



ROC[®] NETWORK ASSET MANAGEMENT

Capex Optimization through end-to-end Asset
Lifecycle Management

Network Asset Lifecycle Management
Optimize Capital & Operational expense
Business Continuity on-the-go with Mobility

ROC network asset
management

Introduction

The telecommunication industry is evolving rapidly and is in a unique position in comparison to other industries. The telecom industry is different from other industries as it needs heavy capital investment over a wide geographical spread and the investment on assets need to be refreshed more frequently than any other industry.

With growing changes in technologies and ever decreasing technology cycles, Telecom industry is under immense pressure to make Capex investments to stay competitive in today's market. Add the auditory, regulatory requirements and transformation from legacy to next-gen technologies, it becomes imperative for the operators to know the rate of change in their network including:

- Rolling out new networks,
- Optimizing investments made in existing assets while ensuring seamless migration to newer technologies,
- Decommissioning and monetizing end-of-life assets

The main challenges that telecom service providers face in effectively managing network assets are:

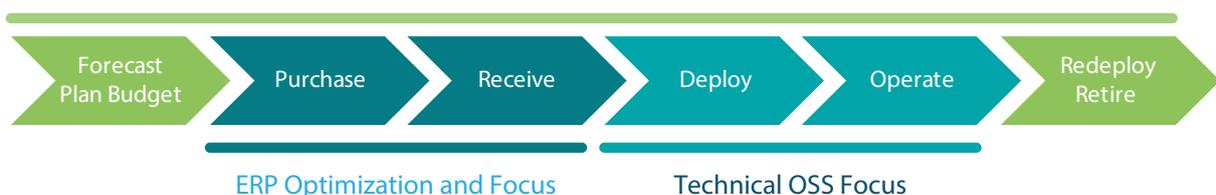
- Unavailability of a central repository with disposition and status of all assets over a wide geographical spread.
- Unavailability of systems and defined metrics to measure ROI from assets.
- 5-15% of assets approximately being stranded or unutilized in the network with no return on investments.
- Lack of standard processes defined as per industry best practices.
- Low process controls and adherence to defined processes.
- Poor quality of data in various systems leading to suboptimal capital planning and decisions.
- Suboptimal field operations due to non-availability of system access and relevant accurate data in the field.

Ineffective management of assets effect the bottom line of Telecom operators to the extent that the below issues are discussed in board meetings of Telecom service providers:

- Suboptimal capex decisions leading to a huge free cash drain within the organization
- Audit and Regulatory compliance issues
- Overspend on operations expense

Asset Lifecycle Overview

A complete solution of network asset management would encompass the continual monitoring and management of lifecycles associated with the assets. Each section of the asset lifecycle is instrumented with features for daily use by the operator for process triggers, insightful dashboards with cube analysis, KPIs and alerting to important conditions, prioritized case work items associated with network (asset re-positioning recommendations and supporting analysis, service re-grooming recommendations and supporting analysis, purchasing recommendations, supporting analysis and validated triggers) and visualized asset lifecycle statuses with associated reporting.



ROC Network Asset Management

Subex's ROC network asset management solution has pioneered the concept of a Capex controls framework which provides the operators with the required instruments, processes, controls, analytics based insights, dashboards and reports to address all of the issues around asset lifecycle management.

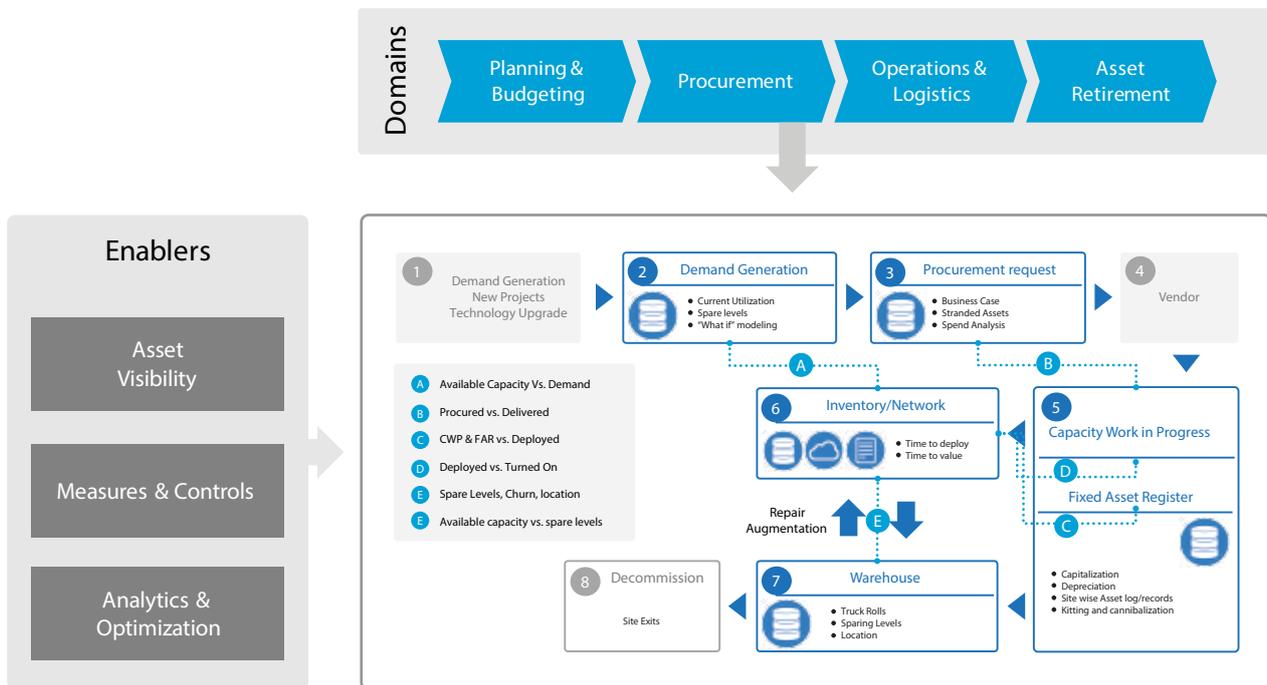


Fig : Subex's Capex Controls Framework

Domains of Framework

Planning & Budgeting

- Return on Assets (RoA) for assets purchased during previous budgeting cycles as a guide to new investments.
- Current utilization of network assets and rates of change.
- Accurate records of asset types and locations.

Ops & Logistics

- Best-in-class automated network discovery that digs deep into the network and builds a complete picture of assets and resources that are deployed, along with their operational status.
- Effective Spares Management, Warranty & Annual Maintenance Contract (AMC) of all assets.
- Real time tracking of all assets by a mobile application.

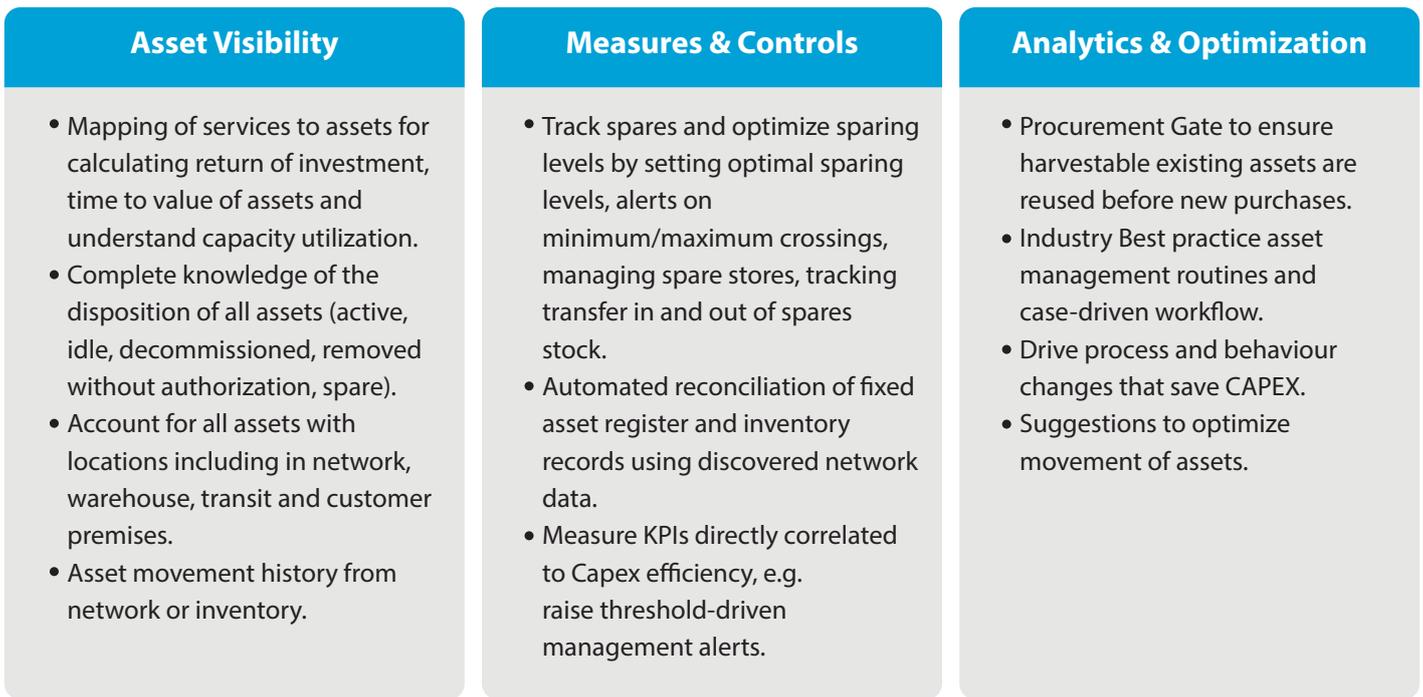
Procurement

- Identification of idle and under-utilized assets that can be redeployed to offset new purchases.
- Integration with ERPs (such as SAP) to ensure adherence to purchase policies.
- Ensure assets are only purchased due to actual need vs. budget.

Asset Retirement

- Integration with international asset brokerage to ensure top market value for disposed assets.
- Identification of idle, excess and obsolete assets that can be resold or salvaged.
- Deep network analytics to accelerate network migrations and site exits.

Enablers of Framework



Subex ROC Network Asset Management Suite: Subex Solution Elements

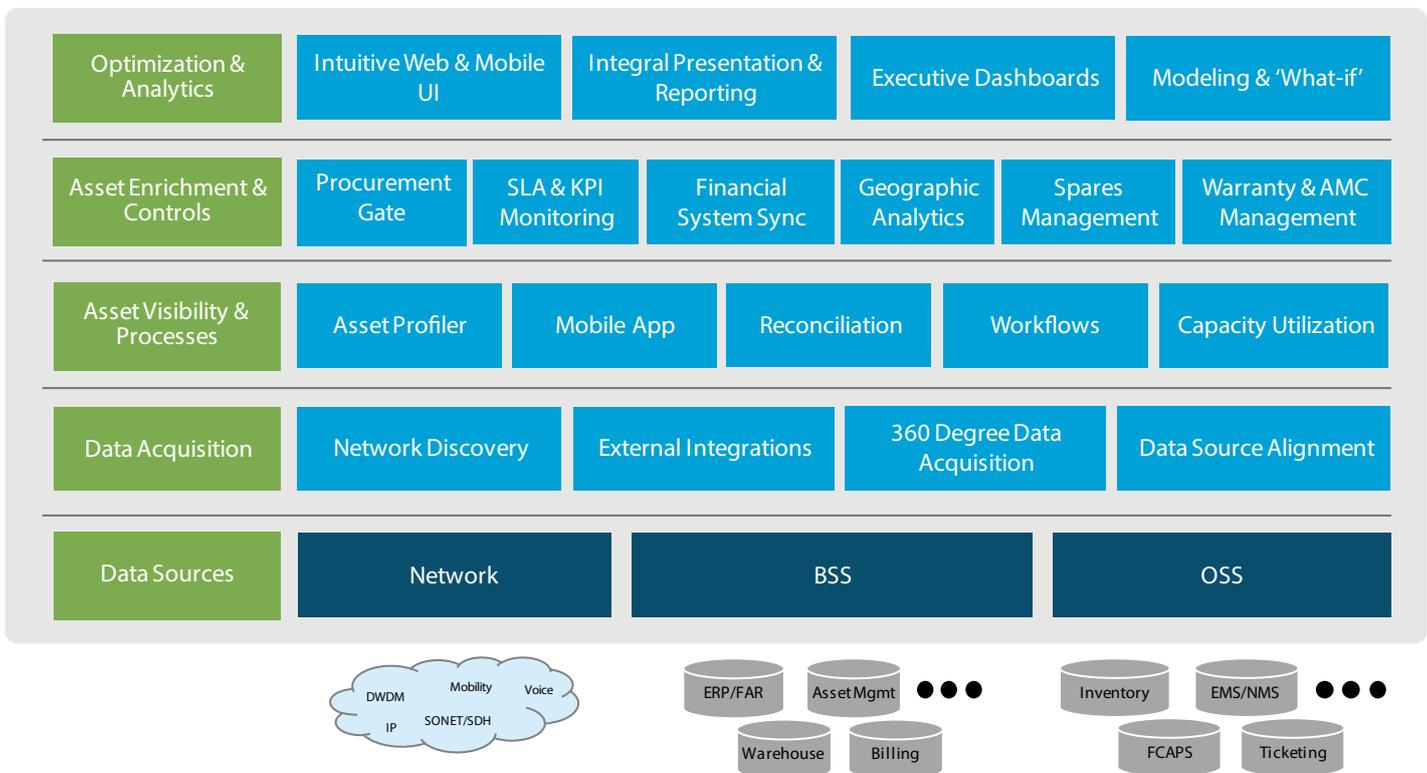


Fig : Subex ROC Network Asset Management is one-of-its-kind Asset Lifecycle Management solution which provides standardized processes for managing and optimizing network assets

Centralized Repository for Active, Passive and Non-serialized Network Assets

A centralized repository of assets with information relevant to the finance, supply chain and network operation teams. This repository also records and maintains events and workflows executed on each asset. Geographic special information is recorded to represent assets on a geospatial user interface.



Industry best practice business processes comes off-the-shelf with the product

ROC Network Asset Management has productized the best practices in business processes to effectively manage assets. These best practices are productized in the form of workflows which explains the set of work steps that need to be followed by various teams during different stages of asset lifecycle to effectively manage them.

Business Optimization on-the-go: Enterprise Mobility

The mobile application of ROC Network Asset Management allows the field operators to access data and tasks, take decisions and close work order on the go. The integrated infrared based bar code scanning abilities help the operators to work efficiently and reduce manual errors. The mobile app works with geographic co-ordinates of user, provides intelligent insights, optimizes the work efficiency and records the location at which a transaction was completed for audit trail purposes.



FAR Reconciliation

ROC Network Asset Management has a reconciliation engine that helps to identify fall outs between what is recorded within the Fixed Asset Registry in comparison to the status of assets deployed in the network with analytics based suggestion for probabilistic matches in order to rectify the fall outs.

Asset Tracking and Process Assurance

ROC Network Asset Management uses an industry leading discovery engine to electronically audit the network at periodic intervals. It identifies the addition/movements/removals of assets in the network, and send alerts to users if these changes are process deviations and thus helps in assuring that the set processes are being followed.



5-10%

Reduction in under-utilized assets

Procurement and Decommission Assurance

- Spend Analysis of networks – new versus legacy networks, site exits etc.
- Complete view of stranded assets in the network.
- Business case validation against budget.
- Monetization of unutilized assets.
- Ordered versus Received assets.

Asset Tracking and Management

- Improved Fixed Asset Utilization (Asset Visibility).
- Optimized Inventory obsolete and turns.
- Improved Network Reconciliation.
- Improved Spares Management.

20-25%

Improvement in network reconciliation

40-60%

Savings due to reduced manual audits

Financial Reporting and Accounting Improvement

- Improved Productivity in Finance Support for Reconciliation & Asset Tracking.
- Improved accuracy around capitalization and depreciation.
- Reduced manual efforts for physical verification audits.
- Automated capitalization of network assets.

10-20%

OPEX savings

Operational Efficiency

- Improved Productivity in Network Reconciliation & Asset Tracking.
- Reduced Manual Tasks in Fixed Assets Processing.
- Reduced truck rolls for field visits.

ROC Network Asset Management, an Asset lifecycle Management solution from the stables of Subex has helped to maximize the return on invested capital for its customers and help build competitive advantage. Subex customers have matured in CAPEX diligence processes as network growth and costs has significantly outpaced network revenues.

ROC Network Asset Management stands alone in the industry today as an agnostic tool to give network stakeholders tremendous power to drive decision, while giving finance stakeholders robust analytics to drive Capex planning.

Why is CAPEX Becoming a Key Concern for Operators Today?

CFO Concerns

- Audit & Regulatory Compliance
- Capital Budgets at Risk
- Shrinking Margins

CTO Concerns

- Network Growth & Transformation
- Maximizing Value from Networks
- What, Why, When, Where to Buy?

Potential Business Impacts

20%



Network Assets Fail to Return Cost of Capital

5-15%



Network Assets are Stranded

Challenge in audit and regulatory compliance



Lack of asset traceability hindering network operations



Potential CAPEX loss & lack of revenue realization



Finance Visibility
Reliance on ERP (Supply chain and GL focus)

Forecast
Plan Budget

Purchase

Receive

Alignment Gap

Deploy

Operate

Redeploy
Retire

Network Operations Visibility
Reliance on Technical OSS (Fulfilment and Assurance focus)

ERP Optimization and Focus

Technical OSS Focus

Substantial margin improvement by aligning **Network Intelligence** across the **Asset Lifecycle**

Asset Lifecycle Management Solution for CAPEX Optimization



Asset Management and Tracking

Centralized Asset Repository

covering asset disposition, technical and financial details



Optimized Asset Purchases

5-10%

Reduction of under-utilised assets



Better Audit & Regulatory Compliance

40-60%

savings from reduced manual audits



Time to Value of Asset

10-15%

Improvement in time-to-value of assets



FAR Accuracy



25-30%

Financial reporting and accounting improvements

Improved free cash Flow



Monetize

End-of-life Assets to generate maximum value

Spare Management

30-40% CAPEX Savings for spare assets



Assuring and Optimizing Assets



Optimize Asset Utilization

by reusing stranded, unutilized & under-utilized assets

About Subex

Subex Ltd. is a leading telecom analytics solutions provider, enabling a digital future for global telcos. Founded in 1992, Subex has spent over 25 years in enabling 3/4th of the largest 50 CSPs globally achieve competitive advantage. By leveraging data which is gathered across networks, customers, and systems coupled with its domain knowledge and the capabilities of its core solutions, Subex helps CSPs to drive new business models, enhance customer experience and optimise enterprises.

Subex leverages its award-winning analytics solutions in areas such as Revenue Assurance, Fraud Management, Asset Assurance and Partner Management, and complements them through its newer solutions such as IoT Security. Subex also offers scalable Managed Services and Business Consulting services.

Subex has more than 300 installations across 90+ countries.



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