

BILL 5 - Harnessing NGOSS to implement a proactive revenue assuring OSS

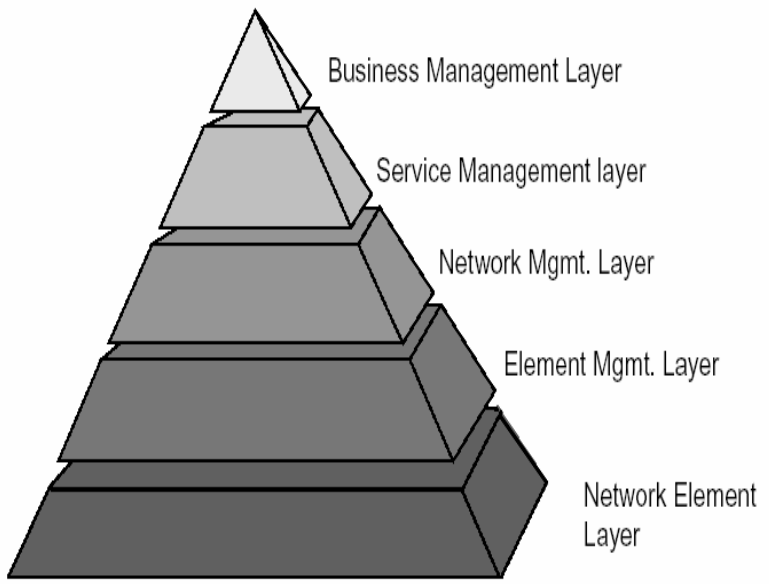
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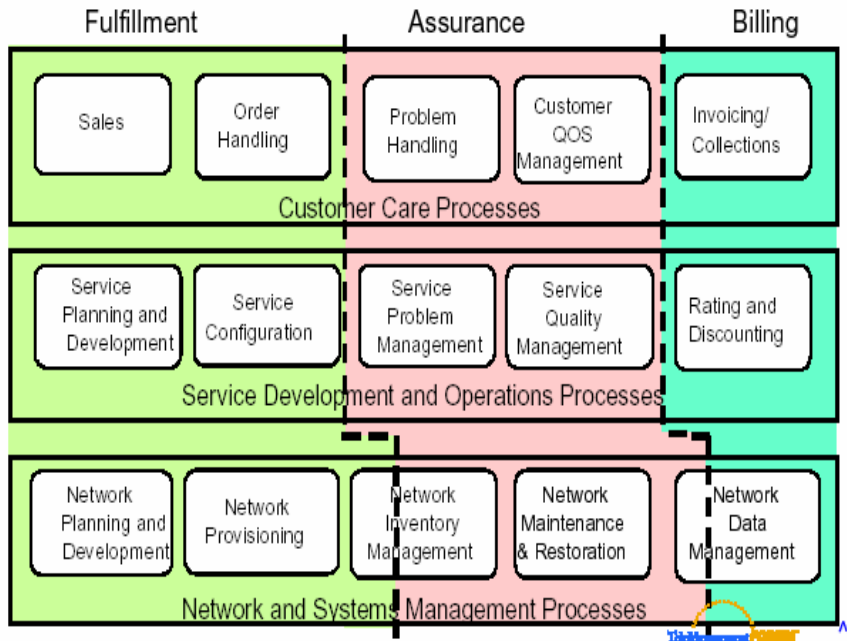
TATA CONSULTANCY SERVICES LTD.

**Kishore J Hegde
hegde.kishore@tcs.com
Tel# +91 44 55503748**

Evolution of eTOM



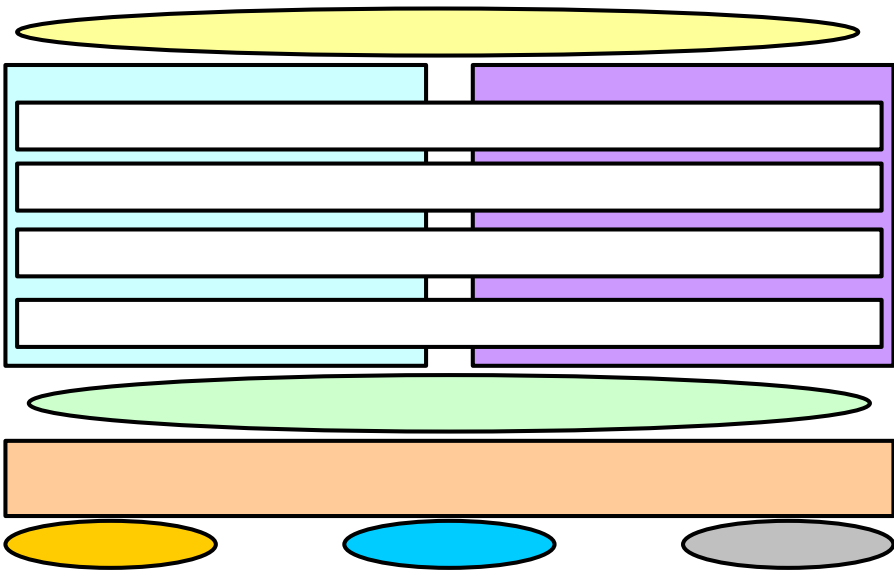
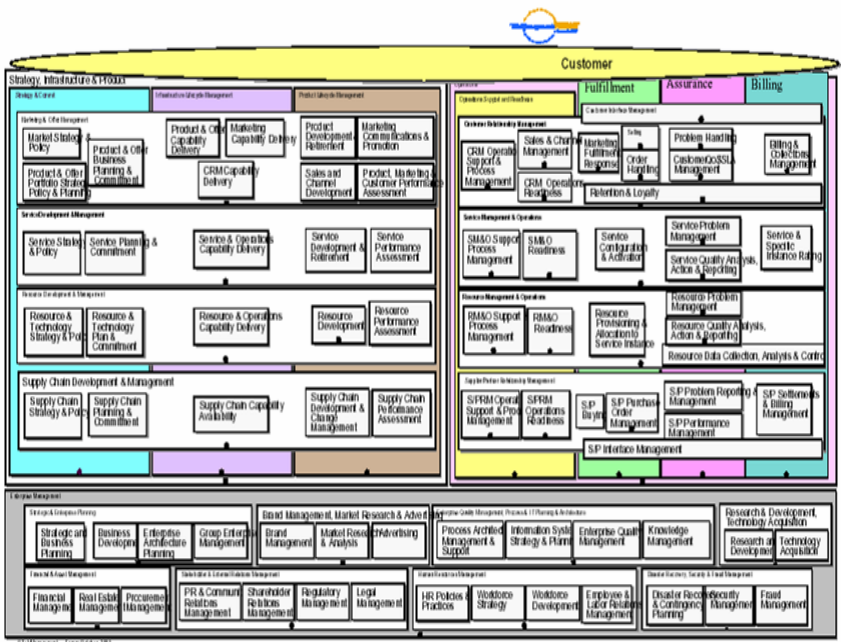
TMN



TOM

- **Roots in TMN Model**
- **5 Layers to logically perceive a Service Providers Business**
- **TOM – initiated the standardization, specification**
- **Defined the interfaces between the various TMN layers**
- **Started Addressing the complexity of implementing and managing OSS**
- **FAB framework of TOM represented the multiples dimensions of operations management through its top-down, customer-oriented, end-to-end process definition**

eTOM – The Baseline



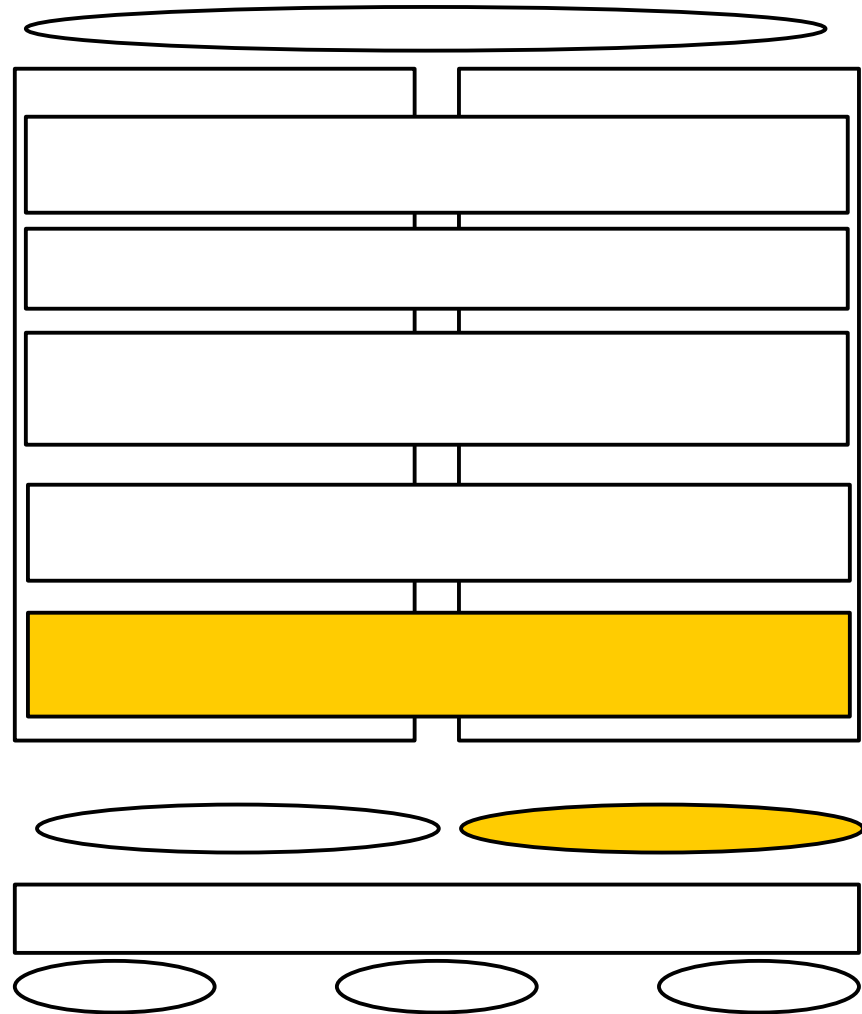
- eTOM has carried forward the strengths of TOM
- Broadening the framework to represent the Total Enterprise and its strategic activities
- Standardized the industry’s approach to address the needs of various entities interfacing with the enterprise
 - Market
 - Customer
 - Supplier/Partner
 - Employee
 - Shareholder

What's Next?

- **To address this question and understand the evolutionary path of eTOM, one need to understand the challenges faced by Service Providers**
- **One set of challenges for Service Providers, that need to be addressed by eTOM and NGOSS**
 - **Identify new revenue streams**
 - **Assure Revenue**
 - **Eliminate Opportunity Leakage**
- **These are critical advantages that an Enterprise needs to acquire in order to succeed in the next generation market**
- **The key to answer these needs cannot be entirely addressed by standardized process alone and is increasingly leaning towards embedding a business intelligence framework to gain insights from both Strategic and Operational perspective, given that fact that Revenue Assurance (RA) is both end-to-end and ongoing.**
- **Business Intelligence (BI) has long been a sublime in the eTOM framework. There is a need to bring this critical element to the forefront and standardize it in eTOM.**
- **Leveraging BI in operations is as important as utilizing it from a strategic point of view**

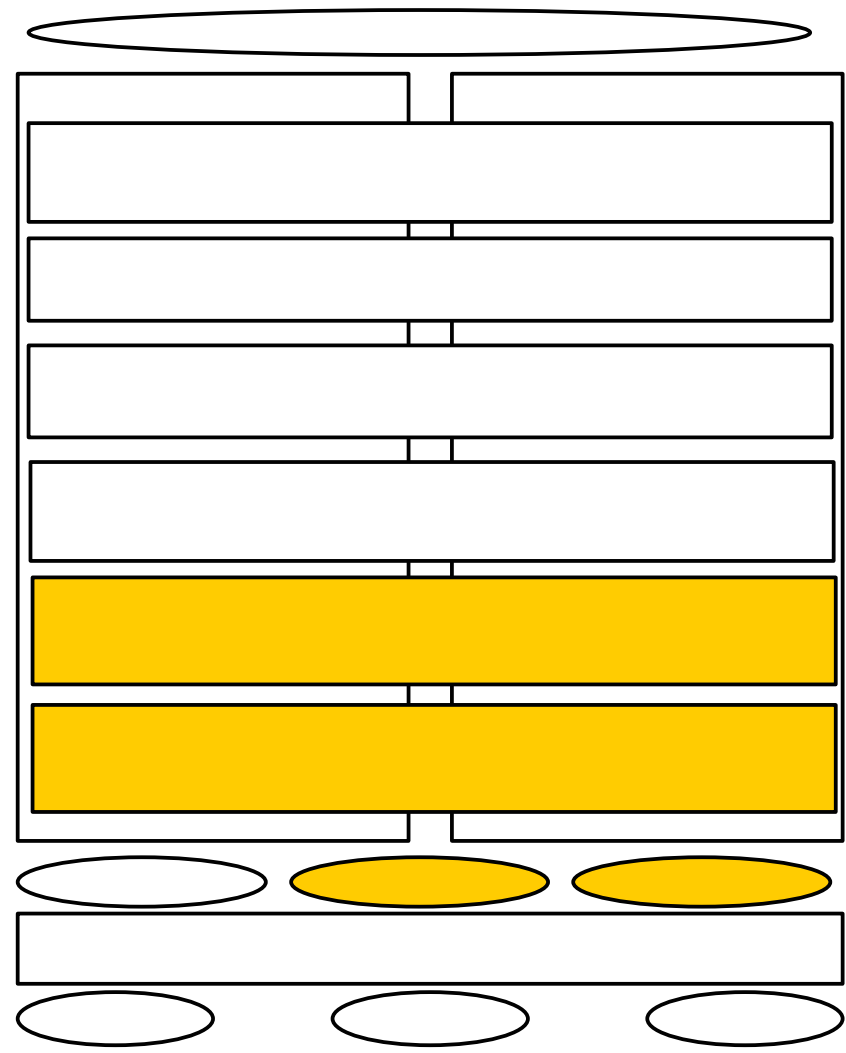
eTOM – The Next Gen (Business)

- eTOM – The Next Gen can play a pivotal role in the standardization of the Business Intelligence Framework
- Provide directions for the institutionalization of BI within SIP and FAB
- Help pave way for an 'Intelligent' Operations
- Guide the industry to negotiate the so called 'implementation trap' in BI initiatives



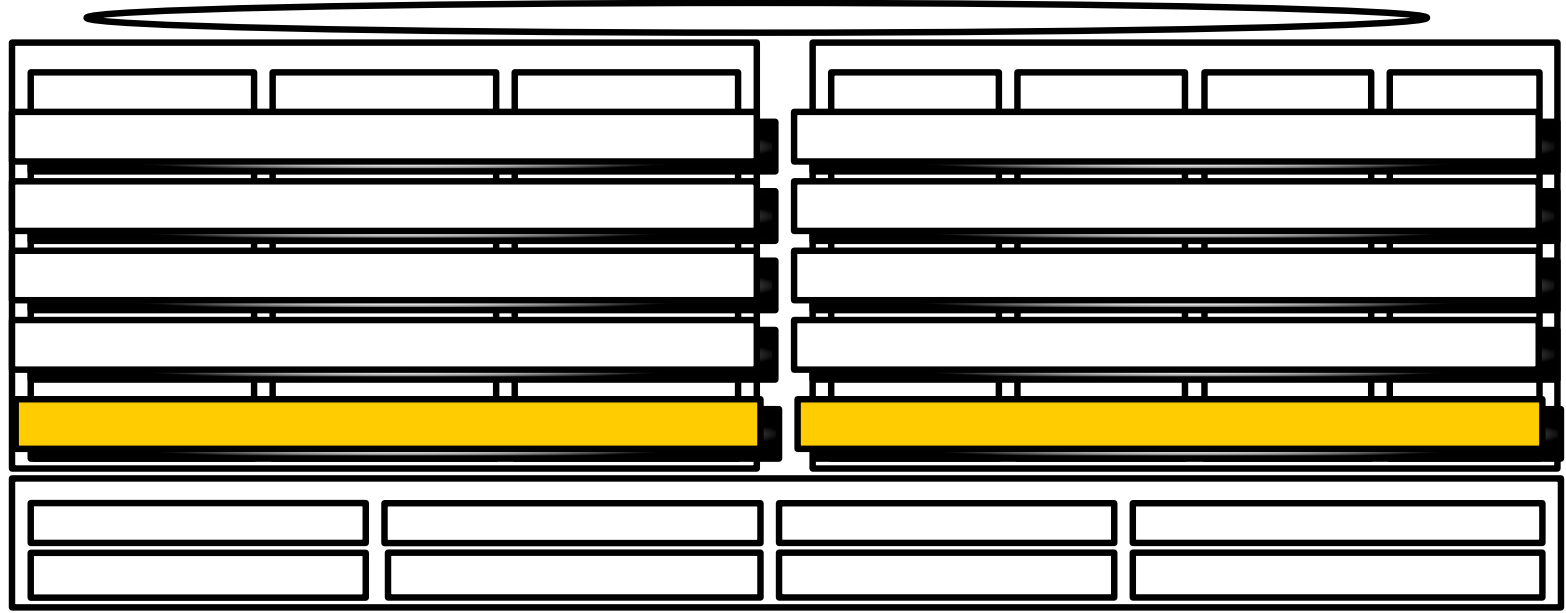
eTOM – The Next Gen (Business and Regulatory)

- The need for **Business Intelligence in SIP and FAB** is becoming critical
- **Regulatory requirements** are seeking more insights into the operational efficiencies of an enterprise
- Though **Regulatory Management** has found a place under eTOM - Enterprise Management, standards such as **Oftel OTR003** will eventually drive the need for an intelligence framework to deal with regulatory needs in the areas of operations
- This paper focuses on **BI** while **Regulatory** can be deferred for a separate discussion



Next Gen eTOM – Process and Intelligence Framework

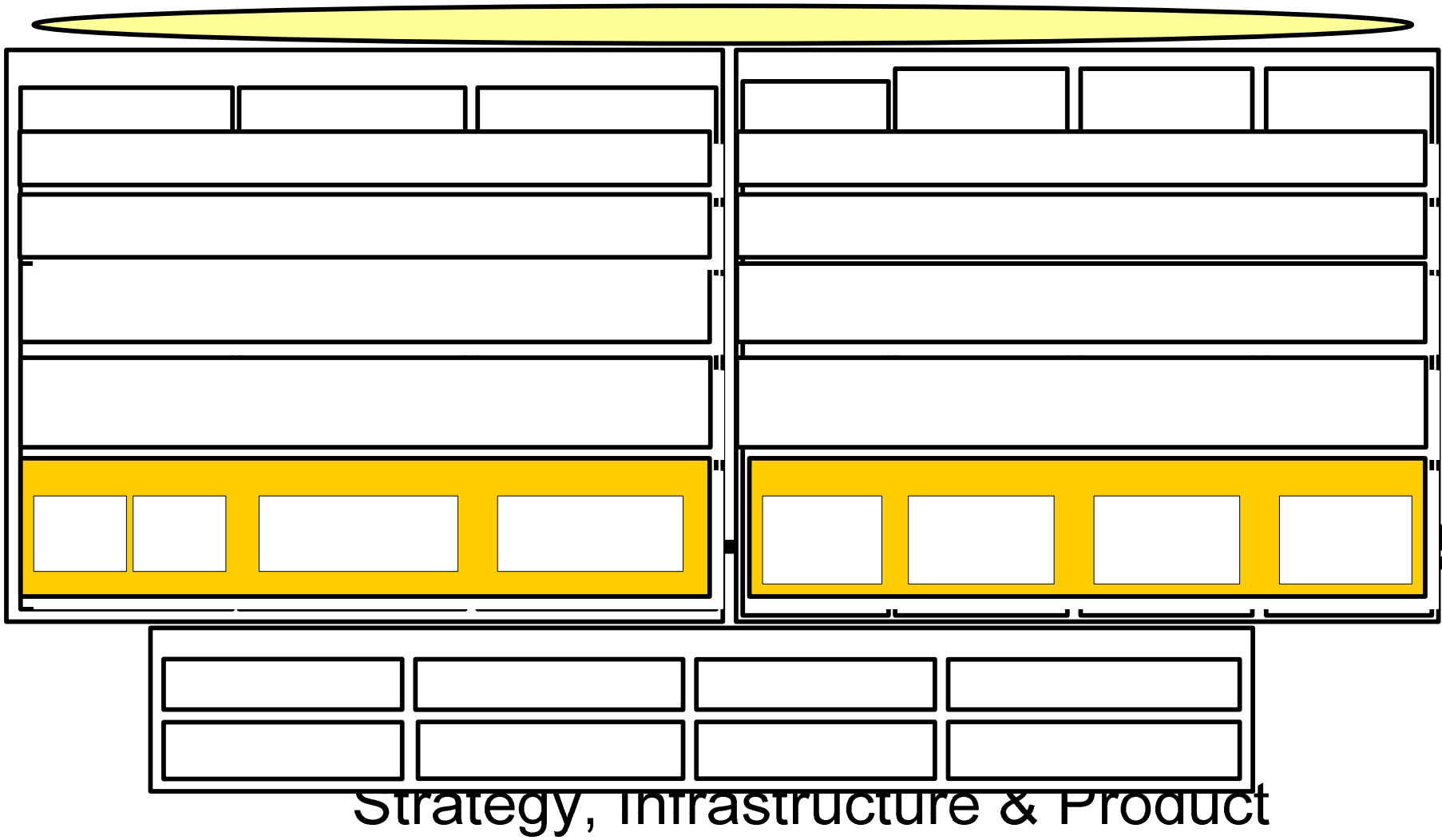
Next Gen eTOM Business Framework - Level 1 View



- Standardized Business Intelligence Framework is the answer to an institutionalized approach to Business and Revenue Assurance
- Next Gen eTOM needs to deliver a framework for both business process and business intelligence to coexist in a symbiotic relationship

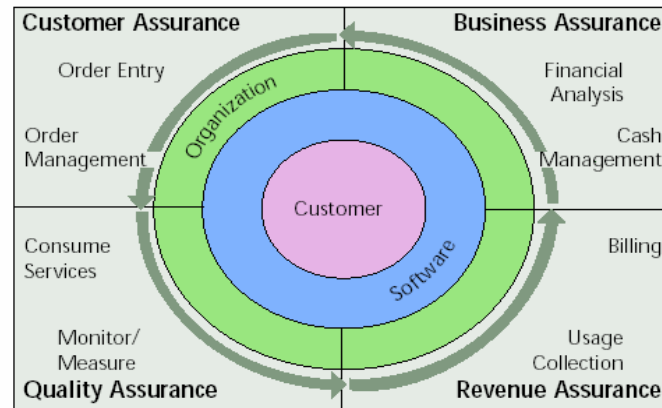
Strategy, Infrastr
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Next Gen eTOM – Process and Intelligence Framework



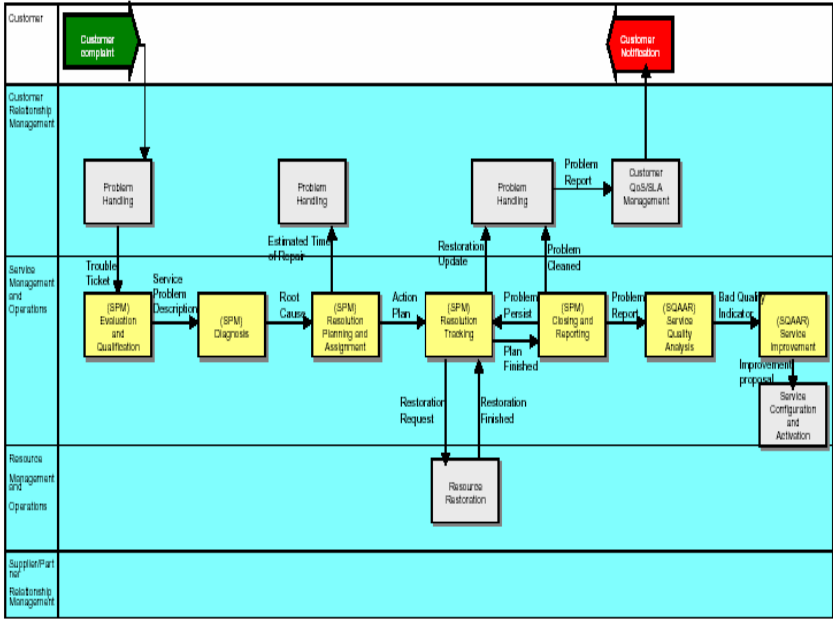
Business and Revenue Assurance thru BI Development and Management

Quadrants of Assurance
Source: The Yankee Group, 2004

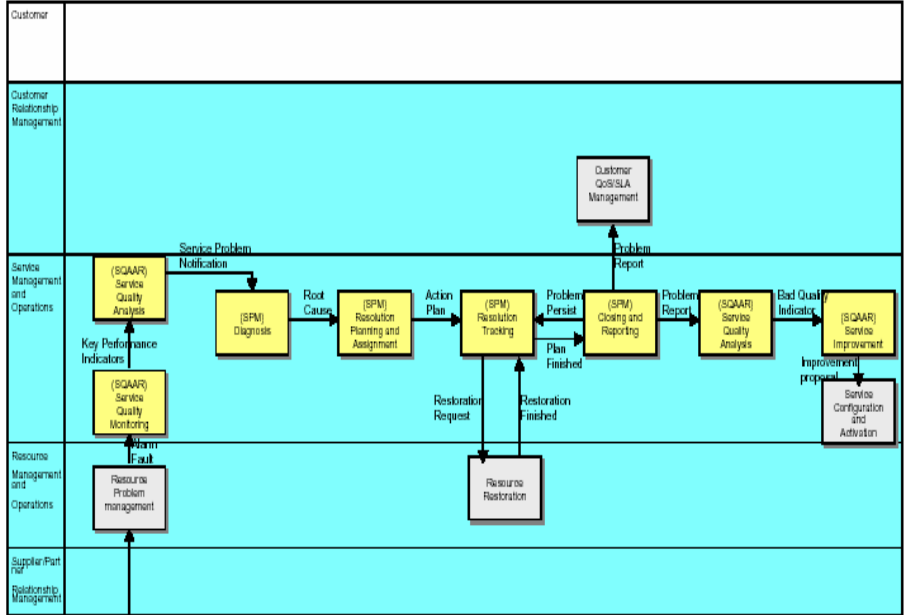


- Revenue Assurance comprises of all set of organizational activities performed across the enterprise to maximize revenue through completeness, accuracy and timeliness of data
- Revenue Assurance can be cogently perceived through the four quadrants
- Service Providers need to strengthen their processes and practices across all these quadrants, in order to identify new revenue streams, retaining new revenue streams, leveraging revenue generating opportunities and eliminating revenue leakage
- Revenue Assurance can be sustained and enhanced only by achieving synergies across the four quadrants of Assurance
- Revenue Assurance is an all encompassing theme that runs across each of the assurance quadrants namely Customer, Quality, Business and Revenue.

Assurance in eTOM



Level 2 Process
 Level 3 Process



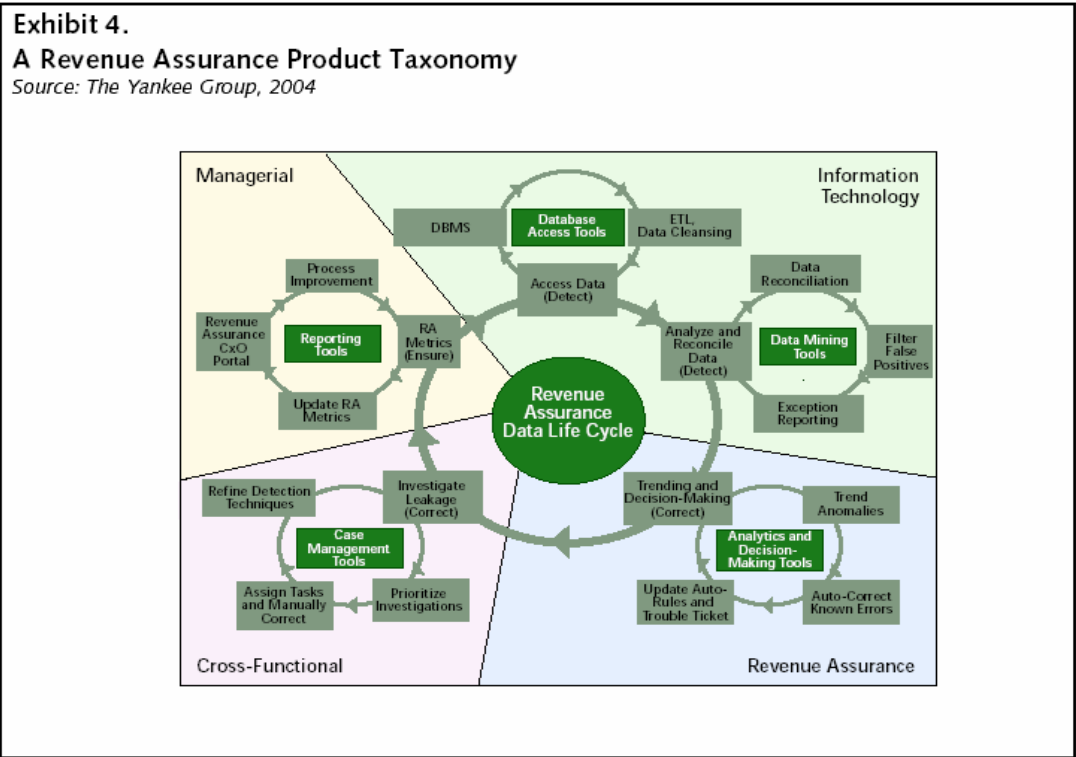
Level 2 Process
 Level 3 Process

- eTOM Assurance vertical provides focus on managing Service Levels, Customer Problem Handling and Alarm Management
- These combined with Service, Resource and Supply Chain Performance Assessment processes provide an initial framework for Service Level Management
- Service Level Management implicitly enables Operators to address the needs of Customer Assurance and Quality Assurance

BI Framework in eTOM

- Intelligence-centric Framework required for Business and Revenue Assurance varies very much from the workflow and alarm-centric model of Customer and Quality Assurance
- Service Providers have had limited success in Revenue Assurance due to the inherently reactive approach, coupled with lack of operational intelligence and the limited toolset available to acquire intelligence
- But, these can only be viewed as 'preliminary' obstacles
- The most formidable and potent threat to successful Business and Revenue Assurance is the total absence of a proven revenue assurance model that can act as a catalyst for accelerated implementation of a revenue assurance infrastructure, thereby helping operators negotiate the 'implementation trap'
- Business Intelligence Framework needs to address standardization in two fronts:
 - Standardization of the BI Lifecycle Process
 - Standardization of the BI Model

Standardization of BI Lifecycle Process



- Standardization of Business Intelligence Lifecycle Process would essentially be based on the Data Access-Data Mining-Data correction-Reporting paradigm
- This generic OLAP workflow is the predominant way current Business and Revenue Assurance activities are handled; albeit in a reactive way

Standardization of BI Model

- The key to moving away from the reactive intervention of business and revenue assurance lies not in the workflow but in the way intelligence is created and applied
- Intelligence needs to be assimilated and applied tight at its source – Operations, to enable intelligent operations
- The sheer volume of operational data that staggers us today is going to grow multifold and gathering `intelligence' will be even more complex.
- Business needs to have acquire this capability if they can take a shot at plugging revenue leakage and assure revenue.
- SID stands at the threshold of giving the overall Business Entity relationship model, paving way for a Standardized Business Intelligence Model embedded in NGOSS
- In one plane, the relationship between the various business entities across the domains needs to become the operational standard for gathering intelligence
- In another plane, an entity-based intelligence model needs to be arrived at.
- SID needs to evolve from a Data Model to a Data and Intelligence Model
- Data and Intelligence Model will ensure that both OLTP and OLAP processes coexist in Operations, resulting in the reduction of of time lag to gather intelligence from data and apply it in the operations domain.

Standardization of BI Model (contd)

- eTOM FAB business workflows will act on the SID Data Model while the operational data thus created would feed the SID Intelligence Model, paving way for creation of intelligence on a real-time basis
- Intelligence will hence be as much a part of Operations as information on Business Entities
- eTOM framework will act on SID in two planes
 - SID Data Model Layer
 - SID Intelligence Model Layer
- SID Intelligence Model will be the Standardization of the Business Intelligence Framework
- Through the Standardization of the Data and Intelligence Model, NGOSS would essentially enable a plug-n-play ability for Service Providers in the area of BI, through a minimum set of standardization of 'intelligence'
- Data and Intelligence is always available with the Service Providers and will not be lost due to changes in vendor tools and implementation
- The next logical step is to unearth revenue leakage and opportunity leakage patterns which is essentially the BI Lifecycle Process (Data Collection-Mining-Analytics-Correction-Reporting)
- The standardization creates a level-playing field for vendors to bring in their diagnostic efficiencies while shielding the Service Providers from the constraints of the implementation and the interpretations of intelligence given by the vendor.

Thank You