

# Autonomous CEI for zero-touch 5G and wi-fi networks – Phase V

Prioritizing convergence, intent-based services, and sustainability for optimal customer experience and Sustainability.



## The solution:

This Catalyst project is in its 5th year and is working to enrich the scope of its Predictive Customer Experience Index (CEI) solution. New use cases on sustainability, customer care, and intent services for network slicing will enable CSPs to deliver added-value services to market sectors, enterprises, and consumers.



## Addressing the challenge:

- This project enhances telecom network performance and customer experience through four integrated use cases:
1. Convergent CEI for Mobile & Fixed Networks: Building a unified Customer Experience Index (CEI) from both Wi-Fi and mobile data via crowdsourcing, enabling seamless service quality insights and feeding a Digital Twin for broader use.
  2. Sustainability Optimization: Combining CEI with energy usage and network KPIs to support greener, cost-efficient operations while maintaining or improving service quality. Carbon impact can become a customer-facing KPI.
  3. Intent-Based Services & Monetization: Using CEI as a key SLA metric in 5G intent services and slicing. Supporting highly customized services for B2B, VIP, and B2C customers and validates differentiated QoS for remote work applications.
  4. GenAI for Root Cause & Customer Care:
    - Complaint Analysis: Extracting issues from customer complaints using GenAI to enhance root cause identification.
    - Response Generation: Drafting personalized, empathetic replies explaining issues and solutions, improving customer satisfaction.



One of the main reasons for customers complaining and calling the Call center is related to Customer Experience. To improve Customer Experience in these cases, we need to anticipate the customers' pain points and proactively implement autonomous solutions before any degradation in the services occurs both on fixed and mobile, providing to our customers a seamless customer experience. A small improvement in network experience may have a big impact in the customer perception, and there is a direct correlation between perceived customer experience and churn.

We also want to explore new business opportunities with the CEI application to Sustainability, dynamic slicing and intent services, always focused on customer experience improvement. These enable CSPs to deliver added value services to market sectors, enterprises and consumers with higher levels of quality and efficiency

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## Business impact:

Using a **Customer Experience Index** is one of the **main drivers for churn reduction**, increased sales, and a customer base with higher ARPU.

Champions:



Participants:



GO DIGITAL, STAY GREEN!

