

Case Study



Infosys Helps DHL Express US

Enhances Customer Satisfaction, Efficiency with IT Simplification

About the Client

DHL Express is a global leader in the Courier, Express and Parcel (CEP) industry, offering innovative and customized shipment solutions. DHL's worldwide network links more than 120,000 destinations across 220 countries and employs 300,000. DHL Express US is a key geographical region catering to a large number of international and domestic customers.

Business Challenges

DHL Express US was facing a high and unacceptable degree of data latency, affecting the revenue collection cycle time, customer satisfaction levels, and operational efficiency. The organization was saddled with a disparate and complex IT system, the result of a large acquisition and integrating the two entities' IT applications. Thus, data was routed in a convoluted manner, leading to the problem. An IT landscape supported by over 600 applications and 1,400 point-to-point interfaces was not helping matters.

The data latency was affecting DHL Express US customer-centric operational metrics. Also called operational data-points timeliness or checkpoint data, operational metrics are of paramount importance. Checkpoints are intermediate milestones in a shipment's lifecycle from pickup to delivery and help define and measure DHL service performance. DHL uses checkpoint data to provide internal operational visibility and external customer visibility through track and trace functions.

Tracking and tracing shipment flow as it happens is highly critical because the customer determines the transportation company's capabilities and service-level attainment using network completion checkpoints. For example, a shipment that needs to be delivered at 10:30 am as per a customer request may be delivered on time. However, if the system captures and reports this information only after 8 hours, the customer can consider it as a failure of service.

Standard operational procedure mandates that operational metrics be available in operational reporting systems within 15 minutes of information capture. However, DHL Express US was experiencing more than 60 minutes (up to several hours) of data latency for over 20% of US checkpoints flowing to various global reporting repositories.

DHL Express US wanted to get all its checkpoint information within 60 minutes of data capture. It also wanted greater than 90% of this information to be available within 15 minutes. Only then would it be possible for it to achieve the following critical business objectives:

- Provide Consistent and Standardized Service by adhering to mandated standard operational procedure
- Enhance Customer Satisfaction by reporting accurate and timely data on service
- Ensure Productivity Improvement with an on-time shipment tracking service that helps both the customer as well as DHL plan ahead

Improve Revenue through:

- **Checkpoint-based Fees** - According to customer tariff agreements certain fees can be applicable only if relevant checkpoints are captured
- **On-time Revenue Realization** - The billing and invoicing process can be triggered only once the network completion checkpoints are captured
- **Value-Added Services** - Proactive notification, shipment tracking and tracing and pre-planning
- **Cost Reduction** - Shipment tracing helps DHL identify lost shipments which leads to fewer customer complaints and claims

Infosys has been DHL's strategic partner for more than 11 years, providing services ranging from solution consulting and system integration to application development, legacy modernization, and package implementation. Confident in the proven capabilities of their strategic partner, DHL Express US sought Infosys' help to provide a cost- and time-effective solution to improve their customer-centric key operational metrics.

The Infosys Approach

Within a span of 6 weeks, Infosys identified the high latency data items and recommended IT solutions. Targeting high latency shipments, Infosys identified a business pattern for 30,000 shipments per day that affected timeliness of over 200,000 checkpoints. The root cause was identified to be incorrect business classification of this set of shipments. Infosys devised an alternate solution to handle these shipments that would not affect other business processes even as it reduced latency to within acceptable limits. In doing so, it demonstrated excellent problem-solving skills and showcased business and IT domain knowledge.

The number of checkpoints positively impacted by this change and which now reach global data repositories on time is over 960,000 per week. The change reduced the latency, on average, from more than 8 hours to 13 minutes.

“Data latency was becoming a serious hurdle for our business. We were desperately looking for a solution and fast. We approached Infosys who instantly got to the heart of the problem. They assessed the situation and identified the shipments – 20% of them – which caused all the trouble. The successful project proves Infosys’ deep understanding and competency in the logistics domain” said Dan Maloney, Director, Network Operations, Business IT, DHL Express.

The Infosys Solution

Infosys’ methodological approach to the assignment and its Logistics industry domain and DHL applications knowledge helped execute this complex project in a short span of time. Infosys provided an end-to-end solution by understanding the business problem and defining and implementing the solution to ensure problem resolution. Infosys used the following 6-stage structured problem-solving and execution methodology:

1. **Understanding the Business Problem**

To devise a solution, Infosys first understood DHL’s business context, priorities and drivers and created a problem statement. The client validated the problem statement and shared it with relevant stakeholders.

2. **Analyzed As-Is Landscape**

Infosys analyzed the associated business and system processes. It then created an end-to-end flow diagram taking into consideration all exception scenarios from checkpoint capture point to operational reporting systems.

3. **Isolated Key Problem Areas**

Infosys isolated the key problem areas and conducted data analysis, and then identified high latency shipments. It created hypothetical business patterns based upon shipment and customer profiles. Then using data analysis, it applied the 80:20 rule for isolating, prioritizing and validating the scenarios. When Infosys started the assignment, 20% of the shipments showed the maximum latency of 6-8 hours. These shipments were forming a business pattern with respect to customer and shipment profiles. These shipments were targeted and a solution was devised to reduce their latency to less than 15 minutes, which improved the overall average.

4. **Performed Root Cause Analysis**

Infosys performed a detailed root cause analysis on the problem areas and identified the business problem as well as the IT impact it had. It validated the causes using multiple data samples of different time periods.

5. **Recommended and Implemented Solution**

Infosys recommended the IT solution, identified dependencies, created and executed the project, and deployed the solution.

6. **Validated Solution Benefits**

Infosys analyzed pre-deployment and post-deployment data points, validated data points in percentage improvement terms, and created a management report. This process was followed for 2-3 cycles.

Client Speak...

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Dan Maloney

Director, Network Operations, Business IT, DHL Express

Benefits

The Infosys solution positively impacted customers using DHLShip service - shipment volume of 30,000 per day. Moreover, the client was able to enjoy the business benefits quickly as Infosys identified the solution in less than 6 weeks and implemented it in 4 weeks’ time.

The benefits included:

- **Improved timeliness by 95%:** The average latency was brought down from more than 8 hours to less than 15 minutes for 200,000 customer-visible daily checkpoints and made them compliant with the checkpoints standard operational procedure
- **Enhanced the overall customer experience:** The solution helped track and trace business processes to provide timely updates to customers
- **Increased efficiency:** Operational reporting on checkpoints improved significantly
- **Reduced revenue cycle:** The on-time capture of network completion checkpoints for 30,000 shipments per day helped the billing domain assess fees and invoice customers in a timely fashion.



For more information, contact askus@infosys.com

About Infosys

Many of the world's most successful organizations rely on Infosys to deliver measurable business value. Infosys provides business consulting, technology, engineering and outsourcing services to help clients in over 30 countries build tomorrow's enterprise.

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