GREYORANGE

aramex
delivery unlimited

Case Study

A leading delivery and logistics services company reduces OPEX by 50% and improves turnaround time by 40% with next-generation sortation technology.

About Aramex

Aramex is an international express mail delivery and logistics services company headquartered in Dubai, United Arab Emirates (UAE). Established in 1982, the company rapidly evolved into a global brand recognized for its customized services and innovative multi-product offering. Today, Aramex employs more than 13,900 people in over 354 locations across 60 countries, and has a strong alliance network providing worldwide presence. Aramex started operations India in 1997. Headquartered in Mumbai, Aramex has 12 distribution hubs and delivers to 8000 pin codes across India.

Industry Landscape

The global third-party logistics (3PL) market is expected to reach USD 925.31 billion by 2020, as per Grand View Research. The exponential growth in the e-commerce domain, proliferation of omni-channel fulfilment and transitioning from pallet-picking to case-picking and piece-picking are some of the trends impacting the global 3PL industry. The industry faces multiple challenges due to poor infrastructure, expensive real estate, high attrition rates, uncertainty in demands and high cost of operations. To meet dynamic customer demands and reduce costs, logistics companies are shifting towards automation and technology in their operations.

The Opportunity

Rapid expansion in the e-commerce segment has been one of the largest drivers of growth for Aramex in India. In fact, logistics is one of the most critical factors for success of any e-commerce company in managing their business criticalities and retaining their customers. The solid growth presented several supply-chain distribution challenges to Aramex. Aramex would charge e-commerce players based on dead weight of sample shipments and would be charged by the carriers (air or road) on the basis of volumetric weight of every shipment. This was resulting in significant revenue leakage for Aramex.

Further, Aramex was under tremendous pressure to meet stringent service-level agreements defined by various customers and deliver shipments in extremely tight schedules. Sorting thousands of packets of varying size and shape efficiently in a few hours and in the limited transit center spaces was extremely challenging for Aramex. Also, manual sortation till last-mile (pin-codes) was error-prone, with errors in the range of 3-5% cases daily. Managing the surge in demand during the festive season further added to the complexity of the problem for Aramex.

Aramex selected GreyOrange as its partner to leverage next-generation warehousing technology solutions to resolve the multiple challenges it faced with order profiling, sorting and routing.

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Manual sortation was error-prone with level of errors ranging from 3-5% everyday. With GreyOrange sorting solution, we have 100% accuracy rate. So, as long as the client has given us the right pin-code, the packages reach the end-destination without any further sorting from the origin to destination. GreyOrange had the right combination of people, who understood our needs and gave us solution based on our requirement, than sell something what they had. It was a good decision to go with GreyOrange.

Percy Avari (Regional Manager - South Asia At Aramex)

The Solution

To enable Aramex in optimizing their billing processes in order to improve the revenue recognition, GreyOrange installed a Profiler solution comprising a Manual Scanner system, a Dimensioning and Weighing System (DWS) and a rejection arm with throughput of 1500 packets/hour at their Delhi hub. GreyOrange DWS is capable of accurately calculating both dead weight and volumetric weight of shipments, along with measuring the packet dimensions and calculating real volume and box volume, enabling Aramex to appropriately charge for the shipment from its customers without any revenue leakages. The GreyOrange Profiler performs at a 99.9% accuracy rate with a 24x7 global customer support.

As the load at Aramex Delhi hub increased manifold in a few months, GreyOrange upgraded the Manual Scanner system in the Profiler to an Automated Scanner system which enhanced throughput of the system to 3000 packets/hour. The Automated Scanner is additionally capable of capturing and archiving images of order shipments. This automated volumetric data collection and archived images of packets also helped Aramex reduce pilferage, as well as in auditing the charging policy of shipments based on both the images and volumetric weights of the shipments.

As Aramex's business grew in scale, it also faced challenges with the sortation process requiring sorting of really high volumes, single item orders of different shapes and sizes, that needed to be shipped to numerous pin-codes across India. To handle this challenge, GreyOrange expanded the existing Profiler to the GreyOrange Linear Sorter which was capable of profiling and sorting 3000 packets/hour. A challenge that GreyOrange overcame in expanding the existing solution was non-availability of space. The Profiler was installed in just 1500sq. feet area. GreyOrange worked together with Aramex in adding 1500 sq. feet of space, which was previously being used for non-core activities and installed the GreyOrange Linear Sorter in a super-squeezed facility with almost 90% space utilization. The GreyOrange Sorter helped Aramex scale-up its operations by consolidating distribution into one hub, and still meet the demand of the entire Delhi region. This resulted in significant cost savings for Aramex. Also, Aramex was able to manage the business growth without increasing the size of hub.

The GreyOrange PPTL system, a proprietary technology, allowed Aramex to efficiently further sub-sort the packets even till the last-mile (pin-codes levels), with minimal errors. The Sorter Management Software also enabled Aramex to create configuration profiles for defining sortation logic for both inbound and outbound processes, allowing them to quickly switch from one profile to another in minutes, while significantly reducing sortation time for shipments. With increase in

sortation throughput, it provided an opportunity for Aramex to expand its customer base in India. It also allowed Aramex to handle peak loads of 25,000 packets in a day during the festive season. GreyOrange assisted Aramex in defining a barcode template for the shipments coming to Aramex, helping them streamline their processes. Additionally, before implementing GreyOrange solution, Aramex used to manually map AWB for any shipment to the pin-code and sort the packets based on the destinations, making it a really long, tedious and error-prone process. GreyOrange's solution also solved the data-integration challenge by automating the process of

mapping air-waybill (AWB) number to pin-codes, reducing error-rate associated with the manual processing.

As a result of the tremendous success in Delhi, Aramex replicated a similar model for the Mumbai region, as throughput requirements for Mumbai were also on a rise. Aramex installed the GreyOrange Linear Sorter with throughput of 3,000 packets/hour. This resulted in Aramex consolidating operations for Mumbai region as well, while realizing substantial cost savings. Aramex also installed the GreyOrange Profiler at their Hyderabad hub.

Results

GreyOrange's solution enabled Aramex to achieve the required throughput, while effectively utilizing space in the hubs.

• Scaled-up operations from 4,000 to 8,000 to 20,000 shipments a day and even, 25,000 shipments a day during peak season leveraging GreyOrange Linear Sorter
• Aramex was able to consolidate operations at 5 sortation hubs into one central fully automated hub, thereby reducing cost by 50%
• Negligible errors in sortation, as there was minimal manual intervention
• Increased serviceable pin-codes by almost three times
• OPEX saving achieved by almost 50%
• Optimized warehouse space utilization with savings up to half
• Improved turnaround time by 40%, with ability to process the shipments in just a few hours

The GreyOrange Advantage

• In-house development of both hardware and software

• Accelerated delivery time with installation of GreyOrange Linear Sorter in less than three months

• Modular architecture to scale-up as per the changing customer requirements

• 24x7 global customer 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**

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