CASE STUDY: Billing Solutions

Bangladesh, Bangladesh Telegraph & Telephone Board and Rural Electrification Board.

Over the past two decades, CNS has provided bespoke billing solutions to several partners in Bangladesh. CNS' Billing solution for the Bangladesh Telegraph & Phone Board (BT&TBB) was an advanced software solution designed to optimize revenue collection. The custom-built system amalgamated several processes into a single, centralized billing database. Meanwhile, CNS' consumer electricity billing system serves the Bangladesh Rural Electrification Board (REB) and thousands of people across the country. The bespoke system operates on a local level to meet the needs of the semi-autonomous units overseen by the REB across Bangladesh.

Our History in Billing Solutions

CNS developed billing software solutions for BT&TBB for almost eight years between January 2002 and December 2009. In that time, CNS oversaw the inception, development, and implementation of a Very Large Database (VLD) with the purpose of recording billing information. The system processed the billing information of the BT&TB's approximately three hundred thousand customers at that time.

The billing database created for the REB operates across Bangladesh's rural areas. Unlike the BT&TB billing solution, this system – which serves thousands of people in rural communities – is decentralized. Designing a system to meet the needs of local Electricity Boards gave CNS' software engineers the opportunity to develop a different kind of database to the massive, centralized formats.

Operator Benefits

Between 2002 and 2009, telecommunications technology experienced a revolution of sorts. Consequently, CNS' large database capabilities supported the booming Bangladeshi telecommunications market. The VLD maintained and supported the billing information of over three hundred thousand people subscribed to landline phones in Bangladesh. The system handled the massive amount of data securely thanks to its intelligent design and the incorporation of Oracle technology which protected the billing information of BT&TB's customers.

The REB benefited from CNS' bespoke, localized database systems. Owing to the fluctuating needs of rural communities in Bangladesh, CNS devised a database that operated locally and could therefore better help the REB better meet the needs of customers in rural areas. The local databases also allowed the REB to import electrical meter readings into the database more accurately. Consequently, the REB's electrical bills were more accurate.

CNS Technology

CNS' Billing Solutions are unique, bespoke, and innovative software solutions that are designed to meet the specific needs of clients. The combination of VLDs and localized databases have enabled CNS' clients to make the most of their billing data and maximize their revenue from billing processes.

Secure software technology is the cornerstone of all CNS databases. At the centre of each solution is Oracle technology. Specifically, the Very Large Database created by CNS for the BT&TB is powered by Oracle 9i technology. The system - developed wholly by CNS - was entirely centralized and secures

all billing information collated by the BT&TB in a massive database. The database was also responsible for handling routing information for customers of the BT&TB. Owing to the nature of the contents of the database, the inclusion or Oracle technology was a must to ensure that customer billing information remained safe from any security threats. CNS' software developers provided the BT&TB with several other tools to maximise the effectiveness of the VLD in use across Bangladesh. In addition to the extensive security capabilities boasted by the system, the VLD created for the BT&TB also featured automatic call detailing, subscriber information management, and billing repository control.

CNS took a different approach to meeting the needs of the Rural Electrification Board. The REB required a system that would meet the needs of its semi-autonomous units across Bangladesh. Therefore, CNS developed a series of small databases for each unit to support rural areas around the country. Ease of use was a core element of the databases created for the REB and the system satisfied this need by allowing operators from the REB to directly input electrical meter readings collected by field personnel. The databases would automatically cross-reference data with an arrears database that is updated monthly. The system then used the cross-referenced data to produce an accurate electrical bill for customers. This simple but robust billing solution was invaluable in supporting the REB's billing process, rural electrification, and the needs of customers in rural communities across Bangladesh.