BIG DATA FRAMEWORK IMPROVES VISIBILITY INTO BT OPENREACH NETWORK

INFOSYS IMPLEMENTS A PROCESS COMPETENCY CENTER
Openreach, part of BT Group, maintains the broadband infrastructure in the UK. More than 500 communications service providers use the company’s access network to deliver fixed line and mobile telephony, Internet, data, and TV services for retail and corporate segments. In addition, Openreach undertakes repair of copper access lines and fiber networks for communications providers offering fixed line service.

The management, service team and analysts at Openreach wanted a granular view of the network for operational excellence. The company sought to enhance network service with comprehensive management of engineering intensity, performance and events. A ‘right first time’ method to detect and correct faults in copper wire lines was imperative to improve order fulfillment. Moreover, a system to identify, analyze and implement opportunities for process improvement was required for streamlined operations.
Foundation of data

Infosys recommended a focus group model to enable ‘right first time’ service, based on discussions with Openreach. We established a Process Center of Excellence to apply design thinking, data analytics and best practices in telecom infrastructure management. It helped us define baseline process scenarios and understand the root causes of shortfalls in customer experience / service delivery.

We built a data model to gain insights into operations, orders and network faults. Data from various sources were extracted to build the prototype, which helped identify key performance indicators as well as performance issues. Our team of domain experts, process specialists and systems analysts analyzed root causes of customer dissatisfaction vis-à-vis industry trends in order execution. The feedback helped the IT team refine the data model and re-orient processes for corrective interventions. Pictorial presentations spanning all dimensions of the concept were used to develop a business case for a strategic big data solution.

Our big data framework analyzes data, including user records, hidden enterprise data, and unstructured notes. The framework quantifies and prioritizes issues after assessing the impact on business. Visibility into the source of each issue facilitates deeper evaluation, which leads to across-the-board fixes. It also guides hypothesis and what-if analysis to find long-term solutions to recurring issues across the order fulfillment process.

Our performance management dashboards help stakeholders identify areas of improvement. Benefits are measured in terms of quantitative and qualitative outcomes such as cost savings and customer experience. Targeted recommendations drive action to avoid / minimize costs and prevent technical faults. A tracking mechanism monitors issues and deliverables to resolve each issue. Infosys’ big data system contributes to the body of knowledge by facilitating sharing of critical issues and solutions with communications service providers and Ofcom, the telecom regulator.

Resource pool

Process automation helps Openreach offer consistent service and improve the delivery mechanism continuously. The Process Center of Excellence delivers the following benefits–

- Improving On Time Delivery (OTD) of orders for number portability
- Enhancing the service delivery time by taking immediate action to rectify any network fault, including faulty pair and underground distribution points
- Saving field visits every week grouping activities required to deliver bundled broadband and voice services to the end customers.

The ‘focus group’ model is being implemented across strategic areas at Openreach identifying efficiencies in the operations with continuous process improvement.
The last word

“We moved from a starting position of nothing to delivering benefits in excess of £900K, on an annualized basis. We should all take pride from the fact that we did things the right way, and dealt with every challenge that was thrown at us with a smile on our face.”

- Rob Dickson, Head of MSLs and RFT, Openreach