

IntelliSight

Leverage real-time intelligence and data analytics to improve customer experience, reduce churn, streamline operations and optimize business models.

Everyone talks about the power of Big Data Analytics, however, many organizations have run into significant implementation road blocks, from both a technical and business perspectives. Some are unsure where to start as many different users—from engineers to marketing professionals—need access to different information in order to make better decisions. Others have deployed analytics solutions, but that only have limited coverage to address a specific need. To thrive in today's competitive world, mobile and fixed telecommunications service providers must have holistic intelligence rather than uncorrelated and often disparate slices of data to justify their decisions.

THE FAST TRACK TO KNOWLEDGE

Empirix IntelliSight is a software solution specifically designed to quickly provide holistic business intelligence for telecom service providers operating in both fixed and mobile domains. It efficiently provides actionable insights on key issues to multiple departments in real time. These insights include:

- ▶ Which applications, services and devices do my customers prefer?
- ▶ How are the services performing and how can we optimize the experiences?
- ▶ How are usage trends evolving and which business models will yield the greatest return?
- ▶ How is network performance impacting customer experience? What is the churn, especially in our most valued accounts?
- ▶ How can we monetize infrastructure and technology investments?
- ▶ Which incremental offers can be most appealing to our customers?

Through a unique combination of pre-built analytics tools, multiple data visualization options, the free-form layering of key indicators and granular drill down capabilities, Empirix IntelliSight efficiently reveals the meaning from information making it easy for companies to quickly profit from intelligence instead of spending days or weeks wrestling with it.

THE EMPIRIX ADVANTAGE: INSIGHTS BORN FROM EXPERIENCE

Every feature, option and solution embodies the knowledge Empirix has gained from years of interpreting network traffic data to create visibility into complex customer and performance issues for telecom operators around the world.

Benefits

- ▶ Speeds time to value by combining powerful database technology with intelligent analytics packages specifically designed for fixed and mobile telecom operators
- ▶ Intelligent aggregation and correlation of data from multiple, disparate sources
- ▶ Suitable for both real-time monitoring and historical analysis
- ▶ Out-of-the-box intelligence for customer behavior, network performance and more
- ▶ Easy to use customizable interface for ad hoc analysis
- ▶ Scales to manage high data volumes
- ▶ Powerful data visualization tools ensure that both technical and non-technical users can quickly and efficiently generate actionable insights
- ▶ Unique Service Model dashboard design accelerating the transition from NOC to SOC

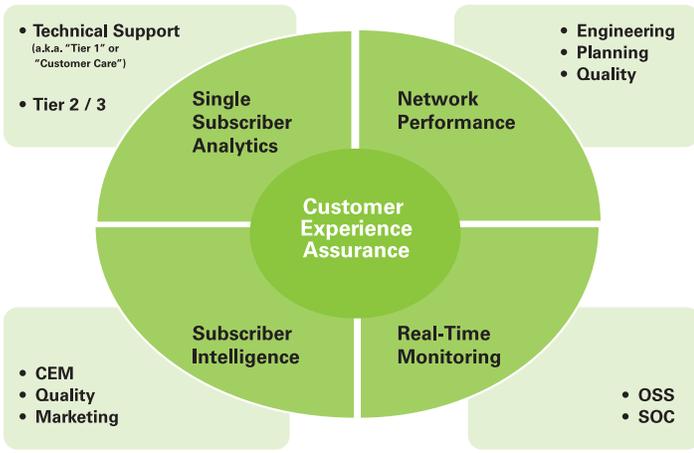


FIGURE 1. TARGET USERS

APPLICATIONS

Customer Analytics

Obtain deep insight of the activity of each single customer or groups of customers, by means of a set of customizable indicators regardless of the type of service accessed or network technology. An invaluable tool for the departments dealing with customer complaints.

Customer Experience

Look into your traffic data from any perspective, finding relationships between customers, applications, devices, locations and the Quality of Experience. Have the ability to rapidly respond to requests from business departments like marketing and sales asking for information related to customer usage or quality of service based on segmented by disparate dimensions.

Network Intelligence

Understand how the network nodes are performing and quickly identify issues impacting the quality of the service as perceived by the customer. Focus your resources fixing first the network issues impacting the large number of customers.

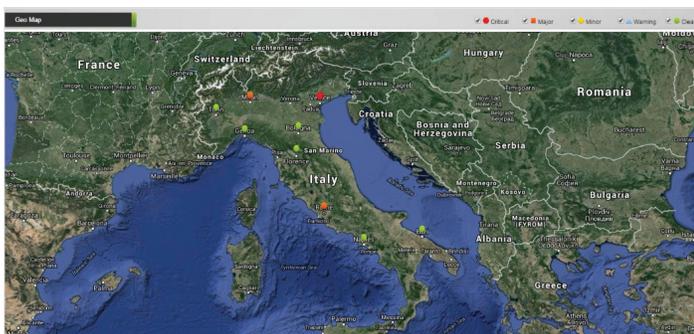


FIGURE 2. NEAR REAL-TIME NETWORK STATUS

Real-Time Monitoring

Speed up the NOC-to-SOC transition in order to have real-time control of end-to-end service quality and have the ability to take immediate action mitigate the risk of revenue impacting issues.

KEY FEATURES

Instant Intelligence: Analytics Packages

Empirix IntelliSight offers pre-configured analytics for a wide range of use cases, including all of the data correlations, workflows and data visualization options that users at all levels need in order to fully explore traffic data under different perspectives. Now, operators can empower personnel across the organization to make smarter decisions at every turn.

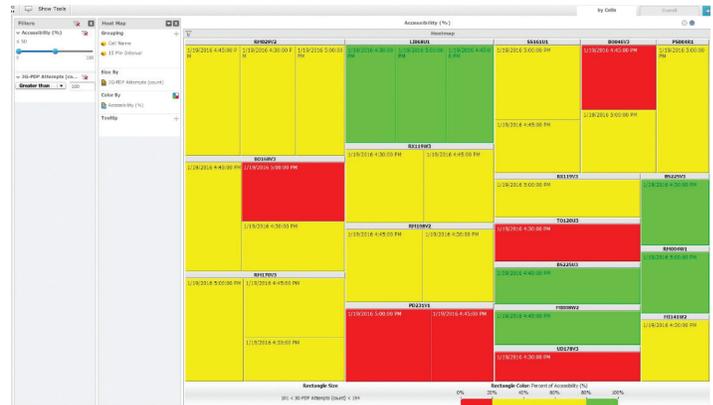


FIGURE 3. POWERFUL GRAPHICAL LAYOUT

Powerful Customization

Different use cases often require different analysis methods, data inputs and specific drill downs to meet key business objectives. For increased flexibility, IntelliSight includes the ability to quickly and easily develop custom logic, enrichments, KPI/KQI, dashboards and workflow designs. This significantly reduces the time, cost and complexity of obtaining true intelligence powered by traffic data.



FIGURE 4. CUSTOMIZABLE SINGLE SUBSCRIBER ANALYTICS

Real-Time Dashboards

Empirix IntelliSight includes a powerful real-time monitoring capability that can generate thousands of indicators according to customizable Service Models using a Metrics/KPI/KQI hierarchy.

Complex alarm logic can be also configured to provide early warning of revenue impacting issues before they affect a large number of customers.

Self-Service Business Intelligence

No one wants to spend hours or days looking at rows of data to try to find important information. Empirix IntelliSight delivers powerful data visualization tools to find hidden relationships by slicing-and-dicing on high volumes of data quickly and easily.

Flexible Southbound Integration

Empirix IntelliSight provides out-of-box integration with Empirix application and service data feeds. For richer analytics, it includes a general framework based on configurable input with any third party data sources, from an operator's existing OSS infrastructure to any network monitoring system. The ability to leverage an operator's existing data collection and warehousing infrastructure significantly reduces project timelines and capital requirements

BENEFITS

Real-Time Monitoring	Benefits
Integrate data from any source in the IntelliSight Data Mediation (ISDM) component, as well as from the Empirix E-XMS probe system	<ul style="list-style-type: none"> ▶ Extract real-time information from any existing data source ▶ Generate arbitrary amount of indicators grouped by configurable dimensions
User-configurable service models and KPI/KQI	<ul style="list-style-type: none"> ▶ Build your real-time view to match the Services you need to monitor ▶ Associate any KPI/KQI to any service
Drill-down from alarms to KPI to xDR to protocol messages (available with Empirix E-XMS probe system)	<ul style="list-style-type: none"> ▶ Investigate issues down to the single Data Record (xDR) including protocol analysis, once alarms are generated ▶ No need to rely on separate protocol analyzers anymore
Customizable dashboards and report templates	<ul style="list-style-type: none"> ▶ Adopt the available templates to quickly build your real-time view
Store data collected in the IntelliSight Database	<ul style="list-style-type: none"> ▶ Time through the IntelliSight embedded business intelligence

Data Analytics	Benefits
Rich set of interactive pre-defined reports covering the main fixed and mobile technologies	<ul style="list-style-type: none"> ▶ Extract valuable information from your network traffic leveraging the extensive Empirix expertise available through the analytics packages
Define new KPI/KQI from the underlying data feeds and make the metric available for analysis and reports	<ul style="list-style-type: none"> ▶ Adapt and tailor each report to keep them updated with your requirements that can come from any department
Fully customizable multi-dimensional reporting with drill-down to link different layouts	<ul style="list-style-type: none"> ▶ Easy to configure linked dashboards composed of data aggregated from the IntelliSight Database
Advanced data discovery with on demand relational analysis capabilities for self-service business intelligence	<ul style="list-style-type: none"> ▶ Visually navigate your data to discover hidden relationships amid high data volumes
Store data collected in the IntelliSight Database	<ul style="list-style-type: none"> ▶ Forward any reports within your organization upon configurable rules

<p>REDUCE CHURN AND IMPROVE CUSTOMERS LOYALTY</p>	<p>High Value Account Analytics: Easily view usage and customer experience metrics for key accounts to preempt churn issues, understand customer behavior and define new service offerings.</p> <p>Customer Care Applications: Provide both Tier 1 and technical support staff with customer-centric performance information including drill downs for specific application, device, service or location, for more intelligent conversations and faster first call resolution rates.</p> <p>Network Performance Analytics: Advanced troubleshooting ensures issues are prioritized by number of customers affected and quickly corrected. Empirix includes options for proactively detecting issues and preempting customer impact.</p>
<p>OPTIMIZE CUSTOMER EXPERIENCE</p>	<p>Customer Analytics: Operators can only attempt to enhance customer experience if they have a complete visibility of how specific application, traffic, service, geographic location and device factors impact customer experience.</p> <p>Traffic Analysis for enhancing Network Planning: Armed with an in-depth understanding of which applications, services and devices customers prefer—and where—operators can proactively improve infrastructure to support those interactions.</p> <p>Congestion Analysis: Understand where bottlenecks are occurring and determine if traffic patterns are steadily increasing, periodically spiking or happening randomly, to preempt problems and maximize infrastructure investments.</p>
<p>DRIVE REVENUE & INNOVATE BUSINESS MODELS</p>	<p>OTT Services Characterization: Understand which OTT services customers prefer to correctly determine partnering opportunities and revenue optimization models.</p> <p>Targeted Marketing Campaigns: Analyze traffic with a granular understanding of mobile interactions on a per customer basis, ensuring that operators can create the most compelling offers and generate significant revenue.</p> <p>Services Analytics: An in-depth understanding of how customers are using and experiencing certain services and applications allows marketing to effectively drive the development of branded solutions and boost user acceptance.</p>