



 **GREYORANGE**

Flipkart



Case Study

The largest e-commerce player in India significantly reduces OPEX and streamlines revenue recognition process with robotic automation.

About Flipkart

Flipkart is India's largest e-commerce marketplace with over 60% market share of mobile commerce. With a registered customer base of 75 million, Flipkart offers more than 40 million+ products across 80+ categories including Smart Phones, Books, Media, Consumer Electronics, Furniture, Fashion and Lifestyle.

Launched in October 2007, Flipkart is known for its path-breaking services like Cash on Delivery, experience zones and a 30-day replacement policy. Flipkart is a pioneer in services such as 'In-a-Day Guarantee' (across 50 cities) and 'Same-Day-Guarantee' (across 13 cities) at scale. With over 85,000 registered sellers, Flipkart has redefined the way brands and MSMEs do business online.

Industry Landscape

Indian e-commerce industry has seen an unprecedented growth in last 3 years – primarily driven by the penetration of broadband and mobile internet, the proliferation of smart phones and innovative business models such as cash-on-delivery. The e-commerce industry in the country is likely to be worth USD 38 billion by 2016, a 67% jump over the USD 23 billion revenues for 2015, as per industry body Assocham. It is expected to breach the USD 100 billion mark by 2020, as per Goldman Sachs. Home-grown Indian e-commerce players are seeing intensive competition from international e-commerce behemoths.

The Opportunity

The strong growth in the Indian e-commerce market presented several distribution challenges for market leaders like Flipkart. Handling really high volumes, orders of different shapes and sizes that needed to be shipped across numerous locations in limited time and also provide services including 'same-day-delivery' (SDD) and 'next-day-delivery' (NDD) in given Indian logistic conditions were some of the challenges for Flipkart warehouse managers.

Flipkart was also looking at improving its processes to handle the strong demand surge during festive seasons to provide best experience to their end-customers. Manual sortation of thousands of packets for hundreds of pin codes in a few hours, while operating within the limited space in its warehouses and transit centres was leading to costly inefficiencies. Further Flipkart partnered with a large number of third-party logistics (3PL) vendors for last mile delivery across India, who would charge for each shipment based on manually approximated packet weight and dimensions. This meant potential revenue loss for Flipkart due to lack of accurate data.



Solution

Flipkart partnered with GreyOrange to leverage next-gen robotic solutions for automating their fulfilment center and transport centers and to resolve the challenges it faced with order sorting, routing and inaccurate billing for shipments by vendors.

GreyOrange performed a comprehensive assessment of warehouse processes for Flipkart. After a methodical analysis, GreyOrange designed a solution for Flipkart and implemented its Linear Sorter systems across Flipkart's fulfilment centre and transport centres. GreyOrange installed two double decks and five single deck sorters of capacity 6000 sorts/hour and four sorters of 3000 sorts/hour across 8 transport centres and the Hyderabad fulfilment centre. GreyOrange was responsible for the integration with not just Flipkart's WMS but also the conveyor system proposed as part of the warehousing solution.

A key feature in the GreyOrange Linear Sorter System is its ability to read 2D barcodes. The system also captures images of the packets for the purposes of archiving. These images come in handy, while resolving disputes with 3PL courier carriers and sellers using Flipkart platform as market place.

The Linear Sorters also come with an in-built dimensioning and weighing system where the real volume, box volume and dead weight of each packet is captured. This automated volumetric data collection and archived images of packet enabled Flipkart in real-time tracking of packets and accurate billing with 3PLs and marketplace sellers. The PPTL systems, a proprietary technology, allowed Flipkart to efficiently sub-sort the packets even till the pin codes levels, with minimal errors.



"The value proposition brought by GreyOrange automation solution was accuracy, repeatability and consistency. GreyOrange worked with us as a team and suggested solution that was scalable. It is a one-stop shop for hardware and software, offers 24x7 support and has shown high level of commitment. I cannot think of anyone else except GreyOrange for this job".

V Ramesh

Vice President-Supply Chain Operations
On GreyOrange's Sortation Solutions



Results

GreyOrange's solution enabled Flipkart in optimizing its supply chain, by achieving the required throughput, while significantly reducing errors and effectively utilizing space in the fulfilment centers and warehouses. The key benefits include:

- Significantly reduced OPEX
- Improved dimensioning and weighing accuracy by 16-18%, resulting in increased revenue recognition by around 10%
- Achieved sorting throughput of 48000 sorts/hour across operations and across all of our facilities
- Optimized warehouse space utilization with savings up to 2.5 times
- Reduced sorting processing time by half



The GreyOrange Advantage

- In-house development of both hardware and software
- Accelerated delivery time of MHs with installation of GreyOrange Linear Sorter
- Modular architecture to scale-up as per the changing customer requirements
- 24x7 global support

About GreyOrange

GreyOrange is a multinational firm that designs, manufactures and deploys advanced robotics systems for automation at warehouses, distribution and fulfilment centres. With deep domain expertise, world class hardware and software engineering and the passion to solve complex business problems, the company is disrupting the way logistics and supply chain processes across the world are being optimized. Founded in 2011, GreyOrange is headquartered in Singapore with offices in India, Hong Kong, Japan, Germany and UAE, and a state-of-the-art Research and Development center in Gurgaon, India. To know more, visit greyorange.com