AccionLabs - Enterprise Data Transformation Services















Agenda

- About Accion Labs
- Enterprise Data Capabilities Overview
- Enterprise Data Analytics Snowflakes
 Case Studies

About Accion Labs

5500+ Global Team

1500+

Members

Projects Delivered

25+

170+ Clients

Accelerators

[Long term relation]

INDUSTRY CERTIFIED

IS0 9001:2015

IS0 27001:2013

IS0 27701:2019

CMMI V2.0 Level3 PCI DSS Compliant

HIPAA Compliant

TECHNOLOGY PARTNERS





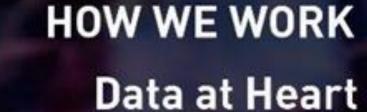












Accion Labs reimagines the possibilities for digital transformation from innovation to growth

Digital in Thinking

Scalability, manageability, robustness, and efficiency are always their top priorities

Innovation in Approach

Everything is planned to minute detail, ensuring high-quality deliveries to clients every time



OUR GROUP COMPANIES







Local Partner - Global Flavours



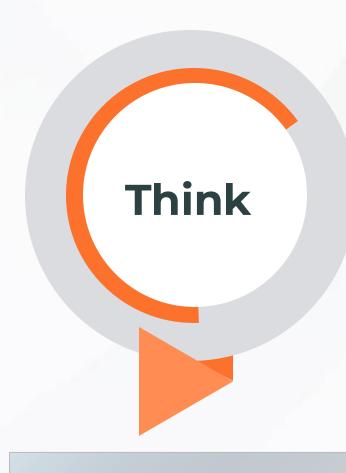


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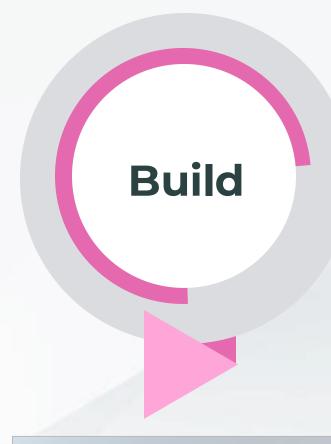
Our Services

Drive rapid business growth through technology

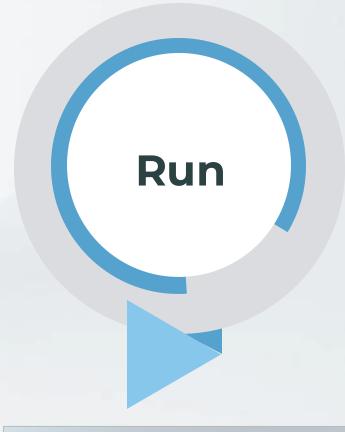




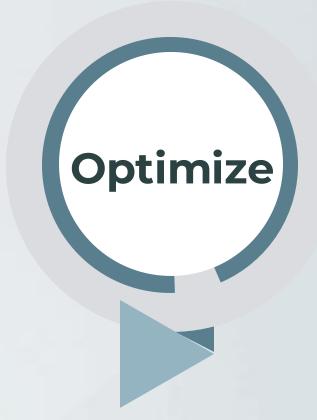




SDLC, Enterprise
Architecture,
Transformation
Program
Implementation



Operations & LCM, Managed Services, Support



Operations & Performance Optimization, Measurement & Analytics

Enterprise Solutions & Consulting

Enterprise Transformation (Technology)

Managed Services -Business Applications and Products Enterprise Process
Implementations &
Optimizations using
Platforms

Legacy Modernization and Re-engineering Enterprise Data Transformation Strategy

Product Portfolio Rationalization Data & Analytics Strategy | Al Strategy

Professional Services

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Our Enterprise Transformation Services



Process Digitization & Optimization

Biz Process Implementation

Business process Customization & Optimization

Workflow based applications

Integration Platforms | **Enterprise Integrations**

Robotic Process Automation

Gen-Al based Process Automation

Tech Landscape Rationalization

Enterprise Architecture

Application portfolio

Re-engineering & Modernization

Design Engineering | UX / UI

Rationalization

Product Engineering

IoT Applications

Data **Transformation**

Org-wide Data Strategy | Data Model

Data Governance & Data Quality

Data Modernization | Data Migration

Data Engineering | MLOps, Al Ops, Data Ops

Analytics - Bi. Reporting, Realtime | AI/ML

GenAl Powered Analytics & Insights

Snowflake

Azure Synapse & Fabric

AWS Redshift

Databricks

Cloud Transformation

Org Cloud Strategy & Roadmap

Application and Infra Cloud Migration

GenAl-powered Managed Services

CloudOps | DevOps | DevSecOps

Cloud Native Business Apps

Cloud Platform & Infra Services

Azure

AWS

GCP

MS Dynamics Salesforce ServiceNow LC / NC Platforms - Power Platform, Mulesoft, Boomi, Appian **RPA** .NET, JAVA, Python Magento **AEM**

Cloud Platform & Data Services

Gen Al Powered (Potentially)

Microsoft Azure Cloud Services | Azure Process Automation | Azure Data Services

AWS Cloud Services, Platform Services, Data Services



Enterprise Data Capabilities

Enterprise-wide Data Transformation Solutioning



ENTERPRISE-WIDE DATA STRATEGY

- Business Aligned Enterprise-wide Data Strategy
- Application Data Model
- Master Data Strategy & MDM Solutioning
- Continuous Data Strategy
 Assessment and realignment
- Continuous Monitoring and Improvement

DATA GOVERNANCE

- Enterprise-wide Data Governance Strategy
- Governance Policies, Frameworks, Guidelines
- Data Catalog, Data Lineage
- Data Governance Tooling

DATA QUALITY

- Identify and Establish Enterprisewide Data Quality Standards
- Solutions to push Data Quality standards across all applications dealing with data
- Data Quality Tooling Solutions –
 Data at Rest + Data in Transit
- Data Quality Monitoring

DATA MANAGEMENT

- Defining & Establishing Data Management Guidelines
- Data Architecture
- Data Engineering
- Data Analytics

DATA INTEGRATION / EXCHANGE

- Defining Data Integration & Exchange Strategy and Mechanisms
- Defining & Creating Data Integration Policies

DATA MONETIZATION

- Defining scope of Data-Driven for Enterprises
- Setting up Data Landscape for Data-Driven Decision-making

Data & Analytics Solutioning



DATA & ANALYTICS ROADMAP

- Data Platforms & Analytics Landscape Assessment
- Data & Analytics Strategy Creation
- Long Term Data & Analytics Roadmap

DATA LANDSCAPE MODERNIZATION

- Composable Data Landscape & Architecture
- SSOT / MSOT
- Low-Code / No-Code
- XOps Enabled (DataOps, MLOps, AlOps, GenAlOps)
- Data as-a-Service
- Analytics as-a-Service

LEGACY DATA PLATFORMS CONSOLIDATION & MIGRATIONS

- Migration of Legacy Data Systems to New platforms
- Migration to Cloud-based Managed Data Platforms
- Consolidation of Multiple Data Warehouses into Unified Data Platforms

BI LANDSCAPE CONSOLIDATION & MODERNIZATION

- Migration and Consolidation of diverse BI tools landscape into a leaner BI landscape
- Self-Service Dashboards

ANALYTICS: BI / REPORTING / ML / AI

- Bl and Reporting | Automated Reports & Dashboards
- ML Modeling
- Predictive Analytics

GEN-AI POWERED DATA ANALYTICS

- Knowledge mining & Content Creation
- Conversational Data Analytics
- Process Optimization

Partnerships & Technology Spectrum





We work actively for clients in 120+ open-source and commercial distributions, application platforms, and data stores including







Partnerships and Alliances































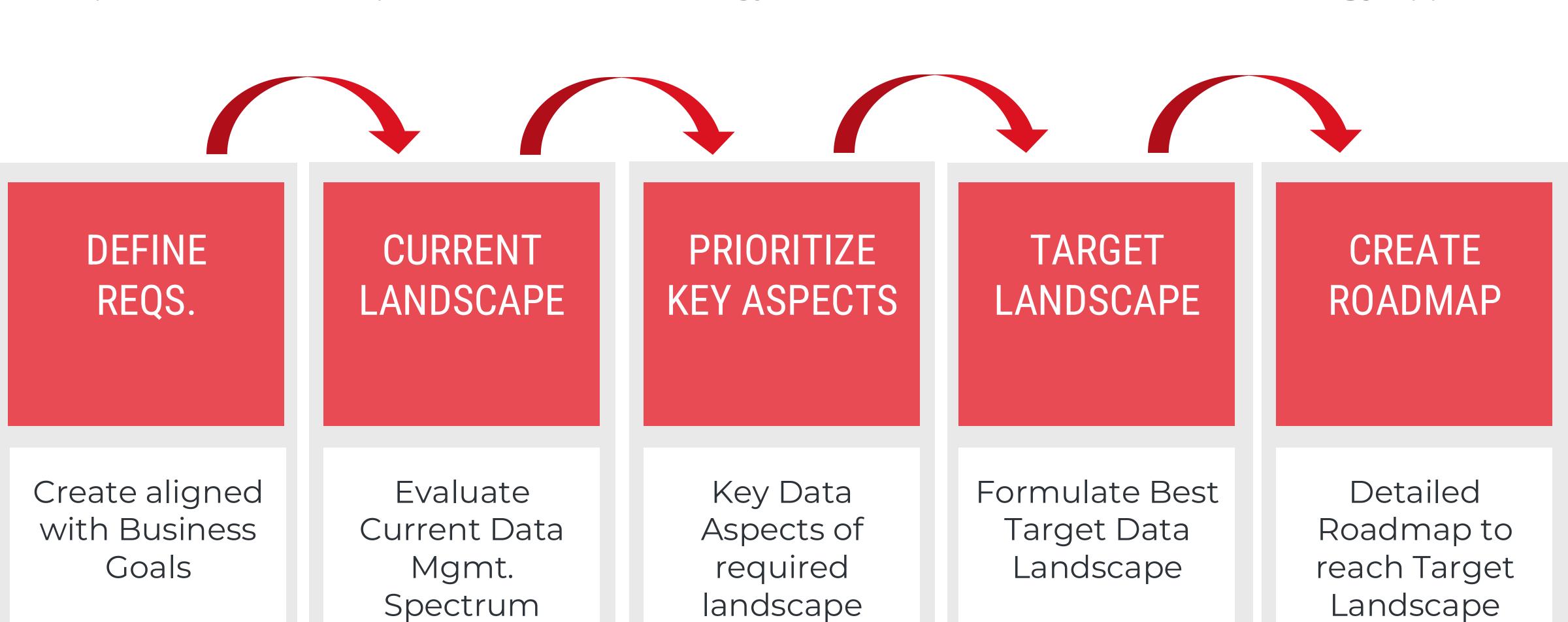




Data Transformation Approach (Business → Ops → IT)



Enterprise Data Landscape Modernization Strategy Outside 🛭 In / Business 🖛 Technology Approach



Data & Analytics Architectural & Tech Choice



Influening Factors:

- SSOT (Single Source of Truth) or MSOT Multiple Source of Truth)
- S-ODS or M-ODS (Single / Multiple Operational Data Store)
- Type of Engineering complexity
- Frequency of Data Model Changes
- ► How "Composable" the Data Architecture should be?
- Frequency of KPI changes
- Need for AI/ML/GenAI
- Frequency of changes to ETL
- Need for Data Ownership
- Well defined Data Ownership
- Optimum Data Governance (Centralized or Decentralized)
- XOps capability (ability to engage/disengage DataOps, MLOps, GenAlOps etc.)

Enterpise Data Hiib

Data Mesh

Data Fabric

Hybrid

MSOT / SSOT

Single vs Multipe Operation Data Store

Data Warehouse / Data Lake / Data Lakehouse









Enterprise Data Analytics - Snowflakes Case Studies

Data Platforms Consolidation on Snowflake of Multiple OpCos (1)



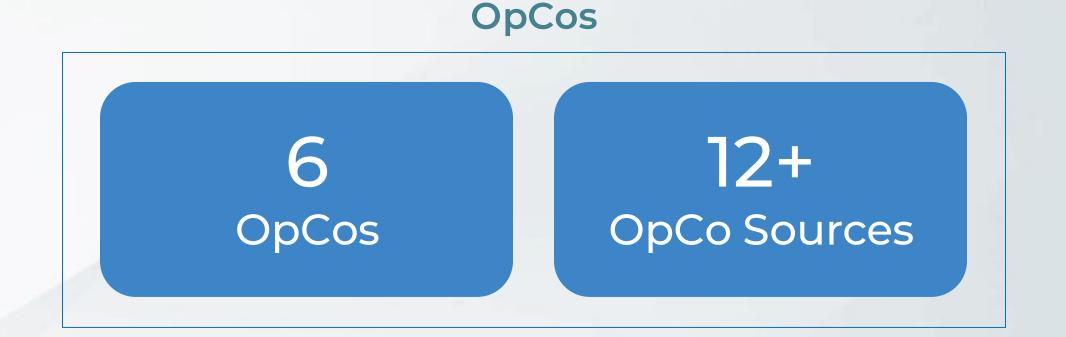
Company

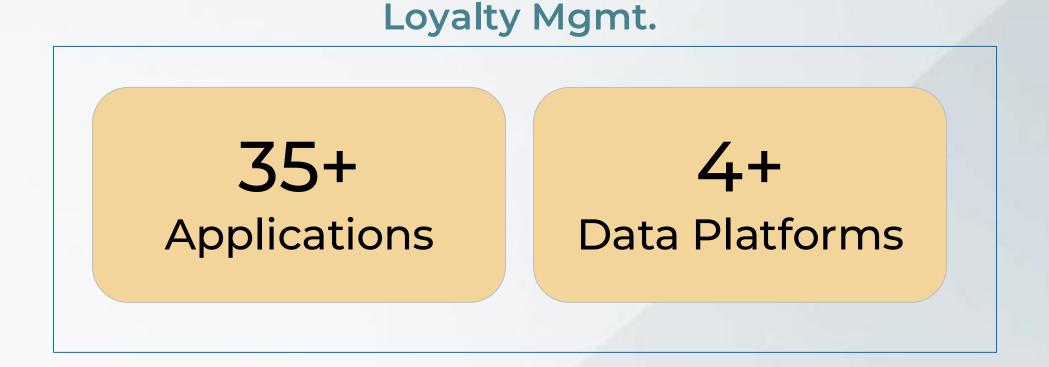
A multi-billion USD Loyalty management company managing Loyalty points for 6 Airlines (International + Domestic) from multiple countries.

Extended Loyalty program to 30+ Partner companies

Challenge

- Data Contracts with 6 OpCos and 30+ Partners (Partner system) continuously expanding).
- 4 Disparate Data systems handled Data & Analytics requirement for Loyalty Mgmt. Company.
- Data Governance required common tools across different technologies-based data platforms.
- Significant collaboration required with OpCos on the upstream side and partners on the downstream end..

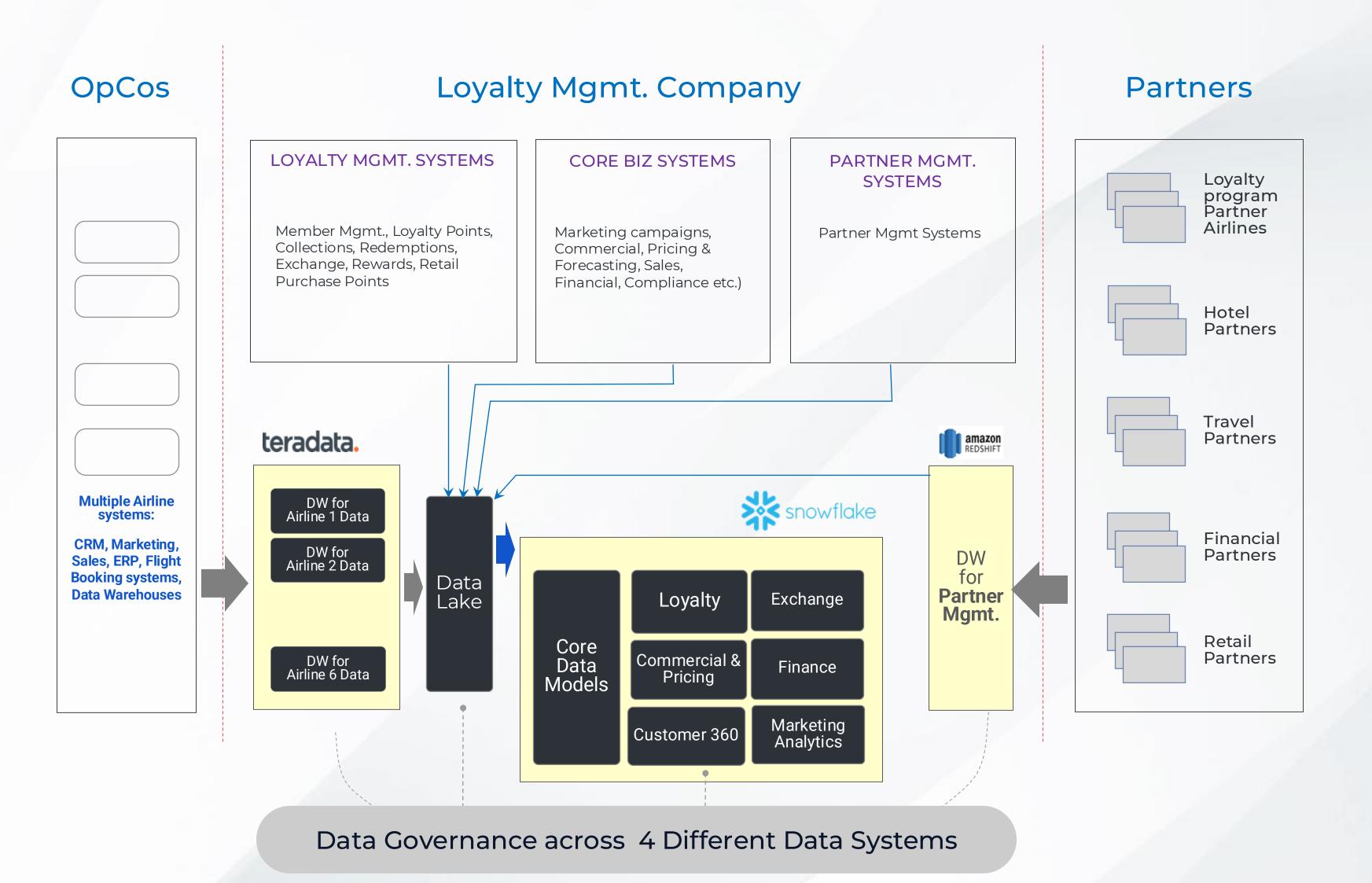






Data Platforms Consolidation on Snowflake of Multiple OpCos (2)





Solution Highlights

- ✓ 2 Yr Migration roadmap
- √ Migration from Teradata (On-Prem) and AWS Redshift to Snowflake ecosystem.
- √ Test Automation (Configuration based) framework to cover end-to-end testing.
- ✓ Alerting and Notification mechanism and Automated Integration with JIRA to to reduce manual effort by Operations team
- ✓ Query Performance Optimization on Snowflake
- √ Governance implemented across 4 Data Systems / Platforms - Snowflake, Teradata, Amazon S3, Amazon Redshift
- √ Colibra used as Data Cataloging Tool
- Business and Tech Data Lineage tracking
- ✓ Audit Trail

Snowflake based CDP for Customer-360 (1/2)



Company

Global Medical Products and Technology leader in Advanced Wound Management and Ostomy Care, with 10,000+ workforce, 8 Manufacturing sites across the globe and operating in 100+ countries.

Key Statistics

30+ Systems

17 Countries 130+ KPIs

Challenges

Fragmented, Ad-hoc Analytics setup to derive Customer Insights

No Data Governance in Place

No 360 view of Customer. Significant Manual Analytics

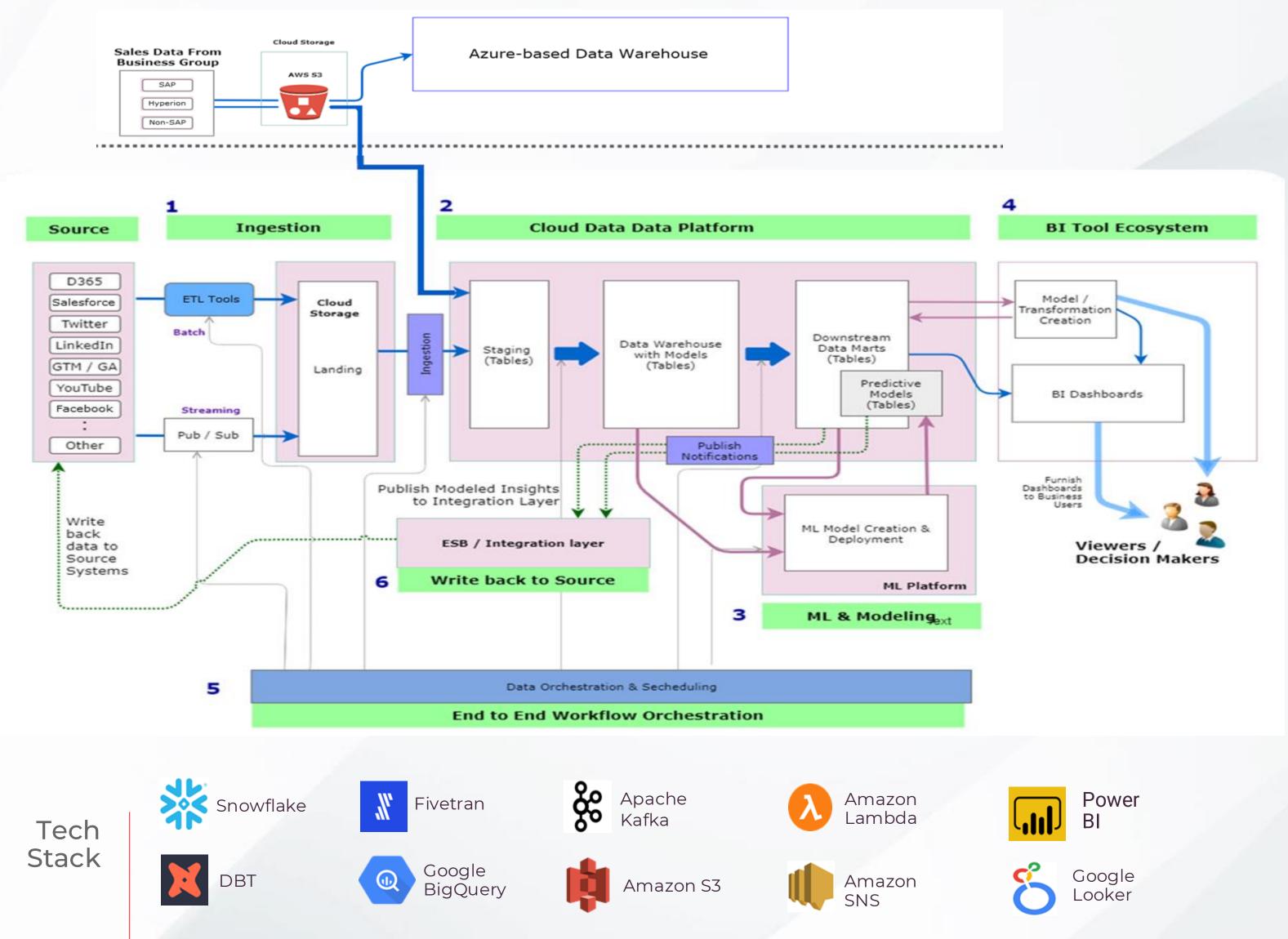
No Data Federation

Significant Operations & Data Reconciliation Efforts

Lack of Trust of Business on Data Quality

Snowflake based CDP for Customer-360 (2/2)





Solution Highlights

- ✓ Data-as-a-Service
- ✓ Mapper Template for mapping Customer 360 View KPIs related fields from source systems with Standardized Input field names
- ✓ ML/AI by integrating with Google BigQuery
- ✓ Configuration based Test Automation framework for end-to-end testing
- ✓ Alerting and Notification and feeding logs into Splunk
- ✓ Audit Trail, Data Lineage
- ✓ Customer De-Identification for handling PHI and PII data.
- √ Change Management setup
- ✓ Data Governance core committee and guidelines setup for CDP
- ✓ SSO, Integration with AD, Security Roles and Policies synchronization.

Snowflake Data Platform Powering Multiple Apps



Company

A Global Travel & Tourism Company that partners with hotels, airlines, travel agencies and travel partners in Europe and Asia and creates various Travel and Tourism packages

Challenges

- A Data Platform with an ability to process and store large volumes of data from inventory and assets (Hotels, Room types, Regions and Markets, Airlines, Products/Travel Packages, Flight Data, Travel Agencies & Partners, Marketing Content) and business transactions (travel bookings, payments to business partners, payments from customers).
- A central Data Platform that would provide storage, computation, modelling, Analytics, BI and Advanced Analytics, Data Marts at enterprise level as well as act as a Data Compute backbone for specific business applications.
- A Cloud based data platform that's easy to manage and provides Data-As-A-Service & Analytics-As-A-Service to all types of users – Business Users, Data Engineers, Data Analysts, Data Scientist.

Highlights

40+Apps publishing Data

6
Downstream Snowflake Apps

6
Business Applications

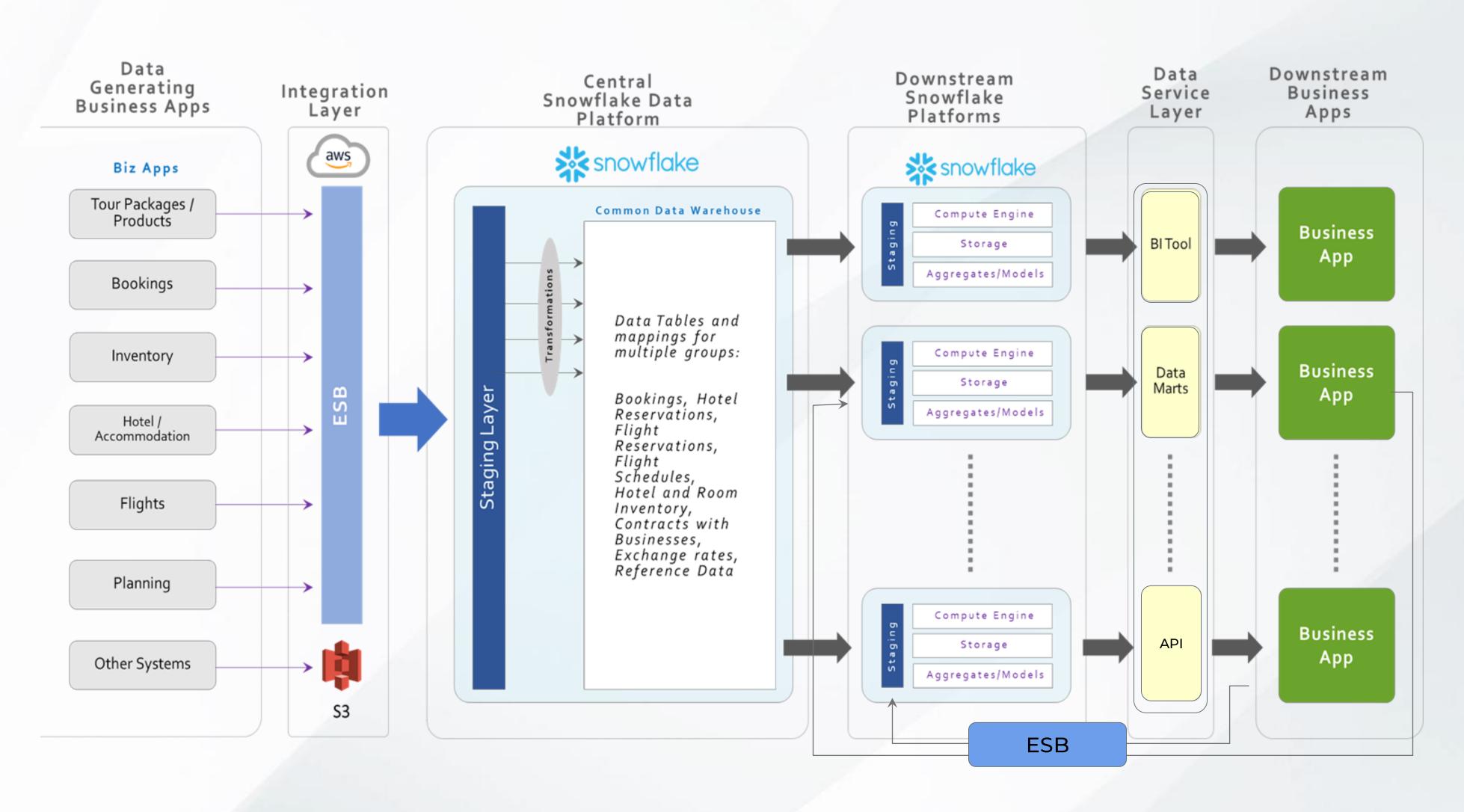
1500+ Health Indicators

50+ GB

Data Generated Annually

Snowflake Platform Powering Apps via Service Mesh





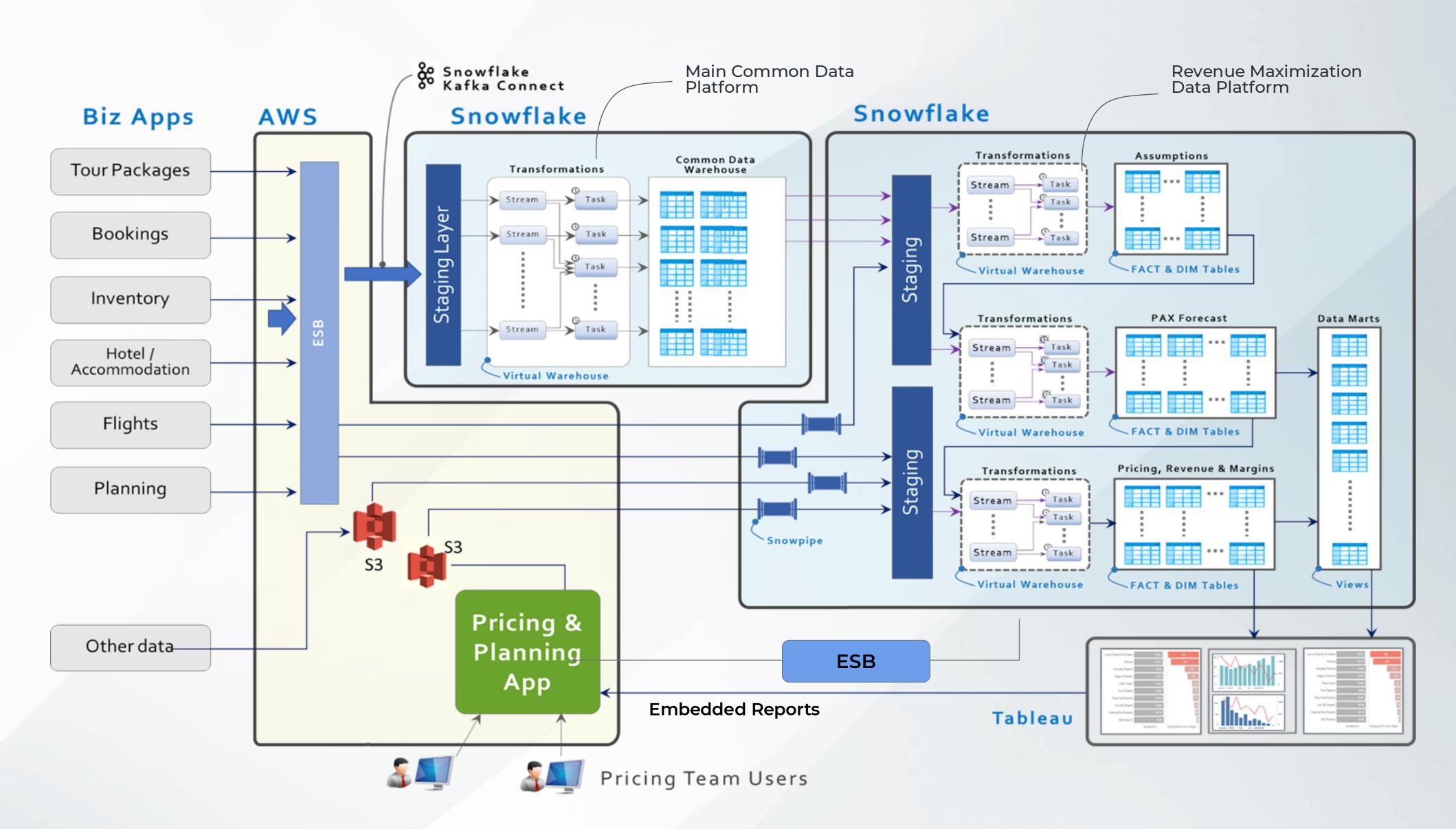
Solution Highlights

- ✓ Data Mesh Architecture
- ✓ Service Mesh Snowflake data products powering Web Apps and business portals via a Data Service Layer
- ✓ Snowflake Performance Optimization
- ✓ Customer De-Identification for PII data
- ✓ Configuration based Test Automation framework for endto-end testing

Snowflake Powered App - Forecasting & Price Evaluation



- Price
 Evaluation to
 ensure
 Revenue
 Maximization
 before taking
 products to
 market
- Improved accuracy than previous manual process
- Iterative process for pricing & forecasting
- Immediate
 Price & Margin
 forecasting
 results



Automated Lifecycle Mgmt. of Snowflake Analytics Platform

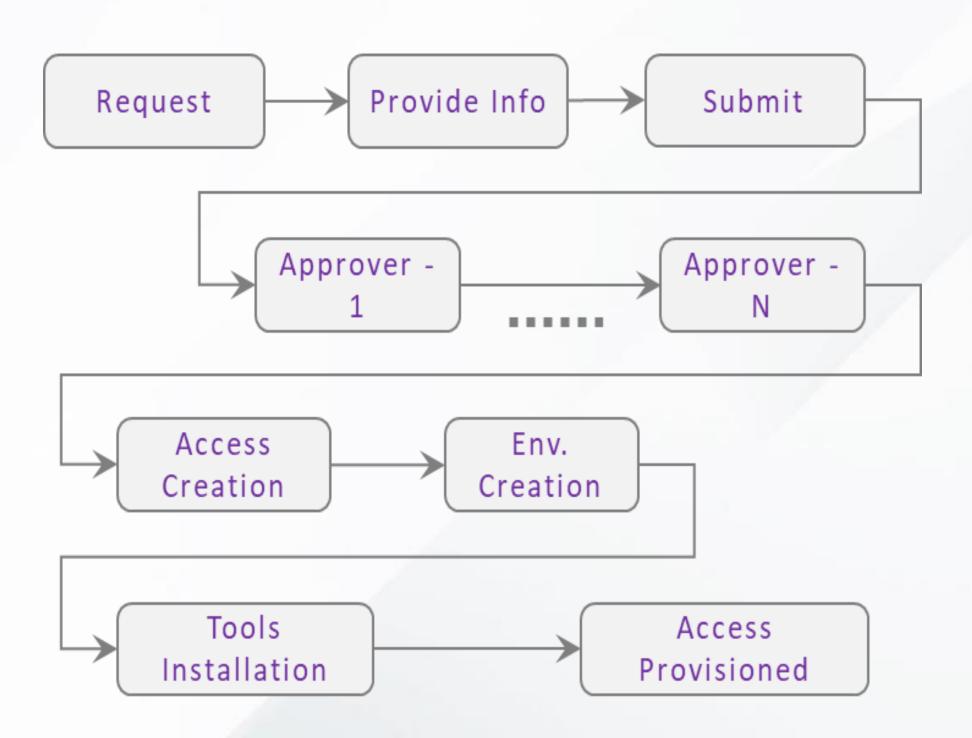


For Global Travel & Tourism Company

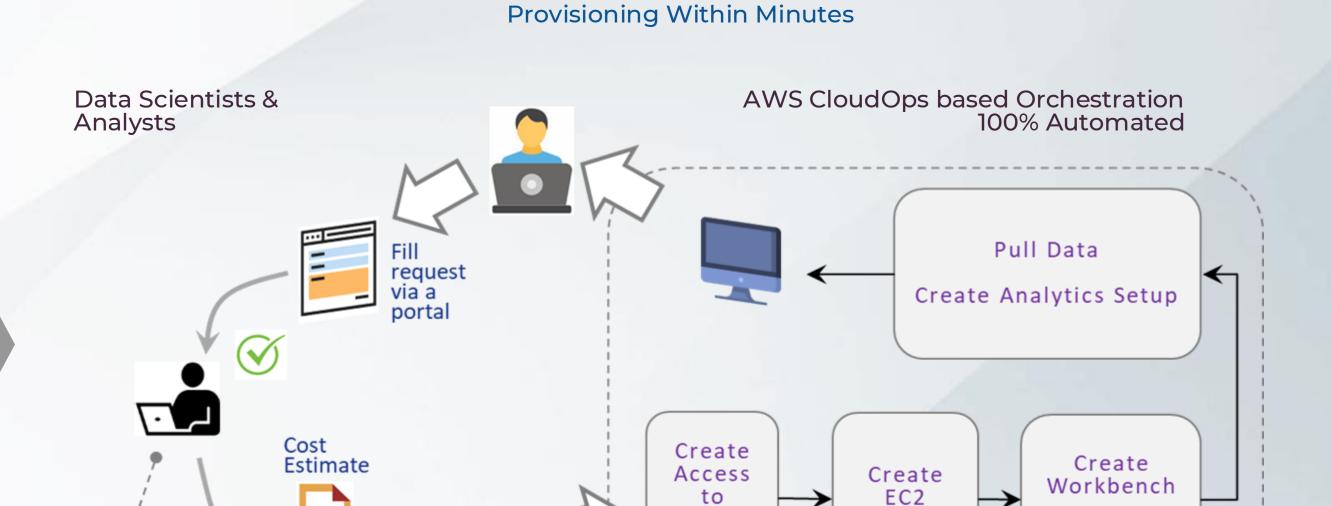
Manual Provisioning

2 – 4 Weeks of Provisioning time

Every step Manual: Workbench creation, Access to data sources, infrastructure setup



Automated Provisioning



desired

Systems

Instances

Install Tools

Request Portal - Request Management | Approvals

Angular | AWS Chalice | DynamoDB | Microservices | Lambda CloudFront

AWS Orchestration: Terraform | Microservices | Lambda | AWS API Gateway | Jenkins (CICD) | S3

Authentication | Authorization - Azure AD | AWS Cognito

Multiple

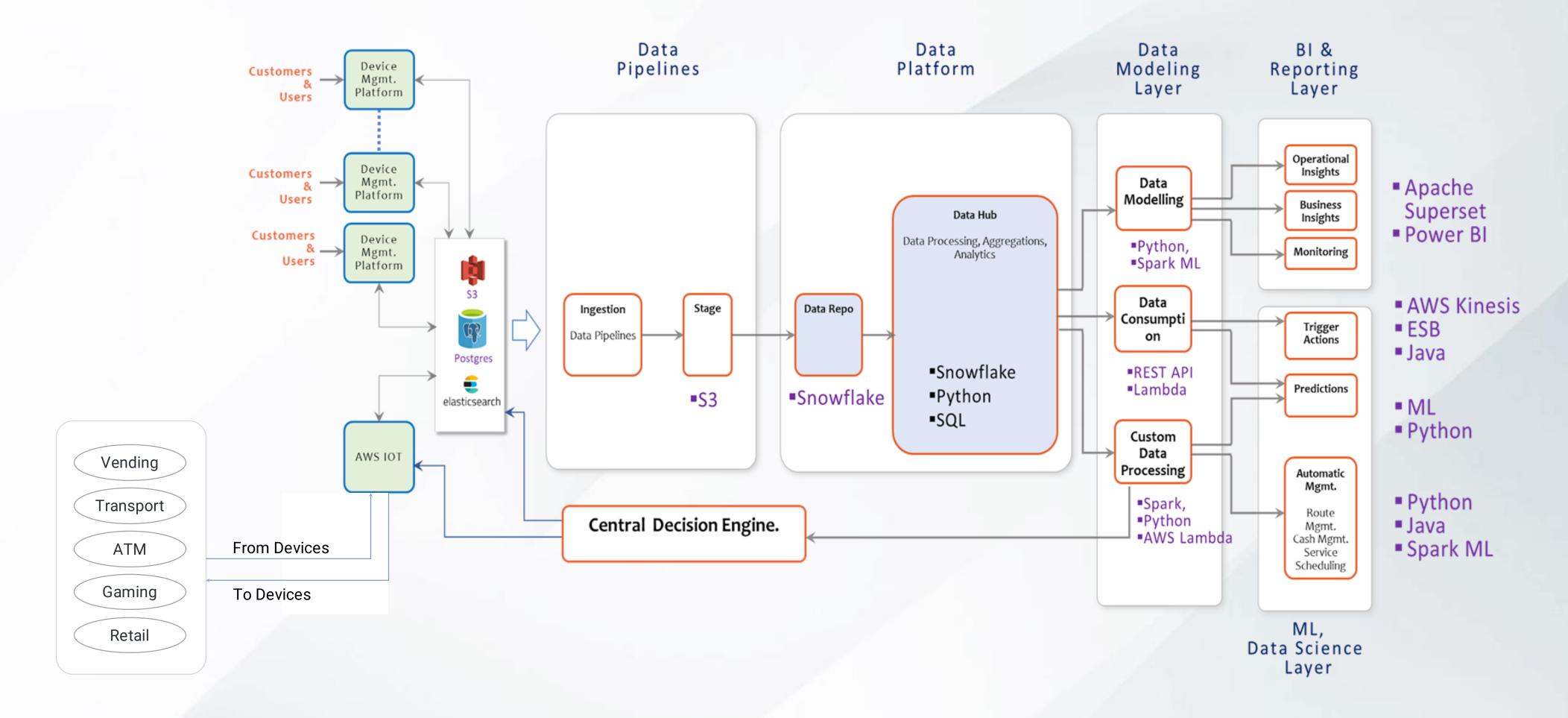
Approvers approve on

Snowflake based Data Platform for Analytics of 1M Devices



Multi Devices Manufacturer with Payment Services

Device Mgmt. Platform on AWS with Snowflake data platform for analytics



Snowflake based Data Platform for Analytics of 1M Devices



Device Families

- Vending
- Transport
- ATMs
- Gaming
- Retail

Stats:

- Total 1 M devices
- 160M messages daily
- 170K messages per second
- 1 TB data per day

Features

Real-time 2-way communication
Remote Operation Monitoring
Alerts / Notification
Remote Diagnostics / Troubleshooting
Remote Configuration
Virtual Device Operation
Business Intelligence / Analytics
Device Performance
Operational Insights
Business Insights
Transaction Analysis
Advanced - Predictive Analytics - Maintenance
Advanced - Predictive Analytics - Sales
Route Management & Scheduling
Doute Creation
Route Creation
Route Creation Route Analysis
Route Analysis
Route Analysis Route Optimization
Route Analysis Route Optimization Service Scheduling
Route Analysis Route Optimization Service Scheduling Service Optimization
Route Analysis Route Optimization Service Scheduling Service Optimization Cash Management
Route Analysis Route Optimization Service Scheduling Service Optimization Cash Management Cloud Payment Services
Route Analysis Route Optimization Service Scheduling Service Optimization Cash Management Cloud Payment Services Payments from Devices

Monetization Opportunities

- Device Health Monitoring & Reporting
- Remote Configuration & Diagnostics
- Advanced Analytics
- Smart Routing & Scheduling
- Virtual Devices View & Mgmt



Thank You

For more info please visit <u>www.accionlabs.com</u>

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