KPMG

Confederation of Indian Industry

Fulfilled!

India's e-commerce retail logistics growth story

August 2016

KPMG.com/in

Table of contents

Foreword

India's interest and curiosity in the e-commerce retail logistics is on a rise. The e-commerce retail market is among India's fastest-growing markets and growth continues to be driven by various supply and demand side factors. The increasing penetration of internet and smartphones across the country, increase in the number of urban households, ease of payment and compelling commercials and discounts combined with the convenience, access and variety that online shopping offers, act as market drivers.

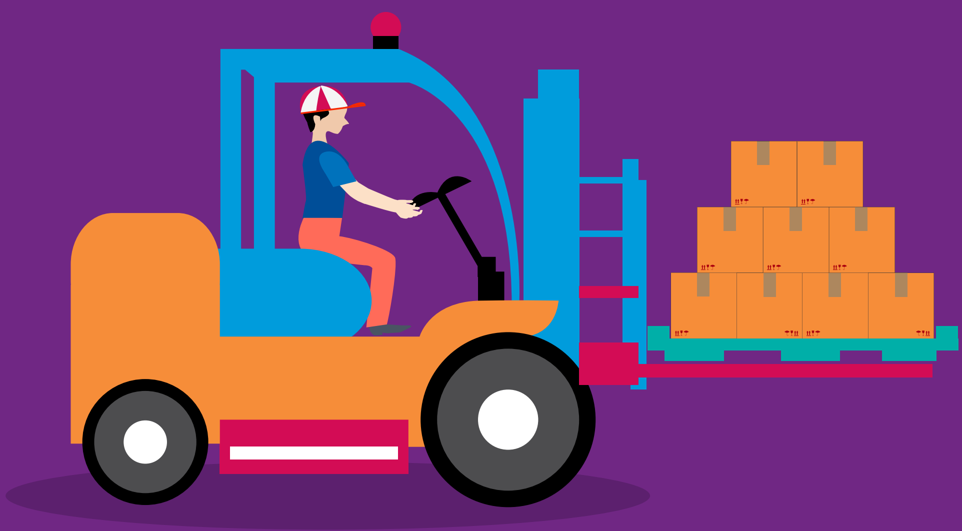
E-commerce retail companies continuously work to introduce innovative business models and technology-driven approaches. Convenient payment options, customer-friendly policies, speedy deliveries and easy returns drive customers to online channels. Further, concepts such as 'online and application (app) only' sales, 'by invite only' discounts, special discount coupons, cash-back policies and special online festivals continue to drive customers to shop online.

Retail e-commerce drives significant investment and value for the Indian logistics sector and has emerged as an important segment in this spectrum. Growth in this industry has resulted in the emergence of new service requirements and hence, a new class/section of logistics operators. Several e-commerce retail companies have also invested in building their logistics networks and capability, recognising logistics as a key variable to drive customer experience and reach.

The logistic needs of the industry are evolving rapidly with the changing business requirements. The industry has been witnessing a rapid scale-up in service orientation and complexity with an ever-increasing emphasis on service levels, increased penetration in tier-II and tier-III cities, surged Cash on Delivery (COD) services, geographic penetration and supply chain security requirements. This evolution takes place while coping with the legacy of infrastructure and regulatory woes, which have long hampered logistics efficiency.

Logistics is thus a key enabler for growth of the e-commerce retail sector and is increasingly emerging as a differentiator in terms of customer service and satisfaction. To build-up their scale while sustaining business margins, e-commerce companies and logistics providers need to work in collaboration to drive the industry forward.

Introduction-Overview of the Indian market



Overview of the Indian e-commerce industry

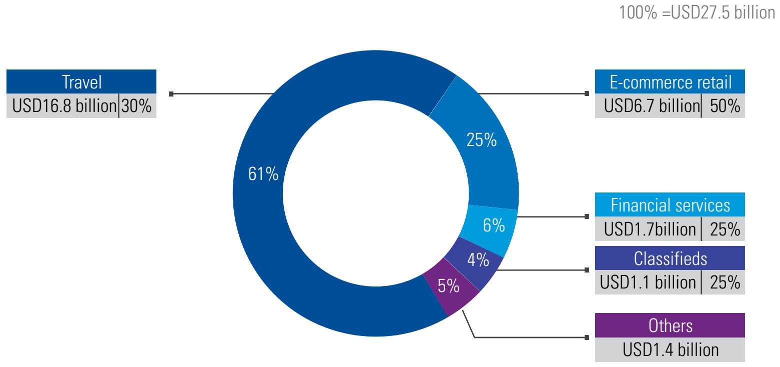
The e-commerce market in India was estimated at USD27.5 billion in 2016, and is expected to grow at a CAGR of 31 per cent to touch USD80 billion by 2020.[1]

The online travel segment comprises about 61 per cent of the e-commerce industry in India, including travel and e-ticketing websites. Ticketing accounts for the largest share of the online travel market, with domestic air ticketing driving growth.[2]

E-commerce retailing is the second largest and fastest-growing segment. This is followed by the financial services and classified segments, job searches and online matrimony which contribute to about 15 per cent of the market by value.

The state-owned Indian Railway Catering and Tourism Corporation (IRCTC) has emerged as one of the largest online sites, with the website itself, attracting about 45 per cent of all visitors to travel websites in India and 19 per cent of the total internet audience.[3]

Market size and growth by category (2015)



Source: KPMG in India analysis, based on industry observations and discussions, 2016
Note: Growth rate for categories, upto 2020

01. "Impact of e-commerce on SMEs in India", KPMG-Snapdeal Report
02. KPMG in India analysis, based on industry observations and discussions, 2015
03. http://www.iamwire.com/2011/11/irctc-face-of-e-ticket-in-india/1862, accessed on 19 November 2015

E-commerce retailing in India

The e-commerce retail market is among India's exciting and fastest-growing markets. In terms of GMV (Gross Merchandise Value), the market is estimated to be worth USD12 billion in 2016[4].

This industry has come a long way since its inception and is continuously gaining momentum and value. The Indian market is driven by factors such as increased penetration of internet and smartphones, focus on advertising, ease of shopping for customers, innovative payment options, deals and discounts and the rapidly changing lifestyle needs.[5]

The top three to four players in the market currently command over 80 per cent of the market share in the overall domestic e-commerce retailing space.[5]

Large players are diversified across categories and are building their capabilities to service several of these categories.

In the coming years, the e-commerce retailing industry is expected to witness the consolidation and emergence of few big players. Further, changes in the FDI regulations could also boost the penetration of major players and help them gain higher market share by FY20.

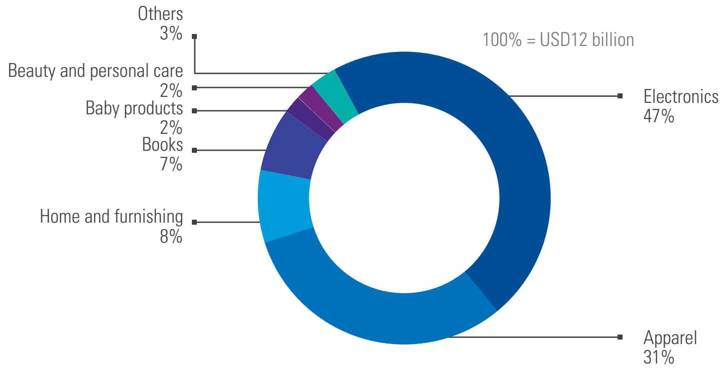
Electronics is currently the largest segment in e-commerce retail, projected to grow at a CAGR of approximately 43 per cent till 2020.[4]

The share of electronics in online retail is, however, expected to decline with higher growth in other segments such as apparel (CAGR approximately 50 per cent) and home furnishings (CAGR approximately 68 per cent) in the coming next four to five years.[5]

At present, the e-commerce retailing industry is witnessing approximately 1 to 1.2 million transactions per day, led by categories including apparel (approximately 43 per cent), electronics (approximately 24 per cent), and books (approximately 22 per cent).[5] The number of transactions may however fluctuate with seasonal variations, including holiday season and discounts.

04. KPMG in India analysis, 2015, based on industry observations and sector progress in 2016
05. KPMG in India analysis, based on industry observations and discussions, 2015

E-commerce retail market by value (2016)



Source: KPMG in India analysis, 2016, based on industry observations and sector progress in 2016

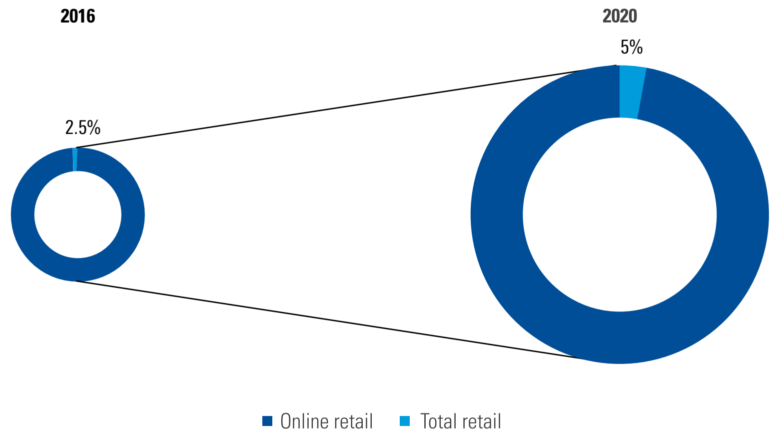
While India has an internet user base second only to China, only 14 per cent of the total internet users shop online in India, as compared to 30 to 35 per cent in Brazil and Russia, and 55 per cent in China.[6]

Online retail in India as a percentage of total retail

Indian retailers are yet to capitalise upon the power of the online space due to lack of internet penetration, along with a much smaller population of online shoppers and low transaction sizes[7].

The penetration of online retail in the total retail market is expected to rise from 2.5 per cent in 2016 to 5 per cent by 2020. Of the total organised retail market, online retail penetration is likely to increase from 6 per cent in 2014 to 25% in 2020[8].

Online retail vs. total retail in India



Source: http://www.emarketer.com/Article/Indias-Retail-Ecommerce-Sector-Small-Still-Growing/1014342, accessed 22 August 2016

06. http://articles.economictimes.indiatimes.com/2015-09-16/news/66604722_1_indian-internet-e-commerce-market-user-base, accessed on 19 November 2015

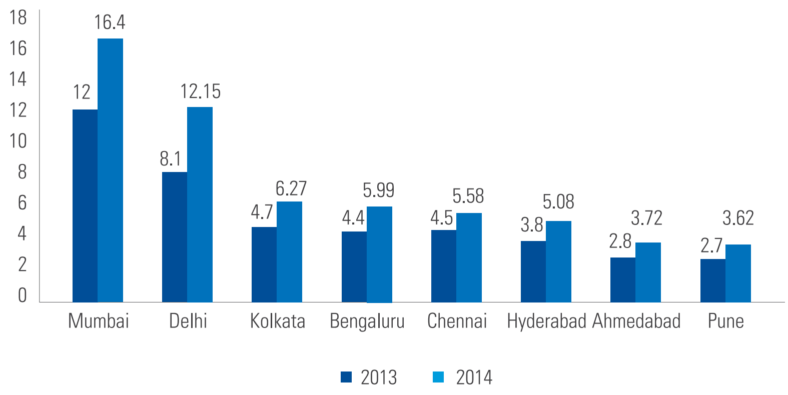
07. KPMG in India analysis, 2015, based on industry observations and sector progress in 2014

08. http://www.thehindu.com/business/Industry/digital-retail-2020-report-by-google-and-at-kearney-online-retail-will-drive-25-of-organised-retail-sales-by-2020/article8671796.ece, accessed 22 August 2016

Sector drivers and trends

Increasing online consumer base: Internet penetration is rapidly growing in India. The total number of web users in the country is over 243 million. The top four metros have a 23 per cent penetration, while the other four metros have gained 11 per cent internet penetration.

Internet users in metro cities in India (in millions)



Source: http://articles.economictimes.indiatimes.com/2014-11-04/news/55757553_1_internet-and-mobile-association-iamai-user-base, accessed on 19 November 2015

Despite the growth, only 19 per cent of the total Indian population has access to the internet compared to more than 40 per cent in other peer countries, such as Brazil, Russia and China. Moreover, out of this 19 per cent, only 14 per cent of the population has indulged in online shopping, compared to more than 30 per cent in other peer countries.[9] While the numbers are currently low, there is a steady increase in internet and mobile penetration, presenting an attractive opportunity for e-commerce retailers.

Changing lifestyle of the Indian consumer seeking convenience, comfort and variety: Online shopping in metro cities is often associated with ease and convenience, saving time and a hassle-free options. Besides, products are delivered to customers either on the same or the following day of placing an order. For medium to small towns, online shopping stores provide a wide range of domestic and international brands, which may not otherwise be easily accessible. Also, e-commerce retailing sites offer better deals and discounts round the year, which may not be the case with retail store shopping.

Increase in internet-enabled devices: The rapid growth in affordable electronic devices to access the internet, including personal computers/laptops, mobile phones (particularly smartphones), internet television and tablets are driving growth for e-commerce retailing in the country. Mobile phones (including smartphones) internet users are likely to grow 2.5 times by 2019, to touch 457 million[10] thereby enabling a corresponding growth trend for the online shopping industry in India. More than 50 per cent of the orders for e-commerce retail giants are generated via mobile apps. In terms of traffic, bigger e-commerce retail companies draw as high as 50 to 70 per cent of their total traffic through mobile.[11]

In the coming years, potentially 40 million shoppers in the age group of 19 to 24 years are expected to spend time and money online.[12] This trend is rapidly aligning with e-commerce retailing, to facilitate the sector's growth.

09. KPMG in India analysis, 2015, based on industry observations and sector progress in 2014
10. "Impact of e-commerce on SMEs in India", KPMG-Snapdeal Report
11. #shooting for the stars, FICCI-KPMG in India report on Media and Entertainment, 2015
12. http://www.consumerconexion.org/pdf/ACQ_OCTOBER_ISSUE.pdf, accessed on 19 November, 2015

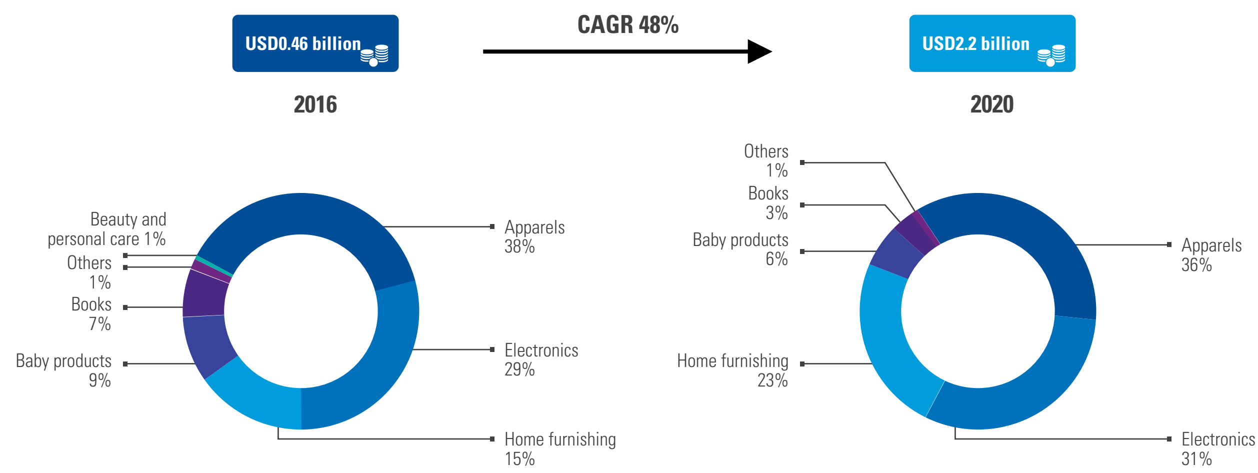
Role of logistics in e-commerce retail

Logistics is a key enabler for growth of the e-commerce retail industry and is increasingly emerging as a differentiator in terms of customer service and satisfaction. Logistics in e-commerce retail is evolving with growing business requirements, and is acting as an important lever for business growth. The logistics sector specific to e-commerce retailing in India was valued at USD0.46 billion in 2016 and is projected to witness a CAGR of ~48 per cent in the up coming five years to reach USD2.2 billion by 2020[11].

While many e-commerce retailers have partnered with logistic service providers to fulfil their business requirements, some players have also invested in building in-house logistics capabilities. While a large share (as much as 50 per cent) of the e-commerce logistics market is commanded by in-house logistics players, the other 50 per cent is controlled by third-party logistics (3PLs) service providers including traditional Logistics Service Providers (LSPs), e-commerce focussed logistics providers and India Post.[13]

However, apart from increasing competition and the rising demand from tier-III and remote locations, an addressable market is expected to be about 45 per cent of the total, which could be close to USD1 billion in 2020. Also, the focus is now shifting from standard to specialised deliveries, which requires 3PLs to invest in new capabilities and building infrastructure.[13]

E-commerce retail logistics market

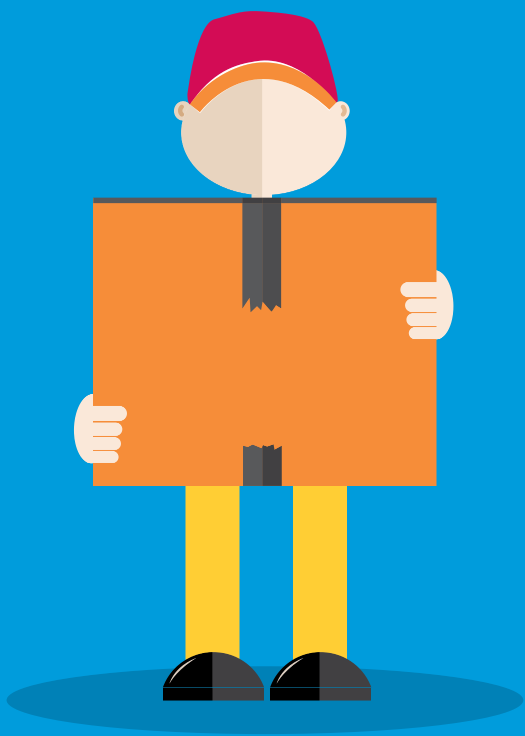


Logistics as a percentage of e-commerce retail sector in India ~7 per cent

Source: KPMG in India analysis, 2015, based on industry observations and sector progress in 2016

13. KPMG in India analysis, based on industry observations and discussions, 2015

Current state of Indian e-commerce retail logistics



Overview of e-commerce retail logistics

Products bought online undergo a range of processes before they finally reach the end customers. These processes have been outlined below:

First mile logistics: This involves picking up of goods from the sellers and transporting it to the e-commerce retailers fulfilment centre or directly to the mother warehouse, depending on the type of fulfilment model i.e. inventory-led or marketplace.

In the **inventory-led model**, products are sent to the fulfilment centre without packaging/labelling whereas in the marketplace model, products are completely packed and sent to the warehouse for storage.[1] After the stock arrives at the fulfilment centre, a physical check is carried out against the Advance ship notice (ASN)/transport challan, followed by a quality check, before the product is put away on the racks. The inventory is updated in the Warehouse Management System (WMS) and a stock report is generated.

In the **marketplace model**, products are checked against the arrival list sent from the seller and stored in the mother warehouse, before the products are sent for the last mile delivery.

Fulfilment: Post first mile logistics, its fulfilment, which involves picking and packaging of products once an order is placed on the website. After the order is placed, a pick list is generated and the product is picked and accordingly updated into the system. Then, the products are packed, labeled and moved to the mother warehouse, from where they are sent for last mile delivery.

Processing/sorting: After fulfilment, the products are sorted based on the delivery location at the processing centre of 3PLs and are connected further in the supply chain through line-haul depending upon the final delivery location.

Line-haul: This stage involves connecting the main supply centre with the main demand centre, via land or air depending on the transit time and cost matrix.

Airline haul is three to four times costlier than surface line-haul, however it has a lower transit time[1]. Recently 3PLs started off surface express movements for dedicated movement between two points, with shorter transit times than the normal surface line-haul movement.

Long distance line haul (more than 500 km) comprised 100 per cent by air earlier, the share of surface line haul in the long distance line haul has been increasing. Short distance line haul (less than 500 km) are predominantly done by surface with airline haul forming around five to10 per cent of the short distance line haul.

Last mile logistics: This phase involves the dispatch and shipping of products from the mother hubs and to the delivery hubs, from where they are shipped out to the customers.

This leg of the entire logistics chain is dependent on manpower and infrastructure in terms of the number of delivery hubs, delivery vans and bikes. Most of the 3PLs face difficulty in maintaining their manpower due to high attrition rate and therefore, face challenges in reliable deliveries.

Returns: Another important aspect of e-commerce retail is higher returns, which can be customer initiated or due to a logistics failure. The returned goods are cycled back into the inventory, restocked and relisted. These can however lead to complications like refund, exchange and replacement, which increases the overall cost of the supply chain. E-commerce retailers are introducing innovative mechanisms to reduce returns such as size-recommendation features to help shoppers make informed choices, reconfirmation via an email as well as an option of cancelling the order before the shipment is processed.

Returns comprise about 15 to 20 per cent of forward shipments; four to six per cent being attributed to logistics failure.[1] The rest are customer initiated returns, either before or after the delivery.

The returns of delivery could be an expensive affair for an e-commerce retailer, as it pushes up the average cost of delivery by nearly 50 per cent due to two-way courier charges. The return charges are usually INR35 to 50 higher than forward logistics.[1]

01. KPMG in India analysis, based on industry observations and discussions, 2015

Cash on Delivery (COD): The adoption of electronic payments as well as credit card penetration is low in India as compared to global averages.[2] This has led to the adoption of COD services to increase the number of transactions and acquire first-time customers rapidly. This also gives the consumer the choice to 'touch and feel' the product before paying for it. This option is expected to remain a prominent mode of payment and could hold as much as 50-55 per cent share in total shipments currently, with the growth of e-commerce retail in tier-II and tier-III cities[2]. The scenario may however change in the future, with increasing penetration of wallets and increase in credit card penetration.

COD also adds to the complexity of cash handling and leakages. The current remittance cycle of once in two weeks is seeing a shift towards a 48-hour remittance. On-time COD remittance is crucial to reduce the lockup of working capital. Usually, COD is a chargeable service and the charges can range from a fixed amount of INR21 to 35, to a 1.5 to two per cent of the product value[2].

E-commerce retail returns are as high as 20 per cent. Though COD has helped e-commerce retailing grow, the chances of returns are higher in categories with higher number of COD orders.[2]

Overview of the e-commerce retail supply chain

Source: KPMG in India analysis, based on industry observations and discussions, 2015

02. KPMG in India analysis, based on industry observations and discussions, 2015

Cost structure: E-commerce retail linked logistics

The logistics cost for e-commerce retailers can be split across the components of consolidation, sorting, line-haul and last mile delivery (this comprises a major chunk of the fulfilment costs). Return charges are additional to forward charges and therefore, may be in the range of 1.5 to two times of the forward charges[3]. Logistics cost are further a function of being local, regional or national deliveries. These cost functions may however vary by scale and the use of technology.

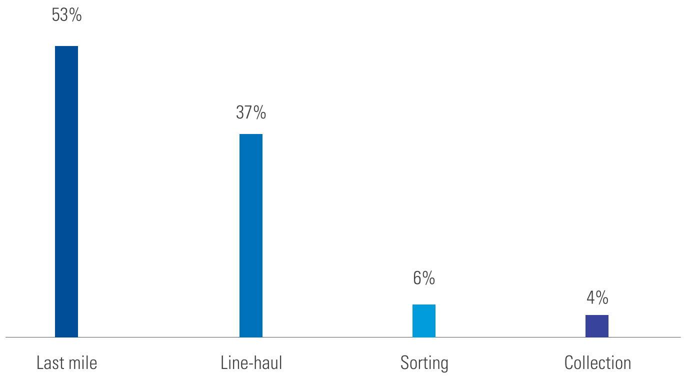
Further, a high percentage of returns (as high as 15 to 20 per cent) in the industry, and other incidental expenses such as misrouting and lost shipments add to the logistics costs.[3]

Also, other special deliveries such as time-bound and slotted delivery commitments along with the prevalence of the COD model increase the logistics costs.

Generally, all the standard delivery costs including COD and returns are borne by the e-commerce retailers. However, the cost for special deliveries or value-added services are borne by the customers.

Logistics cost as a percentage of revenue for e-commerce retailers may vary from five to 15 per cent depending on the category of products being offered.[3]

Components of logistics cost



Source: https://mettl.com/resources/media/IndiaInternet_Time_to_login.pdf?33.0.6, accessed on 19 November 2015

03. KPMG in India analysis, based on industry observations and discussions, 2015

E-commerce retail logistics: Business models

With the rapidly rising scale of operations, e-commerce retailing players have been strategically opting for viable operating models depending on the nature of products and operations.

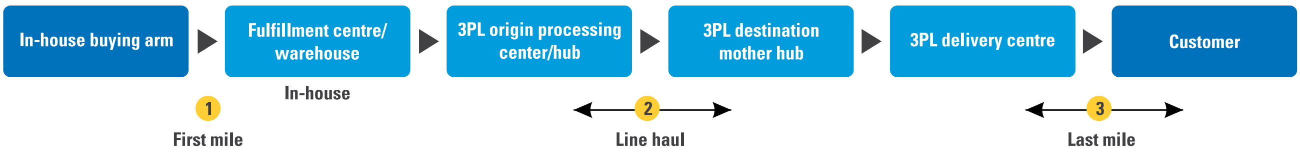
Broadly categorised, there are three kinds of models prevalent among e-commerce retailers:

Inventory-led - Inventory is purchased by the in-house buying arm of an e-commerce retailer and stored by them in their fulfilment centres. This model is becoming less prevalent because it is capital intensive and allows less scalability. However, it provides additional control on quality checks.

Under this model, the inventory is owned and maintained by online retailers. The model helps ensure better quality control and service level for the customers, since the online retailers have control and visibility on almost all the processes, from inventory management order till its fulfilment.

While this is a capital intensive model, with high overheads and substantial inventory risks, it is nonetheless helpful in creating trust and service credibility among users, leading to a better brand value and recall. This model is more popular for fast-moving, low-value multi range products.

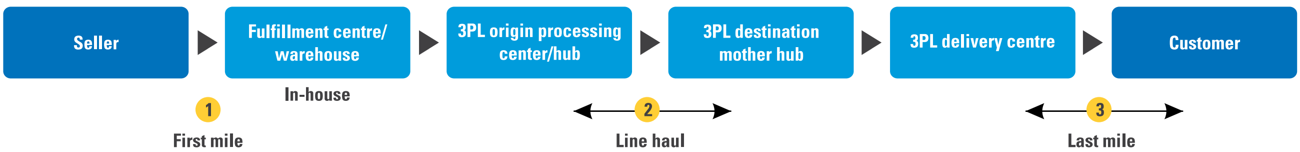
Inventory-led model



Source: KPMG in India analysis, based on industry observations and discussions, 2015

Fulfilled by an e-commerce retailer- This is a variant of the inventory-led model, wherein inventory is not purchased by e-commerce retailer; rather it is purchased by the sellers and stored in the fulfilment centres of e-commerce retailers. Quality checks, packaging and labelling are carried out by e-commerce retailers.

Fulfilled by e-commerce retailer

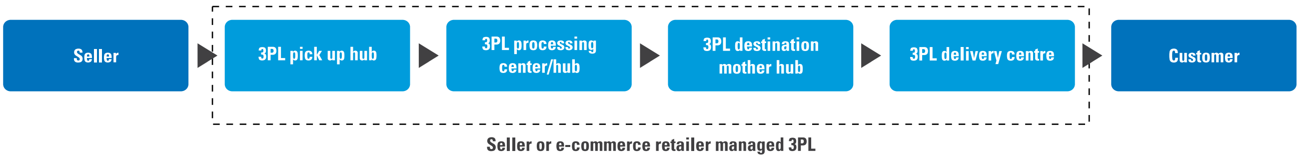


Source: KPMG in India analysis, based on industry observations and discussions, 2015

The marketplace model has two variants - storage/warehousing by an e-commerce retailer and drop ship. In the marketplace model, inventory is not stored by an e-commerce retailer. Packaging and quality checks are carried out by the sellers, and the items are then sent for storage in the mother warehouse of the e-commerce retailer, or directly shipped to the customers from the sellers' warehouses.

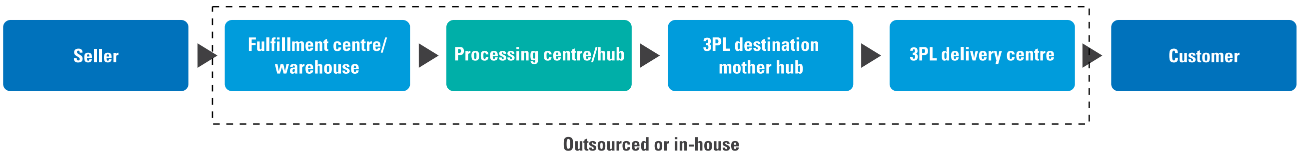
The marketplace model is being adopted for high-value products, while the inventory model is adopted for relatively lower-value, fast-moving products.[4]

Drop ship



Source: KPMG in India analysis, based on industry observations and discussions, 2015

Marketplace



Source: KPMG in India analysis, based on industry observations and discussions, 2015

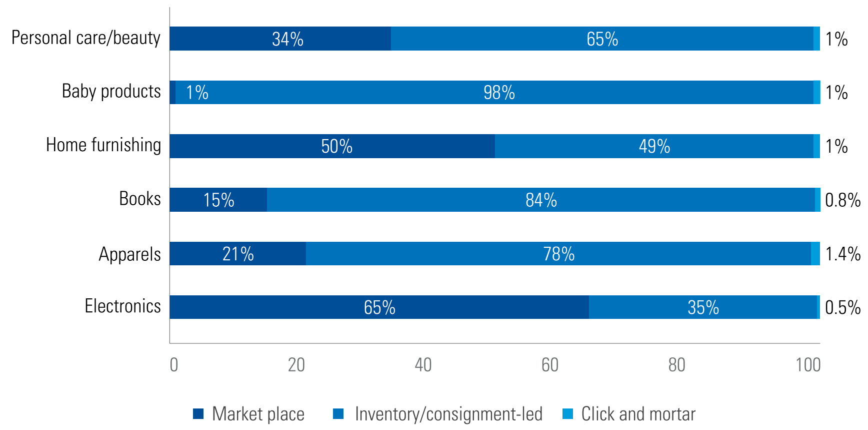
E-commerce retailing companies, in some of the smaller segments like home furnishing and baby products, own the inventory primarily because these are still considered to be slow growth categories on the internet, and as a result have limited sellers/merchants focussing on them.

04. KPMG in India analysis, based on industry observations and discussions, 2015

The click and mortar share is relatively smaller across categories primarily because these companies strategically plan to capitalise on the marketing efforts of established players, and limit their expenses to publicise their own website/shopping pages.

Currently, 75 to 80 per cent of e-commerce retail deliveries take place within 7 to15 days, while express and holiday deliveries comprise of only 20 to 25 per cent of the deliveries.[5]

E-commerce retail models by category



Source: KPMG in India analysis, 2015, based on industry observations and sector progress in 2014

Delivery services in e-commerce retail: Express and holiday deliveries

Logistics service providers offer a variety of delivery options in terms of a delivery time window. These include express deliveries — time-definite deliveries, same-day delivery, next-day delivery and holiday deliveries.

With the evolution of customer needs, the demand for occasion-led gifting and last-minute shopping have increased, leading to the emergence of same-day/ next-day deliveries.

Express deliveries help in building customer confidence and bridge the time gap between the offline and online buying experience; thus leading to higher number of repeat customers. These fall under premium services and are chargeable to customers, making it an attractive category for LSPs.

05. KPMG in India analysis, based on industry observations and discussions, 2015

E-commerce retail logistics: Sector landscape

The e-commerce retail logistics sector in India is evolving, with three distinct 3PL categories serving the sector - captive logistics arms, traditional logistics service providers and e-commerce retail focussed logistics service providers.

Some big e-commerce retailers have set-up their in-house logistics arms while others have made strategic investments in e-commerce logistics companies. In-house logistics arms help e-commerce retailers to run the logistics as per their business requirements, thus providing better control on the complete supply chain and resulting in better performance and customer experience.

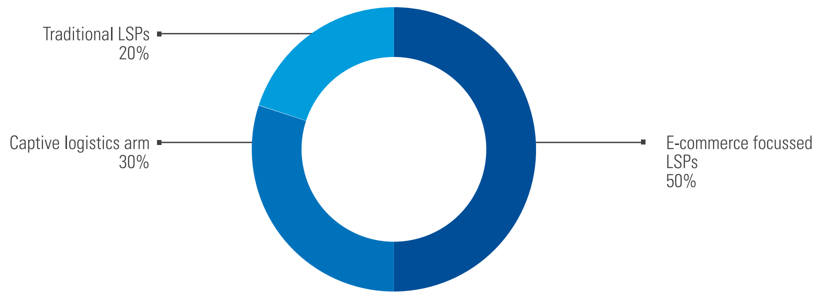
The three categories of players are described as follows:

Captive logistics arms: The captive arms of e-commerce retailers are assured of large captive volumes and some have also opened up to service other e-commerce retailers. They have a first-hand understanding of the sector requirements and have evolved their processes, IT systems and people practices to meet the requirements of the sector.

Traditional logistics service providers: These 3PLs have forayed into deliveries for the e-commerce retail sector. These LSPs have an advantage due to their established network and reach, along with their experience and expertise in providing logistics services pan-India.

E-commerce retail focussed logistics service providers: In view of the rapid growth in the e-commerce retail sector, dedicated LSPs for e-commerce retail have been established over the past three to four years, and have been able to capture approximately 50 per cent of the sector. This has primarily been due to better service, investment in technology infrastructure, wider range of product offerings, competitive pricing and their ability to reimburse cash quickly.

Share of LSPs in e-commerce logistics



Source: KPMG in India analysis, based on industry observations and discussions, 2015

Now, 3PLs are coming up with innovative logistics models such as outsourcing last mile deliveries to hyperlocal e-commerce logistics providers. There is also a growing trend of managing special services such as time-bound deliveries, card swipe at delivery and other in-house value added services, while outsourcing the standard deliveries to the 3PLs.

With the growing demand from customers and the need to attain a competitive advantage, quantum specialised services may increase in the near future, which could result in outsourcing of these services to the 3PLs as well.

Selection criteria for a logistics service provider

Reach is the primary step of filtration used by e-commerce retail companies in India. Currently, many logistics companies have an average reach of 4,000-5,000 pin codes, out of the 26,000 pin codes in India. A large number of logistics companies are well penetrated in the metro and tier-I cities; however, their reach is limited to smaller cities and rural areas.[6]

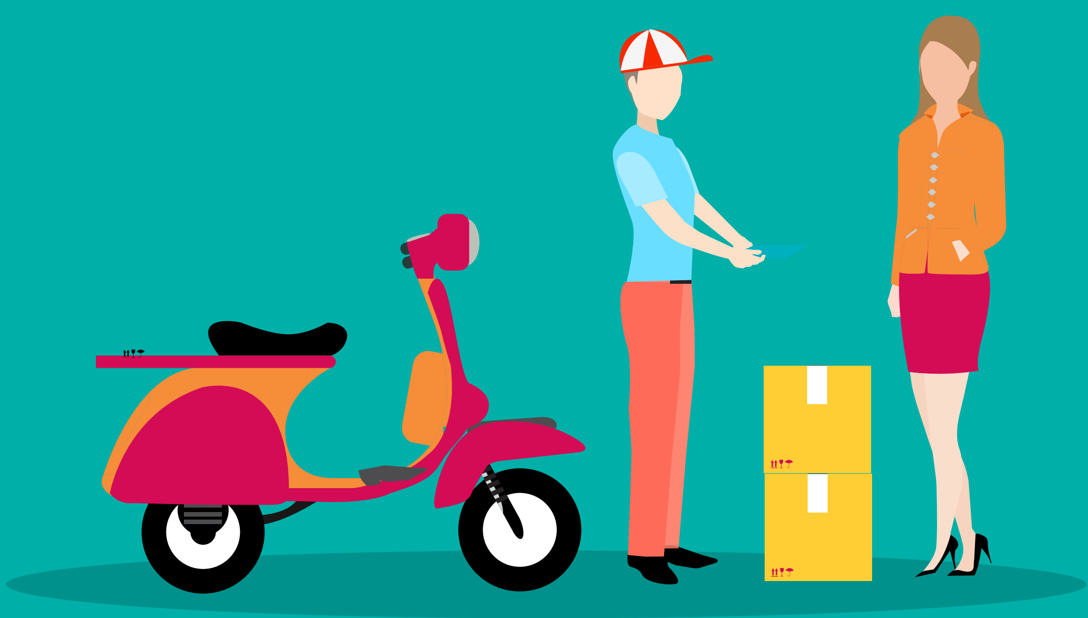
Value-added service offerings like COD, open and buy are critical in certain deliveries and is generally the next step in shortlisting the logistics providers. A few logistics companies offer this service in locations where they have their own branch and are not dependent on franchisees. These offerings are critical especially for segments like apparel and electronics. Beyond the cost of COD offerings, e-commerce retail companies also select a logistics partner that offers a quicker cash remittance cycle.

Along with the reach and spread of operations, the cost of delivery, discounts offered and the cost of value-added services also play a major role in selection of a LSP. Players serving the same locations at competitive rates due to higher scale of operations could be preferred by both e-commerce retailers and vendors.

E-commerce retailers also use certain performance parameters like 'on time delivery', 'returns percentage', 'deliveries per million', 'success rates', etc. to profile and rank logistics partners. The service quality of partners is measured by conducting random customer surveys and accounting of complaint rates.

06. KPMG in India analysis, based on industry observations and discussions, 2015

Trends shaping the Indian e-commerce retail logistics sector



Technology in e-commerce

The boom in the Indian e-commerce sector could be attributed to the enhanced use of technology, which has helped improve e-commerce in areas across the supply chain, inventory management, improved customer experience and loss prevention. From an increased usage of mobiles and tablets, the availability of COD services, superior technology platforms, inventory tracking and automated fulfilment centres, etc. have all been driving growth in this sector.

The increased penetration of internet services and faster internet services like 3G and 4G have contributed to the ease of selling and buying/purchasing products online. Additionally, with increasing smartphone penetration, the e-commerce retailers are also focusing on mobile apps as against websites. The use of digital marketing including mailers, digital billboards, mobile messaging and e-mails also help to target specific potential customers with special offers.

Online advertisements and electronic word-of-mouth via social networking sites further entice people to buy products. For instance, certain mobile companies exclusively sell via websites and mobile applications.

More than 50 per cent of the orders for e-commerce retail giants are generated via mobile applications. In this context, the COD option has been instrumental in driving retail e-commerce growth in a developing market like India, with low penetration of debit or credit cards or even bank accounts to make online purchases[1]. Features such as 'online only discounts', online coupons and free shipping facilities could further help in expansion of this sector. The growth in e-commerce along with low credit and debit card penetration has also led to an increased usage of mobile wallets in the country. One of the largest player in the mobile wallets market in India has more than 104 million users who carry out over 75 million transactions per month[2].

Application Programme Interface (API) integration of e-commerce retailers' system with the 3PLs system: The success of the e-commerce retail business is dependent on the speed of the supply chain. Data transfer for 3PLs is currently manual via e-mails, with little to no integration in the supply chain. In the near future, we can expect to witness an increase in usage of API and system integration between the e-commerce retailer and 3PL for real-time and an uninterrupted exchange of data and information, for immediate action and query resolution. This is likely to help improve the visibility of shipments and also ascertain reasons for delay, in case of any.

Launch of Card Swipe on Delivery: The sector is expected to move towards Card Swipe on Delivery (CSoD) and Point of Sale (PoS) machines for payments at the customers' end. Transactions on CSoD are expected to also increase due to a higher average selling price of products. This could help in ease of cash management required in case of COD orders and help to drive growth in the sector.

Focus on tech-enabled logistics: Large retailers are now investing in tech-enabled start-ups. Several food-delivery apps are now linked to the Google Maps app as well as to the taxi-apps, thereby allowing users to track and monitor deliveries from the restaurants. Also, the food-delivery apps are charging customers for delivery or reverse logistics. Some food tech-apps are also linked via GPS which allow the app to automoatically pick up delivery location instead of manual entry by customer.

Integration of systems in case of a reverse supply chain: Returns management is a key challenge specially with e-commerce retailers providing options of try and buy, and a return policy of seven to 10 days and upto 30 days in categories such as white goods. No 3PLs currently offer real-time visibility or updates on the status of reverse shipments. Now, 3PLs are moving towards dedicated returns management centres which carry out quality checks, relabelling and handover of cargo for return to warehouses of sellers or e-commerce retailers. The future is expected to witness investment in technology by e-commerce retailers and 3PLs for their reverse logistics supply chain, along with a robust control environment to tackle fraud and tampering during reverse logistics.

At present, e-commerce retailers opt for superior technology platforms and integrated order management systems for offering automated fulfilment centres. The sector is witnessing a shift with fast-moving mobile and social technologies. E-commerce channels are integrating their customer relationship management software, social media marketing and search engine enhancement practices for better supply chain management.

01. KPMG in India analysis, based on industry observations and discussions, 2015
02. Alibaba, Ant Financial invest about $680 million in Paytm, up stake to 40%, The Economic Times, accessed 6 Nov, 2015

At present, e-commerce retailers opt for superior technology platforms and integrated order management systems for offering automated fulfilment centres. The sector is witnessing a shift with fast-moving mobile and social technologies. E-commerce channels are integrating their customer relationship management software, social media marketing and search engine enhancement practices for better supply chain management.

Shift towards outsourced fulfilment models

The Indian e-commerce retail sector continues to grow and evolve. In its initial years, e-commerce retailers dealt with low product volumes, with limited geographic reach, and hence managing operations in-house was relatively less complex. Higher costs and limited external capability in case of outsourcing fulfilment also drove several e-commerce retailers to manage their fulfilment in-house. However, with an increase in the scale of business and the emergence of mid-tier e-commerce retailers, the sector seems to be undergoing a modular shift toward outsourcing the fulfilment process.

A shift to the marketplace model and convenience to vendors are expected to drive the demand for outsourced fulfilment centres. Category-specific focus and concerns further drive e-commerce retailers towards outsourcing fulfilment.

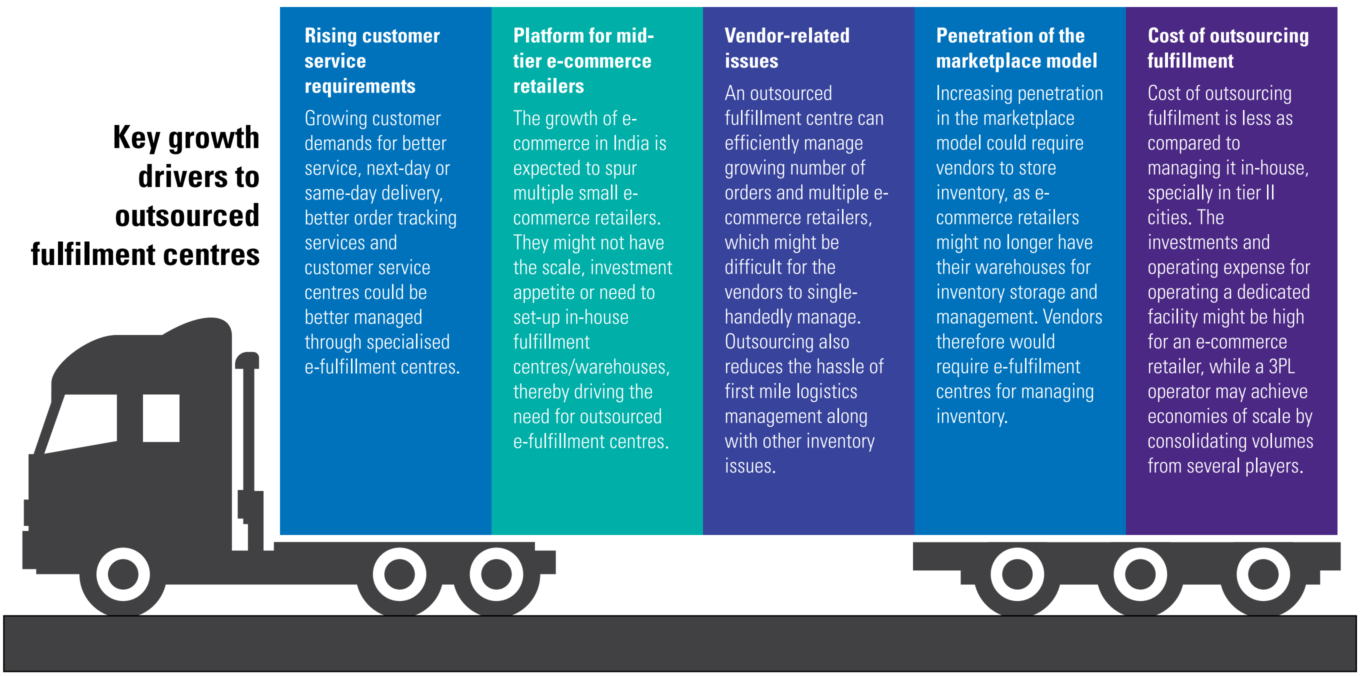
Further, large e-commerce retailers could manage their own fulfilment, but players who need the last mile fulfilment, such as in case of furniture, need to look at external fulfilment as they require hubs for the same near their markets.

Sustained growth in the e-commerce retailing sector in India is expected to drive the requirement for higher warehousing space. Beyond a certain scale, e-commerce retailers may find it difficult to manage multiple warehouses and move towards outsourcing. Below are the key drivers which help move/ enable outsourced fulfilment centres.

Novel parcel delivery models — Parcel lockers and PUDO (pick-up and drop-off) locations

Similar to European markets, the Indian e-commerce logistics market is now implementing the concept of PUDO (pick-up and drop-off) centres that allow buyers to collect or return goods ordered online.

For instance, existing outlets of some large logistics players are being converted into PUDO outlets, which will give online shoppers the option to collect their orders from offline centres located in convenient locations around homes and offices. Indian e-commerce companies are also experimenting with parcel pick-up from local grocery stores and petrol pumps to increase convenience and reduce the cost of last-mile delivery.



E-commerce retailers are also testing click & collect or automated parcel delivery terminals, which will be used to deliver and store parcels purchased online. Customers can operate these boxes using mobile phone apps or one-time passwords that are generated on entering the airway bill number, to collect or return parcels at convenience.

The services are aimed at offering delivery security, flexibility and confidence to costumers, in addition to reducing missed/ failed deliveries which push up the delivery costs significantly for e-commerce retailers. All these ideas underlie the common theme of addressing last mile delivery concerns that continue to the plague the rapidly growing e-commerce retail industry.

Faster delivery models

There is an increasing trends of same-day, 1-day or 2-day deliveries in the Indian e-commerce retail market for most product categories.

Additionally, international as well domestic retailers are offering deliveries not only within a day or two but also within a specific time-frame, 90 minutes to two hours, at an additional charge. This model has been particularly gaining popularities for grocery products.

Focus on rural distribution

Some of the largest e-commerce retailers in the country are now focusing on rural distribution models to cater to tier 3 and 4 town customers. Companies are building pick-up & drop points by tying up with local shops in rural areas and also employing local youth to smoothen the delivery process and also cut down on long delivery times as well as keep delivery costs under check. Specialist skill development and employment companies are helping to run these centres in rural India and involve rural folks in the e-commerce growth story.

Seller driven logistics

There is also an increasing number of instances wherein the sellers manage packing as well as dispatch, depending on the number of sellers, volume of transactions and geographical footprint of the seller base.

This program is however available to sellers who have been associated with the marketplaces for a considerable time and have been consistent in terms of sales as well as customer feedback.

Differentiating loyalty programs

Leading e-commerce retailers are also launching loyalty programs for customers, with subscription policies offering several benefits at a nominal annual charge. Some of the benefits include free shipping and returns, discounts on same day deliveries along with priority customer care.

The loyalty programs as a differentiating factor may be helpful in in tying back users to the site for purchases and increasing customer stickiness.

The e-commerce retail market if also witnessing a host of experience stores focusing exclusively on specialised categories, such as make-up, lingerie, baby-products, furniture, eye-wear, etc. The increasing variety of products available online also have varied logistics requirements with increased opportunities for logistics service providers.

The expectations of the customer base in India are now evolving. There is an enhanced focus on delivery costs than delivery time alone. The market is witnessing a shift towards customers willing to pay for logistics for speed, reliability and convenience.

Increased outsourcing of logistics functions

Logistic service providers in e-commerce retail industry are coming up with innovative logistic models such as outsourcing last mile deliveries to hyperlocal e-commerce logistic service providers.

There is also an increasing trend of e-commerce retailers managing special services such as time-bound deliveries, card swipe at delivery and other value-added services in-house, while outsourcing the standard deliveries to 3PLs.

However, with the growing demand from customers and the need to attain a competitive advantage, specialised services might increase in the near future and thereby, result in outsourcing these services to 3PLs as well.

Regulatory environment for e-commerce retail

The regulatory environment for e-commerce retail sector in India is constantly evolving and being liberalised given the huge potential to attract foreign investment and benefits to consumers.

In terms of the extant Foreign Direct Investment (FDI) Policy[3], 100 per cent FDI is allowed under the automatic route in Business-to-Business (B2B) trading activities including through e-commerce, which refer to buying and selling of goods and services including digital products over digital and electronic network. Such companies are only permitted to engage in B2B trading through e-commerce and not in Business-to-Consumer (B2C) e-commerce activities.

Until last year, there were ambiguities in foreign investment in B2C e-commerce segment[4] . The Department of Industrial Policy and Promotion (DIPP), Ministry of Commerce and Industry, in November 2015, permitted companies with foreign investment engaged in Single Brand Retail Trading (SBRT) activities to undertake B2C sales through e-commerce upon satisfaction of prescribed conditions[5].

03. Consolidated FDI Policy,2016 issued by the Department of Industrial Policy and Promotion dated June 07, 2016
04. Govt turns down FDI in retail e-commerce', Business Standard, 10 June 2015
05. Press Note No. 12 (2015 series) dated November 24, 2015

The key condition for carrying out online SBRT sales is to setup at least one physical brick-and-mortar store (offline sales) in India. In addition to above, inter-alia, FDI in SBRT activities (including via e-commerce portal) is subject to certain stipulations including compliance with the 30 per cent local sourcing clause (for FDI beyond 51 per cent), sale of products branded during manufacturing, execution of a legally tenable brand licensing agreement in India etc.

Over the last couple of year(s), the Indian government has also relaxed the sourcing norm in a calibrated manner. Under the extant FDI guidelines[6], initially, the companies engaged in SBRT activities were required to comply with the 30 per cent sourcing norm as an average of five years of total value of goods purchased from the opening of the first store in India, subject to adherence to certain other procedural conditions. However, for the foreign retailers employing 'state of art' and 'cutting edge technology' in manufacturing of their products and unable to source locally from India, the Indian government has recently introduced [vide Press Note No. 5 dated June 24, 2016] an option to seek a complete exemption from local sourcing for a period of three years, subject to prior government approval. After completion of the exemption period, the SBRT retailer in the next five years will have to meet the 30 per cent sourcing norm at an annualized average rate of the total value of the goods. Thereafter, they need to comply with the norm on an annual basis.

It is important to note here that the Indian brands are equally eligible for undertaking SBRT. It has also been provided that certain conditions of the FDI policy, such as products to be sold under the same brand internationally and investment by non-resident entity/entities as brand owner or under legally tenable agreement with the brand owner, shall not be made applicable in case of FDI in Indian brands. Further, it has been further provided that the Indian brands should be owned and controlled by resident Indian citizens and/or companies, which are owned and controlled by resident Indian citizens.

The above liberalisations in the FDI regime, especially in the context of retail trade, have significantly contributed to revival of the foreign investor confidence in India. This is evident from the fact that up to March 31, 2016, the government cleared 89 proposals for foreign investment in retail trade resulting into a significant FDI inflow into the country[7].

Another significant development in the e-commerce space from a regulatory standpoint is the introduction of guidelines [vide Press Note No. 3 (2016 series) dated March 29, 2016] governing FDI in marketplace e-commerce models. The new guidelines clearly lay down the definition of 'inventory based model of e-commerce' [inventory of goods and services is owned by the e-commerce entity and is sold to consumers directly] and 'market place model of e-commerce' [provision of information technology platform by an e-commerce entity on a digital and electronic network to act as a facilitator between buyer and seller], thereby permitting 100 per cent FDI in a marketplace model of e-commerce under automatic route, subject to certain prescribed conditions. FDI in inventory based model of e-commerce on B2C basis is prohibited.

The prescribed stipulations entail prohibition on offering of discounts or exercising ownership on inventory, no direct role in influencing pricing decisions of vendors, ceiling on each vendor/group company account to not exceed 25 per cent of total sales effected through marketplace model etc[8].

In terms of indirect taxation, the excise tax is levied at the central level, while sales tax at the state levels, along with octroi/entry taxes in select jurisdictions.

The market potential for fulfilment centres is estimated to increase from about USD34 million in FY14 to approximately USD430 million by FY20, depending upon a commodity-wise preference to outsource and vendor preferences.[5]

The rules governing sales tax for commercial and e-commerce retail shipments also vary across regions with regards to the required forms, their validity, exemption levels, treatment of promotional schemes/discounts etc. Also, recently many states (such as Bihar, Uttarakhand, Gujarat etc.) have amended their entry tax laws to levy entry tax on e-commerce transactions. Some of the e-commerce players have even challenged such entry tax provisions before High Court as regards their constitutional validity. Ambiguity and grey areas of interpretation of indirect tax laws are hampering the growth of e-commerce retail sector. The Goods and Services Tax (GST) is however expected to alleviate these concerns to a large extent.

Further, from a corporate tax standpoint, it has always been a challenge to ring-fence the digital economy and bring to tax the transactions in India. The Organisation for Economic Cooperation and Development (OECD)'s Action Plans[9] on Base Erosion Profit Shifting (BEPS) have suggested some measures to adopt global taxation principles for e-commerce viz. modification of PE concept, progressive tax on the bandwidth usage of websites, withholding tax by financial institutions while making payments for digital goods/services.

06. Para No 5.2.15.3 of the Consolidated FDI Policy, 2016
07. 'Government clears 89 single-brand retail, 1 multi-brand proposals', Economic Times, August 01, 2016
08. Para No. 5.2.15.2.4 of the Consolidated FDI Policy, 2016
09. BEPS Action Plan 1: Address the tax challenges of the digital economy

In light of the recommendations of the OECD BEPS Action Plans, the government recently introduced in the Finance Act, 2016[10], an Equalisation Levy (EL) for taxation of digital transactions. The EL is form of tax (although enacted through a separate code in the Finance Act and does not form part of the Income Tax Law) to tax the e-commerce transaction/digital business. The rate of EL is 6 per cent[11] payable on the amount of consideration for specified services received or receivable by a non-resident not having Permanent Establishment (PE) in India, from a resident in India who carries out business or profession, or from a non-resident having permanent establishment in India. The levy is currently applicable only on business to business (B2B) transactions, if the aggregate value of consideration in a year exceeds INR1,00,000 (approximately USD1,500)[12].

Currently, the 'specified services' have been defined to include online advertisement, any provision for digital advertising space or any other facility or service for the purpose of online advertisement. However, the Indian Government may notify additional transactions to fall within the purview of EL in times to come.

A favourable regulatory environment would be key towards unleashing the potential of e-commerce. The real and perceived benefits of allowing FDI in the Indian retail sector such as efficiency in operations, creation of jobs, investments in the back-end infrastructure and its overall contribution to economy also hold true for the e-commerce sector. In the unorganised retail sector in India, e-commerce is not a threat, considering factors such as a minimal product category overlap, the perishable nature of goods sold at grocery stores, small transaction size for such goods and different target consumer profiles.

Against the above backdrop, certain questions still remain unanswered while new questions have been raised with respect to the changes in the FDI norms with respect to e-commerce. The FDI norms fail to elaborate the meaning of 'maintaining level playing field' and 'influencing price' with respect to marketplace e-commerce activities. Further capping the amount of sales by a particular vendor creates distress with big e-commerce companies who have merchants that account for large chunk of sales. The much-needed capital infusion, however, needs to be facilitated either by further relaxing the existing FDI norms applicable to multi brand retail trading through e-commerce or by encouraging domestic sources of funding.

—

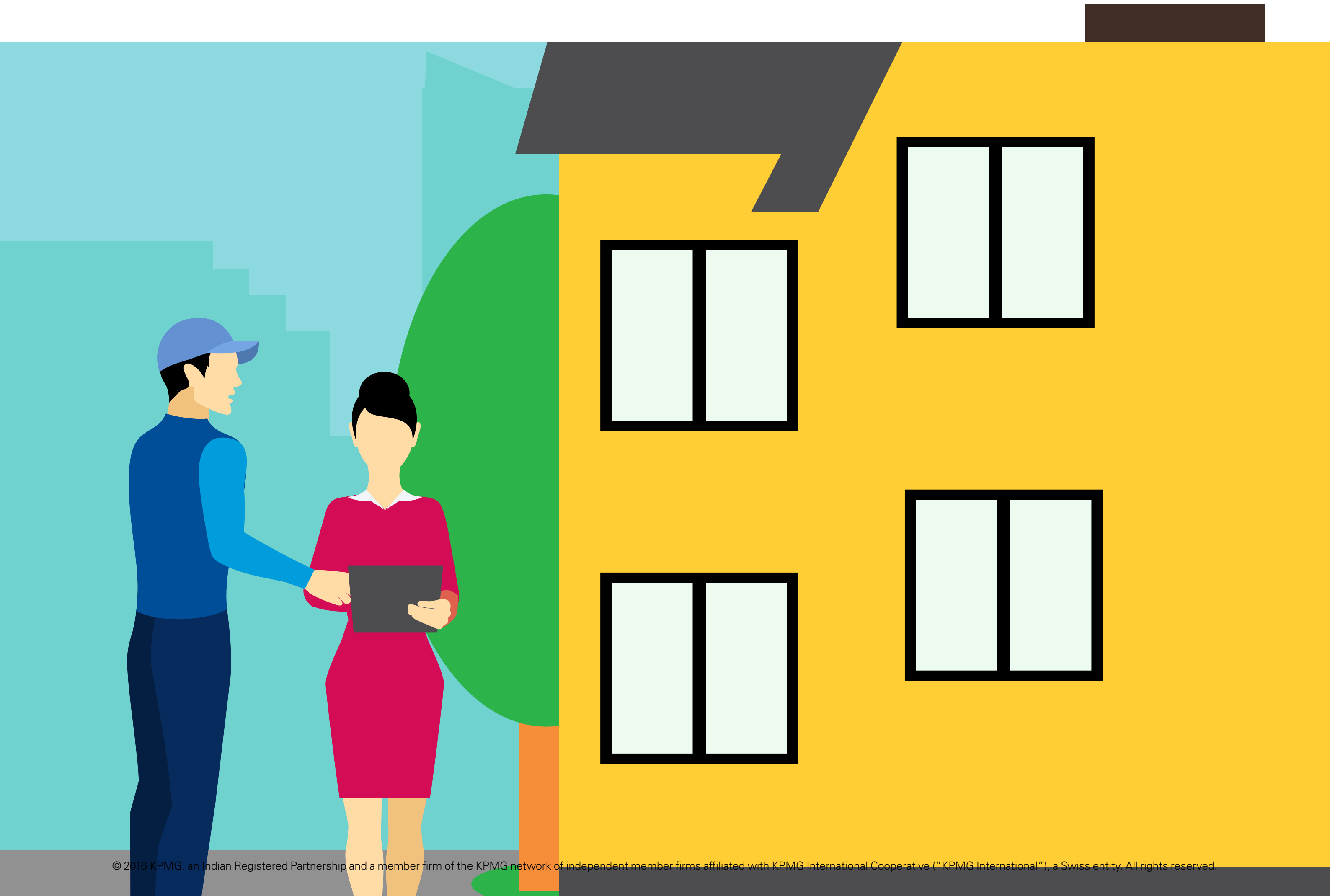
10. Chapter VIII, Finance Act, 2016
11. Section 165 of the Finance Act, 2016
12. USD1 = INR 66.66

The implementation and roll-out of GST could simplify indirect tax and jurisdictional laws for e-commerce. Also from a GST standpoint, the model GST legislation includes an entire chapter on e-commerce and has prescribed information-disclosure requirements plus a tax collection at source model for both goods and services. A distinction in the model GST legislation between assessees actually supplying goods and services (whether through their own electronic platform or otherwise), and assessees merely providing the electronic platform to facilitate such suppliers is welcomed. This is also in parity with Press Note 3 by DIPP for e-commerce marketplace players. Further, finer aspects (including requirement of forms for movement of goods, determining place of supply for goods etc.) are expected to get clear once the final GST legislation along with rules are rolled out.

The government, regulatory agencies, logistics service providers, payment processing gateways, other supporting parties and e-commerce players are beginning to step-up and address these challenges. The GST is a positive step toward simplifying the tax structure on the sales of goods and services.

The varied interpretation of intricate tax norms and complex inter-state taxation rules make e-commerce operations difficult to manage and to stay compliant to the Indian tax code. The government would require to study the taxation and jurisdictional laws to address the multi-jurisdictional nature of e-commerce transactions.

Taking a holistic view of the above developments, coupled with progressive liberalisations in the FDI Policy and evolution of tax laws governing digital channels, e-commerce is poised for an exciting period of growth and investment, with simpler and legally compliant business structures.



Way forward

The e-commerce logistics sector continues to evolve rapidly with changes in the business environment.

With an expansion in reach and service levels, LSPs need to evolve to offer a portfolio of a range of services, as well as consistently innovate to keep pace with the rapidly changing dynamics of the sector.

The sector is expected to witness increased penetration in tier-I and tier-II cities. More than 50 per cent of e-commerce shipments are destined for cities/towns outside the regular metropolis; with focussed local campaigns being undertaken to increase buyers and sellers from smaller cities[1]. The increase in purchase through mobile applications is one of the reasons for a shift in the customers' base from metros to tier-I/II cities.

The share of COD transactions by volume currently is between 60 to 70 per cent, but the volume is expected to increase in the future[1]. A growing trend towards the marketplace model has also prompted e-commerce retailers to open fulfilment centres near the sellers, with fulfilment centres in tier-I cities. This has led to outsourcing of fulfilment centres to 3PLs who have better presence at these locations.

In terms of mode of transport, air transport has traditionally been the preferred mode for long distance movements.[1] However, it increases the logistics cost per unit. However, with the prevalence of the marketplace model, long distance movements are expected to reduce, thereby leading to express surface movements becoming the preferred choice of transport.

The sector is also expected to witness increased focus on returns management. Some 3PLs operate dedicated returns management centres for end-to-end returns management, including a quality check, relabelling and handover of the cargo for return to the warehouses of sellers or e-commerce retailers. The sector is thus expected to witness consolidation for better services and profits.

The e-commerce retail sector is also witnessing new kinds of services such as slotted deliveries and evening/ morning deliveries to increase customer satisfaction. This is expected to add more responsibility on 3PLs and hence, they need to step-up their capabilities to provide customers a better service experience.

E-commerce logistic service providers need to keep pace with the changing needs of the business, whether launch of value added services to match growing customer expectations or expanding reach into the semi-urban/ rural areas to enable new customer acquisition. In a nutshell, logistic service providers need to be flexible as per the demands from the customers.

01. KPMG in India analysis, based on industry observations and discussions, 2015

E-commerce logistics: Risks and challenges

Procurement/inventory management

- Absence of a defined process for vendor selection/quality checks
- Price variances across multiple on-boarded vendors for the same product
- Ineffective inventory planning/monitoring of open purchase orders
- Challenges associated with warehousing/monitoring of stock levels.

Customer order management

- Multiple tax rates across geographies - compliance of sale invoices to tax laws
- Monitoring delivery related service level agreements/pending orders
- Products sold at higher than maximum retail price/negative margins
- Promotion codes used after expiry/beyond the defined criteria.

Logistics and shipping

- Non-compliance with agreements - cash collection/reconciliation/on-time delivery
- Selection of a cost effective and efficient third party logistics vendor for select pin codes
- Challenges associated with route planning/consolidation of shipments
- Vendor payments based on shipment.

Returns, replacement and refunds

- Incorrect/delays in processing of customer refunds (online and COD)
- Replacements/refunds processed to customers without a receipt of goods/adequate quality checks
- Absence of a robust process to monitor compensation provided to customers
- Non-monitoring of customers with significant number of returns.

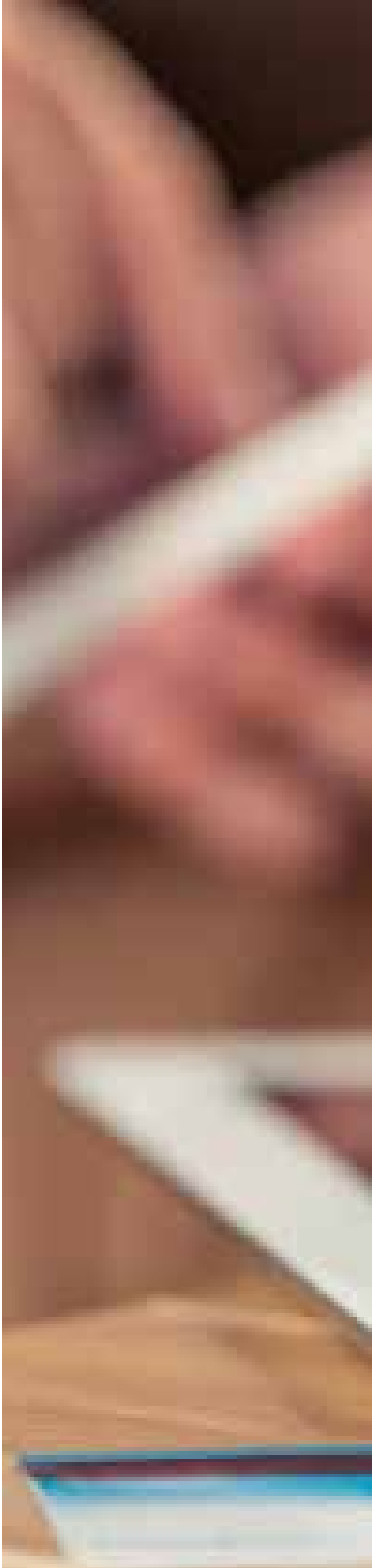
Customer support

- Categorisation of customer complaints and response mechanisms
- Customer dispute resolution
- Monitoring delivery-related service level agreements (customer and seller management)
- Review and monitoring of access controls (order cancellations, refunds, etc.).

Reconciliations

- Goods reconciliations: order quantity vs shipped quantity vs. delivered quantity
- Amount received from payment gateway vs value of prepaid orders vs payment gateway charges
- Purchase order vs invoice vs physical goods
- Logistic vendor invoice vs quantity, weight and area code of deliveries assigned.

Source: KPMG in India analysis, based on industry observations and discussions, 2015



Conclusion

The sustained growth of over 50 per cent in the Indian e-commerce retail sector underlines the need for 'efficient and sustainable logistics operations' for various sizes of e-commerce retailers in India. The growing prominence of the marketplace model and the increasing penetration of e-commerce are likely to alter the way e-commerce logistics functions in India.

A combination of delivery speed, upgraded warehousing infrastructure, better service capabilities, technological advancements and innovations could be some of the must haves for the e-commerce LSPs in the longer run.

The growth in e-commerce in coming times shall be driven by rural and tier II III cites. These cities are expected to account for approximately 55 per cent of the orders[1]. E-commerce retailers are expected to continue to shift towards the marketplace model, with multiple merchants across categories from various parts of the country. Warehouses are being planned across the country to serve a dispersed set of vendors and customers. This decentralisation of demand and supply could also help improve the market share of surface movement.

Technology and logistics are key to the success of e-commerce businesses. Unlike other sectors where logistics is a support function, logistics here enables growth in e-commerce retail with respect to strategy and execution.

Time-definite deliveries including same-day and next-day deliveries as well as delivery with in a particular time window could continue to gain prominence in the future. The service reliability for these segments is expected to remain critical for the success of e-commerce retailers and logistics providers. The ability to handle cash for COD transactions and timely cash remittance could be imperative for servicing the sector.

The increasing network of e-commerce-focussed retail logistics providers and increasing emphasis of full-fledged LSPs on the e-commerce retail sector are expected to lead to intensified competition in the market, putting pressure on costs and margins. The concept of captive logistics arms might be hived off since it is not a core business for e-commerce retailers. Also, while the e-commerce logistics sector is expanding at a rapid level, it might be difficult to scale the logistics infrastructure and capabilities at a corresponding pace; thus leading to an increase in outsourcing as opposed to building in-house services.

In the short-term, specialised services such as time bound deliveries, card swipe at delivery and other value added services could be managed in-house, while standard deliveries could be outsourced to 3PLs. However, in the long-term, with an increase in specialised services, these could also be outsourced to 3PL providers.

The government's plan to implement GST is a positive step toward simplifying the tax structure on sale of goods and services. The government would require to study the taxation and jurisdictional laws to address the multi jurisdictional nature of e-commerce transactions and provide a clarity on tax laws for transactions involving information products.

The emerging trend of outsourcing e-commerce retail fulfilment centres to logistics providers could depend on a commodity-wise preference to outsource and vendor preferences. The scale of operations could play an important role in maintaining cost efficiency, and at the same time addressing delivery-related challenges for e-commerce retailers. Henceforth, logistics providers could expand strategically and functionally to capture the opportunities emerging out of an e-commerce proposition.

Acknowledgement

We take this opportunity to thank our authors, Prahlad Tanwar and Kirtika Doger for helping us develop an insightful publication. We also extend a word of gratitude to Jaideep Ghosh, Shreedhar Prasad, Anujesh Singh and Angad Singh for providing strategic direction to the report and the initiative at large. We hereby acknowledge the efforts put in by our Brand Management and Marketing Compliance team- Hussain Rahat, Priyanka Agarwal, Sharon D'silva and Sanjeev Bhar. We thank CII for their continued guidance and support.

01. KPMG in India analysis, based on industry observations and discussions, 2015

Contact us

Nitin Atroley
Partner and Head
Sales and Markets
T: +91 124 307 4887
E: nitinatroley@kpmg.com

Jaideep Ghosh
Partner and Head
Transport, Leisure and Sports
T: +91 124 307 4152
E: jaideepghosh@kpmg.com

Prahlad Tanwar
Director
Transport and Logistics
T: +91 22 3091 3417
E: prahladtanwar@kpmg.com

KPMG.com/in

Follow us on:
kpmg.com/in/socialmedia

Printed in India.