Revenue Assurance: Advanced Analytics Applications

Revenue assurance – the science of supporting revenue goals through efficient operational processes – depends for its success upon accurate analysis of the data flowing through an organization’s network. This presents unique difficulties for communications service providers (CSPs). The volume and speed of data crossing telecommunications networks challenges traditional analytics methods; yet this data must be analyzed in order to yield actionable insights. With the emergence of OTT and other digital applications, it is more necessary than ever for CSPs to ensure that their revenue assurance strategies are robust.

Argyle Data’s revenue assurance application provides CSPs with advanced traffic analytics offering real-time, granular insights into traffic patterns. Argyle Data’s supervised and unsupervised machine learning approach culls data from multiple sources including call detail records (CDRs), quality of service (QoS) metrics, routing tables, rates, revenue codes, subscriber profiles, and billing information. CSPs gain unprecedented insights into network usage, even down to individual subscriber level, allowing them to develop strategies to support revenues, monetize emerging applications, and build future networks.

The Problem

The telecommunications industry remains a fast-moving and complex ecosystem, with operators facing a rapidly evolving technology landscape. Over-the-top (OTT) and digital services are gaining ground with customers, who are demanding higher quality data services from their providers. Retail telecommunications is a price-elastic business; customers are inevitably drawn to OTT offerings that are much cheaper than traditional voice and messaging services. This places new burdens on CSPs, who are seeing revenues decline yet also being pressured to invest in network upgrades needed to carry rising volumes of OTT traffic.

A further issue for CSPs is their duty to provide ongoing services to their mainstream subscribers, even if use falls significantly. In order to get the best returns for shareholders, CSPs need to constantly analyze expenditure on existing services to ensure they are fulfilling their obligations as cost-effectively as possible. Argyle Data’s analytics capabilities streamline the task.
The Role of Traffic Analytics

Argyle Data’s revenue assurance applications allow operators to analyze their network traffic in granular detail and create cost-efficient strategies including:

- **Identifying least cost routes**, enabling selection according to variety of criteria including lowest cost, highest margin, and best quality of service. Route selection must be updated regularly to reflect pricing/quality changes.
- **Streamlining code management** to protect carriers from overlap or error and enable them to better enforce quality and security while identifying new opportunities.
- **Customizing rates to protect margins**, according to criteria such as country, customer, or code, and quickly broadcasting those rate changes to their partners.
- **Real-time monitoring and analysis of rate and code data** to track profitability, QoS levels, and other detailed information that can be fed back into operational intelligence in order to set rates, forecast demand, and determine future revenue.

Argyle Data’s application communicates this information in multiple formats, including a graphical visualization that is customizable and quick and easy to understand.

By the end of 2017 up to 20 percent of total services revenue will be created from digital services, according to a recent survey conducted by Openet®. Without an improved ability to monetize their digital assets, up to five percent of this revenue could be lost, the study revealed, while also pointing to the crucial role of real-time analysis.

Argyle Data™ Revenue Assurance Application

Argyle Data leverages its real-time data detection engine to provide:

- Unprecedented insights into network traffic patterns and usage
- The ability to associate usage to an IMSI / subscriber-level awareness
- Reliable data for network, financial, and marketing planning, such as offering targeted subscription packages

Our application delivers revenue assurance capabilities including:

- **Monetizing OTT and digital services** enabling the creation of appropriate pricing models
- **Product validation** to ensure ROI from new marketing offerings
- **Product targeting** to direct relevant users to new products
- **Pre-empt fraud** through continuous surveillance from emerging threats including Viber bypass, WhatsApp to Wangiri fraud, and other fraud cocktails
- **ROI** achieved by identifying candidates for OTT and services replacement products, based on their current usage patterns

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1. Assurance and Digital Services – Industry Survey Report

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