

Case Study

Microsoft Business Operations (MBO)

Data @ Scale

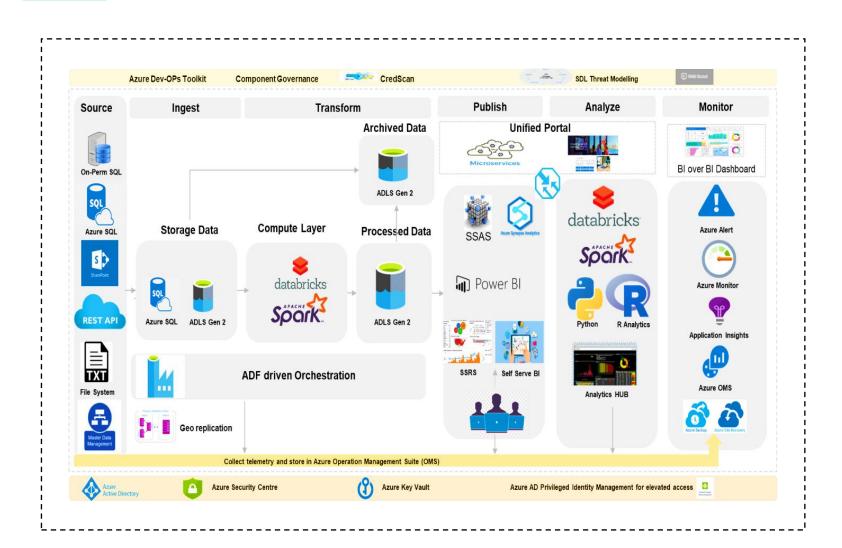


i7+ Years700+ Sprints, on-170+ stPartnershipImage: State of the state	eering team
 Implementation Highlights: E2E Managed Data Pipeline for 120+ data sources Operation lifecycle process automation for worldwide product launches (taxation, pricing, legal, currencies, regulatory compliance) Data over BPM (unique implementation with data and BPM integration) Legacy on-premise migrated to Azure PaaS (zero business downtime) Key Components & Features: Modern BI – Big Data; Azure PaaS with open source Analytics – Volume Forecast; Anomaly Detection, Text Mining BPM – Product launch and pricing workflow PSA – Project service automation for Product Launch Portals – LOB wise Micro-portals Dashboards - CxO level near real-time enterprise operations BI over BI – covering usage, performance, costing and infra War-Room – 24x7 Worldwide coverage during quarter close 	 Value Creation Initiatives: Data Vault data model implementation (better Dev Productivity) Cube generation automation using metadata (better time to market) Quarter close process streamlining and automation (business impact) Data Discovery for search & find data objects (better User Experience) Engineering Best Practices: Secure development life cycle to handle GDPR, PII SOLID architecture approach for scalable, flexible system Detailed BI over BI enabling deep performance insights BI University – Central repository for self-paced end user learning Scaled agile execution; DevSecOps
 HCL Tools, Accelerators & IP's Leveraged: Leveraged Sketch framework to build connected data platform Leveraged R2D2 framework to build data quality components 	 Business Impact Created: Zero issues reported at quarter close (past 3 years) 98% (Max) volume forecasting prediction accuracy \$7M+ savings on partner commissions payouts (till date) 20 days reduction in product launch life cycle (for each product)

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Engineering Driven Approach

Azure Deployment Reference Architecture



Key Highlights

Goal : Highly available, resilient and scalable platform

Automated E2E Data Pipeline

- ADF orchestrated data ingestion enabled by HCL accelerators and reusable components
- Scalable compute layer to handle automated transformation with robust data quality and enrichment rules
- Hot, Warm and Cold paths to access streaming, NRT and Archive data

Reporting / Portal

- Visualization platform that is complaint to existing way's of data access and newer routes
- Secured portal to provide external users access

Pragmatic use of Industry Tools

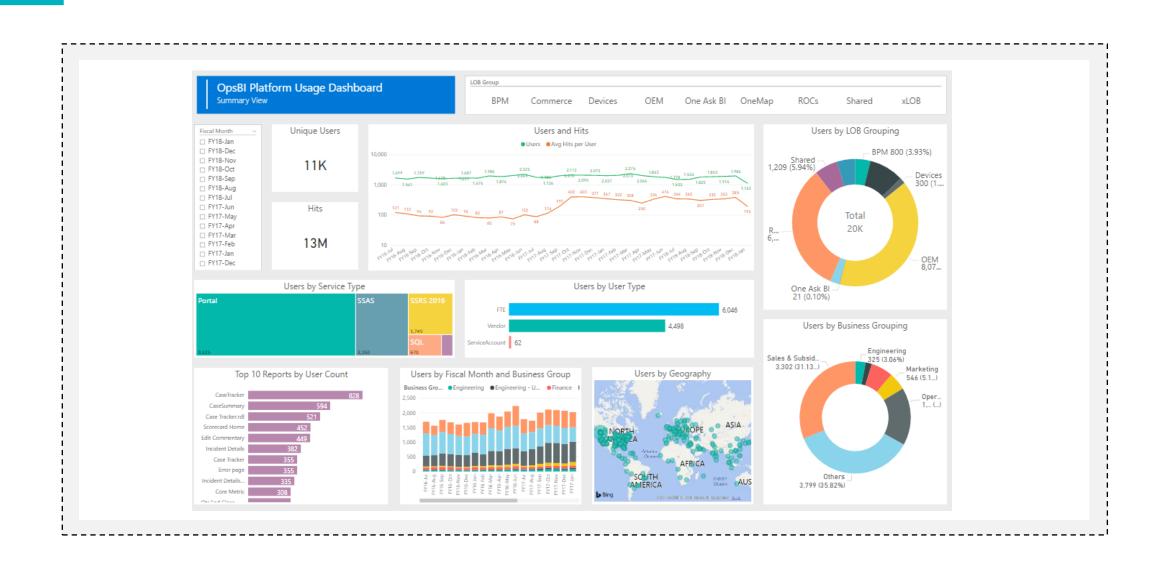
- Python, R Hybrid approach, leverage best from both tools
- ✤ Secure
- Adhere to Microsoft policies and Secure Development Lifecycle

Digital &

Analytics

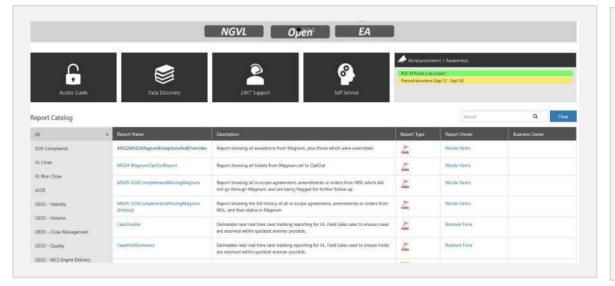
by HCL Technologies

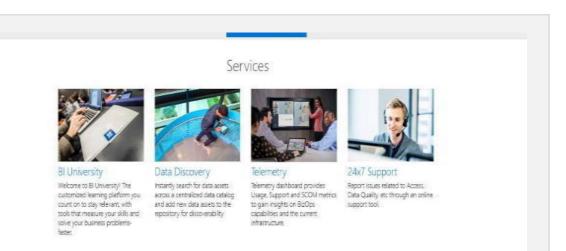
BI Over BI – CXO Dashboard(s)





User Friendly Self-service Portal(s) - One Stop Shop for MBO users







Digital & Analytics

World Wide Ops – DevOps

DEPLOYMENT

1 CLICK

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CHALLENGE

- Independent Development and Operations sphere of influence
- Multiple handover resulting in many failures
- High cost of maintenance as solutions not built with operation focus
- Time consuming manual deployments with high effort
- Resource intensive, manual build, testing and release etc.
- ✤ Less adaptable to changes and business direction
- Building a culture of DevOps

SOLUTION & CONTRIBUTION

15 FEATURE

TEAMS

Recommended and Evangelized DevOps adoption

DevOps workshops and brown bags

Built end-2-end DevOps framework in collaboration with operations

Build Automation and Gated Release

Test Automation and Data Quality

Performance automation with Auto-Scalability

One Touch Deployment



BENEFITS

- ✤ Integrated Dev and Ops as one team
- Performance oriented culture
- Continuous Integration and Deployment resulting in productivity
- Increased velocity in sprint teams
- Test automation improving quality
- Efficient utilization of resources with high cost saving
- Increased responsiveness and reliable delivery
- Better feedback loop resulting in continuous improvement

Visual Studio Online, BIML, Power Shell, C#, Test Automation Framework, SQL Server Suite, COSMOS, Azure Iaas, Azure PaaS





RelationshipTM BEYOND THE CONTRACT

\$10.5 BILLION | 176,000+ IDEAPRENEURS | 50 COUNTRIES