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Unified network inventory ecosystem

Consolidate fragmented inventories into a single source of truth, and optimize processes such as network planning and design, and service assurance

Credits

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Growing demand for integrated inventory

Telecom companies have been seeking an integrated inventory strategy, which has historically been arduous to develop. Integrated inventory strategy provides an all-in-one dashboard with an in-depth view of the network, thus revolutionizing the way telecom assets are operated and maintained.

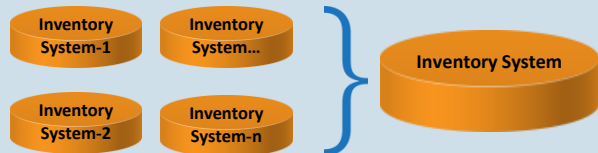
Integrated inventory strategies can be incredibly complex to develop and implement, discouraging most telcos from attempting them. Although there is growing demand for this strategy, the logistics involved pose an impenetrable barrier. However, the industry is changing radically. Consumers growing demand for quad-play, converged services and the recent M&A trends of CSP's have triggered the need for consolidation like never before.

In this insight on Network inventory consolidation(NIC), *Metasolv* is used as an example throughout. However any COTS based application can be considered for the NIC program using the mentioned accelerators & methodologies .

Three distinct scenarios to help CSPs evaluate the right kind of consolidation strategy

1-Retention of existing inventory system as a master

Choosing an existing system



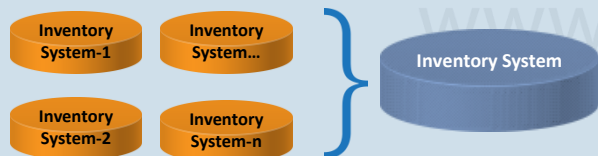
Scenario 1

- ⬆️ High throughput
- ⬆️ OPEX Cost Savings
- ⬆️ Center Optimization
- ⬇️ Data Integrity Challenges with migration
- ⬇️ High time & effort

This scenario is applicable for any CSP, when any one of the existing system can be upgraded to support the current & future needs of inventory in a single instance.

2-Phased migration of diverse inventory system into a completely new master inventory system

Choosing a new system



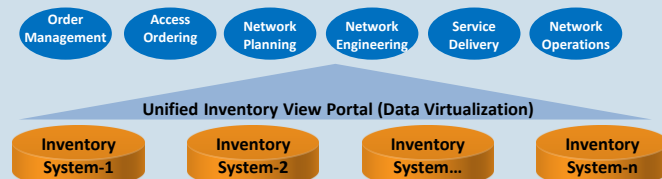
Scenario 2

- ⬆️ State of the Art, Feature Rich Solution
- ⬆️ Choice of Multiple Vendor Offerings
- ⬆️ Single Source of Truth
- ⬆️ Better Customer Experience
- ⬇️ High Initial CAPEX
- ⬇️ High Maintenance Costs

This scenario is applicable for any CSP, when none of the existing systems can be upgraded to support the current & future needs of inventory in a single instance(*lacks features for new service launch).

3- SID compliant –E2E consolidation strategy most efficient for tactical planning & operations

Choosing a dashboard view



Scenario 3

- ⬆️ TM Forum SID Compliant Views of Inventory
- ⬆️ Flexible Plug n Play Consolidation Strategy
- ⬆️ User experience isolation from underlying data store
- ⬆️ Sets Up the IT Stack for Divestiture
- ⬇️ Expensive to build and maintain
- ⬇️ Restricted Capabilities may hinder powerful features available in native tools

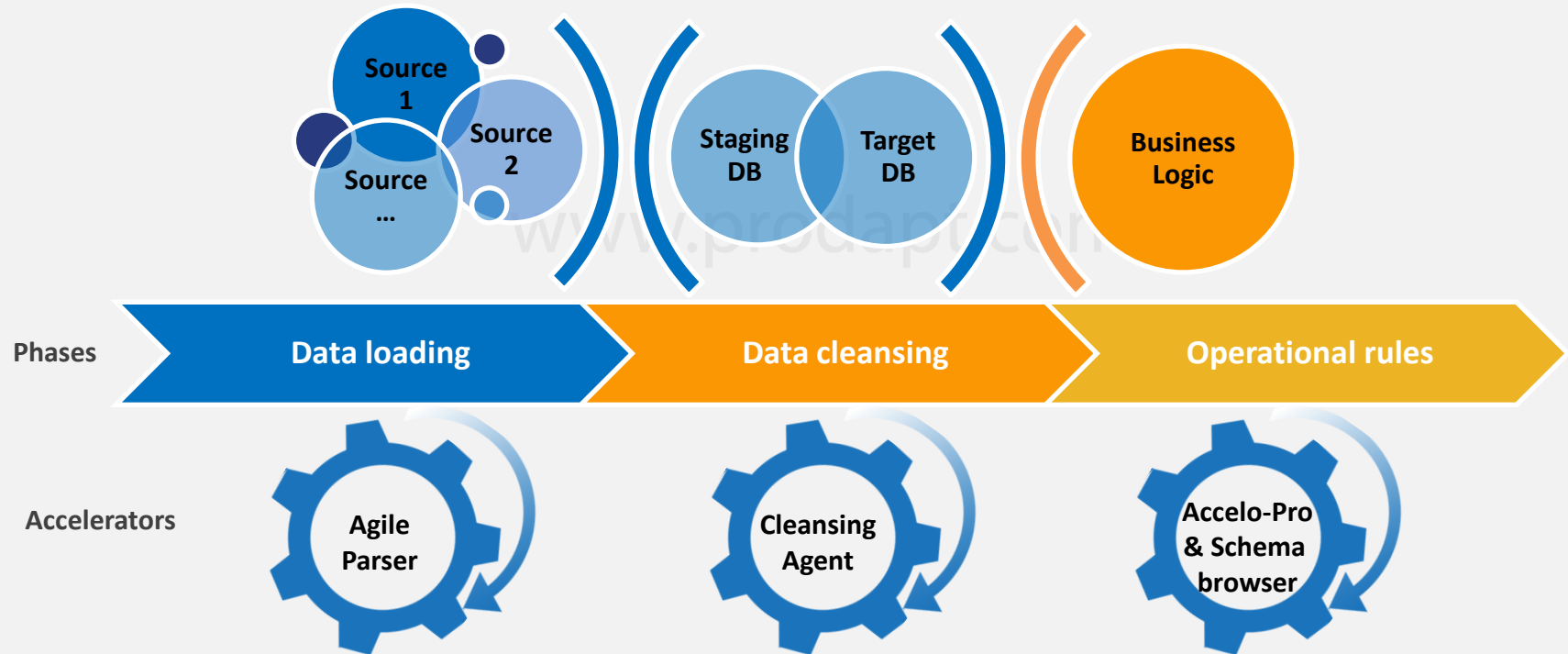
This scenario is applicable when a CSP doesn't want to decommission the existing systems considering multiple factors like Cost, licencing, effort & timeline, but would like to have a unified portal view.

⬆️ *Pros

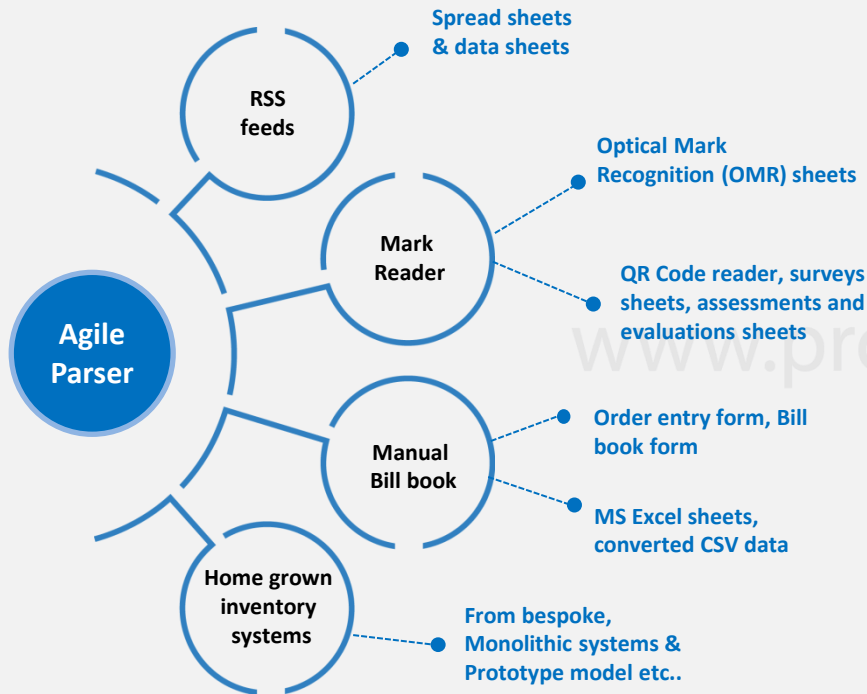
⬇️ *Cons

Key accelerators to advance the major phases of Inventory consolidation

Following are the set of accelerators which helps in achieving network consolidation in lesser time frame. These accelerators are only applicable to scenario 1 & 2 of the consolidation strategy discussed in previous slide. Scenario 3 involves consolidated dashboard view with no changes in underlying inventory systems.



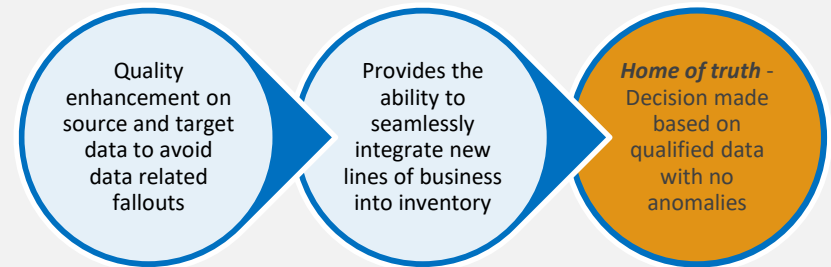
Accelerators to expedite Inventory Consolidation – Agile parser



By using this generic parsing agent, various data feeds can be fetched from multiple sources like spread sheets, mark reader, bill book, data sheets and also from any other home grown inventory systems.

Correct/modify data entities at source & target side systems to normalize the data sets. For e.g. field level update at source system. It's not just combining attributes or unification of equipment's various parameters; it's all about normalizing the data.

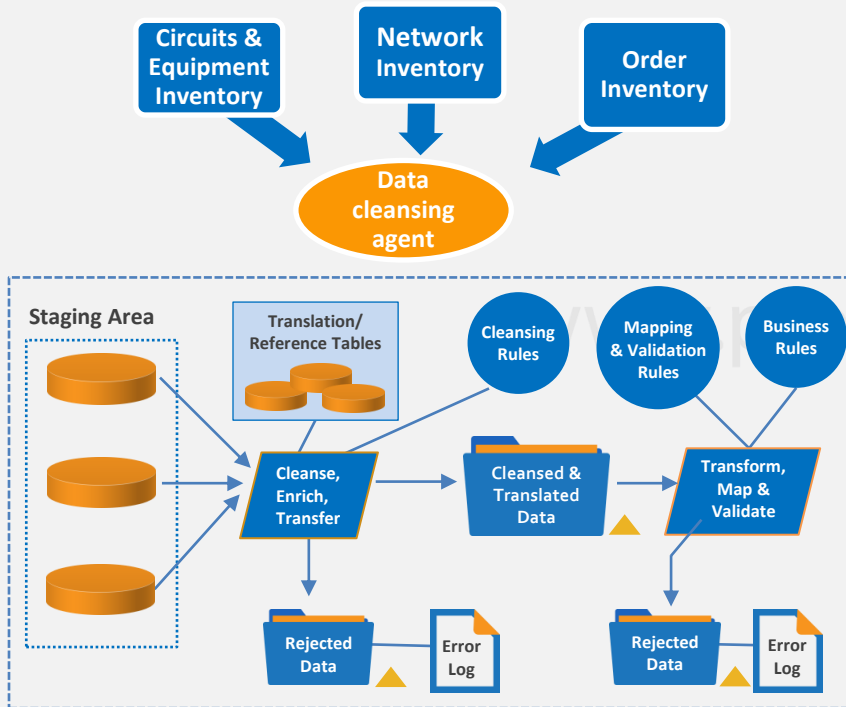
Key benefits of parser



A generic parser with ability to read data from multiple domains in any format is key for accelerating inventory consolidation

Accelerators to expedite Inventory Consolidation – Data cleansing agent

Major areas considered for data cleansing in Metasolv are shown below



As part of data clean up activity, data assessment activity will be performed. The assessment report contains data which violated predefined standards; With the help of audit reports & existing MetaSolv procedures, Data cleansing will be performed on the incorrect equipment associations.

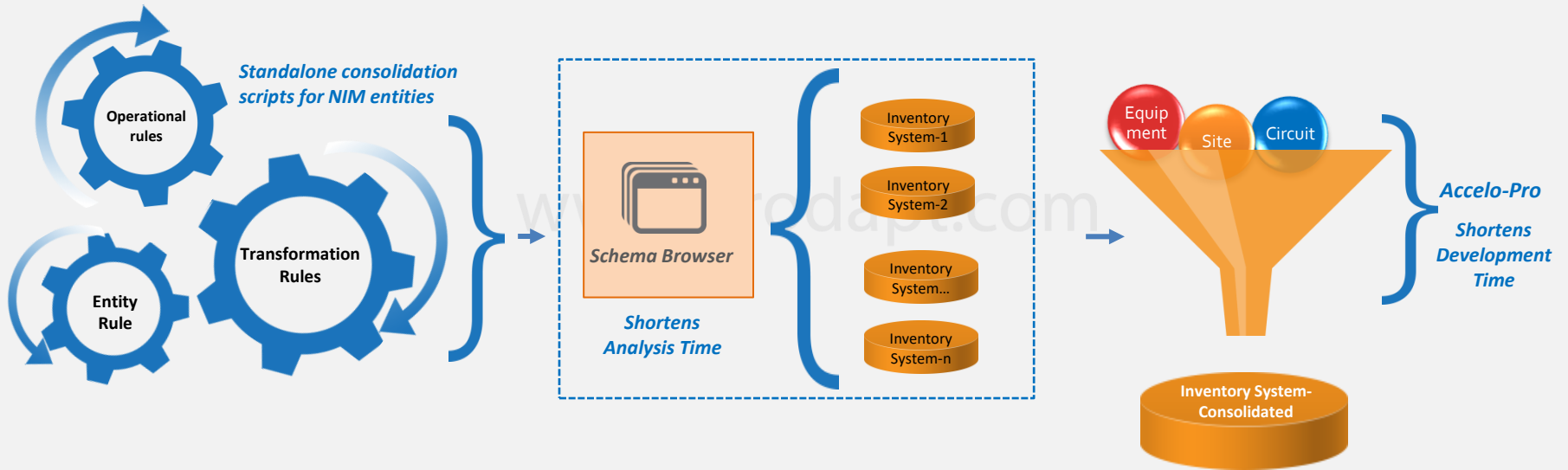
Cleansing agent helps in identifying,

- ▶ Scenarios which has data discrepancy issues during status correction.
- ▶ Associations exists to cancelled or disconnected service
- ▶ Network template and network design mismatches
- ▶ Network components, equipment and circuits assigned under a Inactive Exchange or Network Location
- ▶ Identification of the working path for optical network.
- ▶ Shared components between multiple networks with different Topologies

Cleansing audit report helps in making cognitive decisions by Network planning & Engineering team & also supports in innovative business solutions.

Accelerators to expedite Inventory Consolidation – Accelo-Pro

'Accelo-pro' is a tool majorly used during the migration of inventory data from one MetaSolv Solution (MSS) version to another MetaSolv Solution (MSS) version, however it can be enhanced to support non-MSS based tools with customization.



Key Accelerators : Schema Browser, Accelo-Pro, Reusable Consolidation Scripts(30% Faster Conversion)

Schema Browser

- Study the data & its relationship recursively
- Identifying master table dependencies by greatly reducing analyzing time

Accelo-Pro

- Decomposing elementary level DB & domain level objects
- Set of reusable scripts, specific for inventory migration
- In house development tool, takes less development time

Recommendations for efficient inventory consolidation exercise

Best Practice



Fallout Mitigation Strategy

- ▶ Established SLA levels based on business criticality of fallout
- ▶ Dedicated Level-2 & Level-3 support
- ▶ A clear handbook for handling erroneous orders quickly
- ▶ Escalation matrix for expedited support on fallouts



Pending Order Strategy

- ▶ Volumetric analysis of pending orders by type
- ▶ Pending order conversion automation
- ▶ Flexibility to change order queue size dynamically helps to strategize pre-processing & post processing of order flow
- ▶ Manual re-trigger support strategy for migration orders from point of failure in lower volumes



Agile Vs. Waterfall

- ▶ Waterfall model of execution works best, in simple system to system migrations
- ▶ Agile frameworks like scaled agile is useful with increasing complexity of migrations



QA Validation Strategy

- ▶ Execute Systems Integration Test (SIT) at pre & post conversion based on business scenarios
- ▶ Have CSP business units to execute & validate User acceptance test (UAT)
- ▶ Performance test is critical For bulk data load and for mission critical systems

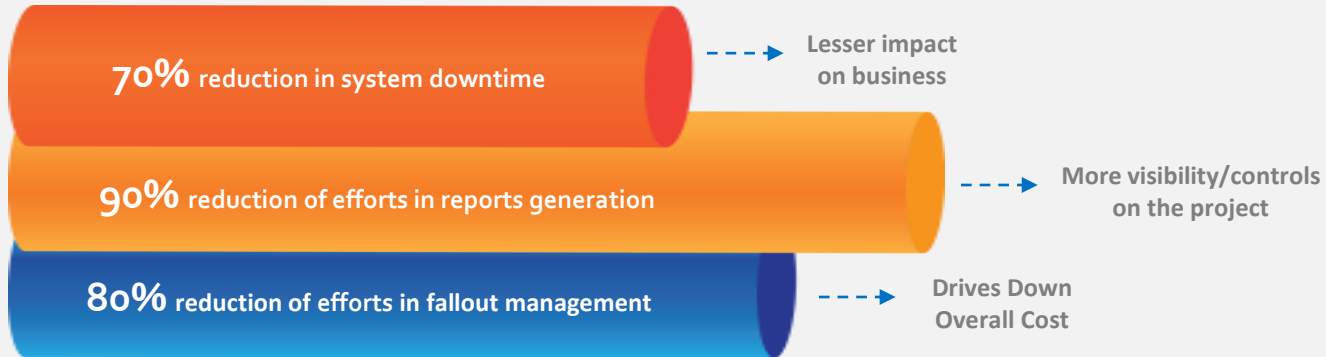
Business & Operational Benefits



Benefits of accelerators during migration phase



Benefits of post inventory consolidation





THANKYOU!

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