

# TELECOM ANALYTICS SOLUTIONS





## EXPERTS IN CREATING KNOWLEDGE & BOOSTING PROFITABILITY

Describing the challenges and ecosystem of a Communication Service Provider (CSP) can only be done using superlatives: with their millions of customers and devices, terabytes of transactions and information, thousands of applications, and hundreds of partners.

As these trends develop, managing information becomes an opportunity to optimize business activities. Beyond understanding, handling and storing data, CSPs need solutions that can extract insights from the multitude of sources available, and power smarter decisions.

TEOCO's telecom analytics solutions align, correlate, and analyze multiple events and interface data sources to create subscriber centric insights, and reveal business improvements opportunities beyond data silos. Our solutions leverage the pioneering SmartHub analytics platform; subject matter expertise acquired over the past 20 years spent optimizing Telco's business activities, and subscriber-centric metrics.

Delivering subscriber-focused scores to power revenue growth

TEOCO's solutions can deliver quantitative and qualitative metrics offering objective KPIs/KQIs measurements to a myriad of applications for business, network or customer use cases. Enriched with the relevant information on subscriber's experience (xDRs), partners (TAP), location, network (probes), activities (logs), propensity scores can be derived to measure critical subscriber decisions that impact revenues and profits.



FINANCE



NETWORK



CUSTOMER

## CUSTOMER CENTRIC PERSPECTIVE

TEOCO's customer analytics suite combines profitability, Quality of Experience (QoE), and behavioral data to better understand, target, and engage a CSP's customer base. The suite combines real-time processing for insights into performance, faults and service quality, complemented by contextual processing capabilities for trending, historic context, geo-located data, and machine learning applied for predictive analytics.

## 360° FINANCIAL VIEW OF YOUR BUSINESS

TEOCO's Financial Analytics solutions provide a granular view of your operational costs correlated with wholesale and retail revenues by performing large-scale analyses of every network and business transaction. Those insights are further refined by subject matter experts who understand network technologies and partner agreements.

Our solutions are based on our telecom finance expertise identifying cost elements in each network transactions: fixed or variable, usage-sensitive or allocated, wholesale or retail, one-time or recurring. The granular details obtained can then be aggregated across multiple dimensions - by partner, service, location, market, or many others.

As such, we can virtually touch upon any aspects of your businesses and draw insights for your profitability, margins, churn, roaming, costs, traffic, usage, subscriber, route, or partner.

## BRINGING TOGETHER BUSINESS VIEWS AND THE NETWORK DOMAINS

Our network analytics solutions provide Key Performance Indicators (KPIs) on overall quality, coverage, and capacity for advanced network monitoring and troubleshooting. Combined with revenue, cost, margin, and subscriber data, our solutions enable you to launch profitable products and services. TEOCO provides comprehensive Technology and Business Support, including for Next-gen, IP, Legacy and Hybrid networks and technologies, throughout wholesale, Resale, Retail, 3rd-Party, Multi-party, Peering, MVNO business agreements and models.

# Analytics Solutions



## USE CASES



### PROFITABILITY ANALYTICS

Bringing together cost, revenue, and margin analytics to understand the profitability of subscribers, services, devices, rate plans, and other entities measured from a revenue perspective.



### ROAMING ANALYTICS

By capturing inbound and outbound roaming event data and enriching that data based on wholesale partner agreements, this use case validates settlements with roaming partners, thereby reducing overpayments. It also optimizes price plans and wholesale agreements, identifies regions where network build out is more profitable.



### SUBSCRIBER VALUE ANALYTICS

Marketing teams must understand individual customers and segments to tailor offers or plan new services. Understanding each subscriber's or segment's financial impact –whether cost, revenue or margin – provides a valuable attribute to refine or prune candidates for campaigns.



### PREDICTIVE ANALYTICS

Using Machine Learning capabilities, CSPs can now zero into a customer segment to understand if there are underlying network conditions that are impacting customer tenure and use this information to help drive future business value. By accessing multiple data set across your organizations: location, customer, behaviors, network context, TEOCO extracts the "Location DNA" of your subscribers, enabling you to target more appropriately the content you address to subscribers or predict when customer will churn and take reactive steps to reduce churn.

# Analytics Solutions



## PROVEN ANALYTICS SOLUTIONS:

Bringing together cost, revenue, and margin analytics to understand the profitability of subscribers, services, devices, rate plans, and other entities measured from a revenue perspective.

### \$500 M OVER 5 YEARS

Saved by a Tier 1 mobile operator by optimizing agreements and costs for partners in interconnect, roaming and third-party content.

### 60% INCREASED MARGINS

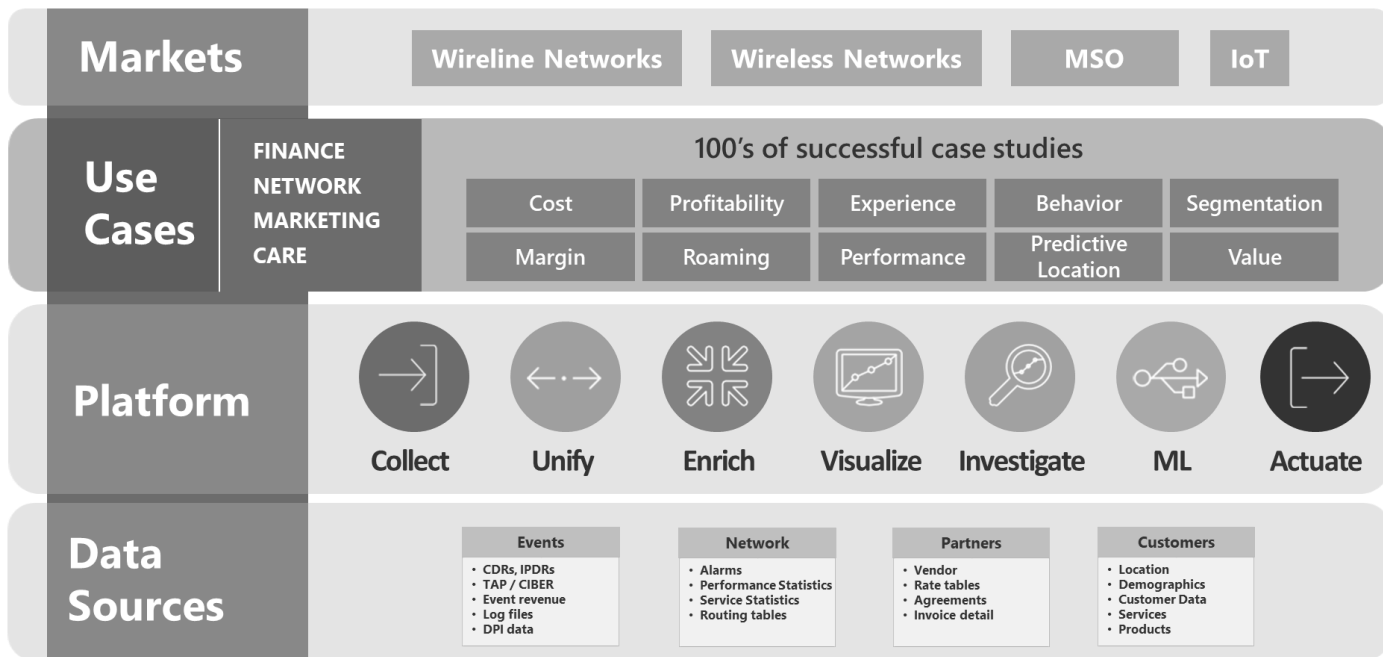
For a Tier 1 fixed operator, by renegotiating agreements and contracts with unprofitable partners and wholesale customers.

### TEN-FOLD REVENUES INCREASE OVER 4 YEARS

An MVNE operator increased revenues ten-fold over a 4-year period by helping MVNO partners optimize service bundles targeting newly identified market segments based on actual subscriber usage and behavior.



## SmartHub Platform



### SmartHub: DISTILLING INTELLIGENCE FROM YOUR NETWORK, OPERATIONS, CUSTOMER & BUSINESS DATA

SmartHub is TEOCO's analytics platform, dedicated to the telecom industry. It integrates a multitude of network, operations, business, and external data sources. Designed to support multiple applications that encourage data sharing and reuse, SmartHub eliminates silos and can assess, validate and model all the data available to TEOCO's solutions: RAN, Service Assurance, Geo-location, service quality and costs. More than an additional analytics layer atop existing OSS & BSS suites, SmartHub provides a standalone analytics environment dedicated to generating returns on investments (ROIs).

### COLLECT, ENRICH, VISUALIZE AND INVESTIGATE DATA TO RAPIDLY DISCOVER MORE PROFITABLE PATTERNS

SmartHub has the capacity to collect and process billions of event messages per day in real time. Based on an ETLT (Enrich - Transform - Load - Translate) approach to data management, the platform supports scheduled and ad-hoc analytical queries from hundreds of users. Data may be deposited to a published landing zone, or TEOCO may interrogate network elements to acquire the data directly from the network.

SmartHub does not need to run pre-covered queries, and supports rapid discovery through analysis. Providing out-of-the-box support for the most common switch and network elements, SmartHub is highly granular and can be configured to receive data from virtually any source, delivering advanced visualization and discovery capabilities. As such, SmartHub dramatically accelerates data processing and delivers a highly granular view of the data to deliver actionable intelligence more promptly.

# ABOUT TEOCO

**TEOCO is a leading provider of analytics, assurance and optimization solutions to over 300 communication service providers (CSPs) worldwide.**

Our solutions enable the digital transformation of CSPs while enhancing their network QoS, improving their customer experience and reducing their operational costs.

Through advanced analytics, TEOCO products provide actionable and measurable insights into network and customer behavior. This includes the optimization, effective monetization, and delivery of new and existing services, such as 5G.

Our commitment to network flexibility and agility makes TEOCO the obvious choice for CSPs looking to maximize the revenue potential of 5G investments and capitalize on new opportunities tied to the emerging Internet of Things (IoT).



**Global  
Footprint**



**Extensive  
Portfolio**



**Proven  
Solutions**



“TEOCO is bridging the gap between operations functions, particularly traditional engineering, planning and network optimization, and the business-defining monetization functions of revenue generation, customer experience, and margin management. Stratecast believes this makes TEOCO a company to watch.”

- Stratecast, Frost & Sullivan