

# China's E-Commerce Market in 2014: The Logistics Challenges

Distribution gains importance as online markets heat up. Strategic partnerships are likely to play a key delivery role.



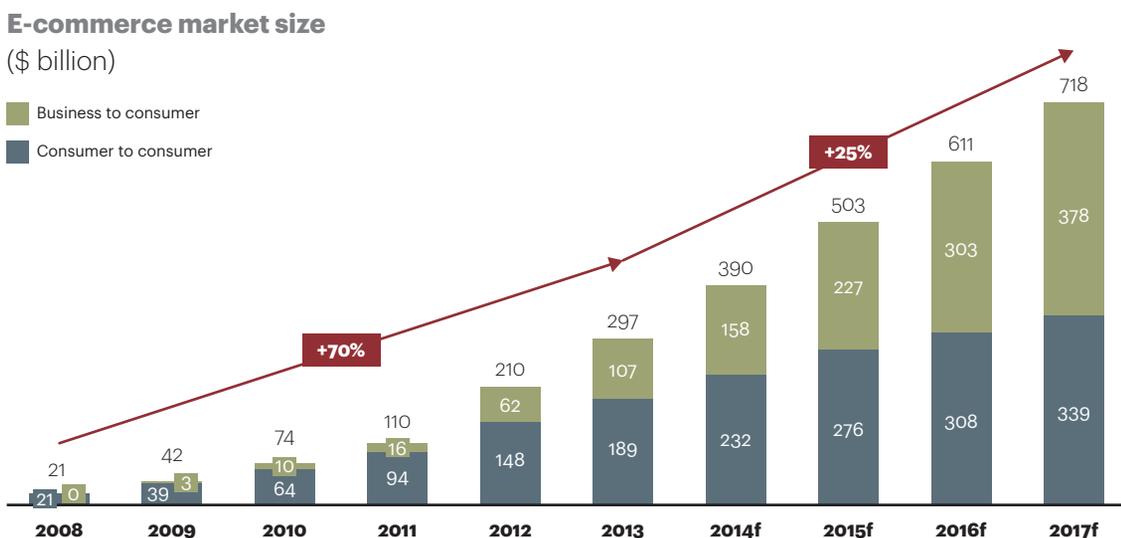
In barely five years, China's e-commerce market—which makes up almost 90 percent of its overall business-to-consumer (B2C) market—has become a formidable force. Online shopping has expanded at a CAGR of 70 percent over the past five years, rising from roughly \$21 billion in 2008 to nearly \$300 billion in 2013 (see figure 1).<sup>1</sup>

Success in this rapidly growing market is not a given. **Managing logistics may be the main differentiator** as the online market heats up.

However, success in this rapidly growing market is not a given. In particular, logistics will be a challenge as e-commerce players attempt to reach more customers over wider geographic regions while improving the quality of their offerings. The growth of domestic express delivery—most directly tied to e-commerce—is lagging the exponential growth of e-commerce in China, raising concerns about how well logistics players can handle ever-increasing volumes.

In fact, managing logistics may be the main differentiator as the online market heats up—along with other B2C segments, such as TV-based and mail-order shopping. We researched the e-commerce industry to determine how major players are tackling the logistics issue. This paper highlights our findings.

Figure 1  
**Online shopping will continue to grow in China, though more modestly**



Note: Exchange rate is 6.2 yuan per dollar. Totals may not resolve due to rounding.  
Sources: iResearch, Analysys International; A.T. Kearney analysis

<sup>1</sup> All monetary amounts are U.S. dollars; growth rates are compound annual growth rates.

# Trends in E-Commerce

Amid the rapid growth in China's e-commerce market, several trends are shaping the near-term landscape.

## Rise in access channels

An estimated 300 million people shop online in China. Today, more than half of China's Internet users access the Internet with their mobile phones. Mobile shopping is a growing trend that we expect will continue to grow. Indeed, the share of mobile shopping in China's online shopping market rose from 1.5 percent in 2011 to 9.2 percent in 2013, and we foresee a 20 percent annual growth rate in the near future (see sidebar: Who? What? Why? China and the Online (R)evolution on page 3).

## Increase in B2C business

China's e-commerce market is dominated by the consumer-to-consumer (C2C) industry, accounting for 64 percent of the market in 2013 and driven primarily by Taobao's early successes.<sup>2</sup> However, B2C is gaining momentum, driven by the rapid growth of B2C marketplaces, and is expected to reach 53 percent of the market in 2017. As C2C shoppers gain e-commerce experience, they are moving to B2C sites in a quest for higher-quality products and services (see sidebar: B2C on Your Laptop on page 4). And as C2C sellers become more established, they are launching their own B2C sites.

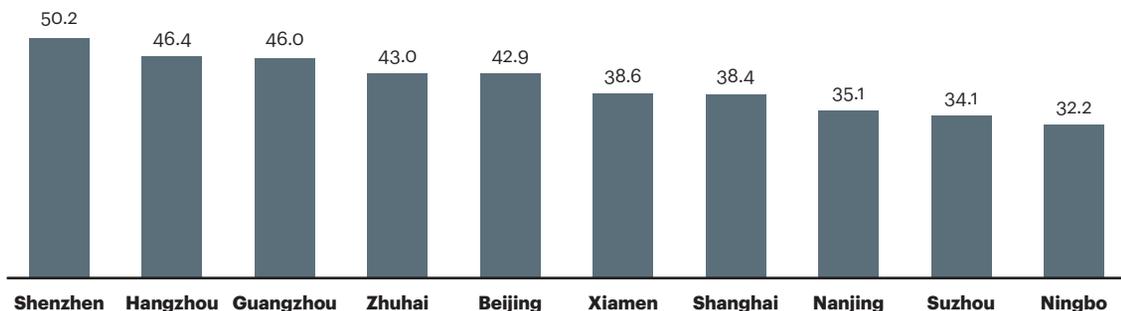
## More geographic spread

Geographic growth in online shopping is becoming a vital issue for the e-commerce industry. Today's consumer market is concentrated in regions, with the top 10 cities (in terms of Taobao usage) located on the coast (see figure 2). However, the number of online shoppers is growing

Figure 2  
**E-commerce is popular in China's coastal cities**

### Online shopping index

(scale of 0 to 100, 2013)



Note: The index considers sales per online store, penetration rate of online shoppers, and online shopping value per customer. The score is calculated based on the online penetration in each city (number of online consumers over the age of 18) and average online spending per consumer (average online spending over average disposable income per consumer).

Sources: AliResearch; A.T. Kearney analysis

<sup>2</sup> Taobao is China's biggest online marketplace.

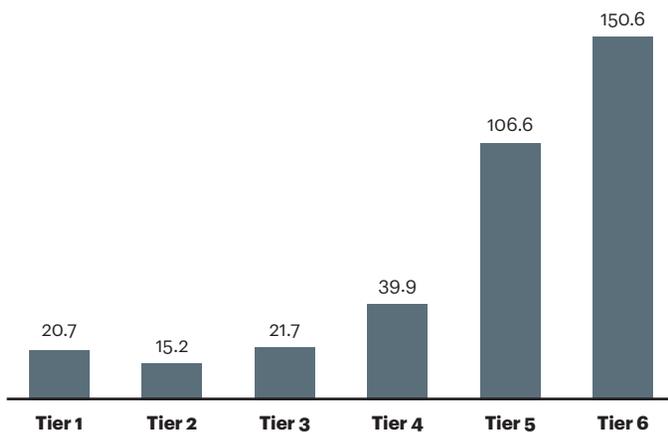
fastest in lower-tier cities (see figure 3). This trend is expected to continue as wealth in the inland cities increases. As overall geographic coverage expands, the ability to offer reliable and consistent services and delivery will be among the biggest challenges—and a major source of competitive advantage.

Figure 3

**Online shopping is growing fastest in China’s lower-tier cities**

**Growth in number of first-time online shoppers**

(first half of 2012 vs. first half of 2011, %)



Sources: China E-Commerce Research Center; A.T. Kearney analysis

**Who? What? Why? China and the Online (R)evolution**

E-commerce has experienced exponential growth in China since the mid-2000s, when it was just a blip on the retail radar screen. Three factors have spurred this online evolution:

**More online shoppers**

China has 600 million Internet users—after 53 million new users connected in 2013. Yet this number is still low when considering Internet penetration rates: China’s current Internet penetration rate is 46 percent, compared to 83 percent in the United States. But China’s Internet users are spending more time online, averaging 25 hours per week. The ratio of online users over

age 30 was about 33 percent in 2013. According to Shanghai-based iResearch, almost 300 million people shop online in China, most between age 18 and 35, with men shopping slightly more than women.

**More purchasing power**

China’s economic affluence has increased significantly in the past decade. Personal disposal income per capita reached \$3,000 in 2013 and is expected to rise by 11 percent to more than \$5,000 in 2018. The percentage of households earning more than \$3,000 per year is also rising, from 69 percent in 2013 to an estimated 75 percent in 2018.

**More online security**

When Web 2.0 arrived, e-commerce sites in China began tracking and publishing credibility records of online sellers, reducing the risk of fraud. This has helped e-commerce overcome perhaps its biggest psychological barrier. Reliable payment methods, such as collection on delivery and Alipay, are also making online transactions more convenient and trustworthy. “Seeing is believing” still rings true for most Chinese consumers, and these payment methods allow them to see products before paying for them, thus increasing the number of transactions.

# Fixing Logistics: Three Proven Strategies

The relative scarcity of high-quality logistics providers in China often means problems for e-commerce firms: late deliveries, damaged and lost parcels, negative attitudes from delivery people, slow collect-on-delivery (COD) processes, poor return procedures, and no special services such as installation or the ability to try on purchases. Such last-mile delivery and customer interface issues inevitably affect the credibility and brand image of e-commerce firms.

Furthermore, e-commerce leaders in certain industries—including baby goods, consumer electronics, telecommunications, computer products, and furniture—are struggling with logistics suppliers' inability to handle large or irregularly shaped shipments at lower costs. Few domestic express companies are equipped to handle freight, and freight companies cannot provide door-to-door service.

Faced with these and other challenges, we recommend three time-tested and proven strategies for e-commerce firms to address their logistics needs.

## B2C on Your Laptop

These are exciting times for China's B2C market, thanks largely to the growth of e-commerce. How are the different market segments faring?

### E-commerce

Almost 90 percent of the B2C market in China is e-commerce, which has experienced 70 percent annual growth since 2008. This rapid growth is expected to continue, with the e-commerce market possibly reaching nearly \$720 billion by 2017. More than half of that could be B2C. More than 80 percent of e-commerce takes place in online marketplaces, of which Taobao (similar to eBay) is the largest. Taobao customers account for nearly 9 million transactions a day.

Online stores are expected to be a big share of the e-commerce market in the future, even as adoption rates vary across industries. Among the largest e-commerce segments are apparel, consumer electronics, and publications (including books and DVDs) (see figure).

### TV shopping

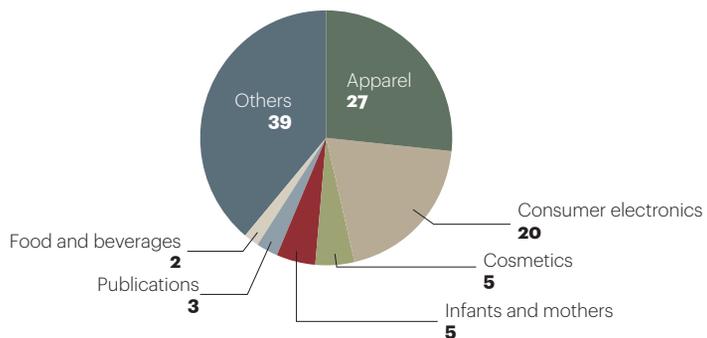
TV-based shopping is the second-largest B2C segment, with four player—Acorn, Happigo, OCJ, and Seven Stars—comprising more than 50 percent of the market. Yet TV shopping is still relatively new to Chinese consumers, and penetration rates continue to be low compared with the United States and Japan. We expect TV shopping to increase its share in the coming decade.

### Mail order

Unlike European and North American markets, mail order is a small market in China, with a few pure-play mail-order companies and some top global firms (such as Bertelsmann) that entered in the 1990s and eventually exited. Existing players tend to combine online shopping with mail order, with the latter serving mostly as a marketing tool.

Figure  
**Apparel and consumer electronics dominate e-commerce in China**

Share of online shopping, by value (2013, %)



Note: Percentages may not resolve due to rounding.  
Sources: iResearch; A.T. Kearney analysis

## Build your own networks

Many large e-commerce players are choosing to build internal logistics networks, incorporating their own teams into the business model to ensure quality. Some of these companies established the in-house capabilities at their inception; others did so only after suffering serious bottlenecks as a result of relying on third-party logistics centers and delivery teams. The improved quality and resource control have proved worthwhile, both in faster delivery and a better customer experience.

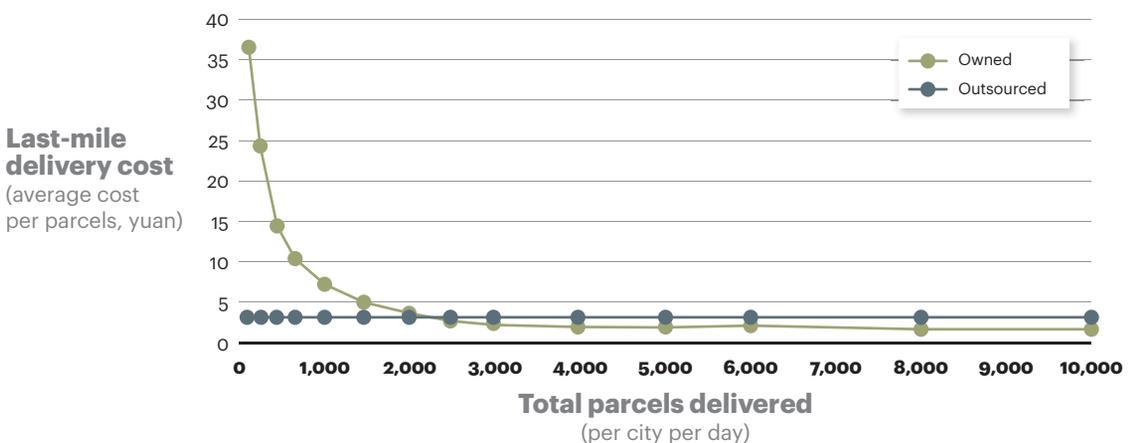
# Building a logistics arm is not for every company—only those with large volumes and efficiencies.

For example, Jingdong (formerly 360buy) posted a 300 percent growth rate in the first five years after logistics bottlenecks forced the company to establish its own express delivery operation in 2009. With its own network, Jingdong can provide same- or next-day deliveries from its seven distribution centers. Jingdong has 97 warehouses in 39 cities, covering 1.8 million square meters, and processed 320 million orders in 2013.

Building a logistics arm is not for every company—only those with large volumes and efficiencies, especially in last-mile delivery, which often accounts for half of total logistics costs. For example, in a project we worked on a few years ago, we found that with fewer than 500 deliveries per day in a city, deploying a company-owned delivery team could cost 15 yuan (\$2.20) or more per parcel, eating away at profits. This cost could drop to less than two yuan (\$.30) per parcel with more than 10,000 deliveries per day in a city (see figure 4). As such, it is doubtful that even the largest e-commerce players can fully address the demand internally and profitably, considering the wide geographic spread of the market. Leading companies understand if and where to deploy their own logistics capabilities.

Figure 4

### Company-owned delivery can eat away at small players' profits



Source: A.T. Kearney analysis

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### Outsource to third-party providers

Given the lack of scale and capabilities, most e-commerce companies still outsource delivery to third-party express companies. Most express delivery providers in China can be grouped into two types:

**Large networks offering basic services.** Firms in this group typically have large network coverage but can provide only basic delivery services. Most rely on franchised models to expand rapidly (only 20 to 40 percent are self-owned) and compete chiefly on speed and price. Network coverage is wide, especially with backup from the state postal service for remote areas.

These large networks do not offer more complex services such as scheduled returns, exchanges, or COD. Given their franchised or subcontracted models, there are also inherent risks. For example, most players offer a one- or two-week COD repayment cycle, exposing e-commerce companies to a significant amount of risk. Ensuring the integrity and viability of the entity collecting the cash is a crucial element to consider.

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## Many logistics companies are **investing heavily to broaden their capabilities** and fill the clear gap in the market.

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One exception is Shunfeng Express, the largest private express company in China, with more than 7,800 locations in mainland China, 9,100 locations globally, and reliable and fast service. Shunfeng maintains a premium position in the market, but its standardized services are not for everyone. China Post's EMS, with more than 45,000 locations around the world, has the largest network, but speed and reliability continue to be issues.

**Smaller networks offering more complex services.** These typically fully owned companies have smaller network coverage—some, such as Topname, compete only regionally—and their focus on regional services enables full-fledged value-added services such as warehousing, COD, and customized delivery. These companies are selective about where they expand their networks, choosing cities only if there is enough volume, and they focus mainly on the B2C market.

International companies such as FedEx and TNT also fall into this category. They have more limited networks than the domestic players but offer a broader range of services and are more reliable and consistent. Other providers, such as Kerry EAS, also serve the B2C market, with strengths in warehouse pick-and-pack operations rather than delivery.

There is a clear gap in the market, with no player offering the breadth of services needed at a competitive price across a broad network demanded by e-commerce companies. However, many logistics companies are investing heavily to broaden their capabilities to fill this gap, particularly in line haul and last-mile deliveries. Warehouse pick-and-pack, which could represent 40 percent of total logistics cost of a parcel (and is a manual operation today), is another opportunity. When sizing up a potential third-party logistics provider, it is important to look not only at its current capabilities but also at its growth and investment plans.

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## Form partnerships or acquire existing firms

A third approach is to invest in existing logistics companies or form partnerships with them. Alibaba, the e-commerce giant that owns Taobao, invested \$4.5 million in Star Express. Alibaba's founder, Ma Yun, also invested in Best Logistics, which subsequently acquired a 70 percent stake in HTO; Star Express and HTO are the major Chinese express delivery companies. However, given Taobao's size (eight million shipments a day), no logistics player or acquisition alone will meet its speed and service requirements. As such, Alibaba partnered with Shunfeng Express, Yuantong, Shengtong, Zhongtong, and Yunda in 2013 to establish a logistics platform called Cainiao. Their target is to build within five to eight years a national logistics network that can deliver to anywhere in China within 24 hours. Alibaba also acquired a 10.8 percent stake in Singapore Post in May 2014 to further expand its international network.

## Logistics: The Key to E-success

The rapid growth of e-commerce and the subsequent logistics challenges mean e-commerce companies and logistics providers both have an opportunity to move quickly to address their problems. The solutions are unlikely to come from e-commerce in-house logistics since market growth will soon make these unsustainable. Real solutions are more likely to be found in strategic partnerships between e-commerce firms and third-party logistics providers. Indeed, within a few years, we expect to see a transformation in China's e-commerce logistics landscape, where e-commerce plus logistics providers will equal market success.

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