillment centers in Asia, in addition to over 1,000 warehouses to build a nationwide logistics network that sends same-day or local delivery to its customers. The next day. At JD's warehouse space of more than 21 million square meters, they provide small to medium sized warehousing, oversized warehouses, cross-border shipping, cold chain, frozen and chilled warehousing, B2B, and crowdsourced logistics. The company plans to build 6 more such high-tech warehouses in the near future [Stock, Lambert, 2019].

At the heart of JD's logistics is technology that provides them with a competitive edge. JD is a global leader in innovation as they incorporate the latest technological advances into their logistics business. With these capabilities, JD is able to deliver almost any product across China the next day.

JD is at the forefront of innovation in robotics and automation to reduce time constraints throughout the supply chain. JD was the first company to simplify commercial deliveries with drones and has developed unmanned delivery vehicles, warehouses and stores [Bowersox, Kloss, 2021].

In many ways, JD paved the way and created the blueprint for logistics and retail innovation. While Amazon may be the first in the US with self-driving stores and smart warehouses, JD has been doing it for years. The JD platform generates 31 petabytes of data every day, which is an incomprehensible amount of data from which JD builds machine learning and artificial intelligence tools. This will provide an advantage that competitors will not have access to, as JD will unlock an unrivaled understanding of consumer behavior in China.

JD may not be as profitable or as strong as other big tech companies, but because of its partnerships and strategic investments, it has a stronger potential. The company has a very strong position in China, one of the fastest growing economies in the world, and is gradually making a name for itself internationally. With numerous partners, JD has the potential to continue growing and investing overseas. JD is perhaps one of the few companies that can compete with Amazon for a piece of the

global e-commerce pie. Of course, not excluding a strong competitor of Alibaba in the domestic market.

JD.com is a technology driven company. On the one hand, technology is a source of sustainable competitive advantage for every JD.com business segment. Since its inception, it has invested a lot of resources in developing its own technology platform focused on application services for its development.

Methods

In the study, the authors used some methods such as analysis and synthesis, induction and deduction, historical and logical, abstraction and concretization.

Results

Popular products in terms of sales that are sold on JD are cosmetics, food and electronics. JD offers millions of products from thousands of brands from over 170,000 retailers. JD allows merchants to open virtual storefronts and is licensed to import food, beverages, clothing and footwear directly from overseas. The company is equipped with JD pay or WeChat Pay as the only recognized payment system.

JD has spent tens of billions building its e-commerce and logistics platforms, and now the earnings are showing a net profit. Since 2012, JD's revenue has increased by billions consecutively year-on-year, surpassing \$100 billion in annual revenue. Over the past five fiscal years, JD has increased its annual revenue by \$86.37 billion (232.17%) at a CAGR of 32.99%. Most recently, JD increased its revenue by \$58.56 billion (105.17%).

Most of JD's huge earnings have been directed towards growing the business, but its gross margin and net income have been thriving of late. Over the past five years, JD's gross profit has increased by \$7.58 billion (453.4%), with a 5-year average growth rate of 41.18% [Ivanov, 2018].

Over the past three years, JD's gross profit has increased by \$5.42 billion (141.34%) at an average growth rate of 34.19%. As gross profit grew, so did JD's net profit. Now JD has two consecutive years of net profits of billions. In 2019, JD had a net income of \$1.75 billion, and in 2020 that figure jumped to \$7.57 billion. In just one year, JD's net income increased by \$5.82 billion (332.5%) as they converted 6.62% of their revenue into net income. These trends have not abated and 2021 will be JD's biggest and most profitable year to date. Over the past three years, the quarter ending in December generated JD's biggest revenue, with a drop in March:

December 2018 - \$19.6 billion, then March 2019 - \$18.04 billion.

December 2019 - \$24.51 billion, then March 2020 - \$20.64 billion.

December 2020 - \$34.37 billion, then March 2021 - \$31.01 billion [Supply chain management, 2022].

In 2020, JD's total revenue is up \$31.4 billion year-on-year (37.90%) and that growth is not slowing down. In the first quarter of 2021, JD generated \$31.01 billion in revenue, up \$10.37 billion (50.24%) from the \$20.64 billion generated in the first quarter of 2020.

JD is in a stronger position in 2021 as it posted \$31.4 billion in revenue and \$552 million in net income compared to \$20.64 billion in revenue and \$151.5 million in net income in 2020. Today the company is demonstrating stunning results. For the first quarter of 2022, JD reported revenue of 240 billion yuan (\$37 billion). The figure is 18% higher than the same period last year.

All growth trends point to continued development of JD based on first quarter raw data, TTM

figures and year-on-year performance. If things don't change, JD is gearing up to have another breakthrough year and outshine all previous years.

Recommendations and conclusions

Much of JD's success is due to the company's obsession with service quality. Particular attention is paid to the delivery of goods: the company has full control over all logistics chains. This policy allows you to deliver purchases on the day of the order (or the next day), which few people can boast of. Much of the workflow in JD is automated. Platform employees use big data technologies and artificial intelligence to make sales forecasts. Algorithms also help them in the formation of pricing policy and develop advertising strategies.

According to the strategy, JD is currently engaged in:

- 1) the development of multi-channel sales
- 2) expanding the range in food retail and in the category of medical goods
- 3) optimization of supply chains of goods
- 4) development outside of China

Management has repeatedly emphasized that the company is focused on gradual long-term development instead of sharp, explosive growth, so one should not expect “missiles” in stocks either.

In Russia, JD.com connects partners and builds a local ecosystem for buyers, grouping all services into three main areas: logistics, after-sales service and the creation of an electronic payment system.

1. Logistics is based on direct shipments from a retailer in China. Due to the partnership with the Russian Post, the delivery time was reduced to 1-3 weeks. The company is also looking for new warehouses in Europe to ensure fast delivery from China.

Today, the company plans to deliver the best Chinese and Russian electronic goods and other best goods directly from European customs warehouses for up to one week for the European part of Russia and up to two weeks for the Asian part.

2. After-sales service consists of the conditions for returns and repairs, the provision of a guarantee and the involvement of a Russian-speaking team that will provide a decent service and answer customer questions.

From a number of manufacturing plants, JD.com received authorization, according to which the company will be able to provide repair, warranty and return of gadgets in Russia. And for JD Collection items, the return period has been increased from the 14 days required by law to 30 days.

If now the Russian-speaking team answers users' questions via e-mail, then in the near future a call center will also be connected to improve the quality of service.

3. In addition to providing basic infrastructure services, JD is constantly moving towards integrated services. Direction for payment, supports more than 30 types of global means of payment; logistics direction, provides online delivery, cooperates with DHlink, UPS, DHL and more than 20 logistics companies, also provides warehousing and freight transportation; direction for credit, works with a number of financial institutions; as for other additional services, it provides services such as marketing, substitution operation and online training. JD takes a series of measures to effectively prevent credit, technical and legal risk, such as establishing a penalty management system for sellers with a risk management system, trading risk warning for the buyer, the mood of the intellectual property rights sectors and conflict coordination and other measures, is committed to providing customers multi-vector services.

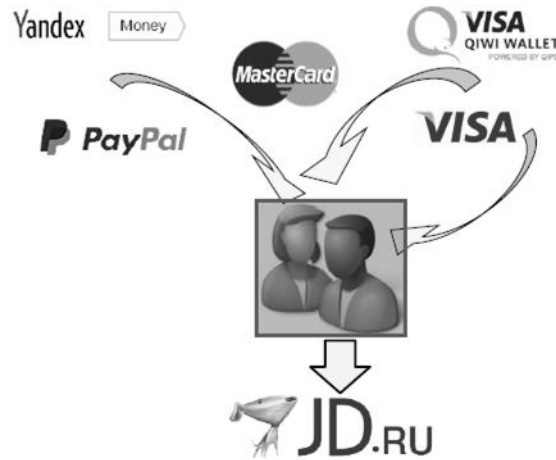


Figure 1 - JD.com payment system in Russia

The above elements of the system are used during joint marketing campaigns. The project involves large-scale sales of high-quality Chinese goods for Russian consumers, including through the flash-sales model

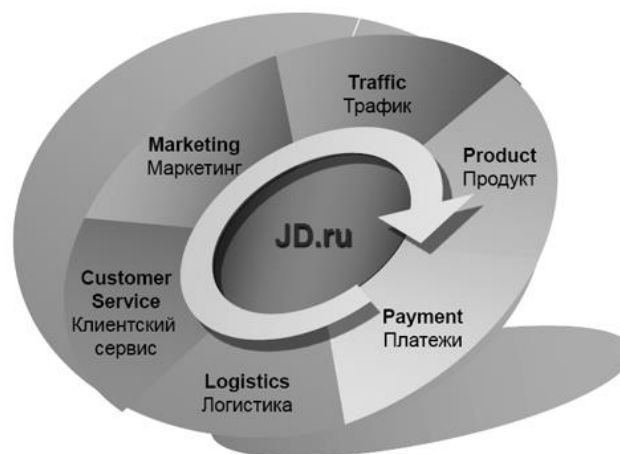


Figure 2 - Local ecosystem JD.com in Russia

Of course, there are also problem areas for JD.com: some products are expensive, long delivery times that the company cannot speed up, difficulties in returning the product if it does not fit, and the lack of full localization. Long-term delivery is due to the fact that orders first arrive at the distribution center of the Russian Post, then sorting takes place and the goods go through customs clearance, after which they are sent for delivery. The tasks of JD.com are to arrange the processing and delivery of orders from abroad to major cities in 10 days. For several years, the delivery time has almost halved.

JD.com should create a platform that will display products while searching, a convenient shopping cart, an updated order list, expanded product cards, an updated personal account, and a shopping guide function will appear. There will also be a format of stories from sellers with important information about the product and promotions. All Chinese goods and goods of local suppliers will be available in the application.

The scheme of doing business in the territory of the Russian Federation is shown in Figure 3. The figure shows that the main elements in the chain are the recipient, the seller and the logistician. The main advantage of the marketplace management scheme is that the buyer has the opportunity to buy any product that he needs on the marketplace, and these purchases are made in one place, for the buyer this saves time, which every day the consumer has less and less.

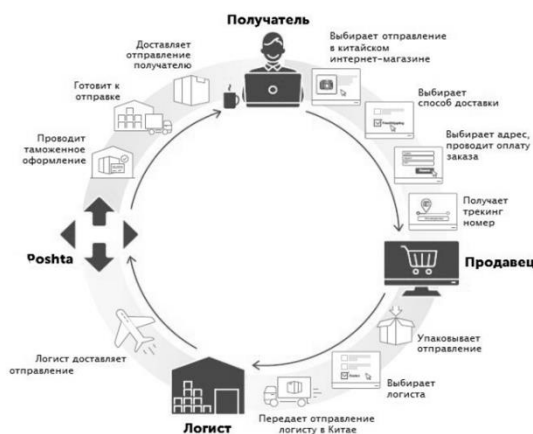


Figure 3 - Scheme of doing business JD.com in the territory of the Russian Federation

Thus, the Russian Post, as part of information support, will place promo posters for the campaign in post offices and integrate themed advertising banners into the mobile application. Companies are considering other options for cooperation.

Today, more than 1,000 branches have dedicated pick-up and drop-off points. Almost 6,000 post offices have implemented an address storage system that allows the operator to quickly find the required parcel. The Russian Post also opened 170 centers for issuing and receiving parcels in 39 Russian cities.

JD.com currently sells 10,000 shipments a day to Russian customers. After partnering with the Russian postal department, the average delivery time from the moment of ordering in a foreign online store to receiving the item at the post office was reduced from 5-7 weeks to 7-10 days in central Russia and 15-20 days in the whole country.

In the coming months, JD.com plans to raise the number of shipments, which can reach 100 thousand per day. After that, the Chinese online retailer plans to launch the third stage of development in the Russian market (for example, it will create local offices).

Today the company stands for a civilized market, which is focused on three main principles. It must be a good product that is sold at a good price and supported by good service.

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Управление цепочками поставок в Китае

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Аннотация

Актуальность темы статьи обусловлена тем, что логистика играет ведущую роль в мировой экономике. В условиях глобальной конкуренции решающими факторами успеха являются высокий уровень гибкости по отношению к разнородным потребностям клиентов, экономическая эффективность, точность доставки и способность предоставлять широкий спектр качественных услуг. В связи с этим в последние годы все большее значение приобретает управление цепочками поставок. Управление цепочками поставок означает управление глобальным потоком (материалов, товаров, услуг) и обеспечение эффективной интеграции и координации поставщиков, производителей, логистики, торговцев и потребителей. В логистике происходит цифровая революция, скорость которой ускоряется из-за возникшей в мире эпидемии. Именно цифровизация является тем фактором, который открывает новые возможности в логистике: ускорение, изменение, реструктуризация бизнес-модели, предоставление расширенного спектра услуг. Инновации в цепочке поставок должны быть направлены на повышение качества и эффективности разработки, и необходимо построить интеллектуальную систему цепочки поставок с поддержкой больших данных, совместным использованием сети и интеллектуальным сотрудничеством. В конкурентной борьбе решающими факторами успеха в настоящее время являются сервис доставки и низкие затраты на выполнение работ в цепочке создания материальных благ и ценностей в целом. Для этого необходимо быстро синхронизировать работу всех участников цепочки и непрерывно ориентировать цепочку создания стоимости на потребности потребителей.

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Ключевые слова

Управление цепочками поставок, служба доставки, низкие затраты, конкуренция, логистика.

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