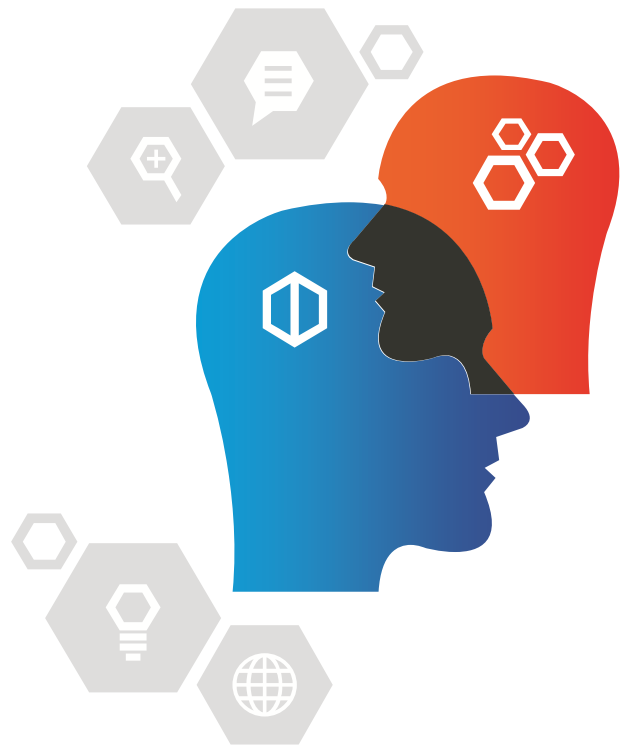


Gamma Analytics

Telecom Big Data Analytics Made Easy, Finally



Communication Service Providers (CSPs) typically and urgently require ability to access, store and manage their data sets easily and readily. Generally these data are sourced from multiple systems and usually generated in multiple formats. This is a challenge as old as the CSPs themselves. While new solutions have continued to emerge to address this problem, until now, a complete set of technologies that provided both results and usability were unavailable. Gamma Analytics changes that landscape with the solution that uniquely delivers on this challenge



“ To deliver an effective, practical and complete solution, Gamma provides the industry’s most comprehensive and innovative platform incorporating the key elements of success. ”



TELECOM OBSESSED

Gamma platform is a lattice of engine-app modules. There are core engines developed as lightweight components in a platform neutral model that can be coupled to pre-built apps that provide instantaneous or near instantaneous results. Thus for example the ETL engine bundled with telecom de serializer app allows users to natively handle raw files from any data source on their network



COST EFFECTIVE

To ensure industry leading ROI the product design supports different deployment models such as Product as a Service, On Premises or Hybrid. Thereby offering a real solution that is budget and resource friendly



REAL WORLD SOLUTION

This platform is designed to provide real world advantages to the operators – ability to process raw files, enrich xDRs, query-able data storage and standard set of analytics



SCALABILITY

Scalability involves multiple elements – data volumes, transaction volumes, processing times and most importantly functional scalability – the ability to support different and more complex analyses types

DOMAIN SPECIFIC	DATA ACCESS	DATA ANALYSIS	DATA SCIENCE	ANALYSES AS SERVICE
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Skybase – Solution Overview

THE FIRST BIG DATA ANALYTICAL APPLICATION THAT INCLUDES DOMAIN INTELLIGENCE TO ENABLE, STREAMLINE AND MANAGE TELECOM DATA PROCESSING

- Designed and optimized for communications providers
- Solution platform includes pre defined analytics for telecom operators
- System set up and go-live in days
- Optional Product as a service model to eliminate HW / SW expenses and minimize HR
- Currently deployed in the Americas and processing terabytes of data daily
- Advanced technology to support real time analyses and visualization - unique to Gamma
- First and only telecom solution to fully incorporate Data Science services
- Cost model to allow immediate ROI



Data Access

- Natively access raw data
- Transform on the fly
- De serialize xDRs, GGSN, IN, CGW etc files

Data Manager

- Securely on the Cloud or onPremises
- Stream or file process
- Realtime or batch
- Structured and unstructured

Processing

- MapReduce on Hadoop
- Cassandra database for real time processing
- In-Memory database

Visualization

- Dynamic Dashboard real time views
- Mobile friendly
- Drill down to raw data
- iOS and Android support

Ad-hoc Query

- Query UI to generate ad-hoc reports
- Query able data storage and archive
- Entire historical data online

CORE MODULES

- ETL Connector
- De-serializer
- Enrichment Plugin
- Loader
- Data Warehouse Builder
- Data Analyzer
- Dashboard
- Predesigned reports for IT operations
- Standard reports for telecom operations
- Churn Management
- Mobile Money

HIGHLIGHTS

- **BIG DATA TO BIG RESULTS**
 - The first Big Data Solution designed to address telecom data processing, storage and real-time analytics on the cloud. Reports and alarms on your handheld
- **DATA TYPES**
 - Ability to handle various industry standard file formats like Binary – ASN.1 & AMA; Text – ASCII & CSV; DB; MIME; JSON; XML
 - Structured, Partially structured and Unstructured Data from MSC, Mediation, IN, GGSN, SGSN, CGW, CMTS etc
- **SEAMLESS ETL**
 - Easily connect to any CSP data source, access and transport data.
 - Perform data transformation natively and on the fly.
 - Load data into any data store.
 - Standard connectors including Oracle, Cassandra, DB2, Hadoop and MySQL
- **CLOUD OPTION**
 - Fully native cloud operation on AWS, Google, Rackspace or private clouds
- **HIGHLY CONFIGURABLE**
 - Configurable up to record, field, decode and transformation level.

Advantages

DOMAIN SPECIFIC

A truly practical solution for the operators must support their business processes natively. This includes built in data handling capabilities, functionality that mirrors the tasks users perform, terminology in line with the users vocabulary and pre-built set of standard functions that actually work and work immediately. Gamma solution focused on these to bring a truly turnkey solution

DATA ACCESS

Gamma's fully optimized ETL engine and data management app provides easy and full access to operator's data – raw and processed - including ability to query historical and archived data as well as unstructured data

DATA ANALYTICS

Gamma's massively parallel and distributed processing through Hadoop or real time processes allows users to perform simple to complex analyses on large data sets. This solution includes an intelligent dashboard for data visualization

DATA SCIENCE

Gamma provides the first product with CSP compliant data science support to ensure that users are asking the right questions, searching the right data and getting the right answers

ANALYSES AS A SERVICE

Combining the best of Platform and Product as a Service features, Gamma offers CSP technical and business consulting services as a bundled option

ADVANCED TECHNOLOGY SUPPORT

- Cloud, onPremises and Hybrid models
- AWS, RedShiftGoogle cloud support
- Hadoop and Casandra File Systems
- Real time deserialization
- Mobile app

ANALYTICS SUPPORT

- Network Management
- Churn Analysis
- Congestion Analysis
- Provisioning Check
- xDR Analysis
- Margin Analysis
- Marketing Analysis
- KPI Alarming

DATA SCIENCE AS A SERVICE

Data Science is a significant component of a successful analytics platform. The technological aspects of accessing, transforming and processing large data sets should be combined with a robust application of Data Science principles. This is the role of a Data Scientist with domain expertise.

This includes the application of the concepts of Data Science to big data and the framing of the analyses. Gamma solutions provide Data Science that is telecom optimized as a service

Typically operators look to the vendor for technology expertise and the vendor looks to the operator for domain expertise. This often results in expectations and results mismatch.

Gamma bundles Data Science services as a component of the platform. This means the apps have pre-defined functionality that includes Data Science elements as well as Data Scientist consultants and consulting services as part of the solution set

This becomes an important differentiator as a standard analytical set includes

- Structured and Unstructured data
- Streaming and batch records
- Internal and external sources
- Private and public systems

Full branding and localization support processes to reduce costly errors and potential revenue loss.

