Data Warehouse Modernization and Migration to Cloud

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Data Fact
Introduction

Data Warehouse Modernization
- What is Datawarehouse Modernization?
- Why is it important to the Enterprises?
- Case Study

Cloud Migration
- How Enterprises Benefit from Cloud Migration?
- Migrate Enterprise Datawarehouse to Cloud
- Case Study

Q&A
What is Data Warehouse Modernization?

**Strategic Value & Benefits**
- Build Predictive/Prescriptive models and leverage the power of big data.
- Bringing time critical situational awareness to data
- Scalability and performance
- Faster data discovery, profiling and data visualization production
- Low Cost of Ownership and Maximum ROI
Why is it important to Enterprises?

1. Identify the Source Tables
2. Build or Modify the Data Model for Staging Tables
3. Build or Modify the Data Model for Data warehouse/Data mart
4. Data Load
5. ETL
6. Deal with performance related issues i.e. Building Aggregate Tables, Database tuning etc.

Data Sources: OLTP, CRM, ERP, Flat Files

Data Sources

Staging Area

Data warehouse

Data mart

Governance

Data Access

Data Management

Security

ETL

BI Reporting & Visualizations

Deal with performance related issues i.e. Building Aggregate Tables, Database tuning etc.
Why is it important to Enterprises?

1. Stream Data in Real Time to the DW avoiding nightly batch jobs
2. Create Flat Schema in Hbase for any new requirements and never worry about Staging or loading Data to Staging
3. Build ANSI SQL Compliant relational data model in Hive.
4. Using Spark for data integration at high speed and also utilize the same process for Predictive Analytics

CONSUMPTION

Big Data Ecosystem

HDFS

HBase

Cassandra

Spark

Hive

Kudu

Cloudera

IMPALA

Cloud Foundry

Apache

Web Logs

Documents

OLTP

ERP, CRM

LOGS
Case Study – DW Modernization

- CDC PROD
- EBCDIC
- B2B LZ
- Message Format: Files Ready
- talend
- Incremental
- Staging Area
- Spark
- EDW
- impala
- cloudera CDH
- HDFS
- Work Flow Management
- Cluster Management
- PAXATA
- AR Insights
- BI Reporting & Visualizations
- MicroStrategy 10
- Ad-hoc
- SQL
- Hue
Focus on Business Value
- Focus on core business problems.
- Rapid Delivery and accelerate time to market processes.
- Adopt a variety of business applications with little or no Infrastructure planning.

Provides Lower TCO and Higher ROI
- Flexible Cost Structure.
- No significant operating expense.

Adapt to Rapid Changes
- Horizontal Scalability.

CLOUD PROVIDERS

amazown web services  Google Cloud Platform  Microsoft Azure
TRENDING TECHNOLOGIES ON CLOUD

CLOUD BASED DATAWAREHOUSES

- Amazon Redshift
- Snowflake

CLOUD BASED DATA INTEGRATION

- Talend
- Informatica
- Alteryx
- Pentaho

CLOUD BASED ANALYTICS

- MicroStrategy
- Tableau
- Qlik
- Power BI
- Looker
Case Study

BEFORE

ON PREMISE

AFTER

CLOUD

Strategic Value & Benefits
- Performance
- Unlimited Concurrency
- Flexible Cost Structure
- Improved Collaboration