



Telecommunications

AI-powered solutions

Goals



Efficient Network Operations

Achieve network excellence by automating the detection, diagnosis, and action recommendations for network performance and operational issues, streamlining the process of identifying and resolving network problems, and ensuring optimal network performance and reliability.



Reduce Energy Cost

Dynamically maximize power savings while guaranteeing Quality of Service, using AI to optimize energy usage based on network demand, leading to significant cost savings without compromising on service quality.



Customer Satisfaction

Proactively address technical customer complaints even before they happen, using predictive analytics to identify potential issues and resolve them proactively, leading to improved customer satisfaction and loyalty.



Manage Data Overload

Collect network and customer data from multiple sources, usually stored in silos, to perform cross-correlated advanced analytics, providing a comprehensive view of network performance and customer behaviour, and enabling more informed decision-making.



AI CARE

Automated issue resolution

AI Care empowers customer care agents (CSA) to act as telecom experts, resolving issues quickly—often on the first call.

By integrating all relevant data sources, the system delivers instant root-cause analysis and suggests responses in natural language for customer service agents, along with technical descriptions for engineering and operations teams.

AI Care automates expert engineering processes to offer two types of issue resolution: **Reactive** and **Proactive**.

- **Reactive:** when a customer files a complaint, AI Care uses specialized logic to identify the most probable cause and generates clear, actionable insights—significantly reducing the time agents spend diagnosing and resolving issues.
- **Proactive:** AI Care continuously monitors subscriber experience in near real-time to detect and

address service-impacting issues – **before the customer even notices a problem**. When an issue is identified, the system automatically creates a virtual ticket and, when possible, resolves it autonomously.

In addition to improving service quality, the solution also enhances operational efficiency:

- **AI Care Now** boosts agent productivity by reducing call handling times, enabling each CSA to manage more customer interactions efficiently. It achieves this by delivering rapid resolutions—typically in under 30 seconds—that CSAs can provide to customers on their initial call.

If immediate resolution isn't feasible, the system provides detailed recommendations that can be escalated to engineering teams for final action.



Key benefits



Boost Customer Satisfaction

- Improve NPS and reduce churn with instant, expert-level support.
- Resolve issues faster—often during the first call or store visit.
- Happier customers through faster response times and improved issue resolution.



Empower Frontline Teams

- Provide L1 agents and store staff with root-cause analysis and actionable solutions in under 30 seconds.
- Deliver natural language guidance tailored for both customer service and engineering teams.
- Increased first-call resolution with virtual tickets triggered automatically when customers call.
- Enhanced quality of service (QoS) and a stronger brand perception.



Scale Expert Knowledge with AI

- Digitalize engineering know-how and scale it as operations grow.
- Use AI-driven RCA (Root Cause Analysis) and recommendations via a simple, intuitive interface



Streamline Engineering Workloads

- Reduce L2 support effort significantly.
- Enable better prioritization of network fixes with comprehensive insights.
- Improved operational efficiency and smarter task prioritization for engineering teams.



POWER SAVING ADVISOR

Save energy without impacting network quality

The solution

Tupl's Power Saving Advisor (PSA) solution is designed to **maximize efficiency of RAN Vendor's Power Saving features in the network** while minimizing impact on the end-users using advanced machine learning (ML) algorithms.

PSA leverages Tupl's MLOps capabilities together with an Action Manager component to minimize time-to-action.

It constantly computes energy consumption at multiple aggregation levels and tracks changes in the PSA configuration as well as network performance metrics.

Key benefits



Go beyond just deploying the vendors' power saving features to orchestrate your power savings strategy and optimize them cell by cell, zero touch.



Achieve a significant amount of energy savings with zero impact on customer experience.



Flexible and easy to expand; ML model can be modified in a cost-effective fashion.



Scales and enhances engineering knowledge through AI as operations grow.



Digitalizes your expert knowledge.



NETWORK ADVISOR

Trustworthy and actionable AI for Telecom Networks

The solution

Automated Network Issues Root Cause Analysis.

Decades of technology investments by Telecom Operators to address ever increasing traffic demand and customer expectations have led to a complex context with multiple technologies, where data needs to be gathered and correlated from multiple sources.

Award-winning Tupl Network Advisor helps network engineers unlock the power of AI to automate processes and digitalize cumulated engineering knowledge for scaling, speed, and consistency. A powerful AI system that adapts to your own environment and processes.

Key benefits



Digitalizes your expert knowledge.



No coding required.



AI automates Root Cause Analysis and action recommendations through simple User Interface (UI) screens.



Can integrate with other workflows or tools such as NOC, field services or even SON.



Maximum accuracy, consistency and speed for optimum level network performance.



Scales and enhances engineering knowledge through AI as operations grow.



NOC Automation

Towards zero-touch automation in your network operations

The solution

AI-Based Automated Network Operations Center.

While Mean Time Between Failures (MTBF) is improving, unexpected equipment failures still occur. As networks grow more complex and customers expect uninterrupted service, meeting these demands requires a new approach. Despite technological advancements, significant manual and repetitive work is still required to address critical alarms.

Tupl's NOC Automation solution addresses this challenge with the power of AI.

After integrating relevant data sources, Tupl ML toolkit enables the extraction of the existing root causing information, performs commonly identified automated actions, and creates tickets with detailed analytics.

Key benefits



Extracts best practices and turns them into digital knowledge.



Improves Tier-2 and Tier-3 performance and efficiency.



Consistently analyzes more data than humanly possible for the most accurate decisions.



Executes agreed actions automatically and creates work orders with deep analytics. Powerful, analytical tools: multi-dimensional radar, top offenders, trends, geographical correlation map.



Reduces Tier-1 work to absolute minimum.