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Indian Express Industry – 2018

A multi-modal play in building the ecosystem

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Executive Summary

Indian express industry is one of the fastest growing markets globally, however it has a small share of less than 2% of the global market. The Indian express industry grew at 15% CAGR over the past 5 years and is estimated to be INR 22,000 cr in FY17.

Domestic express industry, comprising of shipments transported and delivered within the country, is a key constituent of the Indian express industry and is estimated to be worth INR 17,000 cr. The surface express constitutes INR 12,000 cr of the total domestic express while air express constitutes the remaining INR 5,000 cr.

The share of surface express in domestic express has improved by 16 percentage points in the last five years, mainly due to active substitution of air express by surface express. With GST implementation, higher efficiencies are expected in the surface transport and the share of surface is expected to improve in the future.

International express has grown at 12% CAGR over the past five years and is estimated to contribute close to INR 5,000 cr (23% by value) to the Indian express industry. Growth of medium and small scale industries, growth of manufacturing facilities and deployment of technologies facilitating API integration and superior tracking and tracing have been the key drivers of international express.

Outbound express is estimated to have grown at 15% CAGR over the past 5 years and contributes close to 60% (in terms of volume) to the total international express while inbound express contributes the remaining 40%. The outbound express mainly consists of samples, documents and goods such as apparel, leather articles, handicrafts, gems, etc. The inbound express on the other hand consists of samples from various industries and non-samples such as components of industrial goods, auto component spare parts, equipment, lifesaving drugs, and aircraft parts etc. which are time-sensitive.

Customer-wise segmentation of the express services

The express industry is further classified into two segments - B2B (business to business) and B2C (business to consumer). Companies involved in manufacturing and engineering are the key users of B2B express services. Some of these industries include electronics (OEMs), digital goods, auto-components, textiles, pharma, medical devices, and industrial engineering. The B2B segment at a domestic India market level is estimated to be around INR 10,000 cr.

On the other hand, in the B2C segment e-commerce is the largest contributor with more than 70 per cent contribution, followed by Banking and Financial Services Industry (BFSI) and other document deliveries belonging to education, telecom or government and public services sector. At a domestic level the size of this segment is expected to be around INR 7,000 cr.

Express landscape for e-retail

E-retail, as a part of the B2C express segment, is estimated to contribute INR 5,000 cr to the express industry in FY17. In terms of volume, close to 1.3 mn shipments are shipped daily – including the forward fulfilments and returns.

The disaggregated nature of demand and supply, high variability and the complexity of returns for e-retail has challenged the traditional express operations. However, this has also unlocked many opportunities for the express players by providing newer avenues for value addition. The highly competitive nature of e-retail players has translated to an increased competitiveness in the express landscape with the players adopting innovative models based on technology and collaboration to address the prevalent challenges and opportunities to create differentiated value propositions. The dynamic and competitive nature of the e-retail segment has brought in many new trends for the industry such as adoption of alternate delivery methods, customer centric delivery, shift from air express to surface express, increase in regional movement, adoption of technology and expansion to remote locations.

Express industry – a key facilitator of the Indian economy

The express industry is labour intensive and creates employment for a large number of people directly and indirectly. The industry also uses services such as transportation, rail, warehousing, airport services, and cargo handlers leading to significant indirect employment. It is estimated that the industry employs around 1.6 mn people both directly and indirectly.

The express industry also contributes to the national exchequer by way of direct and indirect taxes. In FY17, the express industry contributed around INR 3,000 cr by way of Service Tax and another INR 2,000 cr through Custom Duties besides contribution in the form of direct taxes around employment creation.[1] The social security benefits offered to employees in compliance to the laws of the land are immense, thereby improving quality of lives.

In addition, express industry plays the role of a business enabler by providing logistics links to its customers. It helps businesses reach out to their customers and partners by providing time bound shipment services. Express delivery services are becoming increasingly important for the competitiveness of companies - maximise the efficiency of their production activities, minimise their inventory costs, provide a superlative customer experience, etc. Small, medium and micro enterprises are engaging with express providers for high quality, rapid delivery services that they cannot not provide themselves. Express industry is also vital for companies looking to connect their products/services to the entire country on domestic side and to the world on export/import markets.

The way ahead

The need for time bound delivery services is expected to increase with economic growth and development of trade and commerce in the country. The Indian express industry is expected to grow at a CAGR of 17% and reach a size of INR 48,000 cr in the next 5 years. This growth will be primarily driven by the growth of e-commerce, significant demand from the small and medium B2B segment and growth of country's cross-border trade.

The regulatory policies and the infrastructure readiness are the key factors impacting the logistics performance of Indian express industry. Regulatory changes such as GST implementation are expected to give a fillip to the industry by reducing complexities related to movement of goods and boosting the overall demand in the economy. Improvements in the air infrastructure, customs, export-import policy and e-way bill could also substantially benefit the industry.

The express industry would continue to hold a larger play in employment creation. The industry is expected to increase its employee base to close to 2.6 mn to manage the increased scale and size of operations. The level of outsourcing is expected to increase leading to indirect employment creation in varied sectors such as transport services, rail, warehousing and airport services etc.

In addition, keeping in pace and to sustain the growth momentum, the industry is poised to make significant investments in infrastructure, technology, data analytics, security and automation. These investments are expected to benefit the economy multi-fold.

[1] Department of Revenue, Central Board of Excise and Customs, Deloitte Analysis

India's position in the global express industry

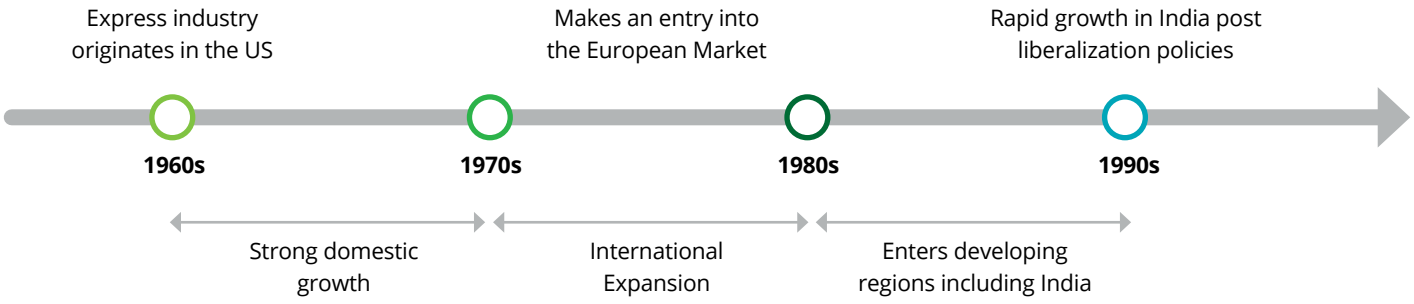
Evolution of the express Industry

The express industry is estimated to have originated during the 1850s in the United States (US) when the US congress sanctioned overland stage route that carried mail and parcels. This resulted in the growth of surface transport and led to the first transcontinental mail and passenger service and aided the rise of the pony or stage coach system. Private express companies such as Wells Fargo capitalized on these changes to create formidable enterprises for mail and package delivery. The growth of industry was further propelled in the 1900's with the emergence of companies such as UPS using motor vehicles and air transportation. UPS started its operations in 1907 and utilized motor vehicles to deliver packages from grocery and drug stores to customers' homes. Success driven expansion led to the company pioneering the world's first air express service in 1929. Subsequent technological advancements and changes in US shopping patterns propelled express carriers to upscale and offer services such as two-day air delivery to major East and West Coast cities.

These advancements eventually resulted in the emergence of express delivery in the 1960s. Around this time, the industry gained prominence around its ability to provide value added, time bound, reliable, on demand, integrated door-to-door logistics for documents, parcels and merchandise goods which neither the postal services nor the freight forwarders could provide.

Subsequently in the late 1970s, de-regulation of air cargo in the US led to rapid growth. The industry moved out of the US and turned into a global business in the 1980s. Globalization and an increase in cross-border trade played a significant role in the global expansion of the industry. The industry was also given impetus by the further development of the global aviation sector, since express service providers would often ship large bags of documents on commercial flights.

Evolution of the global express industry



Express delivery services evolved from solely delivering parcels and documents, which were high-value low-weight items, to now also providing delivery services for specialised items such as high-tech products and general airfreight commodities. Express vendors are increasingly providing more value-added services to customers to enhance the delivery process. The regular users of express delivery services in the global context are mainly knowledge-based and high-tech industries like financial services, automotive, IT, telecom, pharmaceuticals etc. However, the recent times have witnessed the emergence of e-commerce as large customers of express industry.

While the express industry was established in the late 1960s, organized express delivery services began in India only during the 1980s. International express service companies entered the market around this time through tie-up with Indian players. As the scale of operations and expertise grew, these companies also expanded their coverage to large non-document shipments in the country as well. The industry also got a big boost in the 1990s, post the policy liberalization which saw some radical changes in the transportation regulations, freeing up the overall economy.

Global market landscape

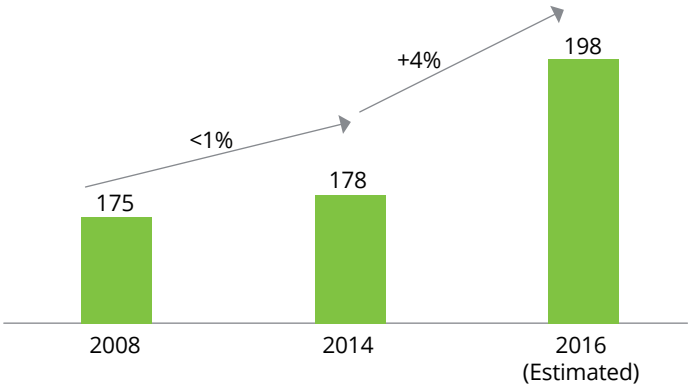
Market size & segmentation

Express, which is an important part of the global Courier, Express, Parcel (CEP) industry, has operators which provide guaranteed, fast, reliable, on-demand, worldwide, integrated door-to-door shipments. The deliveries are usually completed within one to two days with the usage of both airways as well as road transport, to ensure timely delivery.

The global express market is estimated to be around USD 198 bn in 2016.[2] The market posted a higher growth of 4% CAGR in the period 2014-16 as compared to 2005-14 owing to the rapid increase in e-commerce transactions.

[2] Technavio Global Courier Express and Parcel Market 2016-2020, Accenture: Adding Value to Parcel Delivery, 2015

Global express market (USD bn)



Source: Technavio Global Courier Express and Parcel Market 2016-2020, Accenture: Adding Value to Parcel Delivery, 2015

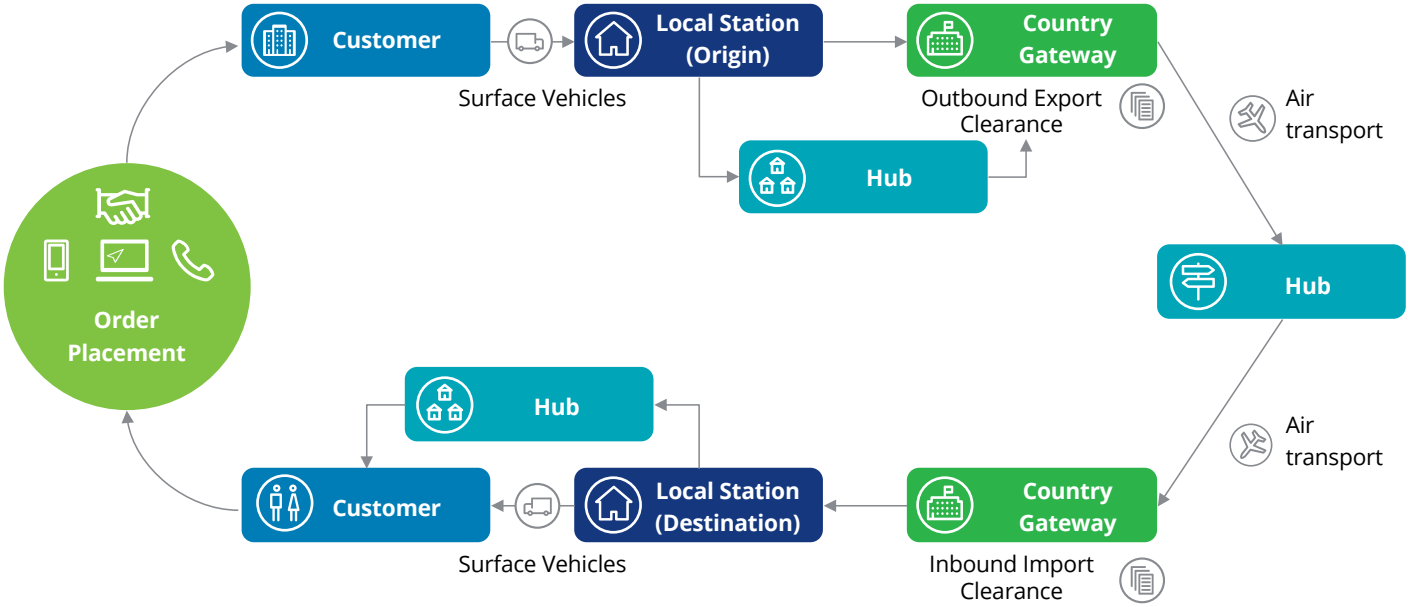
The express segment is expected to continue its growth trajectory and gain increasing share of the total CEP market. In 2016, express delivery was estimated to have a 73% share of the total market which is expected to increase to 75% by 2020.[3]

Overall value-chain of the express industry globally

Operating in the express delivery industry requires extensive infrastructure comprising of warehouses/ hubs as well as a strong fleet of transportation vehicles across all modes (air, rail, sea and land).

Some of the key steps involved in international express delivery service are outlined in the figure below:

Steps involved in providing express delivery service

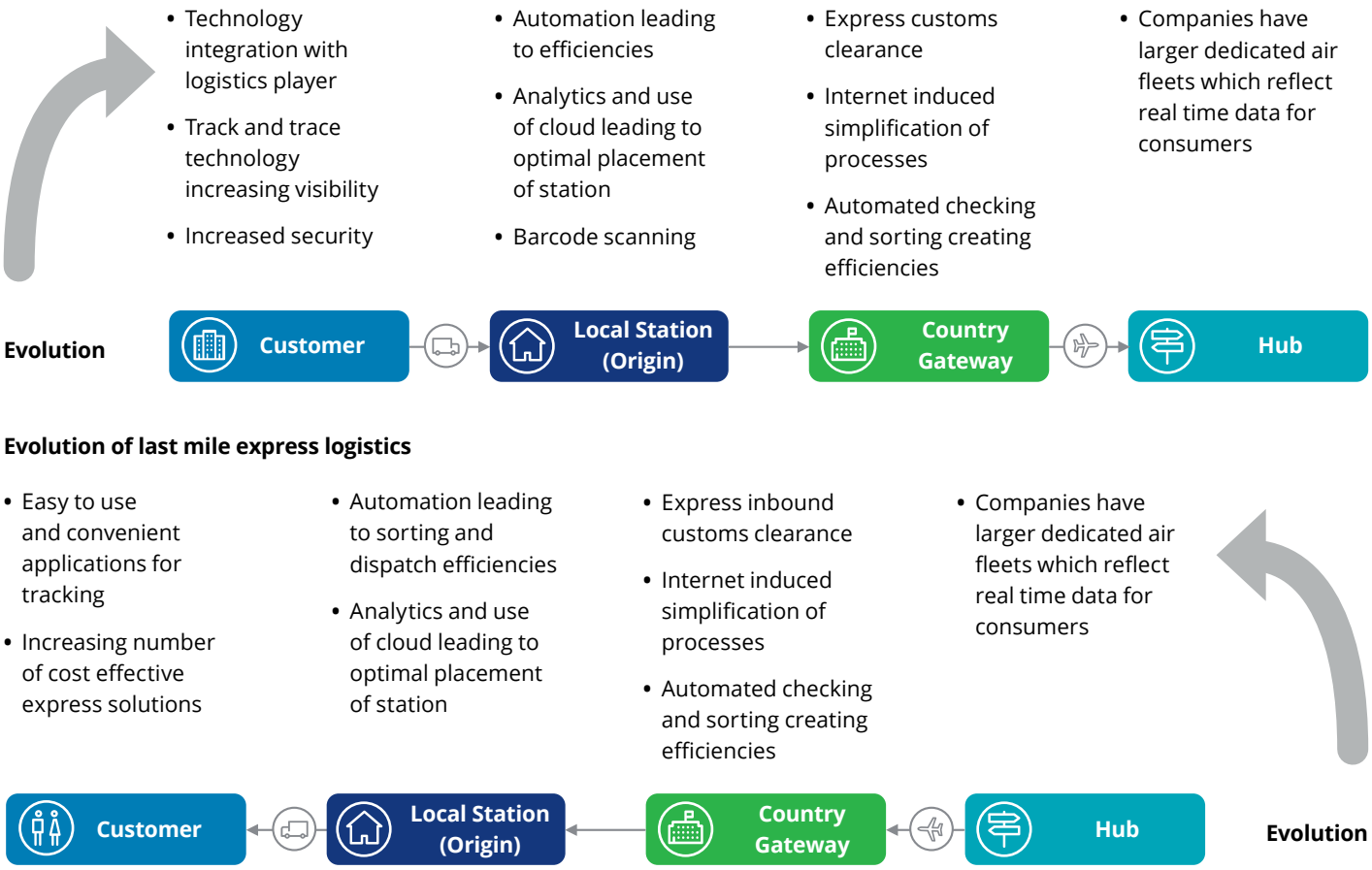


Source: Deloitte Analysis

[3] Technavio Global Courier Express and Parcel Market 2016-2020

Large companies in the express industry commonly use a hub & spoke network (shown in figure above) for package collection. Shipments are collected from the source locations and brought to central processing facilities (depicted by the 'Local stations' in above figure). Through these facilities, collected packages are either routed to customers through hubs or distributed to them directly. Utilizing such a network allows improved tracking, which in turn allows greater transparency and security.

Evolution of first mile express logistics



Source: Deloitte Analysis

It can be noted in the figure above that the value chain is witnessing a significant disruption due to evolving technologies as well as newer business models. With increasing internet penetration, the consumers are more digitally enabled now, which has resulted in a shift in their bargaining power. Rise of the digital consumers has led to more competition in the industry and has necessitated steps by industry players to provide greater transparency across the value chain. Industry players have continually needed to develop new resources and capabilities across each step of the value chain to meet the consumer demand.

Supply landscape and trends

With the increase in trade, particularly cross-border transactions, the demand for express delivery services have seen significant growth. The industry, however, is fragmented and localized in most parts of the world with many local vendors catering to each logistics segment. The competition has also been increasing through new entrants given the expected growth prospects of e-commerce. Companies are continually seeking a competitive edge by constantly adapting to the changing landscape.

The global market is dominated by three (previously four before FedEx's acquisition of TNT) large players, also referred to as 'integrators'. However, as noted above, the industry still remains highly competitive. Summary of the three leading industry players ('Integrators') is given in the table below:

Summary of the leading express players globally

Company	Revenue (USD Bn.) (Reporting Year)[1]	Express share of revenue (%)	Company express segment insight[4]
Deutsche Post AG (DHL)	65.8 (CY 2016)	24%[2]	International markets- with increasing cross border ecommerce and a growing importance of SMB's- account for over 90% express revenue
United Parcel Service (UPS)	60.9 (CY 2016)	NA	Increasing number of light weight packages leading to a reduction the per piece revenue
FedEx Corporation	60.3 (FY 2017)	58%[3]	Express is the only segment with increasing operating margins for the company

Source: 1. Latest annual reports, 2. Revenues from express division considered, 3. Revenues from FedEx Express and TNT Express considered, 4. Deloitte Analysis

While all three of these players have global presence in over 200 countries, their market share varies greatly by region. The integrators are making investments to expand their capacity organically and modernize their network and are also expanding inorganically to widen their capabilities.

FedEx has focused on expanding its business operations in new and emerging markets. To achieve its strategic initiatives, in May 2016, it acquired TNT Express, the world's fourth largest operator for USD 4.8 Billion[4]. The acquisition is seen to have enabled FedEx to expand the portfolio of services it offered in the ecommerce sector in Europe and tap into TNT's strong network in the Middle-East, Africa and the Asia Pacific regions.

Deutsche Post (DHL) on the other hand, focused on expanding its service offerings and entering new markets through investments in order to maintain its growth trajectory. To this effect, in 2015, the company invested USD 108 million[5] in its American hub facility to upscale its e-commerce and global trade capabilities, expanded its cold chain network services for the life sciences and healthcare sector in Europe and won a major contract with BMW to manage its UK aftermarket parts distribution. In 2016, the company further enhanced its e-commerce capabilities by acquiring a minority stake in Relais Colis, a French ecommerce logistics specialist.

Apart from these large logistics providers, each country has their postal service providers that also provides express and other value-added services e.g. USPS (US), Royal Mail (UK), La Poste (France), India Post with Speed Post (India). These postal services also often have international presence, but it is limited compared to that of the integrators. Individual countries also have smaller players that operate within a specific geography or niche segment. Furthermore, in most countries, there are a large number of even smaller, low-cost low-price players that cater to mostly document and small parcel delivery services within a given city or region.

Demand landscape and trends

The main users of express industry include companies from small and medium enterprises, with occasional or regular shipping needs or larger volume businesses. Key industry segments that use express services include engineering and manufacturing, transportation, retail, health services, and financial services.

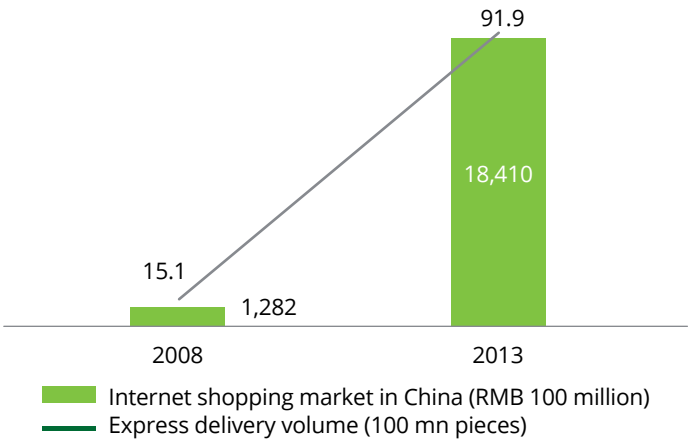
Customer habits have been evolving rapidly in the last decade with the increasing penetration of internet and popularity of e-commerce. Going forward, the influence of e-commerce, both in the B2B and B2C segments, is expected to continue growing as the overall e-commerce industry, in major growth regions like Asia-Pacific, is expected to continue showing double-digit growth and increasing cross-border trade.

E-commerce

In the B2B segment, many firms are now driven towards greater adoption of e-commerce by a pressure to compete at a global level and as a result, e-commerce is a growing trend for businesses as they expand and reach new customers. In the B2C

[4] FedEx website news article | FedEx and TNT Express Agree on Recommended All-Cash Public Offer for All TNT Express Shares
[5] BusinessWire news article | DHL Is Investing $108 Million in Its Americas Hub at the Cincinnati/Northern Kentucky Airport

Express industry in China



Between 2008 and 2013, China's internet shopping market registered a CAGR of 70% to reach RMB 1.8 trillion by 2013 Driven by the demand for quality service and speed and safety in delivery, the express industry saw its volume grow 6x in the same time period.

Source: Deloitte and Development & Research Center of The State Post Bureau Report: China's Express Sector Development Report, 2014

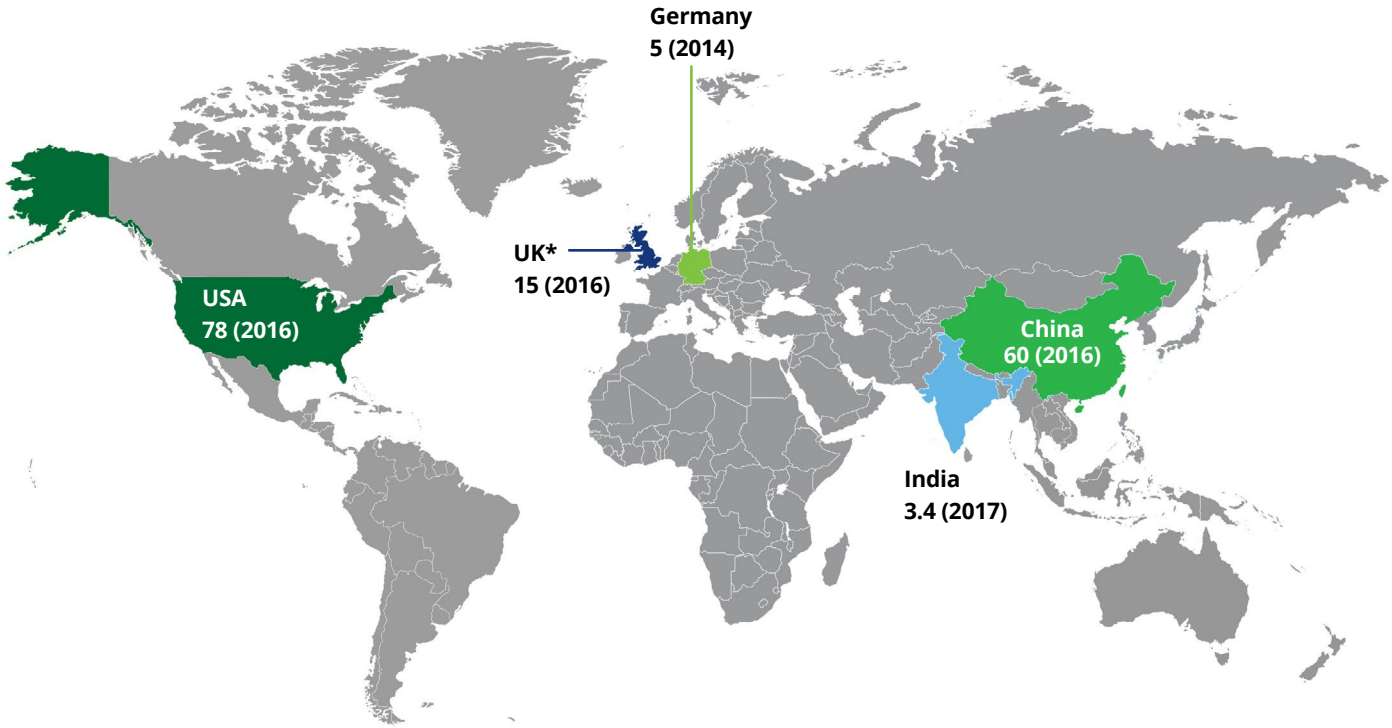
segment, North America and Europe have traditionally been the largest markets but growth is fastest is the Asia-Pacific region. There is also an increased influence of cross-border e-commerce in the B2C segment. For example, in China alone, the e-commerce market growth has contributed to express industry size growing multifold, primarily express logistics driving the demand.

As B2C e-commerce demand continues to grow, the role of last mile logistics has taken the spotlight with a number of investments and start-ups seen in the space around the world. Increasing demand for speed of delivery and expanding internet penetration leading to a greater number of regions active online has led to significant disruption in the last mile market in recent years. Technologies, especially automation around parcel sortation, smart delivery vehicles and aviation infrastructure, addition of aircrafts (including dedicated cargo versions) besides other means of rail and sea/river links are expected to play a key role in the evolution of this industry.

Key Express regions and countries

North America continues to be the largest market for express delivery services, led by the US. The US market is divided into

Key countries in the global express market (Express market size in USD bn, year)



*UK number estimated based on 2014 market size and forecasted growth between 2014-2019

Source: USA: Firstresearch news article: Express Delivery Services Industry Profile, 2017, UK: Mintel Report | Courier and express delivery market posts strong growth as young men splash out on next day services, 2015 and Deloitte Analysis, Germany: Bundesverband Paket & Express Logistik (BIEK) Report: KEP-Studie 2015 – Analyse des Marktes in Deutschland, China: BusinessWire news article: China Express Delivery Industry Research Report 2017-2021 - Research and Markets, India: Deloitte Analysis

two main segments: the large networked couriers capable of nationwide and international deliveries and the smaller local services that transport packages within a metropolitan area. FedEx and UPS dominate the national market, while the smaller services segment is far more fragmented.

In Europe, U.K and Germany are the leading express delivery markets. In line with the other key markets, ecommerce has played an important role in helping Europe showcase strong growth in its express delivery services.

China, the second largest express market globally, has also grown significantly due to the booming e-commerce industry. Express volume in the country grew from 1.2 billion parcels in 2007 to 31.3 billion in 2016[6]. The industry has also benefited from supportive policies issued by both the central and some local governments. Some of the largest players in the local market include SF Express (S.F Holding), STO Express, YTO Express Group, Yunda Express (Yunda Holding Co), ZTO Express. Asia-pacific is a key region for global express trade with China and India being the largest markets, both of which are expected to show strong growth going forward as well with consumption levels picking up.

Regulatory environment

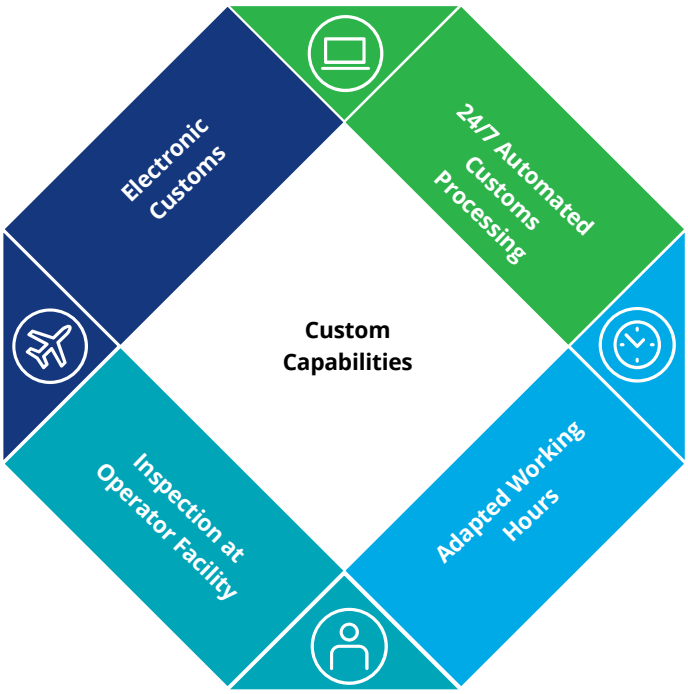
In most countries, express delivery is a part of the logistics industry which is characterized by a number of government and industry standards, regulations and protocols like Postal Regulatory Commission (PRC) and United States Postal Service (USPS). The regulations cover a broad range of protocols that vendors must adhere to, including standard procedures for screening of packages and trade laws between countries.

The regulatory environment for the express industry varies by geography. Most countries have their own rules and regulations in place. The regulatory environments can range from highly restricted to fully liberalized. For example:

- Countries like France and Australia reserve certain product categories for delivery by the government postal service but allow express players to delivery these at price multiples
- In countries like the U.K and Germany, the environment is fully liberalized

The global trend has been moving towards liberalization. Governments have been realizing the benefits of competition in the express industry such as improved efficiency and service levels. Customs capabilities for example have improved over the years.

Capabilities such as electronic customs has made it easier for logistics players to have their documentation accepted and processed. This has also resulted in 24/7 automated processing of documentation. Inspections at the operator facilities have improved TAT for most companies and negated the use of third party broker induced inspection delays.



Going forward, the liberalization trend is expected to result in innovations in the industry, especially for autonomous vehicles. Recognizing the trend, in 2014, an expert committee of the United Nations added a new rule to the Vienna Convention of Road Traffic, which is ratified by over 70 countries as the foundation for international road traffic regulation that allows for more road testing. It represented a significant step forward in the development of automated driving. National governments are also reviewing regulations to allow self-driving vehicles in specific circumstances where automated technology is proved to be sufficiently mature and safe. Early adopters are expected to be developed countries like USA, UK and New Zealand. Similar is the case for unmanned aerial vehicles (UAVs). Currently, the testing is still quite limited in scope and mostly done in rural areas but as clarity on regulations, especially in markets like the US increase, adoption rate for these technologies is also expected to accelerate.

[6] BusinessWire news article | China Express Delivery Industry Research Report 2017-2021- Research and Markets

Key growth drivers

Global express delivery market is expected to continue showing steady growth. Growth is primarily expected to be driven from high growth markets in Asia Pacific like India, China and Japan which will continue to benefit from the surge in e-commerce demand. A summary of the key growth drivers for the industry are outlined below:

Overall economic growth

Revival of the manufacturing sector and overall economic growth has given a boost to the express industry. Increased business activity, particularly growth in automobile production, electronic product shipments, and food & beverage industry will lead to an increase in demand for express delivery services. As consumption expenditure, particularly in Asia pacific continues to show strong growth, express delivery services industry is expected to benefit from the same.

Growth in e-commerce

Urbanization and increased disposable income have led to rapid growth in the e-commerce industry. The total B2C retail ecommerce sales reached USD 1.9 trillion in 2016 with sales in Asia pacific alone crossing the USD 1 trillion mark. This trend is expected to continue with the industry growing to over USD 4 trillion by 2020.[7] The increase in trade on online portals has driven the growth of the global express industry.

However, this growth is also expected to put pricing pressure on logistics players as e-retailers continue to search for ways to reduce their logistics expenses as volumes pickup, thereby increasing focus on leveraging the benefits on economies of scale.

Increasing value-added services

Express delivery players have evolved their business models with deeper engagement to provide a varied range of value-added services to customers and consumers. These include assortment and grading of products, order processing through storage, picking, packaging, management information systems (MIS) and analytics services in the logistics supply chain, mobile tracking applications, online tracking of parcels, SMS and e-mail alerts, hub-to-spoke collection centres, etc.

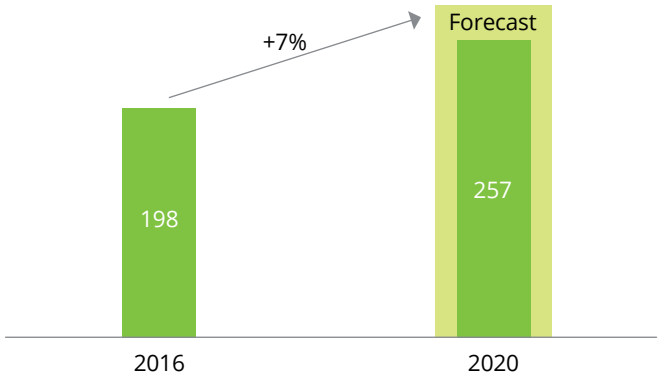
Changing consumer behaviour driven by technology innovations

The advent of social media, ecommerce, smartphone and affordable data has provided consumers with greater buying choices, eliminated information asymmetries and has also reduced switching costs. This has increased their bargaining power, and led to a demand for greater convenience, more transparency and higher service levels. To meet customer expectations and to increase visibility over their supply chain, businesses are increasingly adopting express services and innovative solutions.

Future of the express Industry

As per global reports, express market is expected to grow at 7% CAGR and reach USD 257 bn by 2020. To differentiate themselves from competition, companies are likely to innovate, both in terms of business models and technologies implemented.

Global express market forecast (USD bn)



Source: Technavio Global Courier Express and Parcel Market 2016-2020

Business models

The global express industry has been witnessing significant changes. The industry is moving forward from integrators and postal companies competing for market share to increasing experimentation and innovation as well as increased investment in last-mile delivery start-ups all around the world. The rise of e-commerce is a major contributor to this evolution as increasing smartphone and internet penetration have necessitated enhancement of last-mile delivery services. The situation is further fed by the changing retail models. There is an increased focus on speed and reach which resulted in players like Amazon to increasingly invest in fulfilment centres. Even traditional retailers like Macy's have invested in improving speed of service by partnering with delivery partners to provide fast and reliable deliveries from their stores. As a result of this fast-changing landscape, the express industry has seen a number of different strategies being adopted and new players entering the market.

Diversification and Expansion of the Logistics Business by big Industry Players

Companies have been pursuing automation opportunities and use analytics to identify inefficiencies in order to reduce costs in the mail segments. As the mail volumes decline globally, with increased utilization of digital communication, companies are emphasizing on efficiency and increased profitability in the mail business.

[7] Emarketeer news article | Worldwide Retail Ecommerce Sales Will Reach $1.915 Trillion This Year, 2016

In 2015, FedEx announced its acquisition of Genco Distribution System Inc., one of the largest third-party logistics providers in North America

- Through the acquisition, FedEx offers a more comprehensive portfolio of logistics services, complementing its transportation services
- Helps FedEx expand its e-commerce business and the related reverse logistics processes

A Chinese delivery services company, which is the second largest courier in China after China Post. Provides domestic and international express services to a wide range of customers

The company has been expanding from express delivery to other parts of the supply chain

Invested in adding services such as cold-chain logistics, supply chain finance and cross-border e-commerce

Source: FedEx Newsroom Article | FedEx Completes GENCO Acquisition, January 30, 2015
Logistics Management Article |FedEx acquisition of GENCO is a done deal, February 2, 2015
South China Morning Post Article | SF Express aims to increase cargo aircraft fleet to 100 by 2018, November 18, 2014

Partnerships with Retailers and other modes to Increase Access Points

Large express players like FedEx and UPS have been partnering with retailers in the US to make store locations as pick-up and drop-off points for their packages. This helps improve efficiency in the value chain for these players reducing the last-mile delivery load.

In 2017, FedEx signed a multi-year agreement with retailer Walgreen's that will add about 8,000 store locations as points of service delivery

In 2014, UPS launched its 'Access Point' service with neighborhood convenience and grocery stores. Those access points have expanded to 8,000 locations across the U.S

Source: FedEx Newsroom Article | Walgreens and FedEx Team Up to Offer FedEx Dropoff and Pickup at Thousands of Walgreens Locations Nationwide, January 11, 2017
Fortune Article | You'll Soon Be Able to Pick Up FedEx Packages From Walgreens, January 11, 2017

New Delivery Models Tapping into the 'Sharing Economy'

Companies are tapping into the 'sharing economy' by matching available capacity with delivery needs. This has led to entry of players from other spectrums of the 'sharing economy' into the logistics segments as well as entry of a number of start-ups.

A number of entrants seen in the 'crowd-sourced' delivery space

Source: Techcrunch Article | Uber's Latest Experiment Is Uber Cargo, A Logistics Service In Hong Kong, January 8, 2015
Business Insider Article | UberRUSH opens API to online merchants, June 14, 2016
Seattletimes Article | Dolly raises $8 million to be 'the friend who has a pickup truck', October 1, 2015
The Guardian Article | The innovators: Nimber delivers latest development in the sharing economy, July 12, 2015
Aol Article | Could the 'sharing economy' make parcel delivery cheaper?, May 22, 2015

Technology Innovation

Technology is playing a key role in the industry as traditional players adopt their strategies to meet the increasing demands of consumers as well as find ways to improve operational efficiency in this intense competitive environment. Investments into innovations, especially into digital solutions and new technologies are seen amongst industry players as critical to adapting to the digitally enabled consumers' needs.

Increased Investment Into Technology And Automation Adoption In Mail Segment By Large Postal Companies

Snapshot of technology trends in the express industry

Technology Trend	Internet and IoT	Evolving IT Standards	Data Analytics	Cloud	Blockchain	Robotics and Automation	Autonomous Vehicles	Drones
Impact	Improved supply chain transparency, safety and efficiency	Facilitating collaboration, increasing efficiency and transparency	Enhancing customer experiences, improvements in operational efficiency	Enabling new platform based business models and aiding new technologies such as tracking and E-signatures for delivery verification	Upgrading supply chain technology, reduction in paper based documentation	Reducing the reliance on a human workforce resulting in increased efficiencies and lower costs in the long term	Increasing efficiencies in the delivery process	Achieving cost efficiencies with reference to inventory management, surveillance and delivery

Source: Deloitte Analysis

Companies have been pursuing automation opportunities and use analytics to identify inefficiencies in order to reduce costs in the mail segments. As the mail volumes decline globally, with increased utilization of digital communication, companies are emphasizing on efficiency and increased profitability in the mail business.

bPost is the leading postal operator in Belgium and one of the largest civilian employers in the country offering a wide range of postal and financial products and services

In 2013, deployed a new IVR (Interactive Voice Response) solution at it HQ in Brussles

Guide customers more efficiently through inbound contact-center calls by routing them to best suit individual needs

Enables bPost to meet customer demand of better and easier service for both corporate and personal users

Government-owned corporation that provides postal services both locally and internationally in Australia, with annual revenues of c. AUD 7 billion

Launched MyPost, a platform and mobile app that creates a digital mailbox and manage deliveries

Provides customers with an electronic version of their mail and manage delivery preferences helping improve the service quality for the customer and improving operational efficiency for the company in managing their last-mile deliveries

Source: Realwire Article | 'Perfect Partnership' Delivers IVR with Intelligent, Personalised Call Steering and Self-Service to Belgium's bpost, April 29, 2013
Accenture Report | Achieving High Performance in the Post and Parcel Industry, 2015

Autonomous logistics – Both on the ground and in the air

Autonomous logistics have seen rapid advancements in recent years. Both self-driving vehicles for ground logistics as well as unmanned aerial vehicles (UAVs) are beginning to be introduced into the global logistics value chain. Self-driving cars are at an advanced stage of maturity. Major providers like FedEx and DHL have also begun investing into projects for furthering these technologies, following the lead of players like Amazon and Google, who have already reached more advanced stages of these programs.

In 2017, FedEx entered into a partnership with U.S based startup Peloton Technology to test self-driving tractor-trailer platoons. Peloton's platoons follow a lead vehicle that uses vehicle-to-vehicle communication technology to control the drive systems of the trucks in its caravan. This helps reduce wind resistance and therefore fuel costs.

DHL parcel successfully concluded a three-month of its third Parcelcopter generation. This is part of larger research and innovation project.

Marked the first time a worldwide parcel service provider integrated a parcelcopter logistically into its delivery chain.

Source: Technologyreview Article | FedEx Bets on Automation as It Prepares to Fend Off Uber and Amazon, February 3, 2017
DHL Press Release Article | Successful Trial Integration of DHL Parcelcopter into Logistics Chain, September 5, 2016

Autonomous vehicles and the future of last-mile logistics
Growth in B2C e-commerce has led to increased focus on last-mile logistics with increasing investments being made into this arena. Autonomous vehicles have already started being introduced by the major players. Two major delivery models in this area are expected to play a significant role in the last mile in the future including:

- **Drones/ UAVs:** As the internet penetration increases in rural areas, demand for express services from such regions is also expected to increase. Providing services to these regions is seen to be very costly for companies with any kind of driving vehicle. As a result, companies are expected to begin extensive use of drones to deliver parcels, especially in rural areas where infrastructure limitations make time-bound ground delivery challenging
- **AGVs with parcel lockers:** The concept of parcel lockers has been around in the industry for a few years. As noted earlier, players have also been entering into partnerships with retail outlets for drop-off and pick-up locations which is an adapted version of this delivery model. However, as the consumers continue to insist on greater convenience, Autonomous Ground Vehicles (AGVs) with parcel lockers will provide a cost-effective solution to last-mile logistics in the future. Some studies suggest that this method could provide a cost benefit of as much as 40% over traditional last-mile delivery methods.

Machines joining the logistics workforce
Significant strides are also being made in the area of human-machine interaction and collaboration in logistics. Robotics and automation are helping providers introduce efficiencies in their value chains. Collaborative robots are being slowly deployed by companies like FedEx and DHL which help reduce time and effort wastage in operations.

FedEx has been working with Savioke, a silicon valley based company that makes automated indoor delivery robots, to develop a robot delivery system for its repair facility Tennessee.

Bots are used by workers to cut down on wasted time and storage space

DHL has conducted successful tests in using collaborative robots working side-by-side with the employees.

These next-generation robots are supporting repetitive and physically demanding tasks in logistics operations.

Source: Quartz Article | Fedex is using autonomous robots to essentially replace the mailroom clerk, April 13, 2017
Supply Chain Digital | Automation and robotics: The supply chain of the future, May 3, 2017

Advanced cold-chain packaging innovation
Innovations are also being seen in the cold-chain logistics space. Packaging innovation allows good such as frozen foods, pharmaceuticals and sensitive high-tech products via standard parcel networks and last-mile delivery services, reducing the need for climate-controlled trucks and containers. New concepts include reusable thermos boxes and smart packages that can report and control oxygen, humidity and/ or pressure.

German company Die Bauerntute connects farmers with customers creating a new distribution channel for farmers

Uses DHL's network to deliver fresh food within one day in temperature-controlled reusable boxes, which helps meet the growing demand for fresh and organic foods and ingredients

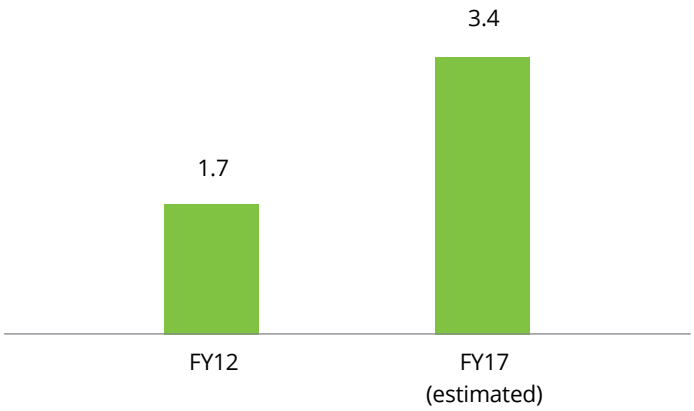
Source: DHL Report 2016 | Logistics Trend Radar: Delivering Insight today. Creating Value Tomorrow!

India's position in the global express market

While still a very small market globally, with less than 2% of the global market size, India has one of the fastest growing express industry. Between 2012 and 2017, the industry showed significant growth of close to 15% CAGR to reach USD 3.4 bn (INR 22,000 cr).

The Indian express industry is currently fragmented with more than 1,000 active players. The key players include - the large scale domestic players, Indian entities of the leading global players as well as the express arm of the government postal service, express arms of e-retailing companies and recently emerging start-ups specializing in e-commerce deliveries.

Indian express industry (USD bn)



Source: Deloitte Analysis, Express Industry in India FY12 by Crisil Research

The Indian express industry is transforming rapidly with the rise of e-commerce, the government's focus on the manufacturing sector, demand from MSMEs, regulatory reforms such as the GST and the increasingly strategic significance of logistics for the industry. The development of enablers such as the road and air infrastructure and technology is assisting the players to cater to the growing demand. Improving tax policy and infrastructure development has also led to a strong bullish sentiment for investment amongst both domestic and international players.

Owing to these factors, the industry is expected to grow at a CAGR of 17% for the next five years, increasing its contribution to the international express industry to more than 2.5% by 2022.

Indian express industry – An overview

The Indian express industry is one of the fastest growing express industries globally. It has grown at ~15% CAGR over the past five years and is estimated to be worth INR 22,000 cr in FY17.

The industry which includes both domestic and international (cross-border) shipping, originated in the 1980s in its formal organized form and has seen many shifts since its inception.

Evolution of the express industry in India

Inception of the express industry

One of the earliest precursors of the express industry in India were the angadias (meaning people who carry goods along with them, in person). The angadias were engaged by traders in Mumbai and Gujarat to deliver gold, cash and precious gems in an expedited mode.

The origin of the organized express industry in India in its modern form can be traced back to 1980s with the launch of Speed Post services by India Post as well as rise of home grown companies providing express delivery services. The early 1990s saw the leading global players extend their operations to India, opening the gateway to international express. The focus initially was on the delivery of documents, the customers being banks and financial institutions and business houses.

Growth driven by technology adoption, B2B demand

As the scale of operations and expertise grew, the industry widened its coverage to non-document shipments. Shortening of product lifecycles, evolving business models such as just-in-time manufacturing, global outsourcing, and increasing demand for expedited delivery created newer demand segments for the express industry. Advancement of technology led to automation of critical functions such as tracking, scheduling, handling consumer conversations, etc. This enabled the companies to scale up to cater to the growing demand. This was also supported by the development of the aviation sector and liberalization policies.

Impact of internet penetration and e-commerce

By FY12, express delivery services were widely used in India for different types of shipments like commercial documents, samples, material parts, spare parts and other goods. The most popular shipments were - time sensitive documents and non-documents such as high value low weight products, perishable products and products with short commercial life cycle. Documents constituted a significant share of the deliveries – 36 per cent by value and 69 per cent by volume.

However, the demand landscape has witnessed a significant shift since then due to the increasing penetration of internet and rise of e-commerce. Over the last five years, increasing internet penetration and mobile phone penetration have significantly changed the way communication and business transactions are conducted. Shipment of documents has shrunk considerably due to adoption of the more convenient and cost effective electronic communication channels.

The number of internet users in India have grown at 27% CAGR over the last five years.[8] The internet penetration has improved from 11% in FY12 to more than 30% in FY17.[9] Customers shopping habits have witnessed a remarkable change with the improved accessibility of internet. This is reflected in the growth of the e-retail industry in India from less than USD 2 bn in FY12 to USD 10-12 bn in FY17.[10] E-retailing led to a surge in the demand for well-functioning express delivery services.

The traditional express players started developing customized solutions and services for this new market in the mid-2000s. Addressing the demand of express delivery from e-retail, needed a shift in the traditional delivery networks – while the traditional B2B players were not equipped for the last mile delivery challenges, the traditional B2C players who were mostly handling home shipments of documents weighing on an average less than 500 grams were not equipped to handle the e-commerce volumes. E-commerce not only added a huge volume of shipments but also led to newer challenges in terms of return shipments, cash on delivery, delivery in remote locations, non-homogeneity of parcels, reverse logistics, etc.

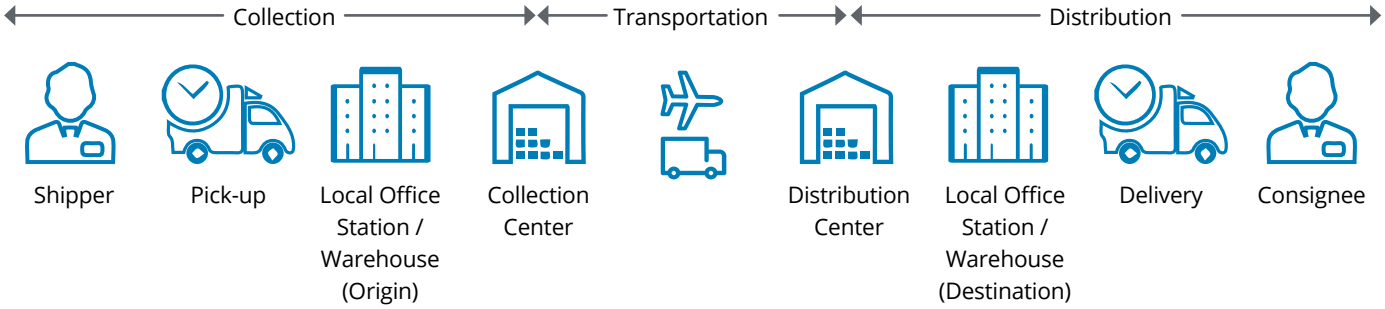
Additionally, the demand centers which were previously confined to select commercial centers and industrial geographies now extended to entire middle class population of the country – metros, tier 1, tier 2 cities and slowly extending to tier 3, tier 4 towns. Hence, newer players stepped in to cater to the demand of volumes by bringing solutions around reach, speed, reliability, agility and customer satisfaction. The traditional players also started setting up separate units to cater to this segment. Having established themselves in the e-commerce express delivery space, some of these are also making their foray in B2B delivery. The express industry continues to witness newer business models based on outsourcing certain parts of value chain to adapt to the evolving needs of the Indian e-retail industry.

Value chain of the Indian express industry

One of the key characteristics of the express delivery service is the integrated nature of the service where the company maintains control over all the aspects of the end to end transportation process. Even though the shipment transport may involve multiple modes of transport and different regulatory or operational procedures, the customer has to deal with only one touchpoint for the complete delivery life cycle of the shipment. The value chain for the flow of shipment in the express industry is depicted below.

[8] Deloitte analysis
[9] IAMAI-IMRB I-cube estimates, Deloitte analysis
[10] Deloitte analysis

Flow of shipments in the express industry



Source: Industry discussions conducted by Deloitte

Pickup/collection, sector-wise sortation, transportation, and delivery/distribution are the main activities in the value chain for express delivery services. The express players work on a hub and spoke model, very similar to the global counterparts. The collection of the shipment from the door of the shipper or the consignor is generally done once a day (typically at the end of business hours) for the B2B shipments and intermittently at regular intervals throughout the day as per the promised service levels for the B2C – e-commerce shipments. The shipments thus collected at the branches are transported to a processing hub centers where the sorting takes place.

In case of air express, the service providers typically have their hubs in or around airports, for speedy transportation. Certain larger players have their own air cargo fleets while the others rely on the belly cargo of commercial airlines for cargo uplift.

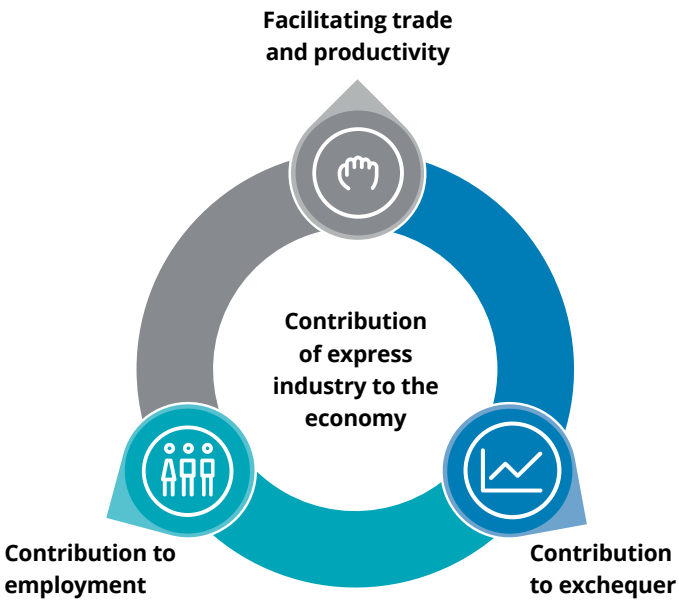
In case of surface express, the movement largely happens by road and to some extent by rail. The trucks which are used on scheduled operations model for movement are either leased or owned by the service providers. In some of the newer business models, the service providers also outsource this mid-mile transportation (co-load/shared uplift) to a third party player.

Shipments are consolidated at the Hub center and may be moved to a local distribution office or directly picked for the last mile delivery.

In addition to collection, transportation and delivery, the service providers provide customs clearances for international shipments and state border clearances for domestic shipments. They also provide services such as special order processing by packaging, storage, deferred delivery, reverse pick-up. All of these services have a vital impact on the economy.

Contribution to the economy

Express operators provide fast, reliable, on demand, integrated, door-to-door movement of shipments across the world which are tracked and controlled throughout the journey. One of the most important contributions of the express industry is its impact on the competitiveness and growth of the other industries. It is one of the fastest growing segments of the Indian logistics industry – the express industry had witnessed a 15% CAGR growth over the past 5 years while the logistics industry grew at ~8% CAGR. The industry contributes about 3% to the Indian total logistics industry. Express is a significant contributor to the Indian economy by facilitating the speed of trade and commerce plus in terms of employment creation and infrastructure development and to the government in terms of the tax revenues.



Facilitating productivity and trade

By providing logistics links to the customers, the express providers play an important role of an enabler for businesses. They help businesses reach out to their customers and partners by providing simplified and reliable shipment services.

Express delivery services are becoming increasingly important for the competitiveness of companies – to maximize the efficiency of their production activities, minimize their inventory costs, and provide a superlative customer experience. Small, medium and micro enterprises are the key users of express. They engage with express players for high quality, rapid delivery services. Express is also vital for companies looking to participate in cross border trade / markets.

From a domestic B2B stand point auto-components, textiles, electronics and IT hardware, pharmaceuticals and industrial goods, are the key consumers of express. With increasing focus by the government on Make in India, these industries have started posting healthy growth rates and in turn express industry is witnessing a sharp increase in demand for express services because of this.

Banking and financial services and e-retail constitute the balance market of B2C shipments. E-retail has been the major driver of the express industry in the past 5 years. This segment of the market has also brought about an increase in the competitiveness of the industry by bringing an increased focus on expanding reach, technology to reduce the transit time, improve agility and end consumer satisfaction. New business models have evolved involving outsourcing and focus on specific part of the value chain such as first mile, long haul, and last mile.

Contribution to employment creation

Express service is a labor intensive industry and creates many employment opportunities. The Indian express industry is estimated to employ around 1.6 mn people. This includes personnel across wide range of skills, including loading, sorting, delivery, technicians, administration, sales and management. In addition, the industry also employs services such as transportation, airport clearance services, cargo handling, leading to a significant indirect employment.

Contribution to exchequer

The express industry makes significant contribution to the exchequer. The industry is expected to have contributed close to INR 3,000 cr in FY17 by the way of Service Tax paid in the form of input credit and cash.[11] In addition, there is also a significant contribution in the form of direct taxes paid by the industry, the personnel employed by the express industry as well as the taxes paid by other industries dependent on the express industry.

Also, the international express segment contributed close to INR 2,000 cr in the form of Custom Duties paid for the inbound and outbound express.[12]

As the express industry continues to grow, the economy is expected to benefit manifolds by way of improved productivity for the businesses, increased employment creation and higher tax contribution to the government.

[11] Department of Revenue, GOI, Deloitte analysis
[12] Central Board of Excise and Customs

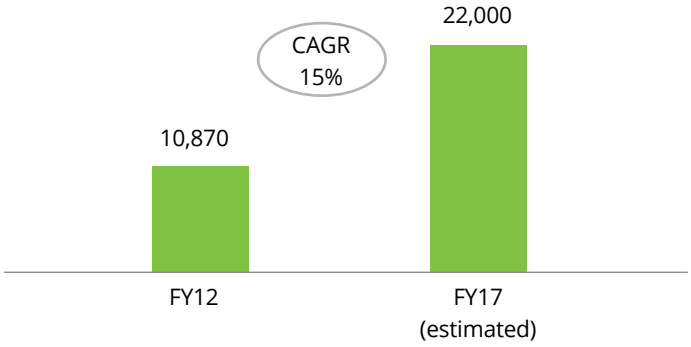
Indian express industry landscape

The Indian express industry has evolved rapidly in the past few years and added newer segments with the changing business environment in the country. As discussed earlier, the Indian express industry is a critical component of India's economy. It is imperative to understand the current structure and growth drivers in order to estimate the future potential of the industry.

Industry structure

The express industry comprising of the services for door-to-door time bound delivery services has grown at 15% CAGR in India over the past five years and is estimated to be worth INR 22,000 cr in FY17.

Indian express industry (INR cr)



Source: Deloitte Analysis, Express Industry in India FY12 by Crisil Research

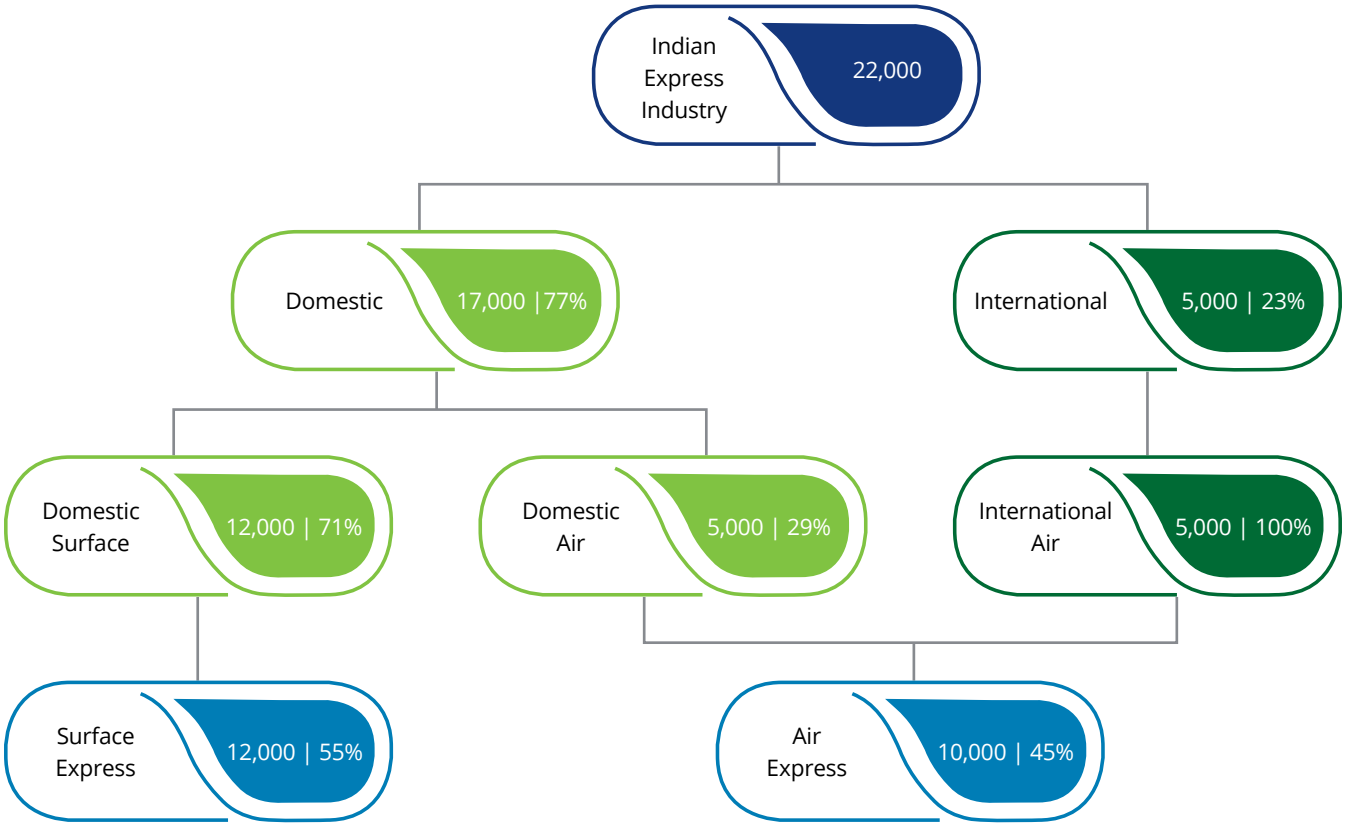
Depending on the origin and destination of delivery, the industry can be segmented as domestic and international express. Domestic express which refers to express delivery within the Indian borders, has grown at a CAGR of 22% since FY12 driven by the rise of e-retail in India. It is estimated to contribute close to INR 17,000 cr (77%) to the total express industry. International shipments constituting inbound and outbound shipments comprise remaining 23%.

Express industry provides an integrated multimodal transportation approach to the delivery of shipments. Shipments are moved through air and surface including rail and road depending on the geography-wise connectivity, urgency of the delivery and the cost of delivery.

All international shipments are routed through air while the surface transport forms the larger mode (70% by value) for domestic shipments. In totality, air express, which constitutes domestic air express as well as international air express, contributes 45% in terms of value to the Indian express industry.

Indian express industry market by mode (FY17)

All values in INR cr



Source: Deloitte Analysis

Note: The figures above are estimates based on industry discussions

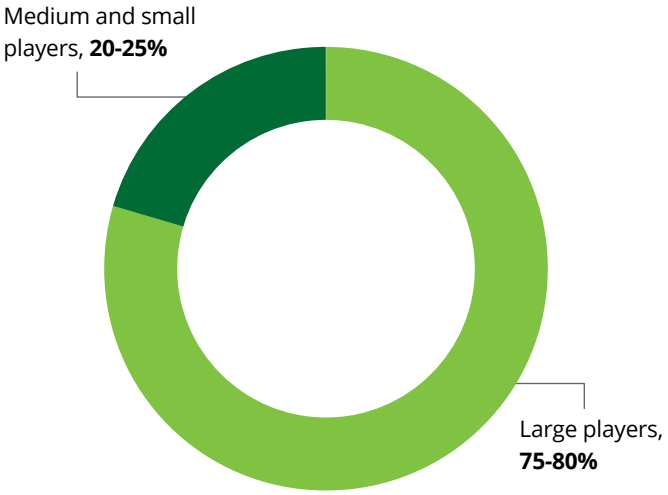
Domestic surface, domestic air and international express are the key segments in the Indian express industry. The growth of each of these segments is being shaped by various operational, demographic and regulatory factors.

To understand the industry better, let us have a look at the key players shaping this industry.

Supply landscape for express industry in India

The Indian express industry is highly fragmented with more than 1000 active players. The large scale players having operations across India and internationally constitute 75 to 80 percent of the market and the medium and small players constitute the remaining 25 to 20 percent.

Indian express industry market by player profile (FY17)



India's express industry market = INR 22,000 cr

Source: Deloitte Analysis

Large express players

There are close to 20 such players. According to the scale and nature of operations, these can be classified as follows:

Traditional express players: These players include:

- Leading domestic players having nation-wide operations
- Indian entities of the leading global express providers (operating mostly in the international express segment but also contributing significantly to domestic express)
- Speed Post - the express section of department of Post of the Government of India

These players are focused on the traditional segments of the Indian express industry such as B2B express and document shipment. However, with the evolving trends they have started to set up business units to cater to the e-commerce B2C demand. They are preferred by the large scale, well-established companies due to their large scale and well established operations.

New emerging players: These include the following categories of players:

- Captive arms of the leading e-retail players
- Service providers specializing in e-commerce

These are technology-based companies which have been established to cater to the newer demand segments such as e-commerce. These are preferred by the customers for their infrastructure focused to their kind of business, reach, scale, agility and precision of delivery backed by technology and automation integration capabilities.

Speed Post enjoys the highest pin-code coverage and reach amongst all of these players – covering close to 19,000 pin codes. In the race to match this scale, few of the players are investing ahead of the curve. Some players are collaborating with Speed Post in the recent times to improve their coverage. Speed Post on the other hand has been investing in re-engineering services and adopting automation to improve the efficiency of operations and systems.

Medium and small players

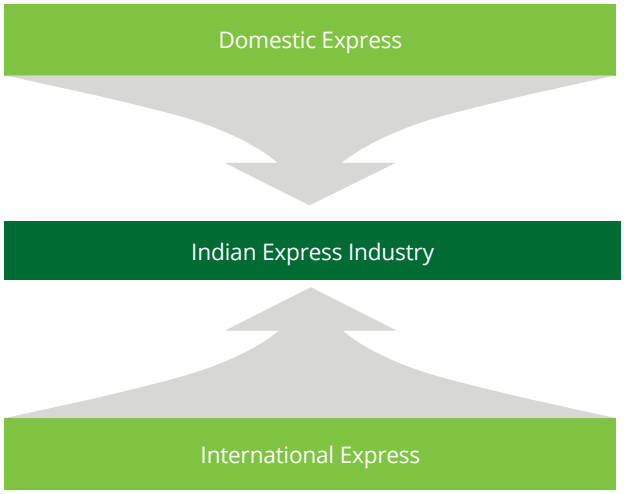
The medium and small players include the express players focusing on certain niches – such as deliveries in select geographies, or across select lanes, or catering to consumers of specific industry.

While the supply landscape of express industry has been evolving to keep up with the disruptions on the demand side, the pace is not yet agile enough. Let us look at the demand factors shaping the industry.

Demand landscape for express industry in India

The five main attributes because of which express is preferred over standard transportation are: global reach, reliability, transparency, speed and security.

Let us look at the demand landscape from two lenses – Domestic and International.

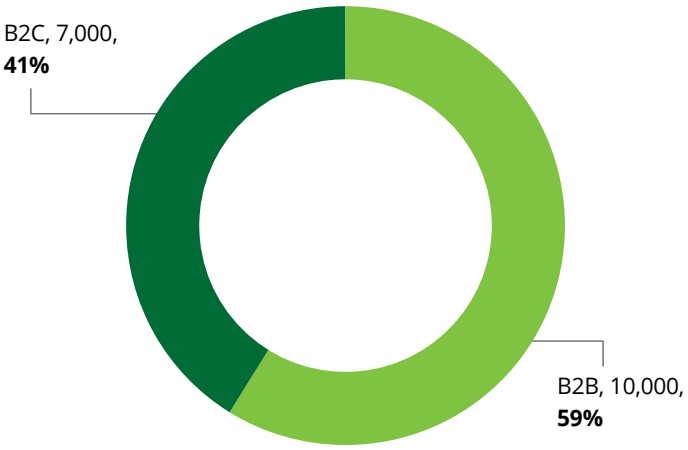


Domestic landscape for Indian express industry
Domestic express, comprising of shipments transported and delivered within the country, is the key constituent (77% by value) of the Indian express industry. West - South and North - South are the key lanes for domestic express.

To understand the demand trends shaping this segment, let us look at the consumers, their demands in terms of the profile of the shipments and the mode of usage.

Customer segmentation
Corporates are the key users of domestic express services. Shipments consigned by individuals or small scale corporates over the counter constitute a very small share (2 to 3 per cent) of the market.

Customer-wise segmentation of domestic express industry (FY17)
All values in INR cr



India's domestic express industry market = INR 17,000 cr

Source: Deloitte Analysis

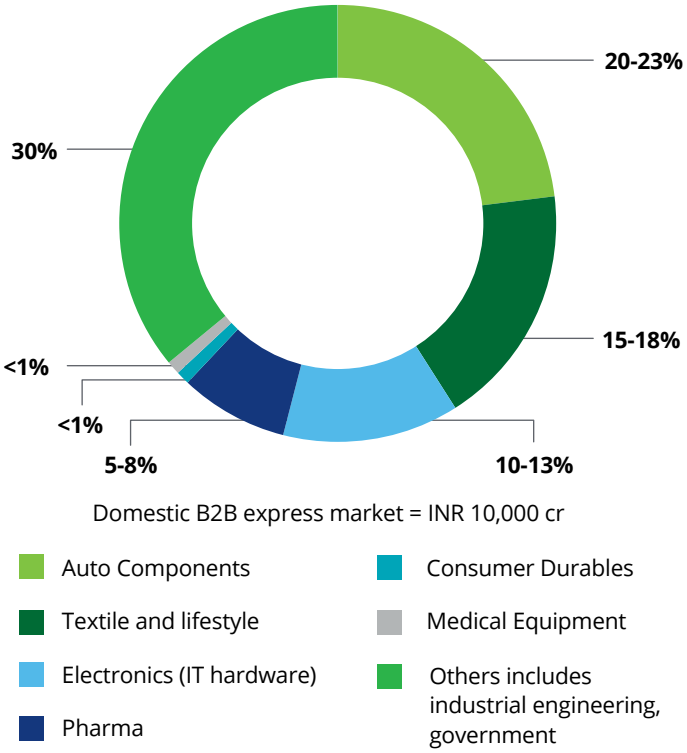
Based on the destination of delivery, the shipments are categorized as B2B (business to business) shipments – delivered to another business entity or B2C (business to consumer) which refers to shipments for home delivery.

B2B shipments contribute close to 60 per cent by value while B2C shipments constitutes almost all of the remaining 40 per cent.

Note: The figures above are estimates based on industry discussions.

B2B - the dominant segment
For B2B express, companies involved in manufacturing and engineering are the main users of express. Some of the key industries availing express services includes electronics, auto-components, textiles, pharma, medical devices, and industrial engineering.

Customer wise segmentation of domestic B2B express industry (FY17)



Source: Industry Discussions conducted by Deloitte, Deloitte Analysis

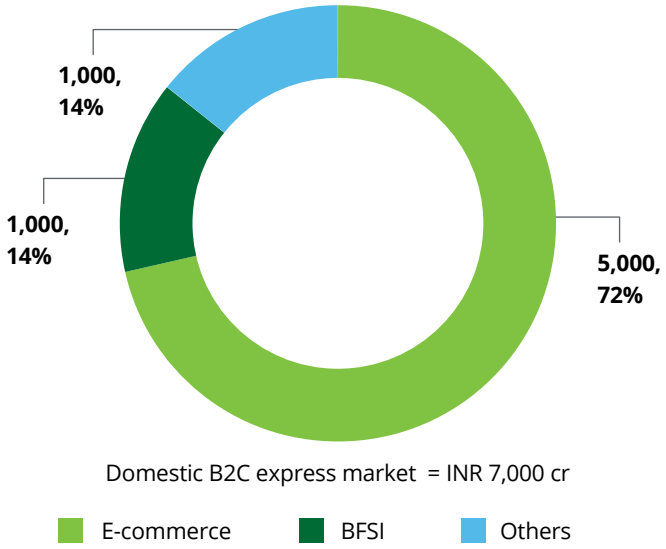
Due to the high costs associated with express transportation, companies currently limit their express consumption to select critical business cases.

Industry	Key business scenarios for demand of express services
Auto-components	shipment of spare parts in express mode to remote locations or on an urgent basis; safe transport of products such as batteries and lubricants which require special handling due to inflammable nature
Textile and lifestyle	shipment of the finished product from the warehouse to the distributor or the location; while the smaller apparel and accessories providers may avail express services for almost all long distance, less than truck load (LTL) transportations, the larger players limit the usage to the scenario of surge demand such as during a sales promotional event
Electronics/Digital/IT Hardware	shipment of spare parts for after sales servicing, PCs, Printers, Laptops and Mobiles
Medical Equipment	urgent shipment of critical medical equipment at hospitals and nursing centers
Pharmaceuticals	surge demand scenarios at the end of sales target period; shipment of critical clinical trial products and time and temperature sensitive medications requiring safe handling

B2C – a fast growing segment

Within the B2C shipments, e-commerce is the main consumer, contributing more than 70 per cent to the B2C revenues, followed by BFSI and other document deliveries belonging to education, telecom or government and public service sector. This segment is expected to witness the fastest growth due to the growth of e-commerce. This segment is covered in detail in the following chapter.

Customer wise segmentation of domestic B2C express industry (FY17)



Others includes delivery of PAN cards, passports, other government documents, telecom, education

Source: Deloitte Analysis

Note: The figures above are estimates based on industry discussions.

C2C – a high margin segment

The market for C2C shipments is very small, less than 3% of the total domestic market. This includes the parcels shipped by individuals across the country for business or personal use. The C2C segment provides high margins, however the growth is constrained by low demand and high marketing investment.

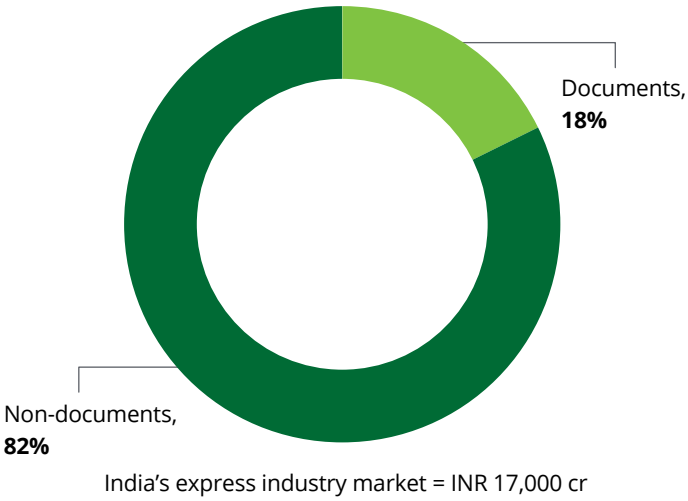
Our survey indicates lack of C2C service needs and insufficient knowledge of the services offered under express as opposed to normal delivery as the key reasons for not availing these services.[13] Most respondents identify express services with delivery by a particular time. More than 70% of the respondents used express services at least a few times annually. Close to 80% of the consumers of these services expect the parcels to be delivered within 2 days. The top 7 Indian cities of Bangalore, Chennai, Delhi, Hyderabad, Kolkata, Mumbai, Pune are the most frequented (85%) sectors for delivery. For express C2C delivery 75% of the respondents choose established large scale service providers with national and international operations. Speed of delivery followed by reliability emerged as the key considerations while choosing a service provider.

Profile of shipments for the Indian express industry

The domestic express services are used for delivering documents such as credit cards, debit cards, cheques, government documents such as PAN cards and passport as well as non-document packages consisting of machine spare parts, electronic items, garments, imitation jewelry, return goods and others.

[13] Consumer survey conducted by Deloitte – details provided in Annexure

Shipment profile wise segmentation of domestic express industry (FY17)



Source: Deloitte Analysis

The share of documents in terms of volume has reduced. Increasing internet penetration, measures taken by BFSI and telecom sector to cut down logistic costs and digitally provide sensitive information (passcode) and monthly summary has led to a decline in the B2C express document transportation. Documents are expected to contribute not more than 20 per cent in value terms to the overall shipments.

With increasing digitization, the industry is moving away from a document v/s non-document classification to a weight-based classification. Close to half of the total packages moved weigh less than 2 kg, 30 percent weigh between 2 to 5 kg and the remaining 20 per cent weigh more than 5 kgs, necessitating four wheeler solutions for transport.

Note: The figures above are estimates based on industry discussions.

Trends by – mode of transport

The domestic express can be segmented based on the mode of transportation employed as – surface express and air express.

Domestic surface express

Transportation is one of the key segments of the logistics industry in India. It enjoys 60% share in the logistics industry in terms of revenue. Road is the largest constituent of the transport segment. This mainly consists of 2.2 million heavy duty trucks and 0.6 million light duty trucks annually and accounts for as high as about 63% of the total transport.[14]

This preference for road transport is also seen to extend to express transportation. Surface transportation is estimated to contribute 71% by value to the domestic express industry. Road is the dominant mode of transport for surface express. Rail is not yet favored by the industry due to concerns around safety, security, pilferage and high cost, while waterways are still to figure into the transportation channel.

The share of surface express in the total domestic express industry has increased by 8 percentage points from 63% in FY12 to 71% in FY17. The main driver for this has been increasing cost pressures for businesses which have necessitated them to find alternatives for the expensive air express besides limited air cargo capacity and uncertainty around timely uplift. In addition, adoption of technologies such as geo-intelligence and mobility based tools, freight and fuel sensors, data-based real time network optimization tools, and logistics management apps streamlining the unorganized trucking business have improved transit time as well as efficiency and transparency in surface transport. Hence, the industry has witnessed a significant shift to surface express from air express. With GST implementation, higher efficiencies are expected in the surface transport and the share of surface is expected to further improve in the future.

[14] Assocham

The domestic surface industry is worth INR 12,000 cr. The large traditional express providers are the key contributors with a share of close 40% (~INR 5,000 cr). The e-commerce players contribute 20-30% and the remaining value is contributed by the other medium and small express players.

The key trends shaping the domestic surface industry are as follows:

Key trends in surface express

Improved transit time due to GST

- Abolishment of entry tax and inter-state clearances due to implementation of GST was expected to lead to some improvement in transit times and cost.
- However, until now, the difference has not been sufficient enough to make a considerable change in overall transit time. Further improvement is expected as the industry adapts completely to the new system.

Increased traction due to cost optimization & growth of e-commerce

- Logistics cost is one of the key areas to optimize the expenses for most of the businesses. This has led to substitution of the more expensive air express by ground express.
- For e-commerce, in 2014, the share of air express was high as 80% however, due to cost pressures, it has been reduced to less than 20%, boosting demand for surface express

Tech-driven transformation of trucking

Entry of logistics start-ups based on deployment of technology has been transforming the trucking network. Some of the tech-driven benefits include:

- trackers, smart phones, GPS navigation, freight data, fuel sensors, network optimization have made road transport more efficient
- newer operating models based on improved tracking and tracing ability has led to reduction of transit times for trucks
- logistics management apps have streamlined the unorganized trucking business with leading to access to easy supply of trucks

Pressure on margins

Pressure on margins due to the following challenges :

- intra-city goods movement becoming more challenging and expensive due to no entry restriction, policy on euro norms, vehicle ageing, parking costs, event based no entry
- increase in costs of diesels, trucks, real estate, minimum wages
- realization fairly constant at INR 10/kg
- logistics management apps have streamlined the unorganized trucking business leading to access to easy supply of trucks

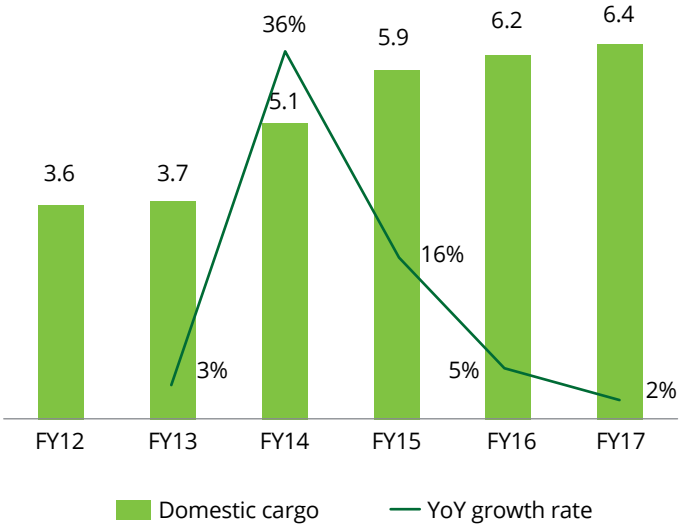
Domestic Air express

Domestic air express is estimated to contribute close to INR 5,000 cr (around 30% by value) to the domestic express industry. Air express is at least four times as expensive as surface transport. Hence it is typically preferred in industries such as pharmaceuticals, electronics, auto-components (spare parts for after sales requirements) where shipments are highly time-sensitive.

Air express has witnessed a slower growth compared to surface express and the share has reduced over the past five years. The key trends shaping the domestic air express are as follows:

- Air express had seen a surge in demand in 2014 due to e-commerce. However, since then the growth has slowed down as the industry is shifting to surface in order to cut down the costs. This is also reflected in the historical growth trend for domestic air cargo. Domestic air cargo has grown at only 10% CAGR over the past 5 years. Domestic air express is also expected to have witnessed a similar growth.
- The express players providing air express services engage with aircraft carriers for the mid-mile transportation.
- There are two primary types of carriers - passenger airlines that use a portion of their belly-hold capacity to carry cargo and dedicated cargo carriers – aircrafts solely meant for cargo carriage. 20% of the total domestic air cargo is transported as dedicated cargo while the remaining 80% is transported as belly cargo. However, the share of dedicated cargo is expected to be higher for express.
- Commercial airlines have started focusing on the cargo business in order to develop alternate revenue streams for stabilizing their business. One of the leading commercial airlines has entered the express segment by providing door-to-door express delivery.[15] This is achieved by collaborating with other express companies and investing in trucks, warehouse space and extra staff for door-to-door delivery.

Domestic air cargo traffic (FY12 – FY17)
(in '00,000 tonnes)



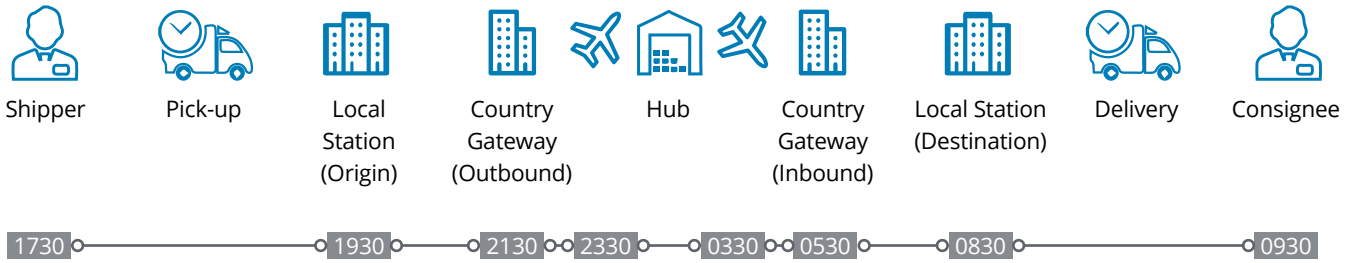
Source: DGCA

International landscape for Indian express industry

International express is estimated to contribute close to INR 5,000 cr (~23% by value) to the total Indian express industry in FY17. This includes inbound as well as outbound shipments for door-to-door delivery and excludes freight delivery. All the international shipments are delivered by air.

In addition to collection, transport and delivery, the express providers also assist in the customs clearance and other regulatory procedures for international express. The key stages for an international express shipment are depicted below.

Key stages for international express shipment



Illustrative timeline

Source: Express Industry Council of India, Industry discussions conducted by Deloitte

[15] https://economictimes.indiatimes.com/industry/transportation/airlines-/-aviation/spicejet-plans-to-start-door-to-door-cargo-delivery-service/articleshow/50916984.cms

Due to high cost involved in international air express delivery, this mode is used very selectively by businesses. The usage is limited to three main categories:

- Samples which are non-commercial, low weight cargo requiring an urgent delivery
- Surge demand which refers to unanticipated high demand especially during festive seasons
- High value products requiring special handling or secure tracking and tracing. For example : pharma products, apparel, precious jewelry, spare parts having an urgent demand

Structure of international express

The key constituents of international express include:

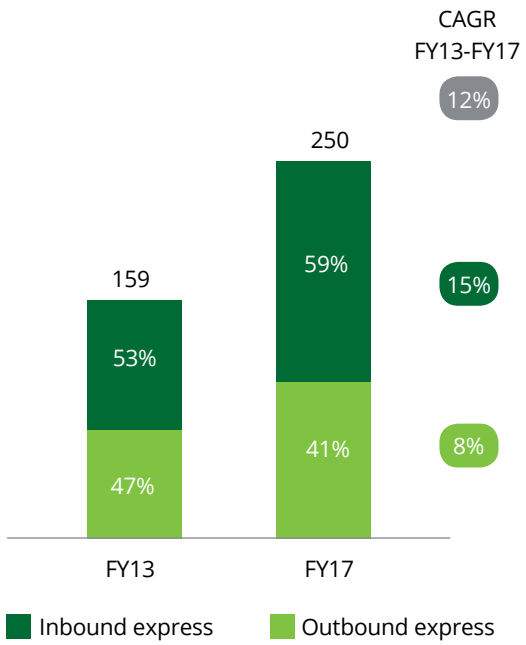
- **Inbound express:** The inbound shipments consist of samples, industrial good components, auto component spare parts. The growing aerospace industry in India is also a key consumer of the express services and is expected to drive growth going forward.
- **Outbound express:** The outbound shipments consist of samples from various Indian manufacturing units and goods such as apparel, leather, handicraft, gems and jewelry.

Of the INR 5,000 cr size of this segment, the large players contribute about 80% by value while the medium and small players constitute the remaining ~20%.

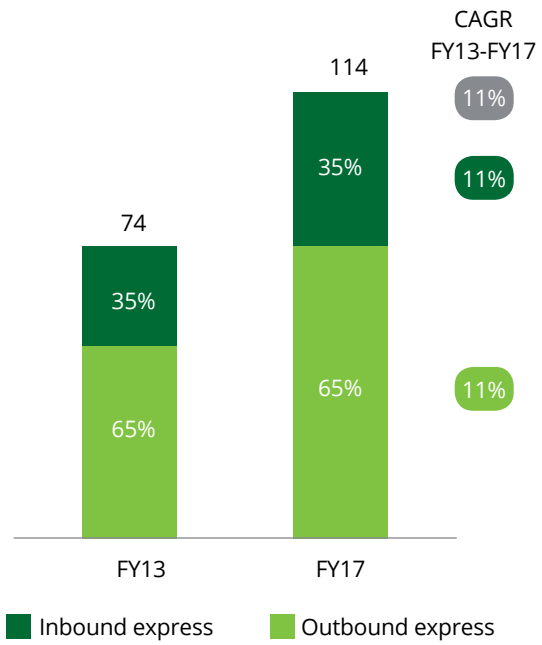
International express segment has been growing steadily over the past few years.

The traffic of express parcels has grown at a much faster pace of close to 12% CAGR over the past five years, while international freight has grown at 4% CAGR. Inbound express has grown at 8% CAGR while the outbound express has grown at 15% CAGR and is expected to have a 60% share in terms of volume.

Volume-wise analysis of shipments for international express (Number of shipments in lakhs)



Weight-wise analysis of shipments for international express (Weight of shipments in '000 tonnes)



Note: Includes documents and non-documents; Includes shipments from the terminals of Mumbai, Delhi, Bangalore, Chennai, Trivandrum

Source: Central Board of Excise and Customs

In terms of tonnage, international express has grown by 11% CAGR from FY13 to FY17. The share of express in total air cargo has been steadily improving - from close to 6 percent in 2013 to about 7.5 percent in 2017 and is estimated to be close to 0.1 mn metric tonnes in FY17.

The weight of inbound shipments (average 7 kg) is higher than outbound shipments which is estimated to be 2.5 to 3 kgs on an average. Hence, inbound express has a higher share in terms of tonnage.

Key lanes for international express

- **Outbound express:** USA, Europe, Middle East are the key lanes for outbound traffic and constitute 80% of the outbound express. Outbound shipments mainly consist of samples, handicrafts, jewelry and textiles.
- **Inbound express:** China, USA and Europe are the key origin destinations for inbound traffic – contributing as much as 75%. Hong Kong, Taiwan and China alone are estimated to contribute 35% to the total imports. USA, Germany, France and UK are the other key origin destinations.

Key trends for international express

The key trends shaping the international express industry are as follows:

- **Growth drivers:** Growth of MSMEs, growth of manufacturing in India due to the 'Make in India' initiative, deployment of technology enabling superior tracking and tracing are some of the key factors that have driven the growth of international express.
- **Automation of Customs clearance:** EDI (electronic data interchange) interface has been implemented at the leading international terminals in India. This automation of customs clearance functions is facilitating smooth customs clearance and inspection procedures and is expected to lead to higher efficiencies in international express.
- **Cross border e-commerce:** Cross border e-commerce has also started to contribute to international express. However, this segment is still at a nascent stage due to the very high transport and delivery charges, lengthy transit times, complex return processes, and customs related bottlenecks.

Cross border e-commerce was limited as the courier regulations of Indian Customs did not support commercial transaction; only free samples and gifts were allowed for shipping through courier mode. As a result, the e-commerce shipments were subjected to custom duties and taxes which considerably increased the cost of shipping as well as the transit time. However, the introduction of Courier Imports and Exports (Clearance) Amendment in 2016 which allows e-commerce goods to be shipped via courier mode is expected to boost the e-commerce.

Outbound e-commerce: Global platforms such as eBay, Amazon and Alibaba are enabling Indian MSMEs reach the international markets and have been one of the key drivers of cross border e-commerce. There are close to 25,000 sellers in India for outbound e-retail.[16] USA and Europe are the main destinations for export.

Inbound e-commerce: Inbound cross border trade has seen some traction due to increasing global exposure of the Indian consumer and popularity of international brands. However, it is currently limited due to the high shipping costs.

High transport and delivery expense is one of the main factors limiting cross border e-commerce. The industry could look at innovative ways of reducing the costs of transaction to boost this segment. Shifting from a weight category-wise bracket rate to a gram-wise rate is expected to help in reducing the shipping costs. With the logistics costs at 10% for cross border e-commerce in India compared to 2-3% in China, there is immense scope for improvement.

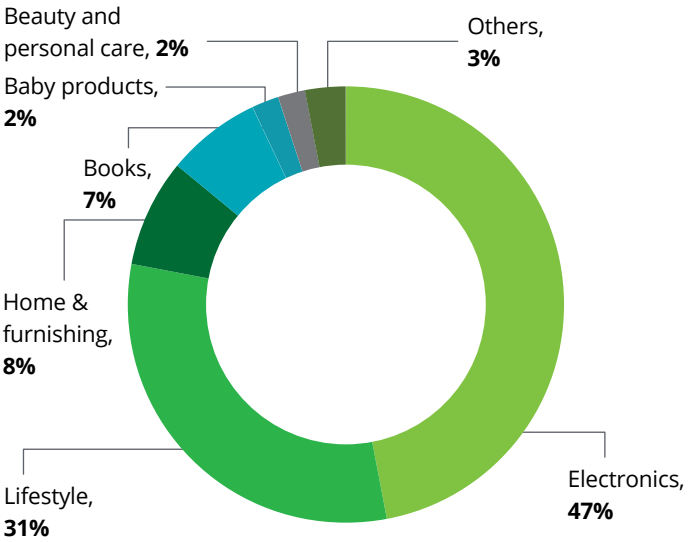
[16] Industry discussions conducted by Deloitte

E-retail and Indian express industry

E-retail has been one of the key growth drivers of the Indian express industry in the past five years. It has transformed the express landscape due to distinct nature of operations for e-retail order fulfilment as compared to the traditional deliveries and the fast paced growth of the sector.

E-retail landscape in India

Category-wise segmentation of e-retail in 2016 (by value)



Source: India's e-commerce retail logistics growth story, CII (August 2016)

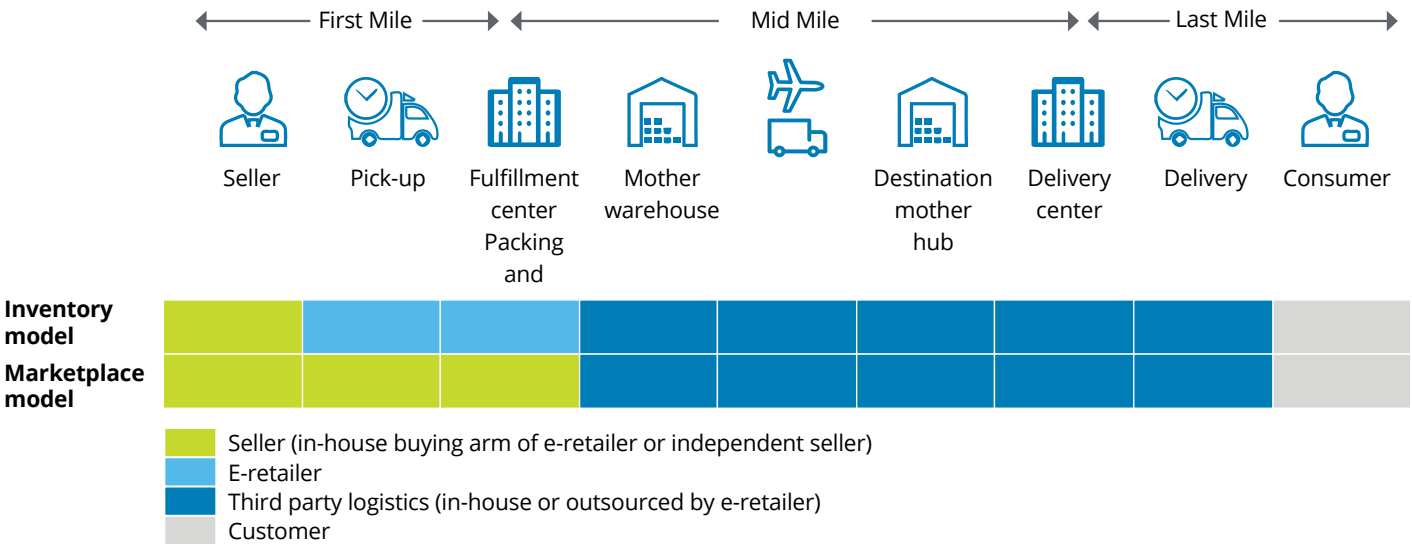
The e-retail industry is one of India's fastest growing industries. Increasing penetration of internet and adoption of technology enabled innovations such as digital payments, hyper-local logistics, analytics driven customer engagement and digital advertisements as well as government interventions have propelled the growth of the e-retail industry in India over the past five years.

The e-retail industry is expected to be worth 10 - 12 bn USD (in terms of GMV) in FY17.[17] This constitutes close to 2% of the total retail business in India.[18] The top two players – Amazon and Flipkart contribute as much as 80 – 85% to the industry revenues.[19] Electronics and lifestyle are the key constituents of e-retail in India and together they contribute close to 80% to the e-retail revenues.

Value chain for e-retail and role of express

Logistics which is the conduit for their order fulfilment is the key enabler for growth of the e-commerce retail industry. The end to end solutions around order fulfilment of the e-retail shipments has created a huge demand for express services. The delivery network for e-retail is similar to the hub and spoke model traditionally followed by the express industry. The key stages in the delivery of a B2C e-retail shipment are as follows:

Key stages in the delivery of e-retail shipments



Source: Deloitte Analysis

[17] Deloitte analysis
[18] Emkay sector report
[19] Industry discussions conducted by Deloitte

This entire process of receiving the goods, packaging, shipping the orders and delivering to the customer is referred to as order fulfilment. Similar to the traditional delivery, there are three main stages of fulfilment – first mile, mid mile and last mile.

There are two main kinds of business models for fulfilment – inventory model and marketplace model. In the inventory model, the inventory is owned and managed by the e-retailer. While, in the marketplace model, the inventory is not maintained by the e-retailer. In this model, on receiving an order, the sellers conduct a quality check, package the goods and either ship to the e-retailer's warehouse or ship directly to customer. The latter is also referred to as drop-ship model.

The e-retail industry is dependent on the express industry for fulfilment. Hence, as the e-retail industry has flourished in the past few years, the segment of express catering to e-retail has also prospered.

Evolution of express for e-retail

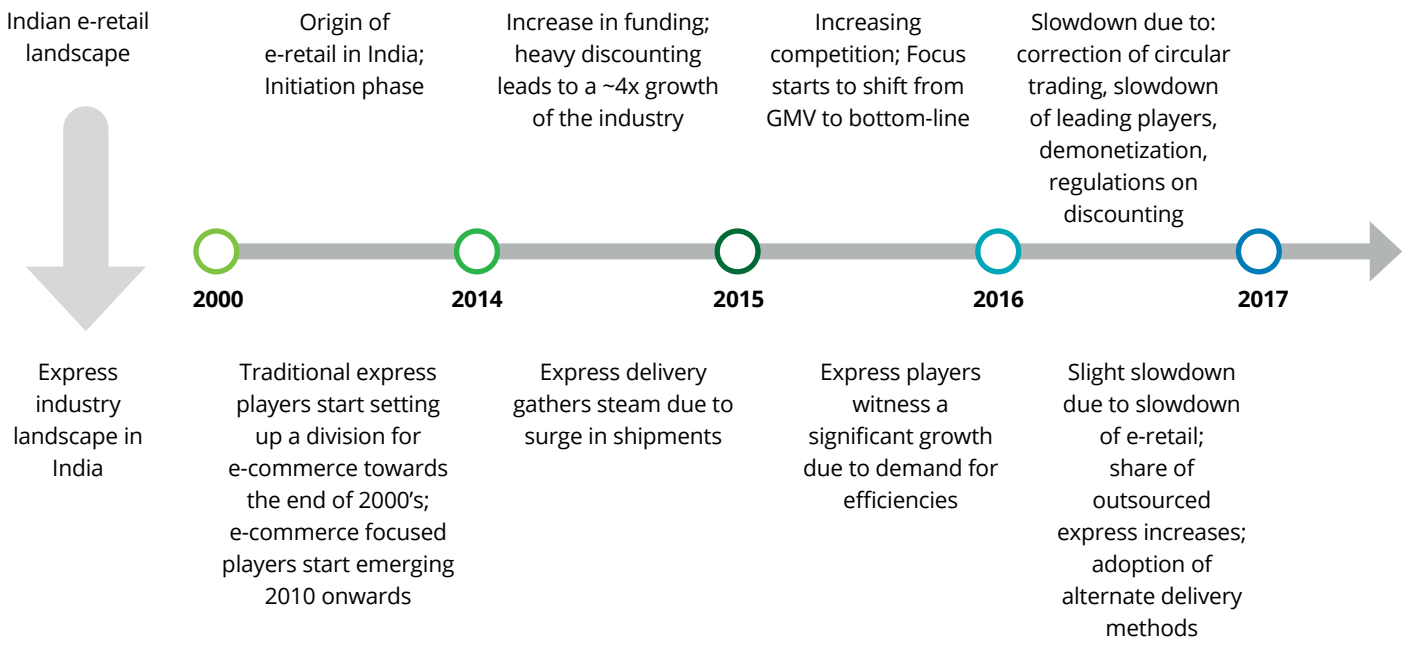
The e-retail industry had its origin in India in 1997 and had been growing slowly till about 2010.

The industry started picking pace from around 2010. It witnessed the fastest growth in 2014 with a surge in funding. The year 2014 saw investments worth close to INR 20,000 cr in e-commerce.[20] This was driven by a sharp rise in valuations of the e-retail players. For example: The valuation of Flipkart - one of the leading e-retailers in India, saw a steep rise from USD 1.9 billion at the start of 2014 to USD 11 billion by the end of 2014.[21] This was also the year of launch of large scale sales events by the retailers at the time of festive season. The deep reduction in prices during these promotion events provided a sharp upswing in sales to the industry.

This trend which continued in the subsequent years considerably increased the seasonality in the market. It is estimated that three fourth of the total annual sales for the industry occur within six months. The sale season typically starts in July - August, peaks in October – November period when the sales events are launched coinciding with the festive season in the country and continues till January.

The express industry which was majorly focussed on the B2B segment till this point of time, was not quite prepared for this surge in demand. Hence, the retailers started investing in in-house logistics capabilities to compete effectively. Air was the preferred mode of transportation and more than 70% of the shipments travelled through air.

Evolution of e-retail in India and impact on express industry



Source: Industry discussions conducted by Deloitte

[20] Future of e-Commerce: Uncovering Innovation, Deloitte – Assocham, 2015
[21] Future of e-Commerce: Uncovering Innovation, Deloitte – Assocham, 2015

The e-commerce industry started to become more organized and stable by 2015. The Gross Merchandise Value (GMV) was an important metric for valuation during the early stages of growth. However, by the end of 2015, due to deep losses and persistently high cost of customer acquisition, the focus started shifting from GMV to profitable sales and sustainable business.[22] The increasing scale and the pressure to rationalize the logistics spend and reduce the inefficiencies in the system significantly benefitted the start-ups focussed on e-commerce logistics. Thus, it can be observed that the e-commerce express sector mimicked the e-retail growth story, albeit with a lag.

The year 2016, was a significant year for e-retail and saw some key changes in the competitive scenario as well as regulatory environment which moderated the growth (~15% YoY) of the industry. Some of these factors include:[23]

- Circular trading correction: Prior to 2016, close to 20-30% of the GMV sales on the e-retail websites were driven by other retailers and wholesalers who in turn sold it to other customers. Corrective measures taken by e-retailers to fix this led to a fall in the overall GMV for the industry
- Slowdown of leading players: The Indian e-retail industry was a highly concentrated market with the three key players – Amazon, Flipkart and Snapdeal contributing close to 80% in revenue terms. Slowdown of Flipkart due to internal factors and decline in sales of Snapdeal due to funding pressures led to a slowdown of the growth of the industry
- Regulations on discounting: Early in 2016, Department of Industrial Promotion and Policy (DIPP) announced regulations limiting the extent of discounting and the contribution of the captive sellers of the e-retailers
- Demonetization: Prior to Nov 2016, close to 70% of the orders were Cash On Delivery (COD). Limited liquidity due to demonetization severely hit the overall consumption and demand for e-retail

Slowdown of the e-retail market also moderated the growth of the express logistics industry catering to this segment.

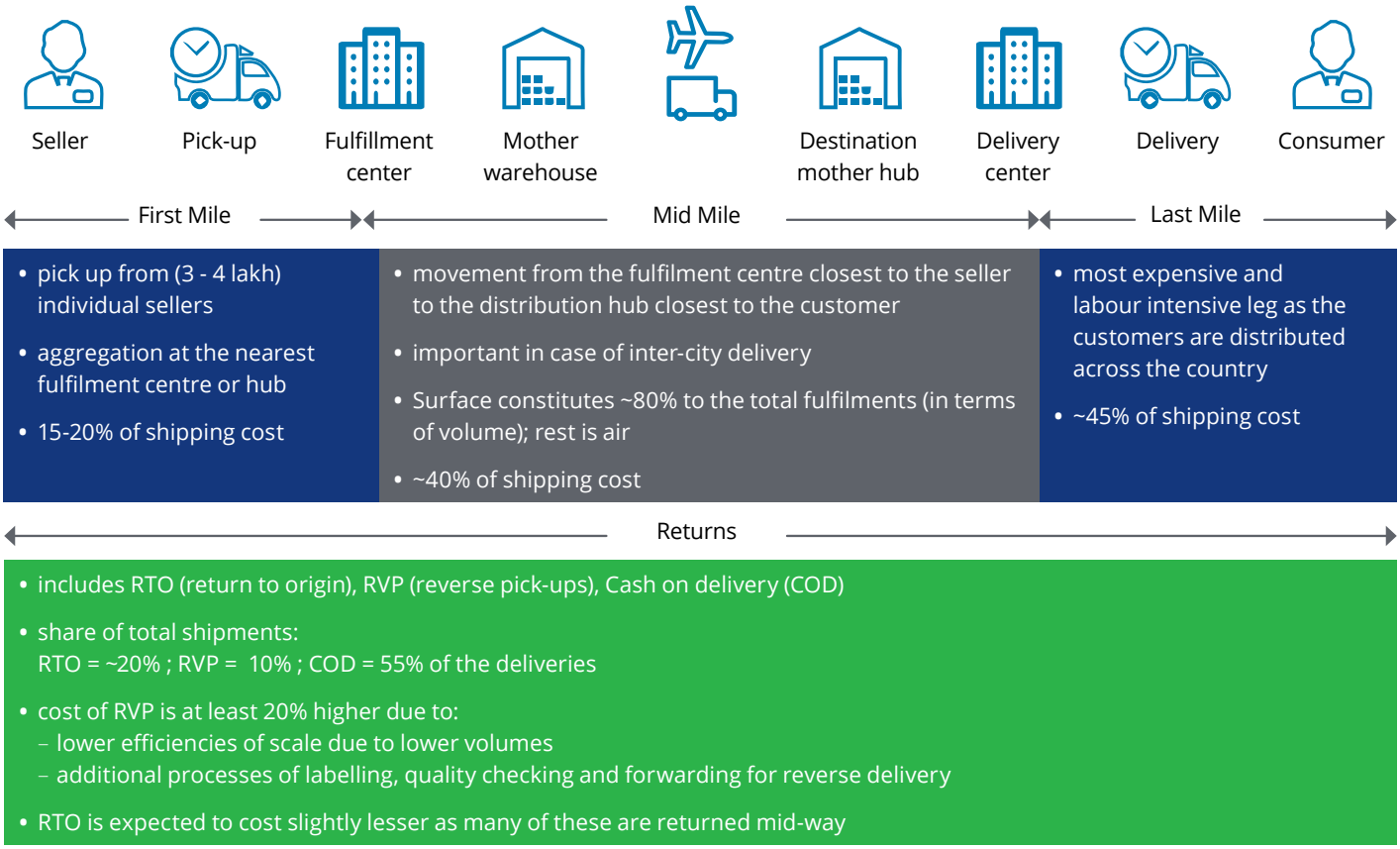
The e-retail industry is expected to witness consolidation and emergence of few big players in the near future. The industry is expected to benefit from increasing interest from large scale international players such as Amazon and Alibaba, favourable demographics and scope for penetration in to the newer categories and geographies. This in turn is anticipated to favour the growth of express industry.

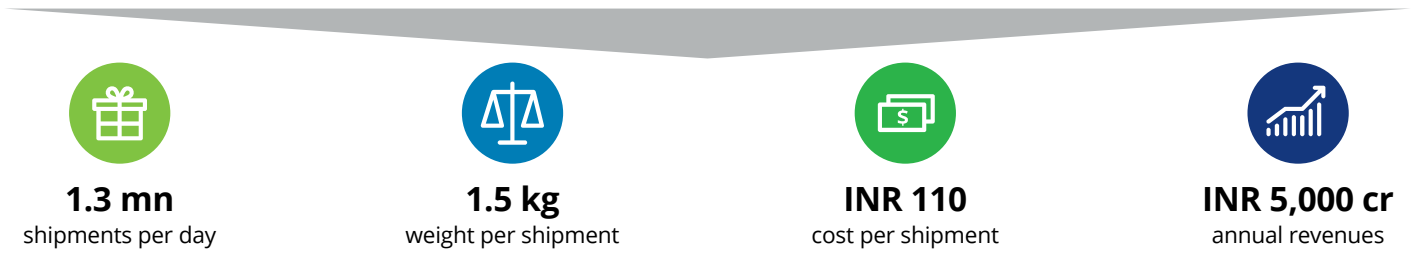
Express landscape for e-retail

Due to the nature of delivery of e-retail - time-bound, door-step delivery, express is indispensable for the e-retail industry. The role of express in the value chain indicated above includes the following key steps:

[22] https://economictimes.indiatimes.com/small-biz/startups/startup-investors-are-changing-their-focus-from-gross-merchandise-value-to-profitability/articleshow/48781005.cms
[23] http://www.businesstoday.in/opinion/columns/how-did-2016-shape-the-indian-e-tailing-industry/story/244487.html

Role of express in e-retail value chain





Source: Industry discussions conducted by Deloitte
Note: The figures above are estimates based on industry discussions.

The e-retail industry is estimated to contribute INR 5,000 cr to the express industry in FY17. This is attributed to the close to 1.3 mn shipments shipped. This includes forward fulfilments, RTOs as well as RVPs. The shipments weigh on an average 1.5 kg.

Delivery profile for express segment catering to e-retail

	Forward fulfillment	Return to Origin (RTO)	Reverse Pick-up (RVP	Cash on Delivery (COD)
Type of delivery	shipment is delivered from seller to consumer	shipment is returned to the shipper as the service provider is not able to deliver the shipment due to non-availability of the customer	customer returns the shipment to the seller after the delivery due to dissatisfaction with the product	customer makes the payment for the purchase of the retail product in cash after shipment delivery

Delivery profile for express segment catering to e-retail (continued)

	Forward fulfillment	Return to Origin (RTO)	Reverse Pick-up (RVP	Cash on Delivery (COD)
Share in the total volume of shipments	70%	20%	10%	55-60%
Cost of delivery (INR)	INR 80	Cost slightly lower than forward fulfillment as many of these are returned mid-way	At least 20% more than forward fulfillment lower volumes and additional processed of labelling, quality checking and forwarding for reverse delivery	Approximately INR 40 because of additional complexity of operations due to management of cash

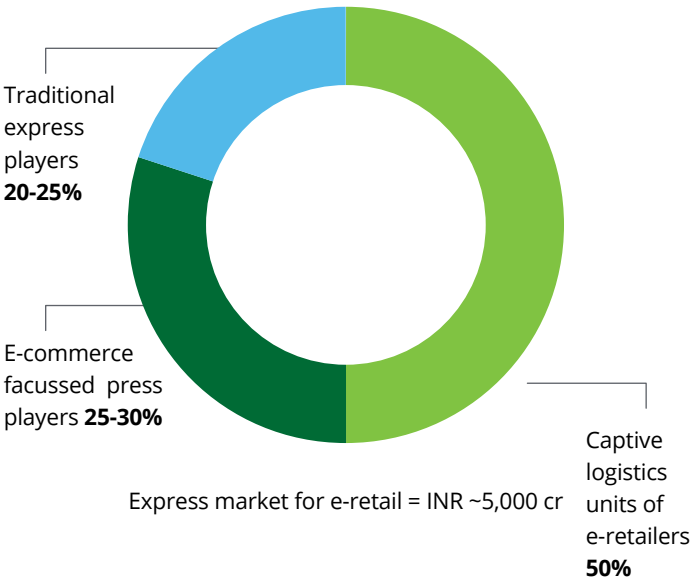
Source: Industry discussions conducted by Deloitte
Note: The figures above are estimates based on industry discussions.

The e-retail industry is estimated to contribute close to INR 4,000 cr to domestic surface express and close to INR 1,000 cr to domestic air express in FY17.

The express industry has evolved to cater to the requirements of e-retail logistics. Many new players have emerged and existing players have adapted their operations to cater to the new segment.

E-retail express providers
Newer players have emerged to address the challenges posed by e-retail and cater to the demand for express in e-retail. These can be classified in three categories:

Supply landscape for e-retail segment of express (FY17)



Note: The figures above are estimates based on industry discussions.

- **Captive logistics units of e-retailers:** The leading large scale e-retailers such as Amazon, Flipkart have established their captive logistics units for the fulfilment needs. At least 60%-70% of their total volumes are processed by their captive units.[24] Such captive units are expected to constitute close to 50% of the total e-commerce express segment.[25]
- **E-commerce focussed express players:** Having identified the opportunity created by e-commerce logistics, many new start-ups such as Delhivery, Ecom Express, and Xpressbees have emerged to cater to the fulfilment demands of the sector. These contribute 25-30% to the total e-commerce express segment. Some of the leading players in this category, who have established themselves in the B2C space, are also venturing in the B2B express business to diversify into newer opportunities and de-risk their business.
- **Traditional express players:** Almost all of the traditional express players have set up separate business units to cater to the e-commerce express market. Together, these are estimated to contribute 20-25% to the total e-commerce express segment.

These players are adopting newer models and technologies to service the e-retail segment.

Impact of e-retail on express

The distinct nature of operations of e-retail has impacted the express operations. The disaggregated nature of demand and supply and the complexity of returns has challenged the traditional express operations. However, this has also unlocked many opportunities for the express players by providing newer avenues to add value. In addition, the competitive nature of e-retail players has translated to increased competitiveness in the express landscape.

As this is one of the fastest growing segment of the express industry, many players are adapting their models to grab a share of the pie and maximize their gains.

[24] Industry discussions conducted by Deloitte
[25] Deloitte analysis

Impact of e-retail on express

Added complexity in shipment delivery

- Disaggregated demand
- Disaggregated supply
- Reverse logistics

Increasing competitiveness in express landscape

- Focus on customer satisfaction
- Improving reach
- Cost optimization

Trends in the e-retail sector of express industry

- Adoption of alternate delivery methods
- Customer centric delivery
- Shift from air to surface for mid-mile transportation
- Increase in regional movement
- Adoption of technology
- Expansion to remote locations

Source: Deloitte analysis

Added complexity in shipment delivery
The key characteristics of e-retail which have increased the complexity of shipment delivery include:

Causes of increasing complexity in express landscape due to e-retail

- **Disaggregated demand:** During the initiation phase, the metros were the main consumption centres. However, all the e-retailers are actively expanding to tier 2 and tier 3 cities for the next burst of growth. The tier 2 and smaller cities and beyond are expected to evolve at a faster rate to contribute to the next wave of growth for e-retail.

  Distribution to remote pin codes is one of the critical success factors for the industry. This is leading to distribution of demand over larger geographies. In addition, the demand in these location is less concentrated and the infrastructure for transport and delivery is very poor, further challenging the delivery.

- **Disaggregated supply:** The DIPP regulations prohibiting FDI in inventory business have led to a shift from inventory model to marketplace model. The leading players are now trying to increase the number of sellers on-boarded. There are approximately 3 to 4 lakh sellers across India. The supply side is highly fragmented and there exists a vast long tail of smaller players. This is leading to increase in complexity for first mile.

- **Reverse logistics:** Indian e-retail has very high rates of returns. The share of return to origin is as high as 20% while there are 10% reverse pick up shipments. The cost of reverse pick up is as much as 20% more than the total forward fulfilment cost.

  In addition, close to 60% of the shipments are cash on delivery (COD). COD increases the settlement period, lengthens the cash conversion cycle and also increases the risk of rejection and returns. In addition, there have also been incidents of theft leading to massive losses for the sellers and e-retailers. These challenges associated with COD have added complexity to the operations of the express industry.

  The logistics players are building capabilities around this complexity in order to offer convenient purchase option to the end consumer. Dedicated logistics players have evolved around this and are offering shorter payment cycle to the industry. As industry moves deeper into the hinterlands, the COD option may emerge as the preferred choice for customers.

There is high variability in the system due to the many product categories, scattered demand and supply centres and wide geography. This has made adoption of innovative models based on technology and collaboration indispensable to optimize the costs of delivery.

Many logistics players have emerged which focus on first mile, mid mile or last mile. The e-commerce express players outsource specific services to these players for cost efficiency. In addition, outsourcing is also undertaken to counter demand variability. These trends are discussed later in the chapter.

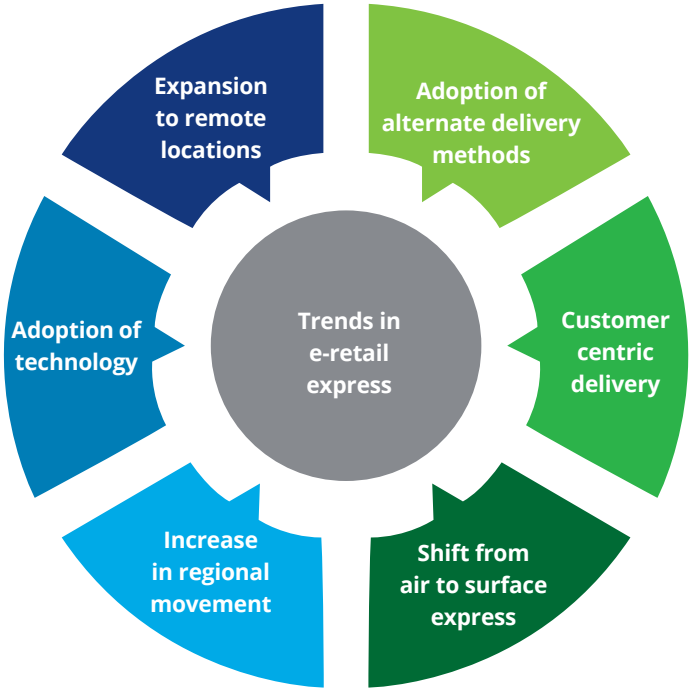
Increasing competitiveness in the express landscape
The entry of newer players such as Paytm, ShopClues and aggressive investments from incumbents such as Flipkart and Amazon, to capture a higher share of the lucrative Indian e-retail market has increased the competitive intensity in the industry. PE investments and entry of foreign players has also brought more rigour to the operations.

This has led to increased focus on improving customer satisfaction, increasing reach and optimizing costs.

- **Focus on customer satisfaction:** As the only physical customer touchpoint, logistics is of paramount importance to e-retailers in distinguishing themselves. Hence, superior customer experience is one of the key mandates for the express segment catering to e-retail. The players have been leveraging technology to provide precise order tracking facility, ensure on-time delivery and smooth delivery and return experiences.
- **Improving reach:** Logistics is the most critical factor in improving the reach of the e-retail services and enabling growth via expansion into the hinterlands backed by increased net penetration and aspiration around access to quality products.
- **Cost optimization:** In addition, profitability being the key challenge for e-retail and logistics being one of the key cost headers for the business, optimizing the cost of delivery is the other focus area for the industry.

Thus, improving the reach and enhancing customer experience while controlling the costs are the key focus areas for players operating in this segment. This has led to many technology and business model based innovations in this segment.

Trends in e-retail sector of express industry
The express industry has been undertaking business model transformations, new collaborations and other innovations to address the complexity and win in the competitive market. Many new trends are observed in express landscape due to the dynamic and competitive nature of the e-retail segment.



- **Adoption of alternate delivery** methods: The e-retailers are working in collaboration with express providers for alternate delivery methods to address the challenges associated with last mile delivery. Some such methods include:
  - **Collaborations:** E-retailers are partnering up with offline stores such as grocery stores (kirana shops), pharmacy stores for last mile delivery. The delivery is done by the staff of these stores and helps them reduce the cost of delivery
  - **Parcel lockers:** Some of the express players are setting up automated lockers / PUDO (pick-up and drop-off) centres which would enable consumers to pick or return their packages ordered online as per their convenience. Close to 78% of the consumers surveyed have shown inclination to using parcel lockers
  - **Click to brick delivery:** Retailers are experimenting with click to brick model wherein the online retailers are integrating with offline stores to leverage their network and storage capabilities for delivery
  - **Outsourcing:** Many express players are collaborating with new logistics start-ups especially for last mile deliveries. Many hyperlocal e-commerce logistics players specializing in last mile delivery have emerged in the last 2-3 years.

    Due to the shift to marketplace model, some of the sellers are taking up the responsibility of fulfilment. Hence, due to lack of experience and facilities with the latter, the demand for outsourced fulfilment is increasing

Some of the start-ups in this category are as follows:

Key proposition	Examples of logistics start-up	Services provided
On-demand delivery	Omedel, DoorGuy	Receive parcels on behalf of consumers and deliver on demand for a fee which is charged to the consumers
On-demand delivery cum pick-up service	Taykit	Tie-ups with local departmental stores, chemists, beauty parlours and women's boutiques for: • dedicated pick-up points • the delivery by store staff • trial kiosks where consumers can try before buying
Intra-city delivery services	Shadow Fax, Runnr	Crowdsourced delivery platform enabling delivery of food, grocery, pharmacy and e-commerce for businesses by hiring delivery boys (on a part-time, freelance or full-time basis)
Last mile delivery in remote areas	dPronto	Trains underprivileged youth from towns and rural areas for logistics delivery and facilitates delivery in remote areas

- **Customer centric delivery:**

  Preferences of consumers for e-retail delivery

  Delivery is one of key ways of differentiation and ensuring customer satisfaction for the e-retailers. Having gotten acquainted with the convenience of e-commerce, customers are now developing preferences for e-commerce deliveries and are willing to pay a premium for these. In a survey conducted by Deloitte, 80% of the respondents admitted to paying a premium for a delivery of their choice. However, the frequency of paying a premium is very low currently – limited to a few times a year.

  In addition, the respondents indicated that speed of delivery, reliability of delivery and returns and refunds are the most important aspects of delivery. However, even amongst these, the preferences change according to the category – for example: Reliability is the most important criteria for mobile phones, other electronics and white goods; whereas returns and refunds is the most important criteria for apparels and speed of delivery for grocery and food items. Close to 60% of the respondents also indicated inclination for choosing the delivery service provider for their e-retail delivery.

  The following criteria were listed as must-have and good-to-have by consumer of e-retail as per the survey:
  - Must have : accuracy of delivery at the desired location and on time, reliability, order tracking, speedy delivery
  - Good to have : free shipping, speedy delivery, flexibility of payment, packaging, slotted delivery, reminders and updates of delivery

  Initiatives for customized deliveries

  The e-retailers are taking the customer preferences into account while crafting their logistics strategy. This is reflected in some of the initiatives and policies of the leading e-retailers such as same-day delivery and next day delivery, 'No questions asked' return policy, Try and Buy service, quality check enabled reverse movement, deferred delivery, flexible payment options besides COD.

  While most of these were offered free of cost in the initial days, the players are also looking to monetize some of these services. Having realized the importance of speed of delivery, some of the e-retailers have started providing expedited delivery services such as same day delivery or next day delivery at a fee. Expedited delivery is also expected to reduce the returns and provide higher customer satisfaction.

  The importance of speed of delivery was also corroborated by our survey. Around 49% of the respondents rated speed of delivery as the feature for which they are willing to pay a premium. This is also important from the point of delivery conversion as consumer purchase decisions can change if delivery is delayed beyond reasonable time limits.

  The other services expected by the customers in the order of inclination to pay a premium include - precision of delivery (delivery at a particular time of the day), safe packaging and delivery, alternative delivery location option, precise tracking of order, flexibility of payment.

- **Shift from air to surface for mid-mile transportation:**

  Air transport is at least four times more expensive than surface transport. Hence, the players are switching to surface transport. Surface transport for e-commerce is estimated to contribute ~INR 4,000 cr to the express industry. Tech-enabled transformation of the trucking market has benefited this shift to surface mode. The shift is also due to limited air cargo space

availability which limits in assuring customers of reliable and consistent service delivery.

- **Increase in regional movement:** Due to increasing volumes and shift to marketplace model, the e-retailers are building multiple fulfilment centres closer to the seller locations. Amazon increased its fulfilment centres by 60% in 2017.[26] The players are also increasing their seller base and leveraging technology to map the customers to the local sellers. This has led to increase in regional movement as compared to a nation-wide movement previously and is expected to reduce the transit time and cost of delivery.
- **Adoption of technology:** Technology is the key enabler of express logistics especially due to the growing complexity added by the advent of e-retail. Some of the key technologies employed across the value chain are exhibited below.

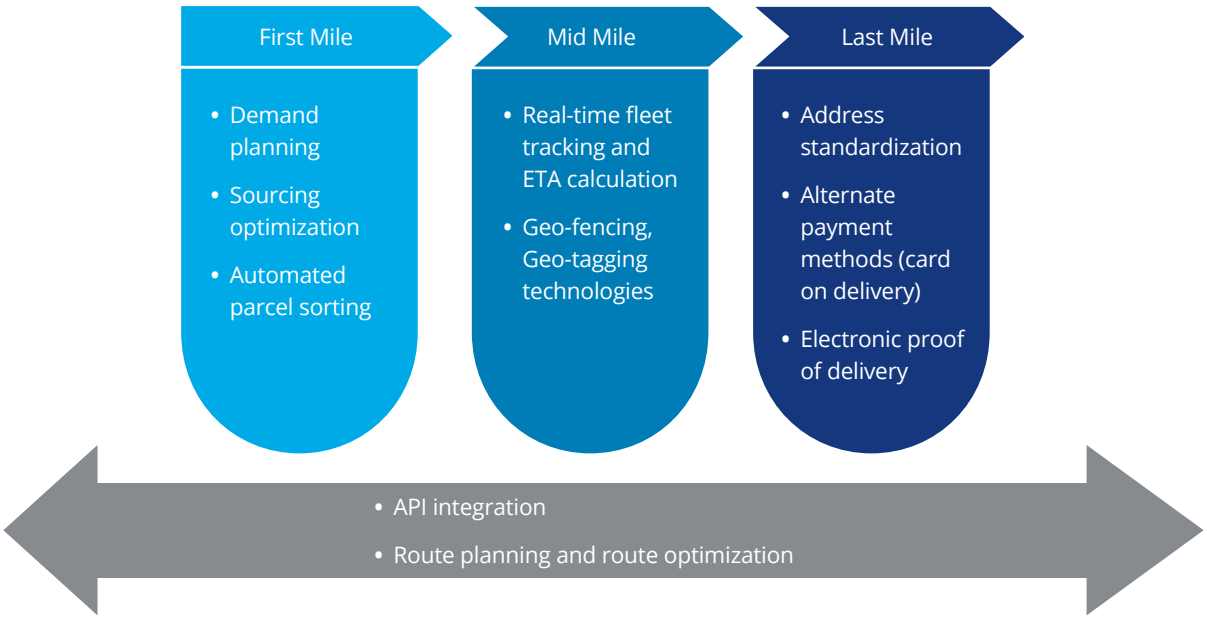
  The consumers are also becoming increasing tech savvy and experimental and are open to trying new technologies and features. In the consumer survey conducted by Deloitte, 84% of the respondents have expressed inclination to use drone delivery.

- **Expansion to remote locations:** The express players are looking to expand their distribution to tier 3 towns and rural areas to improve the reach of e-retail. Few players are collaborating with India Post – as the latter has the highest reach (~19,000 pin codes).

  In its efforts to expand in rural areas while keeping in mind the last mile challenges, Amazon has launched an offline shopping initiative. Besides availing services of traditional and dedicated express players, it has partnered with kirana stores, medical outlets, mobile shopping outlets and assisted e-commerce platforms such as StoreKing, Vakrangee Kendra to assist customers in placing orders. Rural areas are reported to contribute close to 75% of Amazon's new users.[27]

The technologies and models adopted by express players for e-commerce are being applied to the B2B express segment as well. The agility and the customer focus brought in by e-retail is expected to benefit the industry. The e-retailers have set newer standards of credible deliveries and the industry is expected to evolve further to conform to these.

Key technologies employed across the value chain



Source: Industry discussions conducted by Deloitte

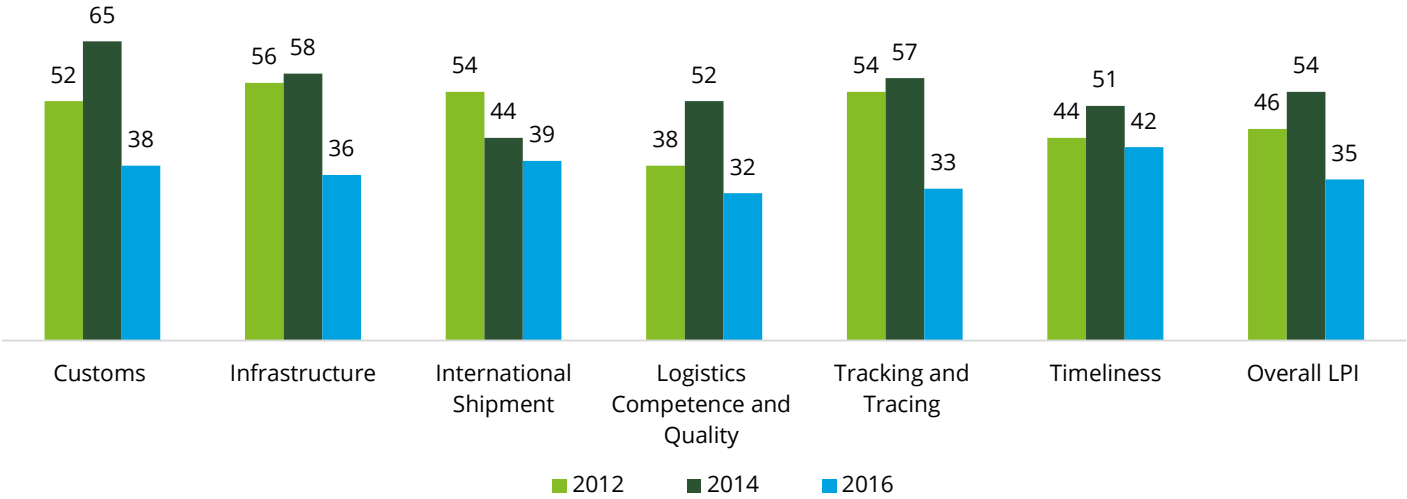
[26] https://tech.economictimes.indiatimes.com/news/technology/amazon-indias-fulfillment-centres-increase-by-60/58488724
[27] https://economictimes.indiatimes.com/small-biz/startups/how-amazon-is-going-deeper-into-the-hinterland-with-a-gambit-of-unique-offline-online-blend/articleshow/60714288.cms

Regulatory environment for express industry in India

The Indian logistic industry has been gaining traction in the past 5 years. With e-commerce penetration, economy revival, GST implementation and government initiatives like "Make in India", National Integrated Logistic Policy, National Civil Aviation Policy, increased investments, there has been a considerable focus on improving the logistics performance.

There has been significant improvement in functioning and operations of logistics in India which is reflected in improvement in India's ranking amongst 160 other countries on the logistic performance index.

India's Rank for Logistics Performance Index and dependent parameters (Rank out of 160 countries)

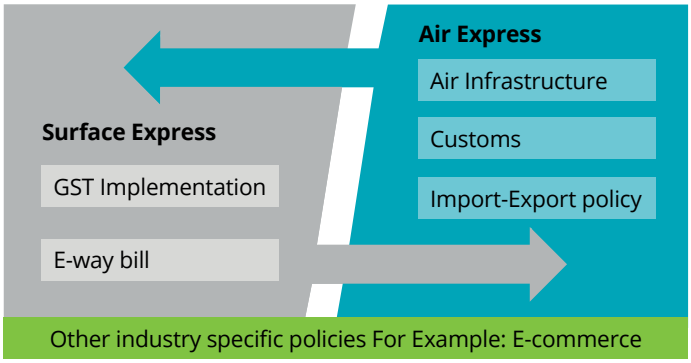


[28]**Source:** World Bank

India's rank has improved by 19 places from 54 in 2014 to 35 in 2016. This is a function of improvement in customs, infrastructure, tracking and tracing and logistics competence and quality.

Despite the enhancement in the logistics performance index, India has a huge potential for improvement. The regulatory policies and the infrastructure readiness are the key factors impacting the logistics performance of Indian express industry.

Regulatory Policies impacting the Indian Express Industry



Source: Industry discussions conducted by Deloitte

The key policies impacting the express industry and regulatory interventions suggested by the industry are discussed in this section.

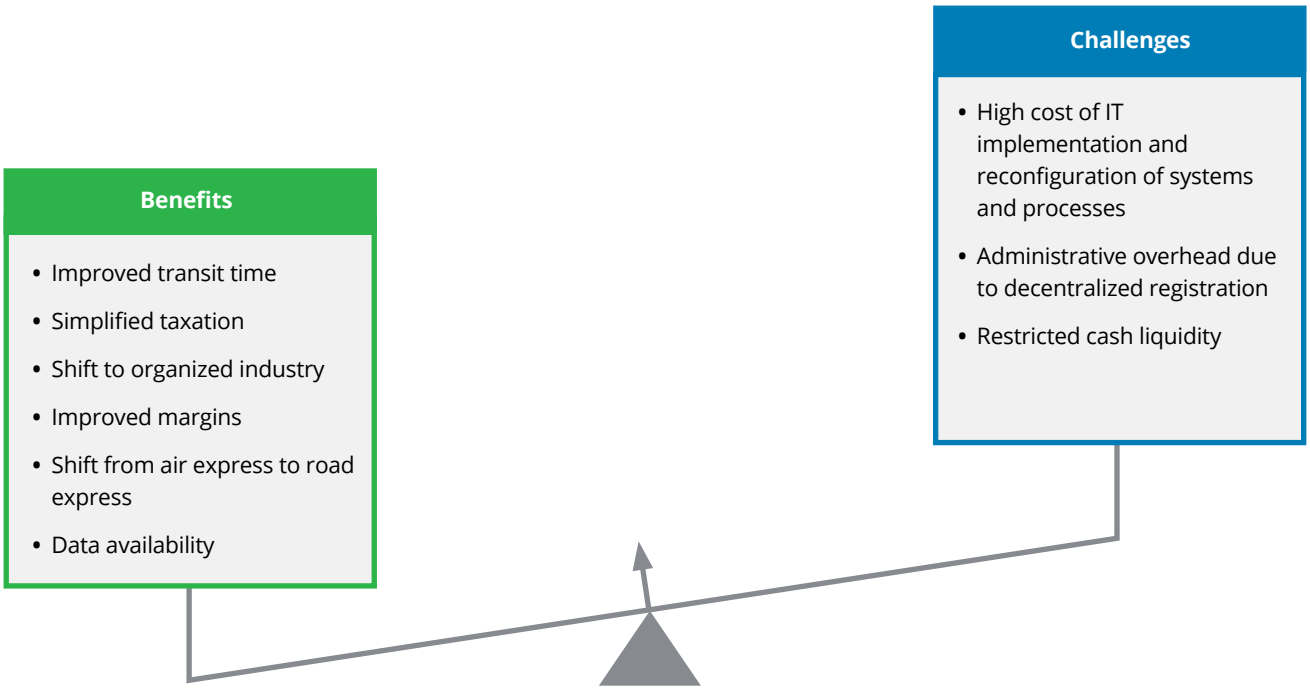
GST implementation

The government introduced the Goods and Service Tax (GST) on July 1, 2017. GST is a comprehensive indirect tax which has replaced all the indirect taxes levied by the states and the center on the goods and services. This is one of the biggest tax reforms in the country, it is driven by technology and has significant implications for the express industry.

The industry is currently grappling with some challenges due to the changes in the systems and procedures. However, it is expected to lead to many benefits in the long term.

[28] World Bank

Impact of GST implementation on the express industry



Source: Deloitte Analysis

Some of the key benefits include:

- **Improved transit time**
  Prior to the GST regime, interstate movement of goods in India was subject to many taxes and clearances. There was a system of check-points in place for collection of these taxes, including Octroi, LBT (local body taxes) and Entry Tax. Each check-point added to the transit time and there was significant paperwork involved especially at the interstate check points. Also, the regulatory procedures varied across states, adding to the complexity.

  Under the GST regime, all the above taxes are subsumed under GST. As the GST act is administered and monitored centrally, there is reduced interstate compliances. Abolishment of the paperwork by introduction of e-way bill is expected to result in faster transit time, improved predictability and higher efficiencies for surface transport.

- **Simplified taxation**
  Prior to implementation of GST, all states had their own tax systems and each of them used to tax goods that move across their borders differently. In addition, there was ineligibility on input credit on cross state taxes with a view to prevent loss of revenue. However, GST implementation has brought uniformity in taxation across states and the differences between goods and services have been eliminated. This is expected to especially benefit players having pan-India operations.

- **Shift to organized industry**
  The express industry has a significant unorganized supply market where the compliance with taxation and other regulatory compliance is perceived to be poor. Due to the above, these players are seen to be able to operate at comparatively lower prices. However, under the new taxation regime, all firms with more than INR 2 mn turnover are mandated to be GST compliant. This is expected to a lead to a shift to organized sector.

- **Improved margins**
  Streamlining of processes using technology and reduction of paperwork is expected to reduce the administrative costs in the long term. In addition, with the check-points at state and city borders no longer relevant, the offices and warehouses set up for the purpose of better tax management are expected to be reconfigured and lead to more efficient utilization of warehouses. Post GST implementation, trucks were reported to travel at an average speed of 300-325 kms a day against 225 kms a day pre-GST.[29] This is expected to lead to savings in carrying cost, fuel cost and transit cost.

  Also, under GST, the express players are expected to benefit from higher input tax credit. For example: vehicle credit, spare parts and components credit were not allowed in the pre-GST era but can be availed in the post-GST era. Thus, the effective taxation is expected to be lower post-GST.

[29] https://economictimes.indiatimes.com/industry/transportation/long-haul-trucks-covering-greater-distance-post-gst-govt-study/articleshow/62126045.cms

- **Shift from air express to road express**
  Improved transit times and system efficiencies along with the lower costs are expected to make road express more attractive for the customers. Hence, there is a strong projection for a shift from air express to surface express.
- **Data availability**
  The electronic nature of filing taxes under GST is expected to lead to tremendous data on inter-state transactions thereby ensuring revenue to respective states at appropriate moments. This could assist the government in policy making and the corporates in internal strategy planning.

While, the industry is expecting multiple benefits associated with GST implementation, there are certain challenges that need to be addressed to reap these benefits. Some of the key challenges include:

- **IT implementation:** The express players have had to make substantial investments in their IT systems in order to make their systems GST compliant. However, there exist many small scale players and significant number of unorganized players, who do not have structured office premises. Bringing them into a digital era would take substantial time and effort both from players as well from Government thereby making the industry a difficult target for IT implementation and GST compliance.
- **Restricted cash liquidity:** Prior to GST implementation, the express industry operated on cash and carry way of doing business. However, GST entrusts the registrants to make cashless upfront payment of tax thereby giving the industry a hit on their working capital management thereby limiting cash liquidity. As many of the clients are medium and small enterprises, that have not yet installed GST compliant systems, the invoice clearance has been deferred, restricting the flow of payments. The funds are getting blocked at the first mile itself. Lack of clarity on input tax credit is also limiting the transactions. This is reflected in the drop in volumes of shipments since July 2017.
- **Decentralized registration:** The players have to operate with as many as 29 GST numbers (one for each state). State-wise GST registration is leading to challenges due to the following reasons:
  - **Increase in compliance:** There is a substantial increase in the number of compliances where monthly summary return and return of outward supplies is required to be filed per state. Furthermore, with multiple registrations there could also be resultant assessments/ investigations/ audits, at a state-level thereby duplicating the compliance effort. In addition, the credit claimed by the registrants needs to be cross verified with the suppliers with their outward supply details to ensure the credit claimed matches with the outward supply. In addition, the provisions of Place of Supply often lead to ambiguity regarding the intra-state and inter-state supplies which result in difference of payments at the time of assessment. These are likely to increase the administrative overhead substantially and could drastically diminish the synergy benefits that GST regime is otherwise set to bring.
  - **Cascading of taxes:** Credit of goods/ services is blocked given that the procurement and usage of goods and services is not necessarily and geographically aligned with the provision of services leading to cascading tax costs.
  - **Ambiguity in relation to payment of taxes:** In order to meet state level compliances, the express delivery companies need to determine the performance of service, the location of service receiver (which could be different from location of consignor and consignee), and also the location of the service provider. This has resulted in material ambiguity with regard to state/ type of GST payment required to be made.

While the implementation of GST may have hit the profitability in the short term, it is expected to reduce the costs and improving efficiency of the express industry in the long term.

Electronic way bill (e-way bill)

In order to ensure compliance with the GST law, the government has introduced the electronic way bill (E-way bill). The E-way bill proposes replacement of the erstwhile physical interface with a digital interface for tracking movement of goods and check tax evasion.

The E-way bill is an electronically generated document which would be mandatory for movement of goods worth more than INR 50,000. The consignor or transporter would need to log into the GST network and generate an E-way bill providing vehicle number from the commencement of movement of goods and then continue generating E-way bills each time a vehicle is changed until the shipments are delivered to the consignee. The E-Way bill has got its own validity time beyond which fresh E-Way bill needs to be generated.

The E-way bill has been proposed to eliminate the shortcomings of the former way bill system in different states, which led to bottlenecks at the check posts. However, certain provisions of the E-way could pose challenges, especially due to the manner the express players operate – in an expedited mode and hub and spoke model.

While the bill is expected to streamline the operations across the industry, there are certain issues which need to be addressed both by the industry and the government for a successful implementation of the same.

Challenges of e-way bill

Sr no	Provision of e-way bill	Key issues	Key interventions required
1	E-way bill is required to be generated in case the 'consignment value' exceeds INR 50,000	Confusion with regards to the value mentioned here refers to the taxable value or invoice value	Provide clarification on interpretation of 'consignment' in order to determine the value of INR 50,000
2	Details such as the value of consignment, invoice number, Invoice Date, GSTIN of recipient, HSN, etc. need to be captured in part A of the bill	Transporters do not always have access to the correct shipment details	Review the details to be captured by transporter
3	Generation of e-way bill for every change in vehicle	Expected to increase the shipment costs substantially as there are many trans-shipment points due to the hub and spoke kind of delivery model	Consider making provisions to update the Part B of already generated E-way bill to add the new vehicle number As the airway bill number is unique in identity and tracked by the Express Delivery Service providers end to end until the shipments are delivered; it could be used as e-way bill number post standardization across the industry
4	Time validity of E-way bills generated is based on distance of delivery	The time to deliver often gets extended due to unforeseen circumstances such as vehicle breakdown, poor road or weather condition, unavailability of the customer and issues in last mile transit	Consider introducing provision for online extension of E-way bill in case of expiry before delivery with an appropriate reasoning
5	E-way bill is mandatory for import shipments	Added complexity and duplication of work for courier companies and importers, congestion at airports and delays due to E-way bill requirement for import shipments	Evaluate the need for generating E-way bills for import shipments given that the Bill of Entry verifies and captures the Integrated Goods and Services Tax (IGST) information
6	E-way bill generation/updation is mandatory for movement of export shipments from one domestic airport to another	Exporting shipments typically involve multiple domestic airport hops to connect to the required international flight; generating E-way bill at each stage is likely to add to the complexity of transportation	Review the regulations for E-way bill generation for custom bonded movements between different domestic airports considering that since the movement is custom bonded, there is limited scope for tax evasion
7	E-way bill can be cancelled by the customer on the common portal electronically within 24 hours on generation	The transporter is not aware of the cancellations made by the customer	Consider having provisions to notify the transporter electronically by way of alerts about an E-way bill cancellation
8	Relaxation to the transporter from filing a part of the E-way bill when the goods are transported within 10 km	The radius limit of 10 km seems too low for any practical benefits to transporters as typically the distance between the pick-up and delivery points and the consolidation centres is more than 10km, especially in the metro locations	Review the relaxation limits in order to ease the movement of goods for first mile and last mile delivery which is typically intra-state

Challenges of e-way bill (continued)

Sr no	Provision of e-way bill	Key issues	Key interventions required
9	Lack of clarity on the provisions of the E-way bill		Government to provide clarity with regards to following: • Cancellation of E-way bill by consignor while goods are on way to express service providers branch • Misrouted shipments • Reverse logistics of shipments • Party responsible for filing the bill

Addressing the above challenges is expected to make the e-way bill truly beneficial for the industry.

Air Infrastructure

Infrastructure for air express in India is quite regulated. The policies governing the development and usage of airport facilities have a significant impact on the express industry. We have listed down some of the key challenges in this respect based on our discussions with the industry players and have also listed down some interventions that, if implemented, will benefit the industry on a whole.

Some of the challenges faced by the express industry with regards to these include:

- **Challenges in commissioning cargo and express terminals**
  Commissioning of cargo and express terminals requires approvals of Bureau of Civil Aviation Security (BCAS), Customs and Central Industrial Security Force (CISF). These approvals have to be obtained before commencing construction as well as prior to initiating operations of the terminal.

  Details of these permissions and the challenges associated with them are as follows:

  BCAS: Approvals need to be obtained from BCAS for security clearance of cargo terminal facilities. BCAS also needs to approve the terminal operator as a Regulated Agent for handling and security screening of shipments. These approvals are seen to take an inordinate amount of delays. A time bound approval process is expected to reduce the delays.

  Customs: Customs approval is required for construction of a bonded facility. It has to be noted that the express players/ agencies need to approach the Customs multiple times for permissions - firstly, before leasing of premises, thereafter to initiate design and construction of facility. Even after the premises are ready approval has to be sought from Customs to commence operations. These permissions from Customs are required even if a facility is within existing Customs Bonded Area.

  CISF: While creating express cargo facilities access control from sterile area onwards need to be manned by CISF. Due to staff shortage of CISF officers, manning such access control has become a significant challenge as until CISF is deployed, the terminal cannot be functional. Hence, the express industry feels that until sufficient officers are posted, the terminal operator could be allowed to start operations with their own security arrangement since the airport access control at airside is manned by CISF at all times.

  Another challenge with commissioning the express terminals is around the delays in obtaining such approvals. Operators have noted waiting periods to the order of 18 to 24 months for securing the required approvals. It needs to be noted that construction of the cargo and express facilities needs substantial investments; inordinate delays in securing approvals for commencing operations leads to a very high opportunity cost due to the blocked investments. This increases the transaction costs for the express service providers.

  There is a need to review the documentations sought as well as procedure for according the approvals. Well-defined time lines and objective check-list criteria for evaluating the proposals are expected to improve the transparency and accountability in the system and help expedite the approval process and minimize the losses for the operators. Provisions to rectify deficiencies if any in the proposals in a time bound manner, would also improve the efficiency of the approval process.

- **Limitations in self-handling of security functions by foreign air cargo airlines**
  Foreign express operators registered as cargo airlines are currently not allowed to perform security functions at Indian airports which affects their operations. Foreign express companies having cargo airlines undertake significant long term investments for developing the infrastructure at the airports as well as generation of high quality employment. Security functions are intrinsic to the operations of express operators landing cargo freighters as they are responsible for the aviation security including their aircraft, network and cargo.

A policy change allowing foreign cargo airlines to self-handle security functions and obtain Regulated Agent Certification could facilitate ease of doing business for the express operators having cargo airlines and lead to development of the air infrastructure and air express segment.

- **Policies affecting domestic airlines**
  The domestic cargo airlines are currently unable to offer international services which hampers their growth prospects and hence the policy for the same could be re-evaluated.
- **Fixation of rates for use of Airfreight Stations (AFS) for transfer of cargo**
  Currently, the price payable by users of offsite air freight station (AFS) is almost equivalent to charges levied for full service for cargo at airports. While it is challenging to acquire space at the airport due to a monopoly situation, it is also significantly expensive to create AFS, thereby making the AFS policy commercially ineffective. Hence, the industry feels that it is important to review the policy on fixation of rates for transfer of cargo from ramp to offsite Airfreight Stations (AFS) for inbound shipments and from AFS to ramp for outbound shipments.
- **Lack of dedicated spaces for express providers at airport**
  Speed is the one of the most critical factor for an efficient express operations. To attain a speedier delivery, air side and city side access with adequate truck dock facilities and sufficient express infrastructure at the airport becomes important. The industry feels that it would be beneficial if such dedicated express facilities are included in the Airport Master plan at the planning stage itself. The infrastructure to be dedicated could be determined based on the predicted demand.
  Augmentation of infrastructure at airports to facilitate quality air express services – dedicated parking bays, terminals at close proximity to parking bays to facilitate fast turnaround are expected to substantially benefit of the industry.
- **Short term lease for air operators**
  Express operators are required to make significant amount of investments to develop the infrastructure for their operations. However, their lease tenure was previously limited to 3 to 5 years and has been revised to 10 years in the National Civil Aviation Policy. However, some airport operators are yet to implement this directive and continue to have facilities on short term leases. The limited rental duration may prohibit investments by the operators due to lack of clarity about the future. The industry feels that there is a need to have long term lease of 30 years for the same.

Customs

Customs plays an important role in ensuring fair trade and legitimate movement of goods across borders. However, one of the penalties imposed by the Indian Customs namely suspension of the license of authorized couriers is posing as a key challenge to the express providers in the international express segment.

Suspension of the license of authorized couriers without preliminary investigation

Currently, offenses such as incidents of revenue leakage, procedural lapse, and employee fraud qualify for suspension of license of the courier agency. Many-a-times, the suspension is not supported with an inquiry or show cause notice and comes without a warning and is often seen as an impediment.

Overnight suspension of authorized courier for inadvertent and insignificant acts of violation may lead to severe disruption for many customers in the global supply chain, thereby impacting the image of the country. Express companies manage complete supply chains for the critical components of the businesses of customers. Customs clearance is just one aspect of the transportation chain which, when suspended, can bring the entire chain to a halt. It should be noted that the impact of such suspensions is significant mainly for the operations of SMEs and MSMEs.

In the opinion of the industry, taking into account the influence of the players on the client businesses, the Customs could act with similar sensitivity as other industry regulators in the Aviation, Banking and Telecom sector.

Some interventions in this regards could include:

- Review the provisions of courier regulations and suspension provisions to ensure judicious action, commensurate with the nature and gravity of the offense or the lapse
- The process of initiating the action of suspension may be reviewed to ensure that the interest of customers is protected and the authorized courier be permitted to conduct operations till the inquiry is completed and the guilt is established
- Considering the impact of the suspension, it could be ratified by the Customs Board or an appropriate committee (rather than an individual decision maker)
- Option of voluntary disclosure by the courier agency to report suspected or known violations by its customer, employees, or any other known, unknown individuals or organizations.

Some of the other challenges related to customs include:

Key challenges related to Customs

Sr no	Challenge faced with regards to Customs	Key interventions required
1	Shortage of Customs officers at express terminals adversely impacting, trade, revenue and growth	Augment Customs officers, especially at Mumbai, Bangalore and Chennai in order to ensure 24x7 clearances
2	Lack of round the clock (24x7) customs clearance at major airports such as Chennai, Delhi, Mumbai and Bengaluru	Process re-engineering, posting additional 3 to 5 superintendents and adequate customs staff to reduce the clearance dwell time and facilitate expedited deliveries at various ports particularly Chennai, Delhi, Bangalore and Mumbai
3	High transaction cost and clearance dwell time for export shipments impact the returns	Review the restrictions and clearance procedures for the export and import of express shipments to enable trade facilitation
4	Congestion of express facilities due to caging of shipments which cannot be cleared due to various regulatory reasons	Facilitate time-bound auctions, disposal and destruction of the caged shipments to decongest the express facilities and enhance throughput
5	Multiple clearances need to be sought from different government regulatory authorities in the form of No Objection Certificate (NOCs) in hard copies and then submit to customs for final clearance; this leads to delays and increases the transaction costs	Institute single window clearance in express Electronic Data Interchange (EDI) for import and export customs clearances

Some of the other challenges associated with customs include:

- Ramp transfer is still not permitted.
- Transshipment across aircrafts with different flight operators is not permitted.
- If passengers are permitted to transfer between aircraft, the same process could be applicable for cargo.

Industry discussions indicate that a detailed review of the Courier Regulations and Customs Act to make it relevant to modern times in an electronic environment can help the players overcome many infrastructural challenges.

Import-export policy

In addition, the industry is also constrained by the certain import-export policies. Some of the key challenges faced with regards to these are outlined below:

Key challenges related to import-export policies

Sr no	Challenge faced with regards to import-export policies	Key Interventions Required
1	International express exports for e-commerce limited to Chennai, Delhi and Mumbai	Enable all ports to engage in e-commerce exports – this would provide the required thrust to exports and also aid in ease of business – would especially benefit hubs like Bangalore which are emerging as centres of e-commerce
2	Restrictions on the category of items imported and exported limiting the ease of doing business for sectors related to perishables, health care, pharma and jewellery	Review the regulations restrictions on import and export in accordance with the World Customs Organization (WCO) guidelines for express clearance allowing manifest-based pre-clearance for duty free documents and non-documents based on a rational de minimus and removal of restriction of import / export of "perishables" through Courier. Review commodity/weight/value restrictions for processing shipments in express/courier mode
3	Regulations for trans-shipment of goods through airlines similar as for trans-shipment through motor vehicles even though the former are not subject to risks of pilferage as in the later	Review regulations for trans-shipment through airlines and requirement of sealing each individual shipments be dispensed with

Reviewing the import-export policy with regards to the challenges faced is expected to provide an impetus to international express in India.

Other industry (e-commerce) specific regulatory policies

In addition to the regulatory policies outlined above, the express industry catering to e-commerce industry is impacted due to the uncertain regulatory environment for e-retail in India. In the recent times the DIPP regulations related to FDI in e-retail had severely impacted the express players. Some of the key regulatory issues impacting the e-retail sector of express include:

- **Lack of clarity between sellers and logistic service providers:** The express players have reported legal issues because of being misinterpreted as sellers. The law needs to evolve with the dynamic industry and make provisions for the newer roles emerging in the sector.
- **Regulations related to e-retail:** The recent regulations regarding restrictions on marketplaces for ownership over the inventory and sales to one particular vendor (not permitted to exceed 25% of total sales) have impacted the business of the express players. The restrictions on discounts by marketplaces also had an indirect impact on their revenues.

Growth of e-retail is expected to bring in further benefits for the express industry. However, the industry needs to address the regulatory and infrastructure challenges in order to maximize these benefits.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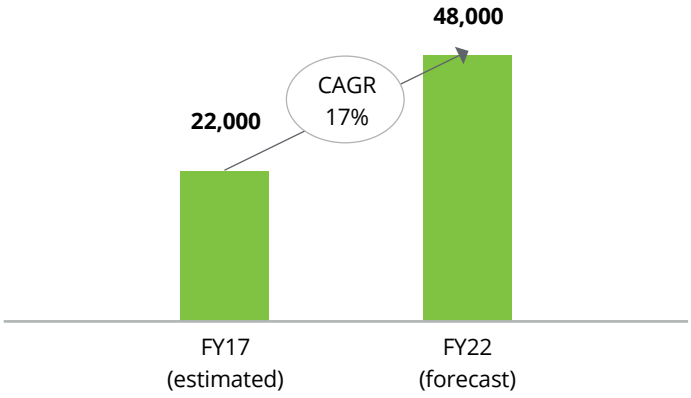
Future potential of the Indian express industry

Future projections for Indian express industry (FY17 – FY22)
(All values in INR cr)



Source: Deloitte Analysis

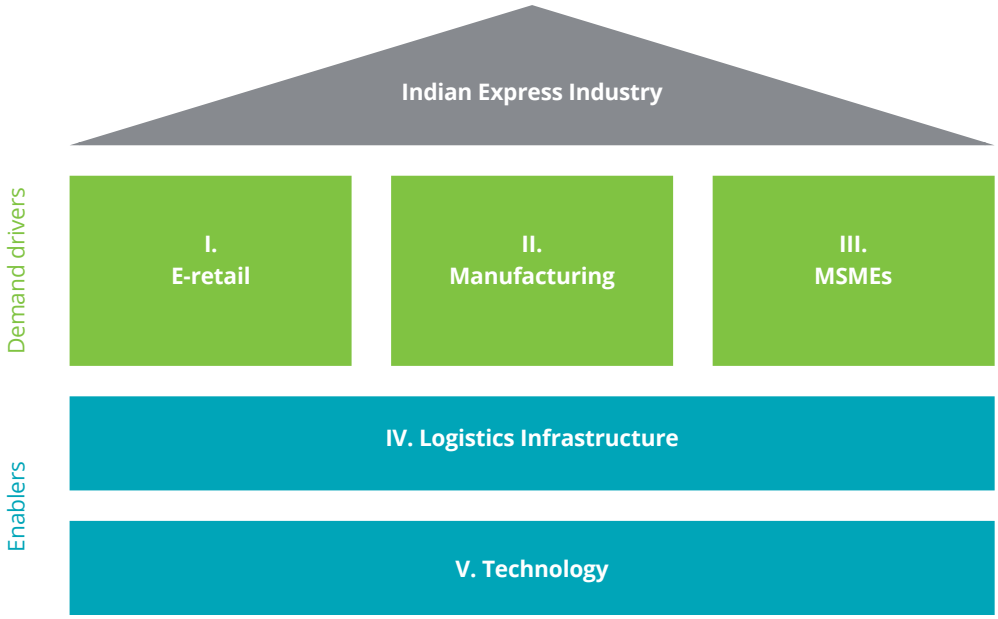
The Indian express industry is expected to grow at 17% CAGR over the next five years and achieve a market size of INR 48,000 cr by FY22.[30] This is expected to be driven by increasing penetration of e-retail and the growth of economic activity and manufacturing.

In addition, the demand for value added services from consumers provides opportunities to the express players to elevate their role from an operational to a strategic role. Infrastructure and technology are expected to be the key drivers of growth.

Growth drivers for Indian express industry

Future growth will be driven by increasing demand from e-retail and manufacturing. Infrastructure and technology would be the key enablers of this growth.

Growth drivers for Indian express industry



[30] Deloitte analysis

I. E-retail

Over the past few years, e-retail has transformed the retail industry in India. Significant growth is projected in coming years given the low penetration currently and potential for growth. Some of the key factors driving the growth of e-retail are as follows:

Growth drivers for e-retail in India

Key Drivers for E-retail in India

Internet penetration

- **Internet penetration** is current ~30%, expected to rise to ~50% by 2020
- **Share of online shopper**s of total internet users expected to increase from current 11% in 2015 to 36% in 2020

Smartphone penetration

- adoption of smartphones expected to improve from – high competition leading to **low prices** and proliferation of **4G network**
- Expected to boost online traffic as contribution of mobile internet for leading websites is more than 50%

Changing lifestyle

- **Ease** and **convenience** offered by e-retail, availability of secure digital payment options and affordable good quality internet expected to drive the demand

Government initiatives

- **Digital India :** Proliferation of mobile devices with internet access
- **Skill India:** Professionally skilled resources for the industry
- **Make in India:** Improved business environment, FDI in key sectors
- **Start-up India:** Funding and regulatory incentives for start-ups

Improving reach

- increasing partnerships of e-commerce companies with the 3PLs in order to reach **tier 2** and **3 cities**

Increasing investments

- Leading international e-retail players such as **Alibaba, Amazon, Tencent, e-Bay** are trying to gain a foothold in the Indian market with increased investments

Source: IMRB, Deloitte Analysis

The Indian e-retail industry is expected to grow at 25-30% CAGR over the next five years driven by these factors.[31] This is expected to lead to a direct demand for express delivery services to ensure speedy, secure, and safe delivery.

Logistics is expected to play a key role in the e-retail industry especially as a lever to optimize costs and differentiate services. The focus on logistics cost optimization is expected to lead to slightly slower growth for the express sector as compared to e-retail. The transportation cost as a share of GMV is expected to reduce from the current 7 - 8 percent to 5 - 6 percent.[32] Some of the initiatives that would enable this cost optimization include:

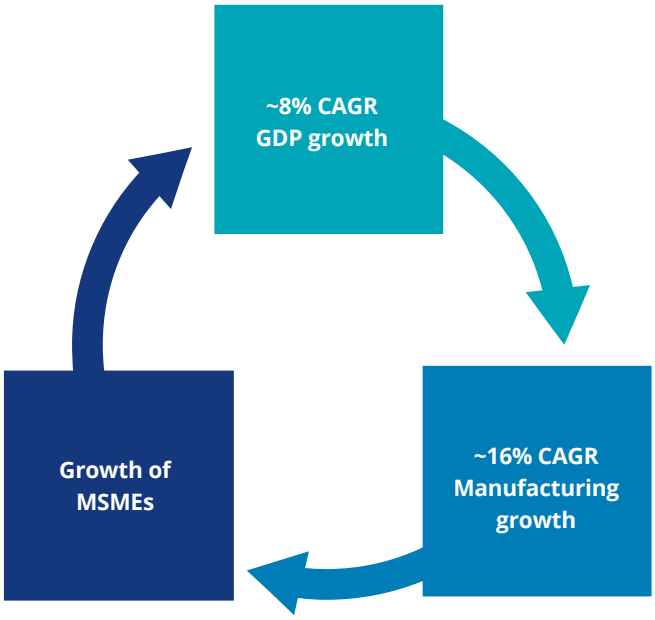
- **Decline in COD :** Evolution of smart payment methods and changing consumer behaviour is expected to reduce the COD levels over the period
- **Efficiencies in reverse logistics :** As the industry gains scale, more efficiencies are expected in reverse logistics by the way of volumes; also, entry of large scale organized players into reverse logistics is expected to improve the performance of this segment
- **Improved automation and rigour for cost optimization :** Adoption of robotic technologies for manual jobs, automation, enhanced route optimization and better line haul planning, real time tracking and tracing is expected to help the logistics companies realize more efficiencies in shipment delivery
- **Growing demand :** Increasing demand in terms of number of shipments and value of shipments is expected to lead to higher efficiencies due to larger scale and bring down the logistics cost as a share of gross merchandize value

As a result of these cost optimization initiatives, the size of express services for e-retail is expected to grow at a CAGR of close to 20 per cent for the next five years.

II. Manufacturing

Manufacturing sector and MSMEs are the key drivers of the growth of the B2B express industry – both international and domestic. Historically, a direct correlation has been noted between the growth of these sectors and growth of express. Favorable policies and projections for these sectors are expected to drive the demand for express in the future.

Drivers for growth of B2B express industry (FY17 – FY22)



[31] Industry discussions conducted by Deloitte
[32] Industry discussions conducted by Deloitte

GDP growth

India is forecasted to have a healthy economic growth with a GDP growth rate of 7.9% CAGR over the next five years.[33] The increase in economic activity is expected to spur the demand for the B2B and B2C express delivery services. Growth in economic activity is expected to result in greater express movement in domestic as well as international market. The express industry has historically grown 2 to 2.5 times the GDP historically. A similar growth is expected in the future.

Improvement in manufacturing sector

There is a push from the government to improve the contribution of manufacturing to the GDP from the current 17% to 25% by 2020.[34] This spells a growth of at least 16% CAGR for the manufacturing sector, providing an impetus to the express industry as the former is one of the key drivers of B2B express in the country.[35]

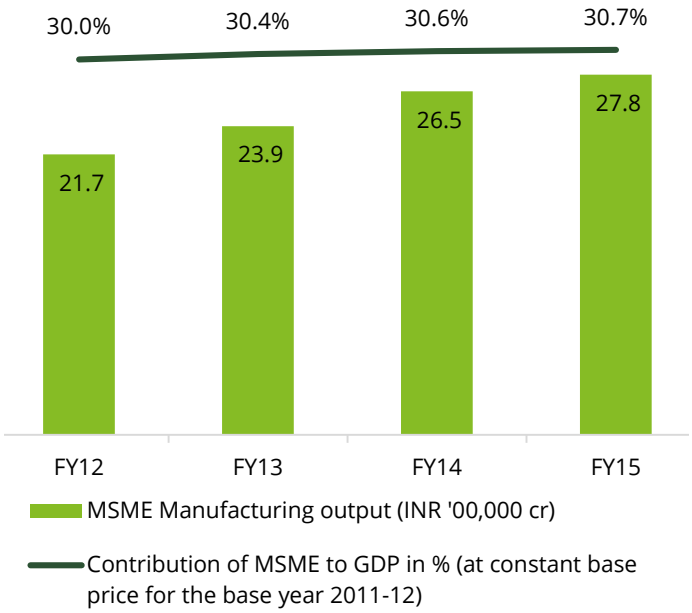
The Make in India initiative was launched by the government of India in September 2014 to transform India into a global design and manufacturing hub. It is expected to be the key driver of the growth of manufacturing sector. Since the launch of the initiative, India has moved up 12 spots from 142 in 2015 to 130 in 2017 in the World Bank's Ease of Doing Business rankings. The total FDI inflows for India have improved from USD 34 billion in FY15 to USD 60 billion in FY17.[36,37] Twenty-five key manufacturing sectors such as auto and auto component, food processing, aviation, biotechnology, chemical, leather, oil & gas, IT-BPM, electronics, textile, road and highway development and defence, amongst others are identified under 'Make in India' initiatives.

Thus, with the growth of these industries, the demand for express services is also expected to witness a healthy growth.

III. MSMEs

The Micro, Small and Medium Enterprises (MSMEs) which are the key consumers of the express services have witnessed a healthy growth (close to 8 per cent CAGR from FY 12 to FY15) and are projected to continue growing at a similar pace driven by the boost in manufacturing, growth of e-commerce and incentives from the government.

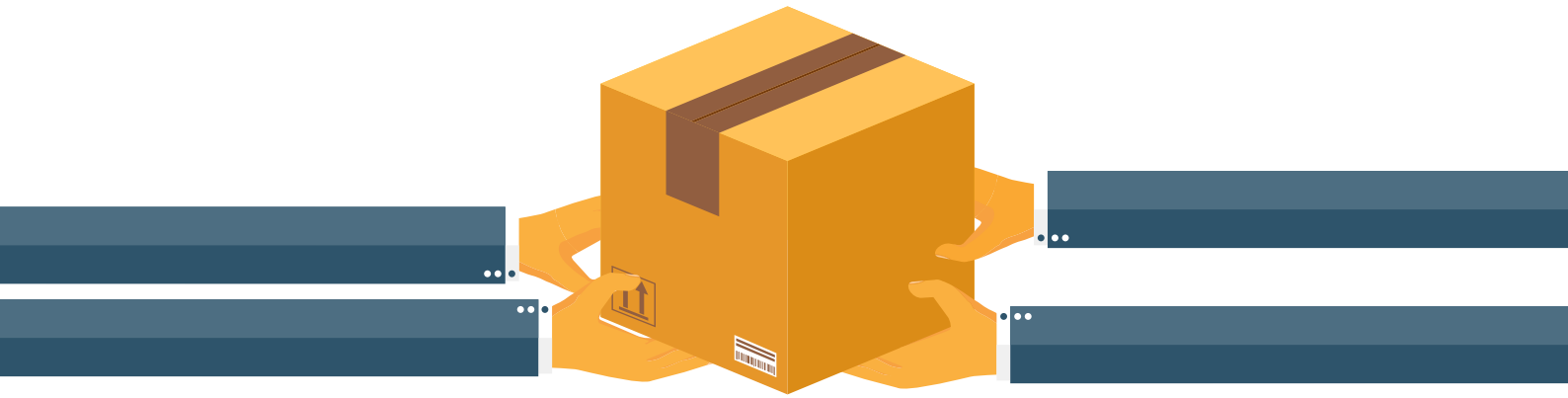
Growth of MSMEs in India



Source: Annual Report 2016-17 Ministry of Micro, Small and Medium Enterprises

IV. Logistics infrastructure

Infrastructure is the key enabler for the express industry. Favourable infrastructure policies by the government are expected to give a fillip to the express industry.
Some of the key initiatives which are expected to improve the logistics performance in the near future are as follows:



[33] IMF
[34] http://www.business-standard.com/article/economy-policy/for-8-gdp-growth-manufacturing-needs-to-grow-12-14-niti-aayog-member-117060101238_1.html
[35] Deloitte Analysis
[36] http://www.livemint.com/Money/9VWjOBNzUu60rCWdp8RxqM/Net-FDI-inflows-touch-record-high-of-349-bn-in-201415.html
[37] https://www.hindustantimes.com/business-news/india-s-fdi-inflows-at-a-record-60-1-billion-in-2016-17/story-7a8pt2u7e8IJttptDQcwhO.html

Drivers for Indian logistics infrastructure

Infrastructure status for logistics industry

Expected benefits of infrastructure status to logistics industry:

- Easy and cheap financing for the industry
- Increase in private investments
- Growth of large format warehouses and multimodal logistics parks

Enhancement of air transport

- Ministry of Civil Aviation focus to make India the third largest aviation market by 2020 and the largest by 2030
- Expanding network under regional connectivity scheme (UDAN) expected to make air transport more economical

Road infrastructure development initiatives

- Bharatmala Pariyojna to provide 50 national corridors from the 6 currently
- Government target to increase the length of NH to 200,000km
- Development of 15 multimodal logistic parks under the Logistics Efficiency Enhancement Program

GST implementation

- Implementation of GST expected to reduce complexities related to movement of goods and boosting the overall demand in the economy
- Increase in efficiencies for movement of goods across state borders

Source: http://www.makeinindia.com/article/-/v/connecting-the-country-road-infrastructure, http://www.businesstoday.in/sectors/infra/how-the-new-infrastructure-status-will-impact-the-logistics-sector/story/264465.html

The logistics industry is expected to grow at 8% CAGR from the current USD 115 bn to USD 360 bn in 2032.[38] The express industry has historically witnessed at least 2x growth as compared to the logistics industry and the trend is expected to continue.

V. Technology

Technology is expected to play a significant role in the future to address the challenges faced by the express industry and maximize the growth. Some of the key technologies expected to impact the express industry are as follows:

- **High impact technologies in the near-term (within next 5 years)**
  The industry expects a higher penetration of the following technologies across the value chain in the near term.

Technology	Impact on express industry
Big data service	Forecast changes in volume and customer demands by analysing original data; Solutions based on real time data analysis for improving network operation, supply chains and customer relationship management
Cloud service	Use of cloud computing service for software platform and infrastructure service, technical supports such as large-scale computers for internal operation of express enterprises
Green vehicles	The vehicles designed by advanced technical principles with new technology and structure, which are made possible by adopting non-conventional vehicle fuels as power source (or by adopting new vehicle power plant, using conventional vehicle fuels) and by combining advanced technologies in areas such as vehicle power control and drive
Internet of Things	Streamline transport by using real-time data and alerts to optimise delivery routes, monitor performance, and quickly respond to delays or issues as they happen

[38] http://www.livemint.com/Industry/v1WBpSQe3Z7DNhL4ouCuyN/Logistics-sector-gets-infrastructure-status.html

High impact technologies in the near-term (within next 5 years) (continued)

Technology	Impact on express industry
Low-cost sensing technology	The sensor technology is the core technology in the Internet of Things. The reduction in the cost of sensors will help with the industrialization of sensors and therefore push forward the popularization and application of the Internet of Things
On Road, Integrated, Optimization and Navigation Software	Real-time planning of driver delivery routes by making use of a large amount of data of online map and optimization computation to save on-delivery time and fuel consumption
On-demand marketplaces	Improve efficiencies by dis-intermediation, address information asymmetry and facilitate price discovery
Vehicle-mounted information systems	This would enable companies to better monitor and control their transportation system. The performance of the freight trucks can be measured by monitoring the indicators such as speed, engine speed, oil pressure, the usage of seat belts, number of backing and parking in neutral gear. This will also help reduce cost of fuel and vehicle maintenance as well as ensure the safety of the drivers

- **High impact technologies in the long term (within next 5 - 10 years)**
  In the long term, the industry expects to follow the mature express markets in adopting technologies such as augmented reality, block chain, automated ground vehicles for improved efficiency. Some such technologies include:

High impact technologies in the long term (within next 5 - 10 years)

Technology	Impact on express industry
Augmented reality	Use of AR devices to speed up the freight loading process; efficient routing, safe transportation and delivery by using AR enabled navigation systems; fast and secure last mile delivery by using AR devices for speedy navigation and user identity authentication
Block chain technology	Enable efficient data sharing and transmission which will ensure transparency and better security for customers
Drone delivery	Use of unmanned flying devices to deliver small parcels
Video analytics	Track and trace the transportation of shipment and identify the point where it was damaged or compromised

The adoption of these technologies is currently restricted by the high costs and unavailability of skill sets required for development and implementation. However, as the industry matures, it is expecting to benefit from many of these technologies.

The robust demand and favorable growth of enablers portrays a promising future for the Indian express industry.

The way ahead for the Indian express industry

The Indian express industry has extensive reach across India and is viewed as indispensable to the operations of the leading industries. Due to shrinking retail spaces, inventory management and express transportation has become one of the most critical factors for success. Express facilitates faster movement of raw materials, components, parts and spares, thereby helping firms maintaining lower inventories. Also, express logistics is one of the key elements in delivering a superior customer experience. Hence, express is no longer seen as an operational consideration but a topic for boardroom discussion.

The changes in the business environment such as increased competition, technological development, pressures for improving efficiencies in manufacturing are expected to elevate the role of logistics and the latter is expected to be looked at as a strategic differentiator. This elevated importance of logistics is expected to be the key demand drivers of express services in the future.

Industry discussions also indicate a high demand for value added express services. In addition, adoption of an innovative culture and global best practices are expected to provide substantial growth opportunities for the Indian express industry. Thus, there is a considerable scope for express to improve its share in the logistics sector.

SWOT Analysis of the Indian express industry

Strength

- Integrated transport and delivery services across India and internationally in expedite manner
- Strong demand from e-retail and B2B manufacturing
- Access to 19,000 pincodes
- Employs 1.6 million personnel across India
- Acknowledged as an innovator in the logistics industry

Weakness

- Stagnation, lack of innovation for B2B express
- Negative operating margins for e-retail express players

Opportunity

- Strategic partnership with the customers
- Provision of value added services such as deferred delivery, customization
- Automation for superior customer experience and cost optimization
- Development of a transshipment hub point for South Asia
- Development of cross border e-commerce
- Improve penetration in the logistics sector

Threat

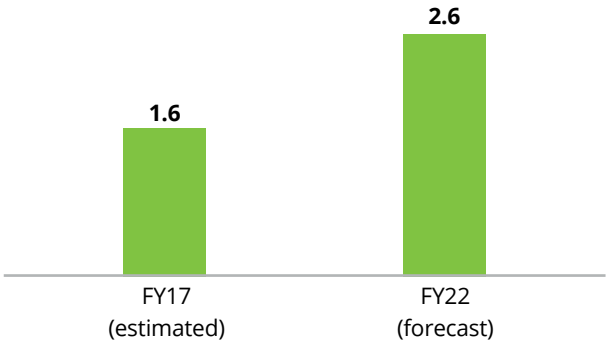
- Cost optimization initiatives by the industry may lead to a shift to more economical alternatives of delivery
- Regulatory challenges associated with e-way bill
- Development of captive logistics units (especially in the case of leading e-retailers) – threat to the 3PLs
- Lack of skilled manpower

However, to capitalize on these opportunities, the industry must endeavor to remain cost competitive. Regulatory support by the government could help the industry overcome many administrative challenges and improve its global standing.

Growth of express services is expected to benefit the Indian economy in multiple ways. Besides improving the competitiveness of the industries, the express industry would also be a large generator of jobs opportunities. The industry will grow its employee base from close to 1.6 million to 2.6 million to manage the increased scale of operations.[39] Rural regions would be key contributors to the additional employment.

In addition, to sustain the growth, the industry would also need to invest heavily in infrastructure, reach, technology and automation. These investments are expected to benefit the economy multifold.

Employment generated by Indian express industry
(number of direct and indirect jobs in mn)



Source: Deloitte Analysis

[39] Industry discussions conducted by Deloitte

Annexure – approach and methodology

Background

The Express Industry Council of India (EICI), an industry body of the express industry in India, plays a pivotal role in driving policies impacting the express industry and aims to create a favourable environment by promoting the common interest of its members. In order to perform its role in a more effective manner, EICI wanted to understand the present state of the industry and identify the major issues and concerns of the industry. Hence, EICI commissioned Deloitte to conduct an independent study of the industry. This report is the result of the comprehensive study of the express industry in India undertaken by Deloitte.

Through report we have attempted to understand the industry from the perspective of both the users and the service providers of the industry. The objective of the study was to:

- understand the latest market trends of the express industry in India and globally
- review the impact of e-commerce on the express industry
- assess the future potential of the industry given changing economic and demographic landscape of India

Approach and methodology for the study

To understand the Indian express landscape three approaches were adopted as indicated below:

Approach for assessing the Indian express industry landscape

A. Tax estimates

Tax collections from the government

- **Service tax** by filing **RTI**

B. Supply assessment

Primary Research

42 individual discussions:

- **12 leading B2B express companies**
- **3 e-commerce focused** express players
- **10 medium and small express players**
- **3 industry experts**

Secondary Research

- Company **Annual Reports**
- Company Websites
- **MCA website**
- Databases such as **EMIS, Capitaline**

C. Demand assessment

Primary Research

- **265 client interviews** across B2B, B2C and C2C companies

Secondary Research

- **Market study reports** for the key industries
- **Company annual reports**

Total number of interviews conducted : **54** | Companies covered : **37** | Individual consumers surveyed : **250**

A. Tax estimates

The service tax estimates from the Department of Revenue were analyzed to understand the progression of the industry in the past few years. These numbers were also used to estimate the market size.

As per the Department of Revenue, the industry contributed close to INR 1,810 cr towards service tax in FY17 (pre-GST regime). This value constitutes the net service tax paid by the industry after setting-off the input tax credit. This credit is claimed by the industry for the services availed by the industry in order to provide the express services. This set off on the gross tax varies depending on the business model adopted and is estimated to be close to 60 percent on an average. Based on this estimate, the industry is expected to have contributed close to INR 3,000 cr in FY17 by the way of service tax paid in the form of input credit and cash.

B. Supply assessment

We conducted close to 40 primary discussions across 25 express players in India. The key topics of discussion included:

- Express market in India – evolution, historical growth and current market size
- Key drivers
- Growth trends for the various segments
- Challenges faced
- Future growth drivers

In addition, we also conducted secondary research by studying the annual reports of the leading companies, newspaper articles and databases such as EMIS, Capitaline.

Approach for primary research for supply assessment

30
senior industry professionals across
15
large express players

10
medium and small scale express service providers

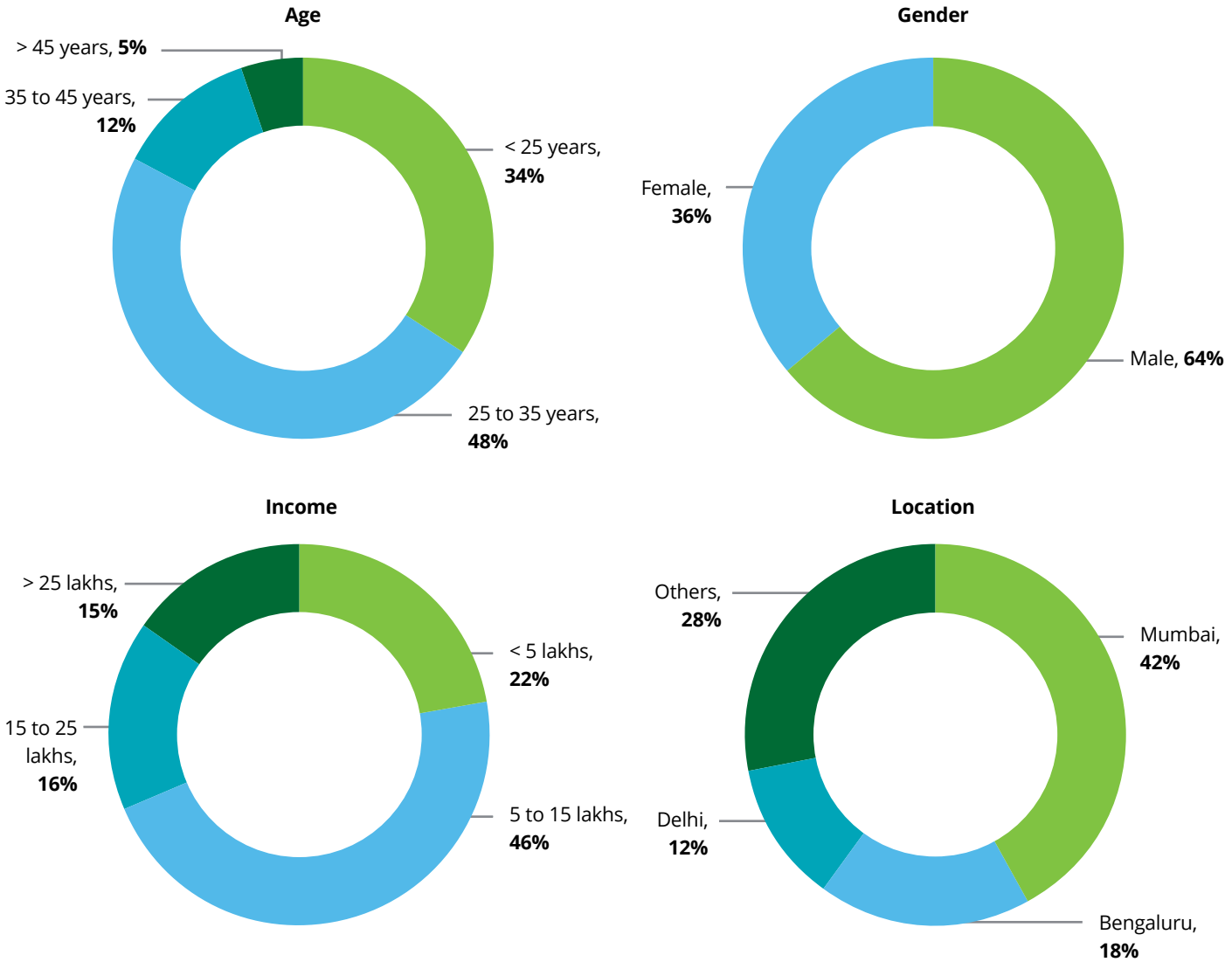
Total number of interviews conducted : **40**
Companies covered : **25**

C. Demand assessment

We conducted a primary survey across 250 professionals from Deloitte across the leading 13 cities – Ahmedabad, Baroda, Bengaluru, Chennai, Coimbatore, Delhi, Goa, Hyderabad, Jamshedpur, Kochi, Kolkata, Mumbai, Pune to understand the trends for B2C and C2C consumption.

The profile of the respondents is as follows:

The profile of the respondents for the demand assessment survey



Total number of respondents = 250

We also conducted interviews with 16 companies across the following sectors to understand the customer expectations:

- Ecommerce
- Auto components
- Textiles and lifestyle
- Electronics
- Medical Equipment
- Industrial electrical

Glossary

AR	Augmented Reality
B2B	Business to Business
B2C	Business to Consumer
BCAS	Bureau of Civil Aviation Security
BFSI	Banking, Financial services and Insurance
Bn	Billion
C2C	Consumer to Consumer
CAGR	Compounded Annual Growth Rate
CEP	Courier Express Parcel industry
CISF	Central Industrial Security Force
COD	Cash on delivery
Cr	Crore
EDI	Electronic Data Interchange
EICI	Express Industry council of India
ETA	Estimated time of arrival
FY	Fiscal Year
GDP	Gross domestic product
GMV	Gross Merchandise Value
GST	Goods and service tax
GSTIN	GST Identification number
HSN	Harmonised System of Nomenclature
INR	Indian Rupee
IT	Information Technology
LTL	Less than truck load
MSME	Micro Small and Medium enterprises
RTI	Right to Information
UAV	Unmanned Aerial Vehicle
UDAN	Ude Desh ka Aam Naagrik scheme
UK	United Kingdom
USA	United States of America
USD	United States Dollar
YOY	Year on year


MAX. GROSS 30480 KG
67200 LB
TARE WT. 2360 KG
5200 LB
CAP. WT. 28120 KG
62000 LB

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