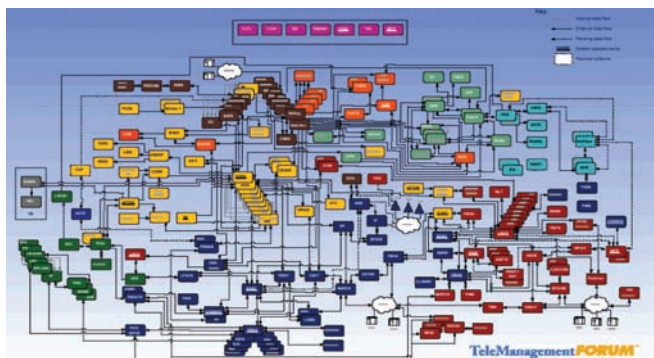


Rocware

Mission Control for Financial Health

- Enable profitable growth through coordinated financial control
- Link operations to profitability through cross-functional data correlation
- Exploit synergies in formally disparate assurance, audit and governance functions
- Deliver Business Optimization in a pragmatic manner

The business landscape for communication service providers is rapidly evolving. With reducing voice revenues, market saturation and increased competition, their greatest challenge today is to continuously improve both Average Revenue Per User (ARPU) and Average Margin Per User (AMPU) while enabling faster time-to-market of new services. To top that, service providers today are finding it increasingly difficult to retain existing subscribers, let alone acquire new ones.



The primary roadblock to achieving the above objectives is that many service providers lack enterprise-wide and subscriber-centric revenue, cost and margin visibility and also a real-time mechanism to study the impact of operational changes on profitability. This lack of real time visibility stems from the fact that most OSS/BSS functions continue to operate as silos thereby leading to un-correlated and massively un-utilized data within the service provider's operational infrastructure.

In order to overcome these OSS/BSS and other enterprise silos, create a direct linkage between operations and profitability and enable credible and timely cross-functional data correlation, service providers are increasingly looking to establish a Revenue Operations Center (ROC) within their environment.

Revenue Operations Center (ROC)

The primary objective of the ROC is to function as the 'Mission Control for Financial Health'. The ROC thus enables profitable service provider growth through coordinated operational control.

For service providers that aim to optimize their operational and process infrastructure, ROC delivers Business Optimization in the most pragmatic manner.



ROC achieves its objectives chiefly by bringing together, in a synergistic manner, formally disparate assurance, audit and governance functions. It thus enables an operations infrastructure that monitors and controls the entire revenue chain and identifies risks to profitability, margins and customer satisfaction. The ROC also allows a service provider to support business and operational innovation programs because of its end-to-end view.

As a centralized and integrated operations infrastructure, ROC ensures that a service provider is guaranteed:

- **End-to-End Operational and Process Visibility.**
This allows a service provider to perform centralized analysis and monitoring and thus have a focal point control for revenue and risk management functions.
- **Integrated and Real-time Solution and Response mechanism.**
This allows a service provider to enable faster time-to-market for new services and faster response to customer troubleshooting requests. This in turn translates into enhanced customer satisfaction which increases customer loyalty and reduces customer churn. In today's competitive environment this leads to significant competitive advantage.
- **Cross Domain Business Application Correlation.**
As the ROC collates and correlates data from various OSS/BSS functions, it enables normalization and correlation of control and audited data, process maps and metrics.

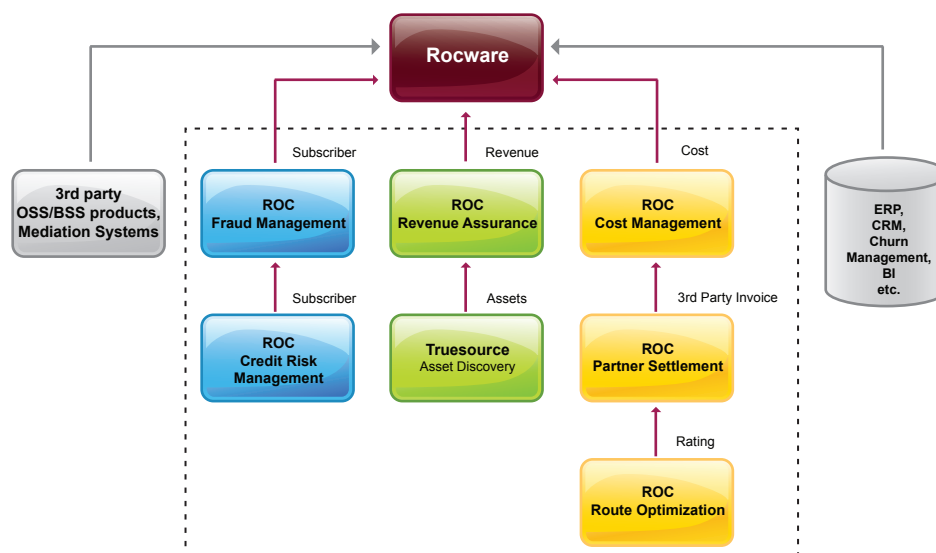
The key benefits that a service provider derives from the ROC are:

- Enhanced Revenue Management
- Enterprise-wide Risk Management
- Business & Operational Assurance
- Pro-active Intelligence & Insight
- Revenue Chain Integrity Assurance
- Improved Customer Experience

The Subex product that enables implementation of a Revenue Operations Center (ROC) is Rocware. The following products from Subex form key components of the ROC -

- ROC Revenue Assurance
- ROC Fraud Management
- ROC Credit Risk Management
- ROC Partner Settlement
- ROC Route Optimization
- ROC Cost Management
- TrueSource Asset Assurance
- Rocware Operations Management Platform

All the above solutions come together to help CSPs prevent fraud losses, collect all revenues, reduce defaulted payments, reduce wasteful expenditure, manage inter-carrier and partner expenses and defer or even avoid capex. Rocware integrates seamlessly with these Subex OSS/BSS products including 3rd party products and also other enterprise systems such as CRM, BI etc.



Rocware

Rocware is a Subex product that enables the pragmatic evolution to building a Revenue Operations Center (ROC), by

- delivering real-time and actionable insights to effectively monitor and control the operational and tactical response
- providing an integrated platform that sits on top of all Subex OSS/BSS products or 3rd party systems
- linking service provider operations directly to financial health

Rocware allows for the correlation of data across business systems, creating an end-to-end view of the customer based on products, services, revenues, margins, costs, and more. Rocware also enables service providers to define key cross-domain metrics and KPIs, specific to their business strategy, that can be monitored and tracked.

Rocware Benefits

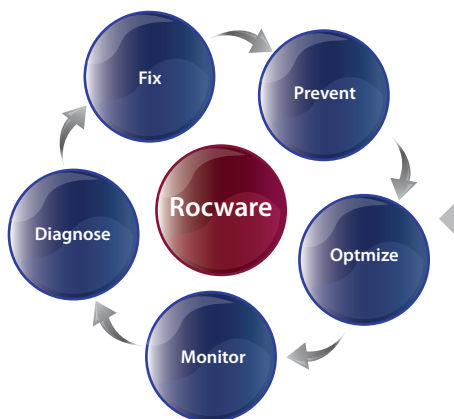
- Overcomes enterprise silos and delivers enterprise-wide synergy by creating linkages between previously unrelated data
- Allows real-time monitoring and analysis of operational efficiency, customer experience and profitability
- Enables intelligent decision-making and an integrated response management across various levels in the organization
- Provides a customer-centric view of processes, margins, revenues and costs

Rocware OSS/BSS Integration

Rocware seamlessly integrates with existing OSS/BSS products (Subex or 3rd party) and other enterprise functions (CRM, BI etc). Data aggregation and analysis includes transaction data (CDRs, IPDRs, etc.), cost and revenue data (supplier/partner invoices and bills), subscriber data, etc.

Rocware Methodology

Rocware includes components for data collection, aggregation, analytics and presentation, all hosted on a common platform.



- **Monitor** - Collecting and measuring data from various OSS/BSS and enterprise applications in real-time
- **Diagnose** - Analysis and interpretation of the data to calculate key performance indicators, predict trends, etc.
 - Comparing indicators against targets and thus identifying issues and automatically generating alarms and alerts in real-time
- **Fix** - Providing a response platform to correct and work these issues through to resolution
- **Prevent** - Identifying and then eliminating the root cause of an issue to prevent future recurrence
- **Optimize** - Utilizing the data to optimize and refine business models and processes to maximize profitability

The value of Rocware extends to various business units within a service provider. For example, the ROC allows senior-level executives to consistently monitor the impact of investments in CEM and related returns. It also allows customer support representatives to make real-time decisions to solve customer issues, as well as cross-sell and up-sell new services. The ROC also provides key customer insights to the service provider's marketing team, facilitating the rapid roll-out of targeted and focused services for specific customer segments. Rocware enables effective management of key processes, for example the Order to Cash process.



Rocware Key Features and Business Advantages

Features	Advantages
Meaningful and relevant metrics linkages and cross-functional data correlation across silos	Provides proactive insight into the market and customer requirements and understanding of the financial impact of business operations. It also leads to faster time-to-market for new services and enhanced customer experience.
Real time and dynamic data visualization through dashboards; Accurate, granular and comprehensive metrics and Key Performance Indicators (KPIs).	Enables customizable data presentation to enhance service provider flexibility. It also allows proactive solution definition, aligned to relevant roles and responsibilities – CxO, Department Heads, SMEs (product manager, financial analyst).
Advanced Analytics for profiling, trending and propensity determination providing rapid insights into customer behavior.	Enables product managers to better understand their customers using slice/dice analysis of the customer base. De-risks decision making by allowing “what-if” scenario playing.
Automated workflow and response engine.	Allows service providers to ensure immediate corrective measures and therefore a faster decision-to-action conversion. Replaces manual tools/excel sheets.
Support for modeling service provider’s business processes and definition of control points.	Maps data to source in order to ensure transparency and automatically verifies process correctness.
Pre-built business modules for key service provider priorities and revenue challenges including support for new business models.	Pre-defined metrics in the form of Rocmap to speed-up deployment times and enable operators to follow industry best-practices.

Rocware thus correlates some of the important service provider business operations and provides analysis in order to deliver synergy across domains –

- **Margin Analysis** – enabling product managers to see service profitability by region, by product type, by subscriber and more and helps them to understand each product’s cost and revenue details.
- **Revenue Integrity Analysis (Order-to-Cash)** – monitoring the revenue chain to ensure that all due revenue is accounted for and to detect all probable revenue leakage.
- **Customer Experience Analysis** –
 - **Order-to-Activation** – measuring the time elapsed between a request for service and service activation; ensures the correct services are delivered to subscribers in acceptable time frames; and monitors both service delivery accuracy and cost efficiency.
 - **Fault-to-Resolution** – monitoring the time and cost associated with troubleshooting processes and customer interactions to ensure they meet the service provider’s desired customer experience goals.
 - **Customer View** – consolidating a view of the customer across all touch points thus identifying high value and at risk customers for immediate proactive attention.

Rocware uses advanced analytics to calculate current KPI values and predict future values, which enables service providers to make more informed decisions regarding investments and enhancements in customer care, marketing and various OSS/BSS functions. Rocware is delivered through pre-built, pre-integrated business-focused modules to provide comprehensive, consolidated and customized information and knowledge to service providers.

About Subex

Subex Limited is a leading global provider of Operations and Business Support Systems(OSS/BSS) that empowers communications service providers (CSPs) to achieve competitive advantage through Business Optimization and Service Agility - thereby enabling them to better operational efficiency to deliver enhanced service experiences to subscribers. The company pioneered the concept of a Revenue Operations Center (ROC) – a centralized approach that sustains profitable growth and financial health through coordinated operational control.

Subex's product portfolio powers the ROC and its best-in-class solutions enable new service creation, operational transformation, subscribercentric fulfillment, provisioning automation, revenue assurance, cost management, data integrity management, fraud management and interconnect / inter-party settlement. Subex's customers include 36 of the world's 72 biggest* telecommunications service providers. The company has more than 300 installations across 70 countries.

* Forbes' Global 2000 list, 2009

For more information please visit www.subexworld.com



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