

# Transitioning a major telecom provider from a legacy to modern billing system with zero disruption

Reducing operational costs and accelerating the launch of a new commercial product

An enterprise billing system is the most critical source of data for assessing an enterprise's financial viability at fiscal year-end. Outdated billing applications are a prime cause of accounting discrepancies and misalignment between objectives and ROI.

A leading global telecom company was struggling with a legacy billing system that was not adaptive to change, required a long lead time to release new features and was not operationally cost-effective.

The telco partnered with HCLTech to migrate its legacy billing application to a commercial off the shelf (COTS) telecom billing product. HCLTech worked closely with the client to migrate its existing billing system by leveraging its accelerators like bill compare and TM Forum based process maps. A focused deployment approach was also initiated to cause zero disruptions to existing operations

## The Challenge:

Overcoming high operational costs and switching to a new billing system with no disruption

The telecom's AS/400-based billing system was inflexible to changes, required a long lead time and carried high operational costs. Since it was heavily customized and had inadequate documentation, it delivered scarce information about system configuration and modifications, making it nearly impossible to isolate and

eliminate redundancies. In addition, many dormant programs made it very difficult to identify functionalities that should be built into a new billing system. Switching to a unified billing system became imperative for the client to be able to achieve tangible, sustainable and accelerated outcomes.



## The Objective:

### Increasing billing system flexibility and efficiency

The client was looking for a partner with a deep understanding of legacy functionalities and proven expertise in enterprise billing system implementation and migration. The telco needed the billing system to be fully configurable so that it could be easily and quickly changed based on requirements, without interrupting operations.

In addition, the experienced partner the client sought had to provide thought leadership for processes, technology and innovations for the COTS telecom platform. It also had to deliver end-to-end managed services and maximize ROI through enhanced service delivery and end-customer satisfaction, ultimately leading to:



Increased  
profitability



Higher  
efficiency



Lower  
costs

## The Solution:

### Seamless implementation and migration to the COTS telecom billing product

HCLTech gathered information about the challenges presented by the existing system and assessed the impact of shifting to the COTS telecom billing product. Discovering that the AS/400 application contained data

as old as 30+ years and that there were discrepancies in each entity, HCLTech analyzed the discrepancies and devised an action plan in collaboration with the client's IT and business teams.

Leveraging its demonstrated capability in transforming legacy functionalities, HCLTech:

- Leveraged X-Analysis Suite for automated reverse engineering to extract data models and cross-referenced data and business logic
- Deployed AS/400 experts to provide 100% coverage of the legacy application's functionality
- Leveraged the COTS telecom billing product's reference data framework to store reference data in key-value formats
- Automated tools to extract, transform and load reference data in production and non-production environments when needed
- Built coarse-grained APIs using multiple fine-grained APIs to ensure minimum changes in order management
- Configured and customized the application using the COTS telecom billing product's software development kit
- Comprehensively tested rating and invoicing functionalities to ensure 100% product coverage
- Built an API-driven migration framework using the accounts to be migrated as input and generating success reports for those accounts
- Read the staging data, executed transformation and used coarse-grained APIs to load the data onto the new billing system



## The impact:

Accelerated client progress via a new billing system, reduced operational cost and improved product launches

Leveraging its IP, accelerators and frameworks, HCLTech accelerated the migration of the AS/400-based legacy billing system to the telecom billing COTS product with zero service disruption for client transactions, positively impacting \$4 billion in billing. By consolidating the billing system, HCLTech reduced

operational costs by 40% and accelerated new features and product launches by 20%. The telco's new billing system provides a reliable source of data for assessing its financial viability at fiscal year-end and aligns company objectives with ROI, giving its leaders a clear view of performance.