Business Imperatives

Across the globe majority of the organizations building Data Lakes are struggling to unlock value in Data. Data first approach to Data Lake is not working out due to multiple barriers.

**Usability Barriers:**
Don’t know what is in the lake. Need handholding in understanding the data

**Skill Barriers:**
Hiring Data Scientists is difficult. Not every problem requires a Data scientist

**Access Barriers:**
Driving Analytics across heterogeneous data landscape

**Performance Barriers:**
Running analytical models against Hadoop scale data using traditional means takes too long

**Technology Barriers:**
Absence of right tool to get value out of the data and enable self-service

**Productivity Barriers:**
Users spend most of the time hunting and prepping the data. Inversing the 80-20 pyramid

Organizations looking to modernize their analytics infrastructure to enable self-service are running into challenges with islands of data and heterogeneous technology landscape. This leads to perpetual data integration making Analytics unviable and they often miss the window of opportunity.

As part of the current analytics life cycle 80% of the time gets spent on Data Acquisition and Preparation and only 20% is actually spent on Analytics.

While the current analytics product landscape consists of products that specialize in discovery or blending or modelling, there aren’t any platforms in the market which offer an integrated capability of discovery, blending, modelling, model management and model consumption. The need therefore is of a platform that leverages a unified metadata framework to provide end-to-end capabilities across the analytics life cycle.

Breaking the barriers

Infosys Analytics Workbench breaks the barriers that are currently leading to inefficient analytics life cycle by providing a platform that empowers self-service analytics.

The platform consists of a data platform at its core with best-in-class capabilities for data discovery, wrangling, analytical modelling, model management and visualization, augmenting the data platform to deliver end-to-end self-service capabilities to the data analyst and scientist community.

**Key Capabilities**
- **Discovery:** Allows Boundary-less discovery with Virtualization - thumb rule from any data stores – Enterprise or Big Data Systems
- **Acquisition:** Ease of Acquisition, Personal Workspace with Data Profiling, Drag Drop, and Auto Data Model Features
- **Preparation:** Out of the box features on Data Blending, Mash and Merge along with Business-Friendly interface for Data Wrangling
- **Insights:** Rich visualization and descriptive Analytics for immediate insights
- **Modelling:** Create, Reuse, Refine, Repurpose models parameterized, Workflows and Publish for Consumption
- **Consumption:** Brings self-service business Analytics with Advance Visualizations

With Infosys Analytics Workbench, organizations can reverse the equation and spend only 20% on data acquisition and preparation and 80% in pure analytical modelling and insights.
## Benefits

**Usability:**
Smart data catalogue for self-service data discovery and best-in-class wrangling capability for data preparation

**Access:**
Extensive wrangling capabilities around structured, semi-structured and un-structured data across multiple sources enables data scientists to work in a boundary less data landscape

**Technology:**
Integration of best-in-class tools to enable self-service across all stages of analytics life cycle. Pre-built integration cuts down time involved in standing up analytics platforms

**Skill:**
Empowering business users to consume analytical models through Analytics Market Place

**Performance:**
Enables agility in Analytics life cycle by seamless Integration of Technical Capabilities across End to End Analytics Life cycle (Discovery till Democratization)

**Productivity:**
Hadoop scale analytical engines that support model execution at scale leveraging distributed processing improving model accuracy and reduces time for insights generation

<table>
<thead>
<tr>
<th>(x) Speed</th>
<th>(+) Innovation</th>
<th>(+) Cost</th>
<th>(e) Scale</th>
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<tbody>
<tr>
<td>Increases Time to Market by 40%</td>
<td>10X reduction in time for sandbox setup</td>
<td>Pre-Built Integration reduces development effort by 30+ %</td>
<td>30X increase in refresh frequency for model variables</td>
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## Case Study

### Client Context

Client is one of the largest banking institution in US who embarked on a Big Data journey and was looking to address the following challenges in terms of data consumption from the platform

- Reduced the Time to insights from days to Hours leveraging the power of Hadoop
- Provide more accurate insights by using Full data to execute the analytical models and uplift in campaign effectiveness
- Democratize Analytics by enabling self service capabilities

### Infosys Solution

- Provided a foundational data capability using components of Infosys Analytics Workbench on Data Lake
- Build process to identify relationships across datasets ingested into Lake environment, map to domains and security classification
- Self-improving machine learning based suggestions for tag creation, correction and maintenance
- Automated tag discovery, glossary linkage and automated tag propagation
- Visual interface for Data exploration

## Benefits

- Enabled self-service analytics through an integrated platform that caters to all stages of the analytic life cycle
- Delivered loosely coupled architecture to integrate with existing client investments to maximize ROI
- Faster time to market compared to traditional ETL based approach for creating consumption views

For more information, contact askus@infosys.com