Success Story

NATIONAL BROADBAND INFRASTRUCTURE PROVIDER
REVIEW OF FIXED WIRELESS ACCESS STRATEGY

CLIENT PROFILE

Largest Fixed Wireless Service provider. Client is a multi-service operator, providing Fixed Wireless, Satellite, and FTTx services. The fixed wireless network is limited to rural areas.

CLIENT CHALLENGES

The Client wanted to assess whether Fixed Wireless Access (FWA) offers a viable long-term approach, compared to other broadband deployment alternatives. With growth in data usage, the Client was uncertain and wanted to assess whether investment in FWA makes market or business sense.

SOLUTION

We worked closely with the client to understand the current situation, set of challenges and provided detailed analysis for FWA based solution, and advice whether it is a sustainable future solution or not. Our in-depth analysis was primarily focused on –

- Current network and customer experience analysis
- Benchmarking against other fixed wireless operators
- Long term network modelling
- Technology roadmap analysis
- Assessment of potential alternatives technologies

KEY FINDINGS FROM IN-DEPTH ANALYSIS

- Client's current network performance was at par with other global FWA providers
- FWA is a viable future solution. However, significant investment is required in use of advanced LTE/5G technology and new mmWave spectrum
- Capex could be reduced in the long term by up to 50% through timely adoption of these technologies and appropriate usage limits
- Improvements in limited portions of the backhaul architecture, to make it more resilient, would result in reduced planned outages for customers
- While some of the FWA areas could potentially be considered for fiber due to changes in housing development etc., other alternative technology approaches were deemed inadequate, immature or commercially risky
BUSINESS SITUATION

The Client provides advanced broadband national infrastructure. They currently provide fixed broadband, fixed wireless and satellite services. The Client wanted to assess whether Fixed Wireless Access offers a viable long-term approach, compared to other broadband deployment alternatives. They needed a partner to conduct long-term analysis on the viability of Fixed Wireless Network. They appointed Tech Mahindra to conduct a feasibility study.

Our Consultants conducted a detailed analysis of client's current network and found that while historic customer experience was adequate, the client had not made best use of available capacity features and had a high level of planned outages.

We addressed limitations and provided recommendations related to technology, high-level cost comparisons against other fixed wireless operators, recommendations to better measure impacts of outages on end-customers, implementation of a fair usage policy, etc. It was concluded that the Fixed Wireless network could survive the next decade, with some required conversions of the microwave network to fiber.

TECH MAHINDRA’S METHODOLOGY AND SOLUTION

We followed a step-by-step approach to -

- Analyze the current network performance from network counter and probe data
- Benchmark against other FWA operations across the globe
- Assess the viability of alternative solutions and emerging technologies
- Review and further develop a long-term technical roadmap
- Undertake network performance/cost modelling through development of a bespoke model encompassing:
  - Customer experience
  - Technology deployment options
  - Associated capital spent

With the help of bespoke network model, we were able to drive the analysis, and provide Client with powerful and flexible approach to analyze various strategies and deployment scenarios with associated customer experience and capital costs.