

TCS Way of Telecom Assurance

Many Assurance products and solutions are available in the market to address specific aspects of assurance like fault, performance and so on, aiming at ensuring customer satisfaction. However, there are gaps in assessing the effectiveness of the solutions and their role in ensuring a healthy and satisfied relationship in Telco's eco-system.

This white paper discusses the TCS Way of Telecom Assurance, a relationship and promise-based paradigm to enhance the experience between various relationships in a Telco eco-system, through commitment to promises. This paper also discusses the TCS way of assessing effectiveness of assurance solution to manage and deliver on those promises.

About the Author

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Rajesh is a consultant with Service Assurance team in TCS. With an M.tech degree, he has over 11 years of experience spread across Service Assurance, Geographical Information Systems (GIS) and has worked in various key roles with large service providers. Within TCS, he has been involved with Service Assurance Systems implementation for different SPs, due diligence studies, Presales activities, asset development, TIPS preparation and R & D initiatives. He was a part of the British telecom's BT TeMIP project, which has got a special commendation award in the value category of "BT Investing in Excellence" awards.

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Introduction

In today's highly competitive telecom market, launching new products and value added services are not sufficient to grow the market share. The key to sustain business and streamline the revenue flow lies in the service provider's effectiveness in customer service, the quality and promptness in responding to issues and network faults. In other words, service assurance is very important in today's Telco eco-system.

Many solutions and/or products are available in the market to address specific aspects of assurance. Any gaps in assessing the effectiveness of assurance solutions and process automation may prevent organizations from getting a complete picture of their business and how it operates. This may result in uncertain and erroneous decision-making. This means that assurance is limited and the business fails to operate at optimum levels.

TCS Way of Telecom Assurance introduces a relationship and promise-based paradigm that takes into account various promises such as security, availability and so on, that may exist between relationships between the stakeholders to prevail a happy situation in the entire organization. TCS Way of Assurance aims at improving the relationship experience through commitment to promises by enhancing the effectiveness of assurance solutions to deliver on the promises. It's a holistic approach with practical outcomes!

The rationale behind TCS Way of Assurance is to enhance the traditional representation of assurance to bring in focus on relationships, promises, parameters, enablers and categorization. These are explained in detail later in the paper.



Figure 1: TCS Way of Telecom Assurance

Why TCS Way of Assurance?

The benefits of TCS way of service assurance are:

- Focus on all the stakeholders or entities, elucidated in Figure 2, in a Telco eco-system to ensure satisfaction at all levels which are defined by a promise and to strike the right balance across the organization to meet the ever-increasing expectations in an optimal way.
- Ability to monitor health of relationship proactively by viewing all transactions between the relationships in real time. This leads to a process which in turn forms an exemplary system. This will ensure that the Telcos get a complete visibility into a transaction, the current status of the transaction and where it is going at any point in time.
- Strategic decisions to sharpen assurance processes by analyzing relationships. Benefits and costs of each promise implementation to make sure that the organization meets their overall strategy for future plans.
- Increase the effectiveness of automations. This helps to reduce operational costs, improve customer satisfaction, crystal clear processes through automated root-cause analysis and correlation. This results in localizing and pinpointing issues quickly in the equipment/network/service.

Increased cross-sell and up-sell based on promises for each relationship in the organization.

TCS Way of Telecom Assurance

TCS way of telecom assurance provides end-to-end assurance mechanism that not only improves the traditional way of carrying out assurance by focusing on specific modules like fault, performance and so on, but also enhances its role and effectiveness in ensuring healthy and satisfactory relationships among the various stakeholders/entities in a Telco.

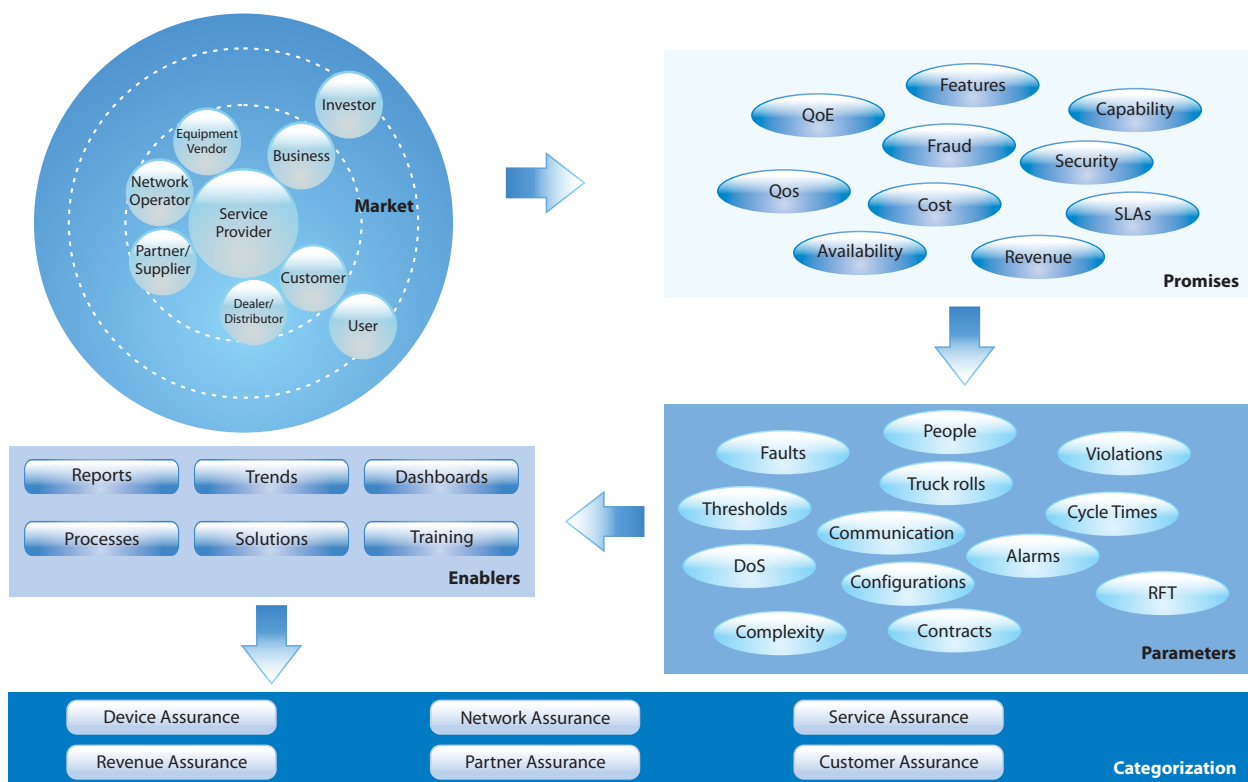


Figure 2 – Components of TCS Way of Assurance Framework

TCS Telecom Assurance – Components

Relationships are the focal point in TCS way of telecom assurance. A healthy, happy and satisfactorily functioning relationship is the “Mantra” to drive assurance activities. Market is the main force that gives rise to and drives various relationships.

Promises are the measures to assess the health of relationship.

Parameters help quantify a promise.

Enablers aid in tracking and managing the parameters.

Categorization helps group assurance activities to focus on demands and requirements of a specific assurance domain.

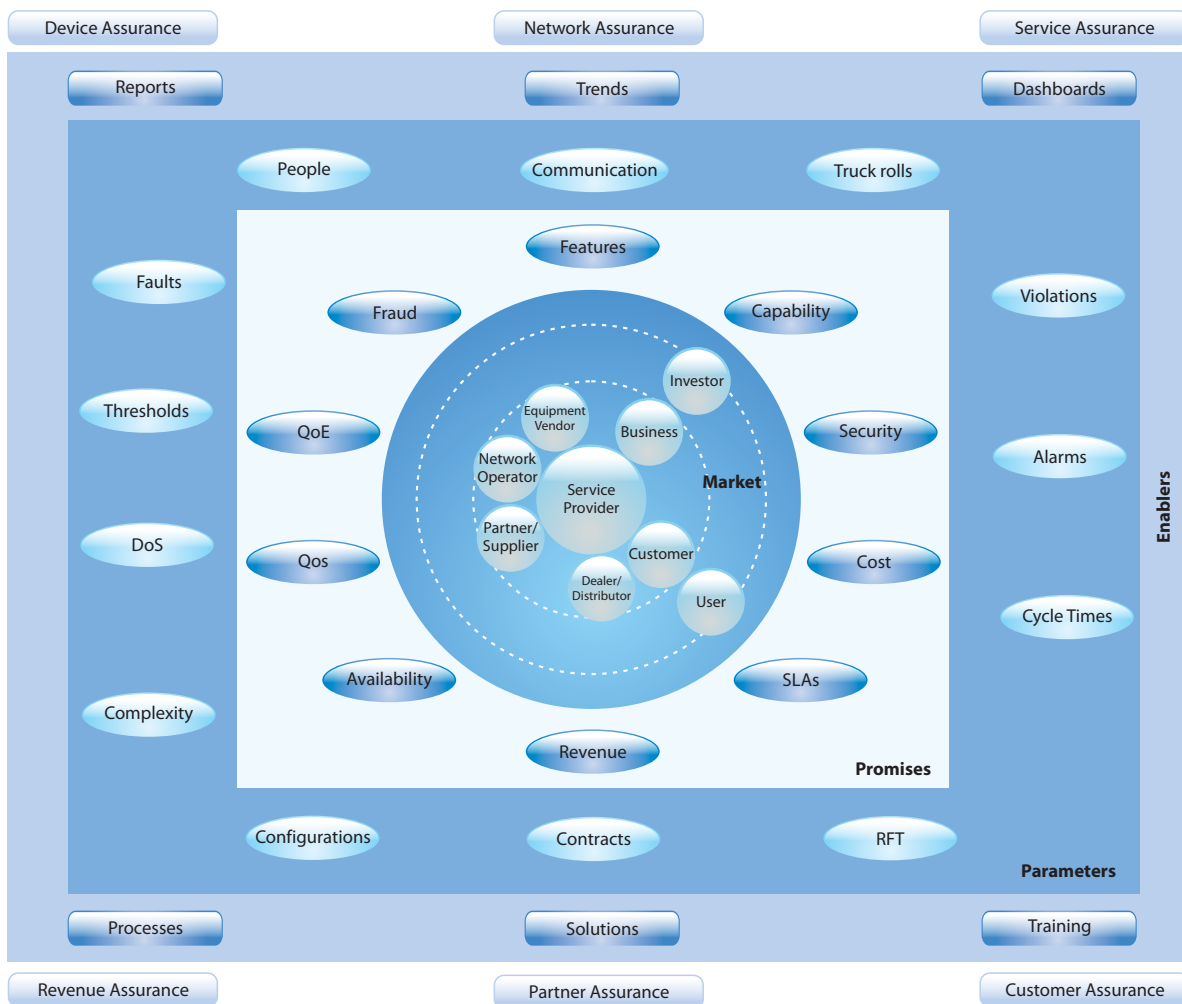


Figure 3 – Eco System of TCS Way of Telecom Assurance

Figure 3 depicts the eco system of TCS Way of Telecom Assurance and serves as a framework that helps to define relationships; identify and align various components of the eco system to fulfill the commitments of the relationship.

Many relationships exist in a Telco world and every relationship is bound by certain promise.

In TCS Way of Assurance, to manage effectively, a Promise is quantified through Parameters; these parameters are captured, measured, and corrected through Enablers like Processes & Solution. Enablers Dashboard, Reports and Trends aid in tracking and viewing the parameters and the complete chain is managed through Categorization of assurance domains.

The concept is illustrated in Figure 4 using one of the crucial relationships of a Telco Service Provider and Customer relationship.

The Service Provider and Customer relationship is linear and contractual in nature where the Service Provider is typically bound by SLA promise. The promises are tracked using the parameters.

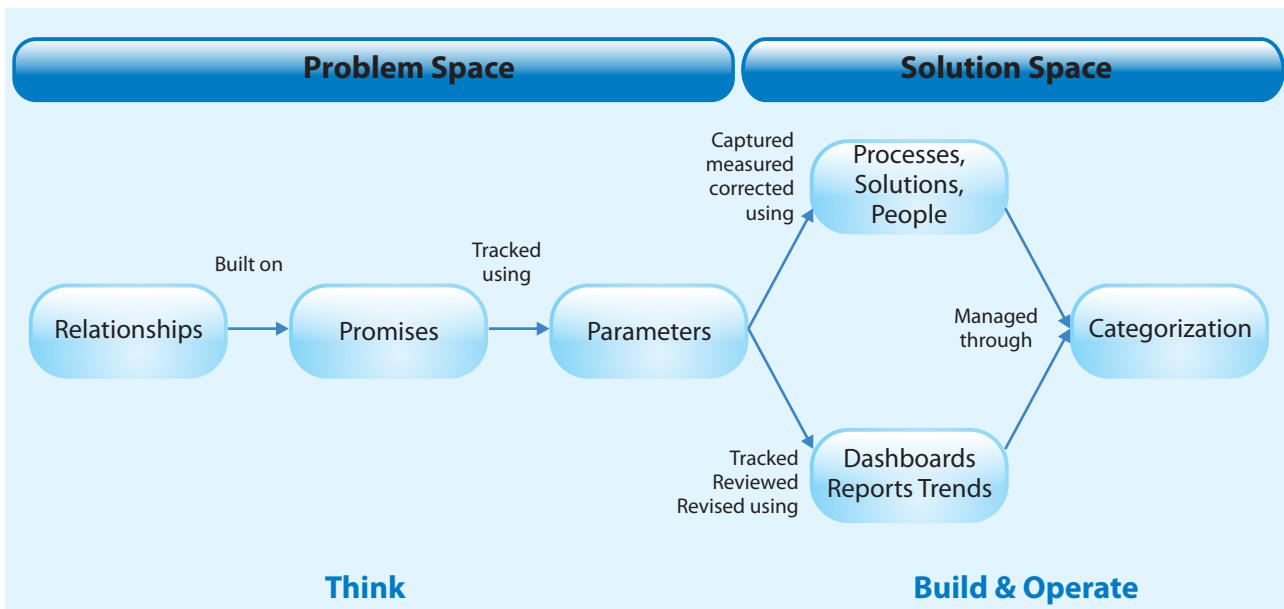


Figure 4: Service Assurance Landscape

The following steps explain about how a parameter is defined and tracked:

- Contracts, Faults and Cycle Times are the parameters (or counters) to effectively measure and implement SLA promise (or Key Performance Indicators (KPI)) between the service provider and the customer.
- A set of appropriate Processes (business and operational) enable to streamline and govern the activities to manage the parameters.
- Solutions (e.g. fault, trouble management) help automate the process and mechanism to capture, measure and correct the parameters proactively and efficiently.
- Promises (KPI) and parameters (counters) are presented on Dashboard, Reports and Trends to track health of a relationship.
- Categorization helps manage all components of the eco-system and activities to address domain specific challenges and requirements (e.g. Service Assurance, Network Assurance, Revenue Assurance and so on).

TCS Way of Assurance helps standardize assurance processes. This, in turn, enables the organization to increase user productivity, business transactions, customer satisfaction and time to market for products and services.

SLA Promise

Let us take an example of SLA management and try to connect the above elucidated approach to it.

Think!

The cardinality between the service/network provider to other entities/relationships like equipment vendor, partner, customer and network provider is 1:M. (1 : Many relation)

The influencing parameters between service provider and equipment vendor are faults, alarms, thresholds, violations, cycle times and RFT. Likewise, influencing parameters for other entities are depicted.

The above parameters and the entity are correlated by the correlative entity. The entity 'Equipment Vendor' with parameters 'Faults, alarms, thresholds, violations, cycle times and RFT' are correlated by 'Equipment' entity.

SLA promise comprises all combinations of relationships/entities, parameters, correlative entity and SLA management solution.

Build!

SLA management is the key solution to fulfill SLA promise in the Telecom organization.

To Define the SLA management solution – Fault management, performance management and service quality management are used as enabling solutions.

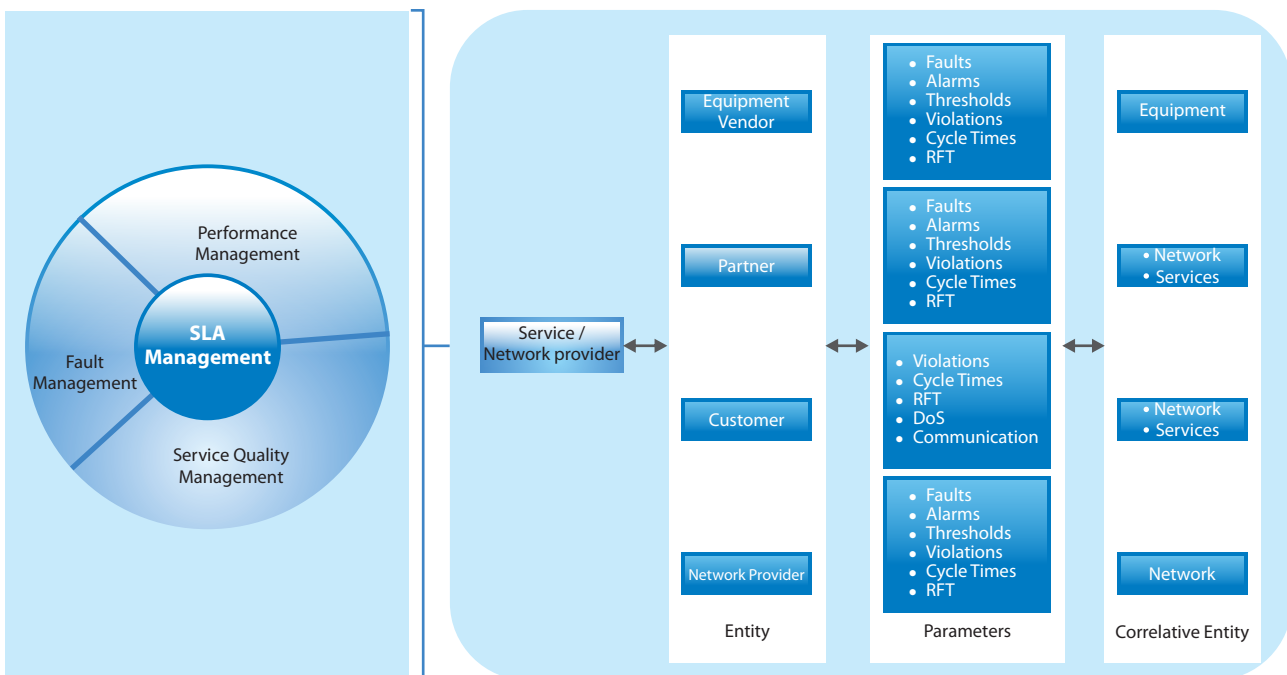


Figure 5: SLA Management

Conclusion

Assurance has become a critical success factor in the Telecom world in achieving their business goals of lowering operational and capital expenditure, enhance revenues and retain customers. TCS way of telecom assurance allows the service provider to predict and plan future events, identify and plan new revenue sources, thereby fulfilling their promise to their customers

With TCS way of service assurance, we try to explain a new approach to the traditional way of assurance with the help of relationships and promises. The commitment to a promise across relationships results in a happy situation in the entire organization.

About TCS Telecom Industry Solution Unit

TCS' Telecom Business Unit is the second largest vertical contributing higher percentage to the overall TCS revenues. With a dedicated pool of professionals and an accumulated experience and ongoing associations with world-class Telecom service providers and equipment manufacturers, TCS has acquired unparalleled understanding of the Telecom domain.

TCS helps wireline, wireless, broadband, and cable service providers redefine their markets with innovative solutions that help them become more agile, reduce fixed operations costs, and introduce next generation services. TCS sets customers apart from their competitors with instant access to industry solutions, best-in-breed technology, assets, and frameworks.

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