



# BI Migration Data & Analytics



# Persistent Structure - Digital Engineering has been the bedrock of our growth

Across industry verticals powered by service lines

## Service Lines

- Digital Strategy & Design
- Software Product Engineering
- CX Transformation
- Cloud & Security
- Intelligent Automation
- Data & Analytics
- Enterprise Integration



**Software and  
Hi-Tech**

## Industries



**Banking  
Financial Services  
Insurance**



**Healthcare  
Lifesciences**



**Consumer  
Retail  
Logistics**

## Enabling functions

### CTO Office

Driving Innovation and Research in Digital Engineering

### Delivery Excellence

Quality, Process Excellence, Benchmarking

### Tools COE

Tools, Accelerators & Assets to support Service Delivery

### Talent Management

Availability of Right Skills, at the Right Time

### Learning & Development

Continuous Training & Talent Development

### Human Resources

Employee Wellbeing & Experience

# Persistent Data & Analytics Practice – Helping customers in driving actionable insights out of their data ecosystem

**1000+**

Engagements  
in past 30+ Years

## Global data & analytics practice overview

We are trusted strategic partner providing superior and measurable business value by bringing in best in class people, processes and technology solutions

**9.2/10**

CSAT score

**3500+**

Data relevant  
certified  
professionals



**Data Strategy  
& Consulting**



**Enterprise Data  
Management**



**BI &  
Reporting**



**Advanced  
Analytics**

## Open-Source Contributions

Hadoop, Sqoop,  
Hive, SciDB,  
Apache Phoenix

**Building data  
products  
is our DNA**

## Accelerators

Data Foundry, Connector Factory, Text.AI, ML Ops, Migration Utilities  
AI ML based Data Quality, Dynamic Data Ingestion Framework



# Reporting platform Challenges

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# Reporting Ecosystem - Challenges

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01

## Maintenance

Supporting existing reports across various verticals and formats in large numbers comes with a huge cost

02

## Governance

Clients generally don't know which report already exists before submitting for a new report

03

## Redundancy / Usage

Organizations do not have an accurate understanding of the frequency of usage of any report and the redundancies exist amongst their reports

04

## Modernization / Migration

Modernizing the legacy BI platform and migrating reports/dashboards is a challenge for organizations for number of reasons.

# BI Migration Challenges

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# Typical BI migration challenges

<b>Which Approach to Choose?</b>	<ul style="list-style-type: none"><li>\ Lift and Shift</li><li>\ Net new development</li><li>\ Hybrid approach</li></ul>	<b>What to Migrate?</b>	<ul style="list-style-type: none"><li>\ No clear inventory of reports, dashboards, data assets delays the migration process</li></ul>
<b>What can we automate?</b>	<ul style="list-style-type: none"><li>\ Is there any possibility to automate any of the migration step?</li></ul>	<b>What best practices to adopt?</b>	<ul style="list-style-type: none"><li>\ Can we use best practices in the target platform to adhere to the prescribed approaches and standards?</li></ul>
<b>How to increase user adoption?</b>	<ul style="list-style-type: none"><li>\ How can we enable the developers and end users on the new BI platform?</li></ul>	<b>How much time will it take?</b>	<ul style="list-style-type: none"><li>\ Lack of control over migration timeline and lack of clear migration strategy.</li></ul>
<b>Large number of data assets</b>	<ul style="list-style-type: none"><li>\ How will we migrate the data assets and sources?</li></ul>	<b>Migration Planning and Cutover</b>	<ul style="list-style-type: none"><li>\ Migration Planning amidst other business priorities and carefully planning cut overs need meticulous planning and top down push</li></ul>

# Need for BI Migration

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# BI Migration – Common questions

How do we migrate hundreds of BI apps without overwhelming the team and confusing end users?

How can we define best practices in our new platform so we don't make a whole new mess?

How do we know which BI reports or dashboards to migrate?

Will the process be completely manual or is there any automation we can achieve?

How to prioritize the migration sequence to free up user licenses and maximize ROI.


How to get users to adopt and use a brand new BI platform and embrace self-service for their analytics needs.

Persistent Migration Accelerators can help in answering these questions.

# Why BI Migration

- Lack of advance features and capabilities in Legacy BI systems
  - Might struggle with handling huge volume of data, real time analytics, or supporting mobile access
  - shift towards self service analytics from manual analytical processes
- Scalability Challenges
  - May not be scalable, performance bottlenecks
- Cost Overheads
  - Maintaining and licensing legacy BI systems could be costly
  - May require extensive customizations to adapt to changing needs
- Future proofing BI strategy and platforms
  - Adopt latest technology, keep abreast with market changes
  - Take advantage of more modern capabilities, such as visual data exploration/Artificial Intelligence (AI)/Machine learning (ML) /Natural Language Querying
- Data Security & compliance risks
  - Legacy BI systems may not have native support to latest security and compliance requirements like HIPAA, GDPR etc.

# Business Impact of Migration to PowerBI

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# Business Impact of migrating to PowerBI

**~30% elevation in  
user experience**

**30% savings related  
to licensing costs**

**Secure Data  
Governance across  
the Platform**

**Do More with Less  
by using Intuitive MS  
Power BI tools**

**Accelerated  
Decision-making  
with Self-service  
Analytics**

**Data-driven  
collaboration among  
stakeholders**

# Accelerator Driven Migration Approach

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# Persistent accelerators for Report Factory



## Preparation

- \ **Usages Metrics** for assessment and prioritization
  - Generate current system inventory, usages, user and report mapping.
  - Helps in prioritizing reports during migration.
- \ **Report Unifier** for consolidation
  - Identify duplicates, similar reports to be consolidated and rationalized.

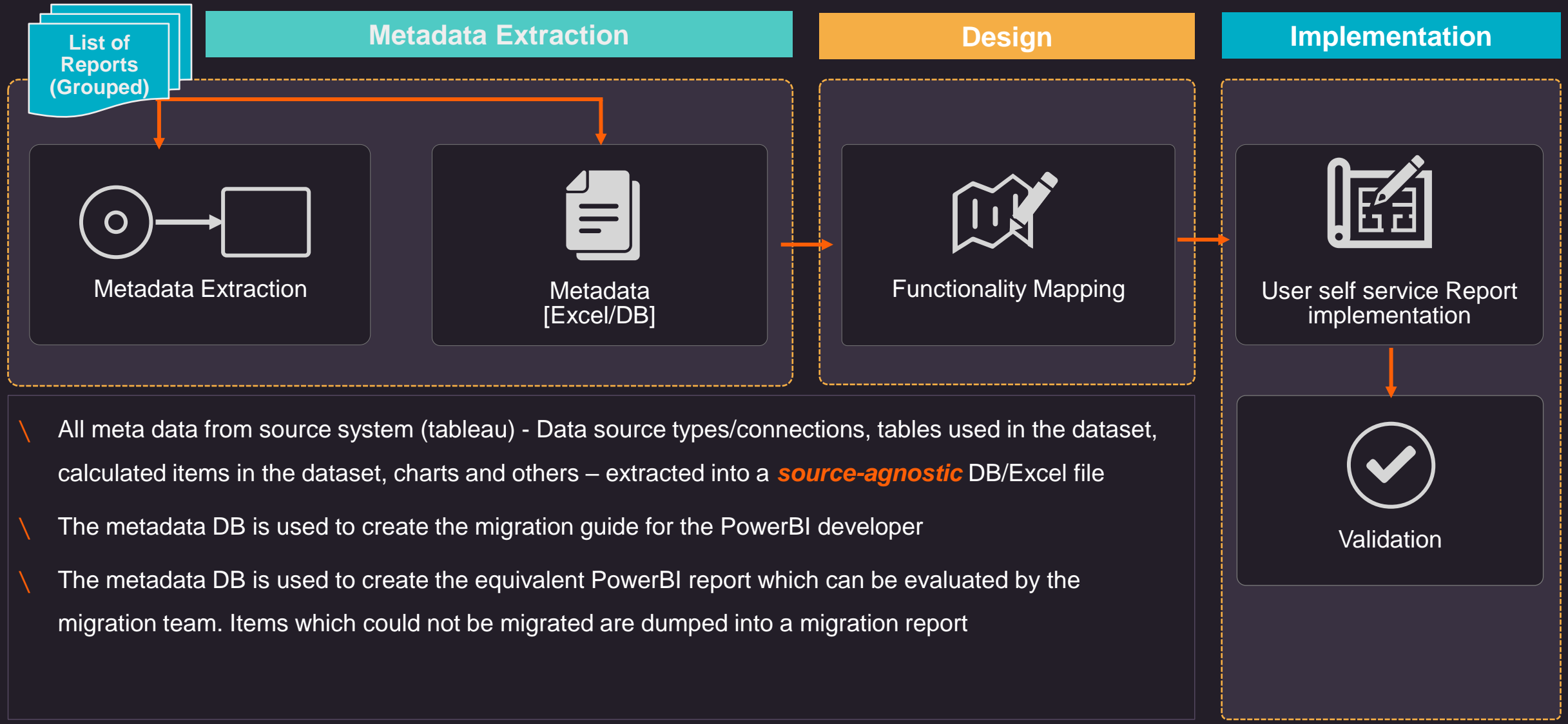
## Execution

- \ **Automated Metadata extractor**
  - Extract KPIs, objects , data sources etc. which have **been** used in reports.
- \ **Functionality mapping and parser**
  - Map functionality of source(Tableau) to target (Power BI), parse to generate target template .
- \ **Automated PowerBI report creation**
  - Create PowerBI visualizations for Tableau reports to the extent possible in automated way.

## Post Production

- \ **Automated Reports Recommendation Engine**
  - Provide existing templates matchings to new report requirements.
  - Reduce time, effort and future maintenance costs.
- \ **Usages metrics and Report Unifier** for continuous monitoring on old and new system.
  - Run these accelerators at scheduled interval(s) to monitor and mine performance and consolidation opportunities.

# Tableau to PowerBI Migration Accelerator



# Usage of Metadata – Examples

## A Migration Guide Sample

### Power BI Report Conversion Guide for Tableau Report - Superstore

This document provides a comprehensive guide for converting Superstore. Follow the steps outlined in each section to ensure a smooth transition.

#### Data Sources Used

- #1 : Connect to the Excel file - 'Data/Superstore/Sales Target.xlsx'
- #2 : Connect to the text file - 'Sales Commission.csv'
- #3 : Connect to the Excel file - 'Data/Superstore/Sample - Superstore.xls'

#### Calculated Fields Used

Calculation Name	Formula	Type	Role
Base Salary	50000	quantitative	measu

#### Migration Notes :

In Power BI, you can create a new column or measure to represent the eq formula. Here's how you can do it:

1. Open your Power BI Desktop.
2. Go to the "Modeling" tab and click on "New Column" or "New Measure"
3. In the formula bar, you can write the equivalent formula.

## Analyze MetaData for Standardizing Report Design

