ROC revenue assurance

ROC® REVENUE ASSURANCE SOLUTION

Simplifying Revenue Assurance

Take decisions while on the move

Improve analyst productivity

Recover revenues faster

subex

powering the ROC

Introduction

Simplifying Revenue Assurance

While revenue leakage remains a major concern for telecommunications providers, they are now faced with the challenge of dealing with complicated Revenue Assurance processes and solutions. As operators move deeper into next-generation services and content-driven service environments, revenue assurance becomes both more complex and more critical. Product portfolios are expanding, networks and services, operations and revenue chains are becoming increasingly complicated, involving an intricate web of partners and resellers. Not only this, telecom operators perform some functions such as scoring their maturity, planning their RA roadmap, etc offline, which means they have to cope with the challenge of scattered practices. Also, as telecom operators grow in size, they have to deal with large volumes of data, control points, KPIs involving time consuming and repetitive investigations.

And of course, the telecom industry is no different when it comes to attrition; they too have to deal with the problem of resource churn. Knowledge management problems arise when experience people leave the Revenue Assurance team.

Traditional approaches to revenue assurance fall short in this scenario. Today's Revenue assurance (RA) solutions are ill-equipped for complex service and business models. Organizational challenges can also limit RA effectiveness. A lack of visibility within the operator organization, the "diminishing returns" of successful RA projects, and the difficulty aligning RA results with an operator's broader business goals can all work to limit the future reach of much needed RA practices.

In today's dynamic communications environment, a successful revenue assurance practice requires a more mature revenue assurance solution – one that not only enables proactive and ongoing revenue recovery but simplifies RA by visually aiding telecom operators and guiding them to improve performance.
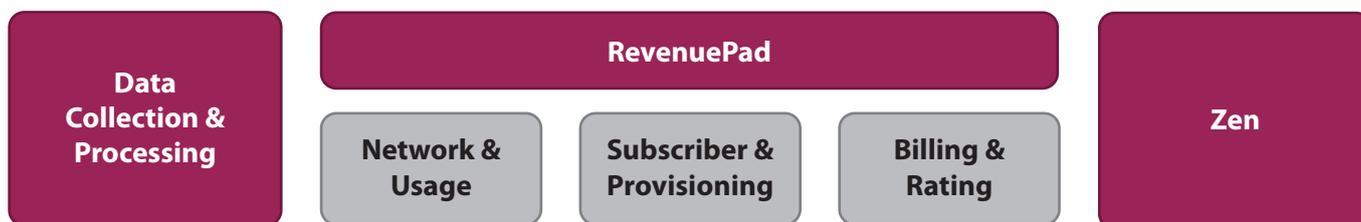
> *We have seen fabulous results from Subex. ROC Revenue Assurance is able to monitor our entire system flow—including both legacy systems and strategic systems. This automated monitoring has resulted in a 6x productivity improvement over our previous manual audits. The system keeps paying for itself and Verizon keeps expanding ROC Revenue Assurance's use.*
>
> **Verizon's Executive Director of Broadband Billing and Revenue Assurance**
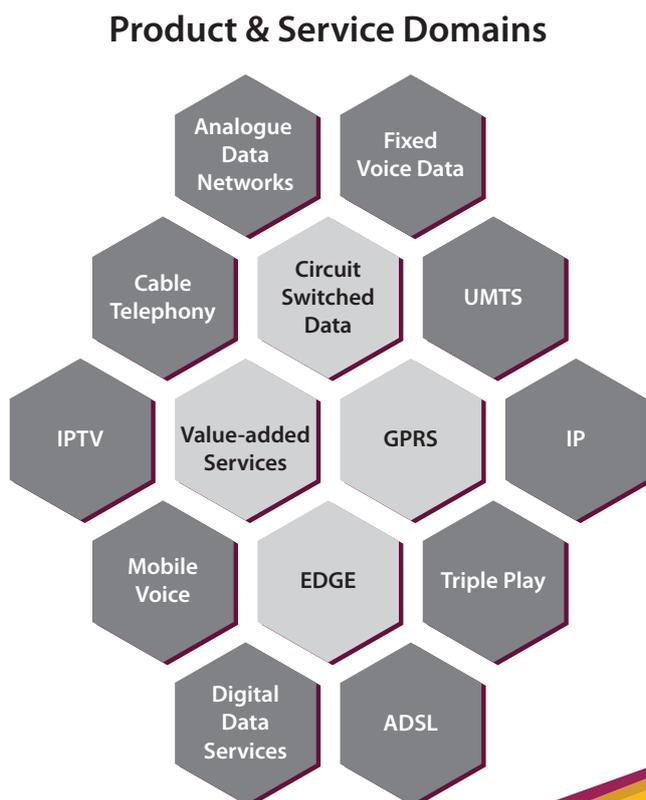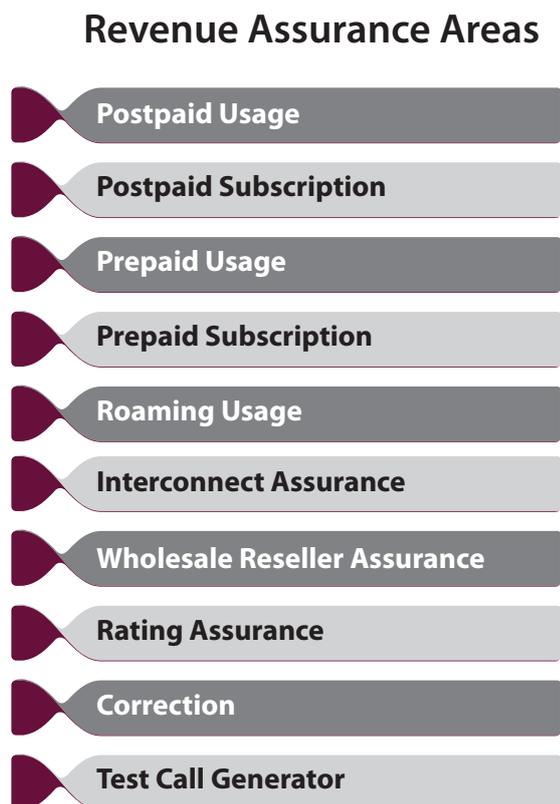
ROC Revenue Assurance Approach

The ROC Revenue Assurance solution from Subex simplifies the highly complex Revenue Assurance domain by introducing two path breaking concepts- RevenuePad and Zen. **RevenuePad** is a command center for Enterprise-wide RA. Its intuitive console helps you to **Plan & Map** your RA roadmap by providing a consolidated strategic view of enterprise maturity as an outcome of operational performance. It also provides guidance on which **Assurance Areas** and metrics to cover thereby aiding the improvement of RA performance. RevenuePad introduces the concept of Visual RA. **Visual RA** provides a bird's eye view of the organization's network topology and directly points to the problem areas which need immediate attention. Thus with RevenuePad, telecom operators can gauge and improve RA performance and work towards achieving their business goals.

Zen is the **industry's first virtual analyst for RA**. It helps RA analysts by providing root causes of revenue leakages. Time is of the essence, and the faster a domain analyst can find the root causes, the more revenue leakages an organization can prevent. With Zen, the analysts are guided to the underlying root causes of discrepancies quickly in an automated manner, thereby removing manual error and dependency. This leads to productivity improvements of an order of magnitude of 10 to 20. Apart from guiding analysts, it also learns from past and builds a repository of discrepancies and associated root causes to enable knowledge sharing within the organization. Using these two fantastic concepts, ROC Revenue Assurance simplifies RA and aides telecom operators to achieve faster, better revenue recovery.

Data Collection & Processing	RevenuePad			Zen
	Network & Usage	Subscriber & Provisioning	Billing & Rating	

ROC Revenue Assurance coverage

Revenue Assurance Areas

- Postpaid Usage
- Postpaid Subscription
- Prepaid Usage
- Prepaid Subscription
- Roaming Usage
- Interconnect Assurance
- Wholesale Reseller Assurance
- Rating Assurance
- Correction
- Test Call Generator

Product & Service Domains

- Analogue Data Networks
- Fixed Voice Data
- Cable Telephony
- Circuit Switched Data
- UMTS
- IPTV
- Value-added Services
- GPRS
- IP
- Mobile Voice
- EDGE
- Triple Play
- Digital Data Services
- ADSL

ROC Revenue Assurance Benefits

a **Faster root cause investigation** : Using RevenuePad and Zen, ROC Revenue Assurance enables comprehensive leakage investigation at various levels by providing dynamic views of the RA universe. With its graphical, interrogative analytics and minimal learning curve, it speeds up case investigation to deliver faster results.
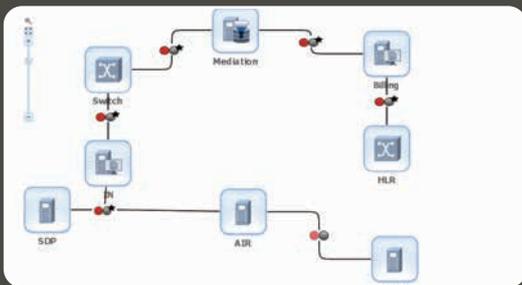
b **Exposure of hard-to-detect revenue leaks :** Through Visual RA, ROC Revenue Assurance directly draws users' attention to important problem areas and prompts corrective action

c **Immediate contribution to the bottom line :** Using RevenuePad, users can track cases of potential revenue leakage in a structured workflow, from detection to recovery, thereby achieving their business goals and making an immediate contribution to the bottom line.

d **Continual savings through real-time KPI tracking:** ROC Revenue Assurance's RevenuePad monitors and reconciles key performance indicators (KPIs) on a continuous basis to ensure that revenue assurance aspects of the business are intact while taking immediate action when prescribed limits are breached.

e **Monumental improvement in analyst productivity:** Zen provides analysts with direct root causes of problems, thereby reducing the time to find root causes by greater than 90%, and improving analysts' productivity tremendously.

f **Ongoing revenue stream protection :** Using RevenuePad's advanced analytics & workflow engines operators are able to monitor their complete revenue chain on an on-going basis & drive issues quickly to closure.

g **Rapid ROI :** With a flexible design, ROC Revenue Assurance can be easily adapted to different networks and product/service domains, allowing rapid program expansion, swift detection of issues, and accelerated return on investment (ROI).

Key Differentiators

a Ease of use
With RevenuePad and Zen, users are visually guided to problem areas and root causes and are prompted to take corrective action. Users can also monitor various KPIs, metrics on a regular basis, thereby tracking RA performance and improving the same. Since ROC Revenue Assurance is mobile device enabled, users can gauge RA health, analyze key metrics and make business critical decisions while on the move.

b Right Information to Right People
ROC Revenue Assurance provides unified customer view which helps to avoid calls to the same customer by different departments and hence increases customer satisfaction. It displays multi-issue customers and values and allows resolution prioritization by bill cycle. Its SLA-Driven Workflow Management captures leakage cases in a structured workflow, facilitating the historical mapping of Revenue Assurance department growth.

c Increased Productivity
Since Zen provides direct root causes of problems, it leads to almost 20 times improvement in analyst productivity. Also RevenuePad visually guides users to the problem areas requiring immediate attention and thus improves productivity.

d Low Total Cost of Ownership
ROC Revenue Assurance allows customers to freely evolve their system and their Revenue Assurance practice at will. They can grow at their own pace as there is no dependence on IT or vendor support. Configuring new or existing processes, adding new data resources, can be easily done without reaching out to the IT teams.

e Rapid Implementation and Configuration
Predefined Revenue Assurance Metrics enable rapid baselining of Revenue Assurance departmental practices and processes with "out-of-the-box" business rule templates, audits, KPI, reports, and dashboards. Powerful record and file integrity management, higher accuracy of incoming data is ensured.

f Faster time to resolution
All dimensional data can be added by a simple radio-button click. Data is accurate and does not have to be "frozen" before importing. This ensures greater accuracy of data. Also, ROC Revenue Assurance uses real-time data in memory. Hence, the issues are current and not out-dated, providing a current view of revenue status.

> *As a growing operator it is extremely important that we reduce leakage so that we can continue to offer new products and services to our customers. Subex's revenue assurance and fraud management systems will allow us to do this effectively.*
>
> **Cell C's Chief Risk Manager & Internal Auditor**

ROC Revenue Assurance Success Stories

Reliance Communications

The Operator

Reliance Communications is India's leading integrated telecommunication company with over 150 million customers. The business encompasses a complete range of telecom services covering mobile and fixed line telephony. It includes broadband, national and international long distance services and data services along with an exhaustive range of value-added services and applications.

The Requirement

RCOM had a fast expanding subscriber base which led to complexities in tracking leakages. The RA department did not have a clear view of network operational efficiencies as most of the information was extrapolated from various sources. Analysts were unable to quantify issues on daily basis. RCOM also faced challenges in accurately reconciling voucher information.

The Solution

With ROC Revenue Assurance, CSP was able to automate most of the tasks that the Revenue Assurance analysts used to perform manually. Data matching capabilities helped RCOM immensely for subscription assurance, as analysts were able to get a comprehensive listing of missing information by source, by looking at a single screen which contained the results of record level reconciliations between the billing and provisioning systems. Customized dashboards helped the operator to see at a glance the overall health of the network.

The Benefits

The CSP's Revenue Assurance department underwent a radical change after the introduction of ROC Revenue Assurance into their core processes. Automation of Revenue Assurance processes improved the overall operational efficiency. Unique root cause analysis enabled the close loop approach of Monitor, Analyze & Correct. A strong process flow for reconciliation was introduced and substantial savings were recorded through real-time KPI tracking.

Starcomms

The Operator

Starcomms Nigeria is one of the leading telecommunications operator and leading "triple-play" provider in Nigeria and is listed on Nigerian Stock Exchange since 2008. Starcomms commenced operations in 1989 with a customer base of less than 2,000, the network has since crossed over 3.2 million subscribers; making it the 4th largest telecommunications operator and largest CDMA 3G Mobile network in the country.

The Requirement

Starcomms wanted to make sure that the data generated by prepaid and postpaid subscribers is correctly processed by IN and Retail billing systems respectively. Dependence on the IT team resulted in scalability issues. Their RA infrastructure was limited and the quality of data reported was not credible. Hence they needed some processes and procedures in place to make sure that they can monitor and prevent the revenue leakage.

The Solution

Subex's ROC Revenue Assurance provided a comprehensive coverage of end to end revenue assurance for usage and subscription assurance covering Revenue Assurance analysis of the complete end-to-end value chain, from switch to billing. The solution helped Starcomms in supporting retail and wholesale billing integrity through reconciliations, trending, monitoring of KPIs and general reporting of specific data control points.

The Benefits

ROC Revenue Assurance at Starcomms is not merely an RA success alone. It has also been an operational success in the sense that it has helped Starcomms in understanding where they stand and in sketching their plan for the way ahead. ROC Revenue Assurance has helped them in maturing as an operator by laying down the RA processes. ROI was realized within the 1st month of Go-Live of project.

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# Revenue Assurance Automation
The Key to Growth and Profitability

Challenges in Revenue Assurance

- Enormous Volumes Of Data
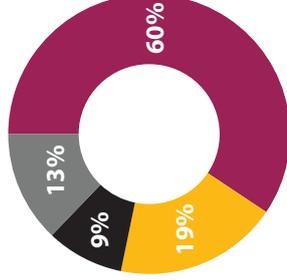- Increasing Complexity
- Scattered Knowledge

Percentage of leakage identified

- 60%
- 13%
- 9%
- 19%

41% of operators fail to identify more than half of total leakage

Source: KPMG Global Revenue Assurance Survey 2012

Leakage as a percentage of revenue

1/5th of the operators are leaking up to 10 percent of their total revenue

Africa & Middle East
- 50%
- 32%
- 18%

Asia Pacific
- 75%
- 15%
- 10%

Europe & Americas
- 66%
- 19%
- 15%
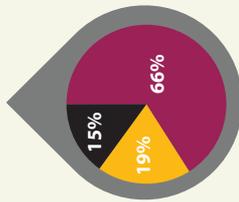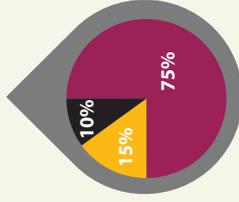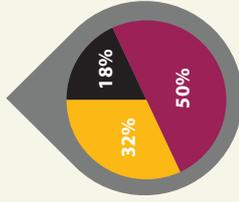
- ● Up to 1% of revenue
- ● Between 1-10% of revenue
- ● Greater than 10% of revenue

RevenuePad

- Network Topology
- Executive Dashboard
- Business Hierarchy

Revenue Pad allows operators to monitor enterprise wide Revenue Assurance operations through a single screen.

How ROC Revenue Assurance can help - it simplifies RA with two path breaking concepts - RevenuePad and Zen

Typical Scenario

30 Hours

Time Consuming Process

Mountain of Data

Root Cause

Solution - Zen
Industry's first Virtual Analyst for Revenue Assurance

30 Minutes

Improvement In Time Saving

Mountain of Data

Root Cause
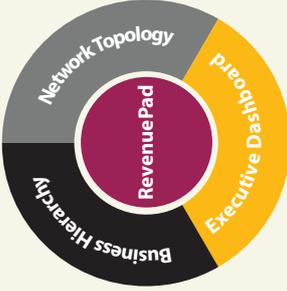
Zen is a virtual analyst which analyzes millions of discrepancy records & presents the possible reasons for discrepancies to the analyst

What ROC Revenue Assurance can do for operators

Tier 1 APAC Operator Success Story

Challenges
- ★ Limited capabilities of in-house RA tool
- ★ Extended investigation times

Benefits
- $24mn — leakage identified till date
- 100% — ROI in 10 months

Tier 1 NA operator Success Story

Challenges
- ★ Multiple new services introduced
- ★ Monitoring billing flows in multiple business units

Benefits
- $3mn — discrepancies identified during implementation
- 600% — error finding efficiency increase

Tier 1 European operator Success Story

Challenges
- ★ Lack of business rules documentation
- ★ Failure to prioritize areas of corrective action

Benefits
- $4mn — leakage identified in a year
- 800% — ROI in the first year

Why operators choose ROC Revenue Assurance

- Faster Root Cause Investigation
- Exposure of Hard-to-Detect Leaks
- Ongoing Revenue Stream Protection
- Higher Analyst Productivity
- Rapid ROI

Subex Limited is a leading global provider of Business Support Systems (BSS) that empowers communications service providers (CSPs) to achieve competitive advantage through Business Optimisation - thereby enabling them to improve their operational efficiency to deliver enhanced service experiences to subscribers.

The company pioneered the concept of a Revenue Operations Cente (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 such as revenue assurance, fraud management, asset assurance, capacity management, data integrity management, credit risk management, cost management, route optimization and partner settlement. Subex also offers a scalable Managed Services program with 30 + customers.

Subex has been awarded the Global Market Share Leader in Financial Assurance 2012 by Frost & Sullivan and has been the winner of Pipeline Innovation Award 2013 in Business Intelligence & Analytics; Capacity Magazine Best Product/ Service 2013. Subex has continued to innovate with customers and have been jointly awarded the Global Telecoms Business Innovation Award for 2012 with Idea Cellular for Managed Services and in 2011 with Swisscom for Fraud Management.

Subex's customers include 29 of top 50 operators[*] and 33 of the world's 50 biggest[#] telecommunications service providers worldwide. The company has more than 300 installations across 70 countries.

[*]TTotal Telecom Top 500 Telecom Brands, 2013
[#]Forbes' Global 2000 list, 2013

tmforum Business Metrics Automation CERTIFIED PRODUCT	Runners-up in Best Global Product/Services	Runners-up in the Big Data & Analytics category	Global Telecoms Business Innovation Award, 2012	FROST & SULLIVAN Received Global Market Share Leaderin Financial Assurance Award 2012 by Frost & Sullivan	ORACLE DATABASE READY

* for RA & FM

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