

## **Problem Statement: AI/ML based Predictive Analysis in Telco**

**Background:** Telecom operators need real time Analysis of their network traffic with low latency for predictive model using Machine learning and AI. Based on Predictive analysis or insight, provide feedback to Core Network Functions for automated Closed Loop Control. The Analytic Engine systems would be driven by data from complete network – Radio network, Core network and OAM system. The system should be able to correlate data for subscriber's session from different sub systems in real time based on different parameters like subscriber identity, session data, location, time, and services and provide graphical models to gain insight of the end user experience.

### **Benefits of Telco Analytics:**

1. Reduce subscriber churn by monitoring network parameters and Quality of service
2. Understand subscriber's usage and provide customized marketing campaigns
3. Help retaining high ARPU customers by analyzing service degradation
4. Predict congested cells based on location and time of day and provide reduced QoS data to all subscribers in congested cells
5. Support Subscription model for periodic or Notification reports or Adhoc model (Request/Response) for one-time report from Analytics system

### **Ideal solution/Use Case:**

1. Support multiple interfaces to retrieve unstructured data from different 3GPP Network elements
2. Provision for user defined predictive models based on telco use case
3. Apply real time AI and ML for Predictive models
4. Predictive Congestion Management in the Network
5. Analyse degradation in service based on QoS data
6. QoS prediction for improving the SLA using Adaptive Policies
7. Mobility Predictions using past location data for Smart Paging
8. Stitch together the subscriber session activities and analyse browsing patterns

### **Must haves – success triggers for responses:**

**About us:** STL is one of the industry's leading integrators of digital networks providing All-in 5G solutions. Our capabilities across optical networking, services, software, and wireless connectivity place us amongst the top optical players in the world. These capabilities are built on converged architectures helping telcos, cloud companies, citizen networks, and large enterprises deliver next-gen experiences to their customers. STL partners with service providers globally in achieving a green and sustainable digital future in alignment with UN SDG goals. STL has a strong global presence in India, Italy, the UK, the US, China, and Brazil.

STL Tech is a public company, listed on BSE and NSE, with a broad global shareholder base with presence in over 100 countries. For more details: <https://www.stl.tech/>

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