TCS has connected 1.2 million Australian premises to its optic fibre network by rolling out the network as an end-to-end service offering.

THE CONTEXT

In a first for the company, TCS won a Greenfield project to set up an end-to-end optic fibre network across Australia. The company began by planning and designing the entire network manually, which resulted in errors and delays. For instance, because of the large number of errors, the network designs were not constructible and the client was unable to scale up the delivery model. As a result, between 2009 and 2015, the company had planned and designed only around 5% of the entire fibre network. By 2015-16, the delay in cycle time for designing each project area stood at 42 weeks against the targeted 26 weeks.

TCS's competitors had already automated network design by virtue of being in the business for long. However, none of them had a comprehensive one-stop solution that included programme management, a Plan & Design Automation suite, and multi-party collaboration for service delivery, which is what TCS decided to build.

THE INNOVATION

TCS devised the Fibre Rollout as a Service (FRaaS) as an end-to end service offering. Its comprehensive service delivery model is enabled by an end-to-end orchestration engine for planning and designing networks across multiple technologies in order to deliver fibre to multiple points (FTTx).

This encompasses automated plan and design, workflow, document and defect management, trouble ticketing and field force management. In addition, it fosters collaboration with multiple external and internal stakeholders to deliver a solution that is consistent on design quality and is scalable, thereby leading to a higher throughput (two times the weekly roll-out of connected premises). It also ensures a 50% reduction in cycle time for generating final designs and an 87% improvement in the number of customers activated per quarter for telecom operators.

KEY CHALLENGES

TO REDUCE DELAYS IN DELIVERING CONSTRUCTIBLE DESIGNS OWING TO COLLABORATION ISSUES ACROSS VARIOUS STAKEHOLDERS

The company had to collaborate with stakeholders such as local municipal authorities, power companies, and heritage bodies to roll out the network.

TO TACKLE SLIPPAGES IN SCHEDULES AND ARREST COST OVERRUNS

Inconsistencies in design data, delays in field surveys and poor quality of designs could result in slippages and lead to cost overruns.

THE IMPACT

The FRaaS innovation has helped TCS to connect 1.2 million premises to the optic fibre network. Moreover, it has increased Internet speeds in Australia by over 10 times from 2 Mbps to around 25 Mbps, speeding up the digitalisation of the Australian continent. The programme is seen as one of the key contributors to the country's GDP growth because of its profound economic impact in connecting communities and enabling entrepreneurship, innovation in education and remote learning, and also in connecting remote health services across Australia.