



JD / JD Logistic

Jeff Towson - Peking University

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JD.Com / JD Logistics

China Transformed is our focus on the twenty companies that we believe will continue to radically alter China and beyond. These interviews form the foundation of an immersive ongoing exploration into these groundbreaking companies, the investment opportunities, and the competitive landscape.

Richard Liu, JD's founder, made a series of bold moves over the past two decades, starting with moving from physical to online sales in 2003 during SARS, then closing all the physical stores to focus on e-commerce. In 2008 he determined that the one area JD did not provide a quality experience with was delivery, so he built an in-house network of logistics, drivers, and delivery people. JD can now deliver almost anywhere in China within 12 hours.

There are three contact points with the consumer: the app, receiving the delivery, and customer service, all of which JD does in-house. No one else does this:

For an in-depth discussion on the company, we were joined by investor and analyst

Jeff Towsen - Asia Tech Strategy

Alibaba and JD have different types of ecosystems. JD is asset-heavy, and it employs hundreds of thousands of employees and owns hundreds of warehouses. It is much more operationally intensive than Alibaba, which works through partnerships by building platforms and providing connectivity.

JD and Alibaba run differently. Like Apple, JD pursues an integrated, controlled model where everything is built in-house. The benefit is greater control over quality at the cost of speed since everything has to be done by itself. Alibaba is approaching logistics in a modular way, just like Android, where anyone can write something for it. The experience on Android is not as good, but it grows much faster.

JD does everything in-house and creates an end-to-end experience, while Alibaba builds technical architecture, digital and data technologies, and works with many delivery companies and warehouses. Both companies will work fine as two national logistics smart networks in China. Both aim to go global, extending their supply chains to Europe and Asia.

While it is always helpful to compare these two companies, this conversation explores many of JD's strategic advantages, especially around the logistics network. When looking at China's twenty transformative companies, it is difficult not to include JD Logistics, the most integrated and innovative logistics company on the planet.

JD and JD Logistics – An Overview

Jeff Towson: JD does not get nearly enough attention, and it is hard to find a better space to target as a business than e-commerce in China; JD and Alibaba got there first, and JD is better positioned than most of the other companies. JD can be viewed as a standard e-commerce company; they do first-party retail, which Alibaba does not do, and also operate as a marketplace, which Alibaba does. JD is both a retailer and a platform and operates an excellent niche position as the quality player with high customer service.

There are three things they are working on which are essential to watch:

- Community group buying, which is a big deal in China over the past year.
- Data ecosystems, JD is paired with Tencent and Walmart, working together on data and other areas.
- JD Logistics has filed to go public and released a lot of interesting data on logistics, IT systems, and warehouses.

Community Group Buying

Community group buying is a powerful tactic that every company in China has jumped on, including Didi, Meituan, Alibaba, and JD. The idea is that a consumer goes onto a group buying site, and there is a community leader nearby in the building, whether a person living downstairs or a convenience store on the corner. That person is coordinating purchases all over WeChat and disbursing to the community.

Community group buying is powerful because it offers discounts, mainly focused on daily necessities such as groceries or water. It is also very convenient, with the community leader more accessible than corporate support. The lead buyer gets a commission, which helps drive growth significantly. This all started with COVID because they wanted to stop interactions between delivery people and buyers in their apartments.

Some think this is the death of convenience stores, which have been pummeled by e-commerce and mainly focus on perishable items and frequent purchases, which this model directly attacks. A lot of these little convenience stores have turned into group buyers, working directly for the platforms. All the companies have jumped onto this, and JD has done so with a \$700 million investment into Xingsheng Youxuan.

Data Ecosystems – Strategic Partnerships with Walmart and Tencent

Data ecosystems are also a significant factor, critical in China and less relevant in the West. Alibaba and Tencent are ecosystems with multiple services and companies. JD is a strategic partner of Tencent and Walmart and has a less clear partnership with Google. There is no real integration between JD and its partners, but there is a lot of coordination, particularly with data and inventory. A product on JD can be delivered through a community buyer or through a Walmart down the street, where it can come directly from Walmart's inventory. This behind-the-

scenes inventory integration creates a forward delivery point for JD, similar to Alibaba New Retail. It is e-commerce combined with logistics and a network of retail locations that can be used for customer interaction, yielding large swathes of data.

On JD Logistics:

Software is easy to replicate with significant network effects, while physical assets are tough to imitate. Competing with JD requires not just building the software but building the massive network of warehouses and delivery people they have been building for 13 years. It may also be necessary to replicate the retail footprint coming from Walmart, which is nearly impossible to replicate after billions of dollars of annual investments.

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There are three contact points with the consumer: the app, receiving the delivery, and customer service, all of which JD does in-house. No one else does this: Coupang, the South Korean e-commerce company that recently went public, copied JD and essentially is the mini-JD of South Korea.

Some statistics on JD's logistics network:

- 2200 total "cloud warehouses" across China, all operating on common software and network
 - 800 directly owned and operated warehouses
 - 1400 additional warehouses owned by others but connected through software to JD's network
- Long-haul transportation network: 7500 trucks and delivery vehicles and 200 sorting centers
- Last-mile delivery network: 7200 delivery stations, 200,000 delivery people
- Growth: 10,000 employees in 2012 to 50-60,000 in 2015 to 200,000+ today, most of this is delivery people.

JD also has a bulky items logistics network, 86 separate warehouses, and 100+ sorting centers for big and oddly shaped items such as furniture. They also have a cold-chain logistics network of 87 warehouses and 2000 vehicles for perishable items. There is also a cross-border network. They have built six different networks over the past decade, but in practice, they operate as one integrated unit.

Express delivery networks are physical networks that are people-centered. From 2008 to 2018, they built a people-based physical network for moving items and now have started building an IT system on top of that, digitizing the network. They built a warehouse management system, transportation management system, order management system, and another software system

By Paul Krake

tracking goods. They are taking the traditional physical network and making it smart and automated, which no one has done before at this scale.

This network will be able to do things that have never been done before. You can go into warehouses where there are no people but autonomous robots that move things and work together, run by AI.

The main benefit is a unique capability JD has that others do not. The revenue coming into JD Logistics is 50% from JD, providing logistics for JD and shutting out rival e-commerce companies. Secondly, they are selling what they call integrated logistics. According to their filing, logistics and fulfillment in China are 14 trillion RMB (\$2 billion) per year business. About 50% of this is outsourced, with single-service logistic companies such as FedEx, or a furniture transport company, or a warehouse storage company. What JD is pitching is integrated logistics: warehouse, transportation, food storage, cold storage, bulky items, express delivery, all as an integrated service.

JD has identified six or seven industries where they are creating unique solutions. For FCMG (Fast-Moving Consumer Goods) such as Coca-Cola, which needs to constantly get Coca-Colas into all the little convenience stores, constantly refilling them and getting it from the bottling company to the warehouses, and storing near the retailers; JD can take the whole spectrum and handle all of it. JD can also give the data that shows the whole process for all of China- nobody else can do that.

With furniture, JD can connect everything from the factory where a desk is produced to specialized warehouses to coordinating with the seller and home delivery. FCMG, groceries and perishables, furniture, and pharmaceuticals are ideal target industries where JD focuses on the unique customized solutions for industries that others cannot replicate.

China is far ahead of other countries on this because it is so large-scale. Pinduoduo is also active here, and ByteDance is slowly trying to get into e-commerce; there is WeChat, the number three e-commerce player in China. Although the focus is often on Alibaba, JD, and Pinduoduo, WeChat is probably number three with \$250 billion of Gross Merchandise Volume (GMV) last year, more than double the previous year, driven by WeChat Mini Programs. Media companies such as ByteDance are trying to become e-commerce companies, and while they are making some revenue, they are not building extensive networks of warehouses.

To reiterate the critical points for JD:

- Community group buying is a potent short-term tactic.
- Data ecosystems: Walmart, JD, WeChat.
- Automated logistics at scale: a China phenomenon with JD and Alibaba on the frontier.

Innovation and Strategic Partnerships

What is the end-game of group buying as a tactic? Is JD moving down the quality scale to compete in lower margin products?

Jeff Towson: Group buying is a viral mechanism where customers become sales agents. It is a compelling early-stage tactic but does not tend to last forever. Pinduoduo used this and targeted fifth-tier cities, where they could compete against Alibaba more evenly. Pinduoduo competes on a different dynamic, and their primary metric is not GMV but activity. Their goal is to have users hang out on the platform and have fun; their metrics are Monthly and Daily Active Users (MAU and DAU); they do not need to make that much money.

What is JD doing on the experimental and content side of things? Will they be able to compete with ByteDance and Kuaishou in the content space?

Jeff Towson: The future of commerce looks like commerce plus content plus social media altogether. WeChat, JD, and videos combined: a consumer watches a live streamer who is talking about a new smartphone, clicks on the smartphone, shows it to a friend, and they buy it together. However, this is not the only strategy, and it depends on the sector. JD has a clear niche for high-quality authentic products, and while they have JD Live for live streaming, it is nothing like Alibaba's Tudou or additional media assets such as newspapers and Alibaba Pictures. Pinduoduo is a fun place, and their users are highly engaged. Their strategy will continue to be successful in specific product categories such as fashion. JD is strong in electronics and appliances but will struggle with fashion because the content is hugely important.

What is the structure of the joint venture with Tencent and Walmart?

Jeff Towson: It is a strategic partnership; Tencent has been active in e-commerce for a long time, with strategic partnerships with JD and Meituan, and is a significant investor in Pinduoduo. Group buying is not allowed on WeChat, with the sole exception of Pinduoduo. Mini Programs is also a massive move, so they are doing e-commerce in multiple dimensions and have strategic partnerships with JD. The strategic partnership is the same as with Walmart; it is not a joint venture.

Is JD's partnership with Walmart really about inventory management and just effectively adding a few hundred additional warehouses to an already extensive network?

Jeff Towson: At these physical locations, they add a few things:

- They act as a close-to-the-consumer inventory hub and delivery place, allowing for 30-minute delivery.
- They can integrate the user experience where consumers walking into a Walmart can use their smartphone to be offered products in-store and directly buy them in the same app. Alibaba is trying to do this, but JD and Walmart have not started this yet.

- Alibaba is going for a complete transformation of the consumer experience, where department stores will be an integrated “online meets offline” experience.
- Non-digitized grocery stores may become obsolete.

Is Amazon’s acquisition of Whole Foods comparable?

Jeff Towson: Very minimally, Amazon is years behind Alibaba now. I can go into my local supermarket in China and buy everything and deliver it to me within 30 minutes. They know my record and can sell me Avengers movies while I buy a bottle of wine; they will cook my crab and deliver it at home. Then at home, I can turn on live streaming and watch Taobao Live and click on buy, and it is delivered. Amazon offers none of this and does nothing integrated with entertainment.

WeChat is also all integrated and so much better than anything in the US. Twitter and Facebook have done nothing interesting in the past several years; WhatsApp does not even have payment.

Growth and Valuation

As JD spins off various subsidiaries in health, logistics, or maybe data, should I be concerned as an investor of a JD.com-only company?

Jeff Towson: I tend to ask if this company is infrastructure or is it a profit center? How does JD view it? If it is infrastructure, then you would expect the sub-company to have specific economics. It will be prominent and capital-intensive, with some yield, but not an awesome one. I would not expect profits from JD to show up down there and not on JD.

If it is viewed as a profit center, as Alibaba viewed Ant, you would expect growth in terms of a basic growth engine and some degree that would come at the expense of Alibaba since it used to be under it. Alibaba usually gives a good indication of how they view these things, with Ali Cloud as a number one profit center. JD Logistics is less clear; I do not see it as having a significant impact on the profitability of JD going forward. It also offers so much competitive protection to JD; other companies cannot replicate it, assembling all the warehouses with integrated data systems.

Is JD going to be rewarded for being an asset-heavy company?

Jeff Towson: There is always a trade-off, they are taking a lot of things public, and I am not sure if I agree with that. I like the idea of spinning out JD Logistics because it has different economics as an asset instead of JD. Many people want to invest in stable-growth, slow-growth companies that are more predictable than e-commerce.

Everyone wants to be a high-growth digital company because software has just unbelievable economics; it does not cost anything to grow. But the vast majority of digital companies make no money, and there is a very low competitive barrier unless there are network effects. A digital-physical hybrid is attractive because although the economics are not as attractive, there is a considerable gain in terms of the competitive barrier between building warehouses and physical

infrastructure. Kuaishou and ByteDance have economic power but can fall very fast, whereas taking down JD would require years and years to overcome their physical infrastructure.

Should we value JD Logistics like FedEx or AWS?

Jeff Towson: It is not AWS; cloud businesses have their own powerful economics. Even though JD is digitizing, the economics of logistics are very easy to understand; you know how many items are shipped around the country on a daily basis. That is a stable trend which can be predicted ten years out. I do not think you should separate e-commerce from logistics, but you can add e-commerce transactions on top of another business such as ByteDance.

The problem with JD Logistics is that it is unclear what the market is. The idea of integrated, full-service solution logistics and fulfillment for businesses is a new thing and might create a whole new type of customer.

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