



# Journey to Snowflake

- SG & DP

# Agenda

- About WarnerMedia
- Background about what we do
- Journey towards Snowflake
- Snowflake – Storage/Compute Optimizations
- Snowflake - Data Modeling and Data Structure
- Snowflake - Engineering perspective
- What to do look for during Migration

# About WarnerMedia


- WarnerMedia is a leading media and entertainment company that creates and distributes premium and popular content from a diverse array of talented storytellers and journalists to global audiences through its industry-leading consumer brands including: HBO, HBO Now, HBO Max, Warner Bros., TNT, TBS, truTV, CNN, DC Entertainment, New Line, Cartoon Network, Adult Swim, Turner Classic Movies and others. WarnerMedia's brands operate one of the world's largest TV and film studios, own a deep library of entertainment programming, and own or have a management stake in more than 25 digital properties.
- WarnerMedia is part of [AT&T Inc.](#) (NYSE:T)

# Background on what we do

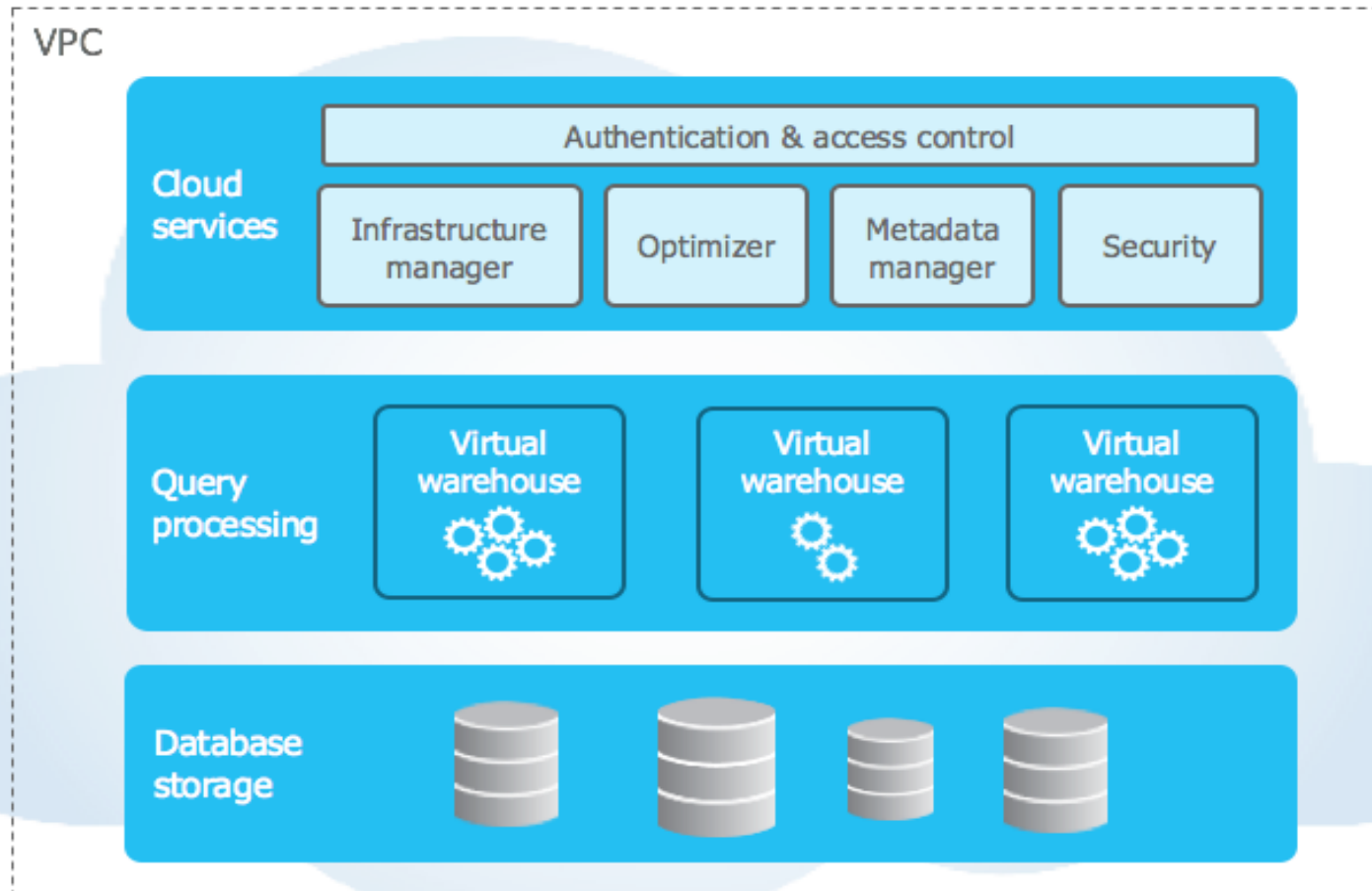
- Collect data for US and Rest of World(ROW)
- Enabling data driven culture
- Enabling Insights and Advanced Analytics



# Journey towards Snowflake

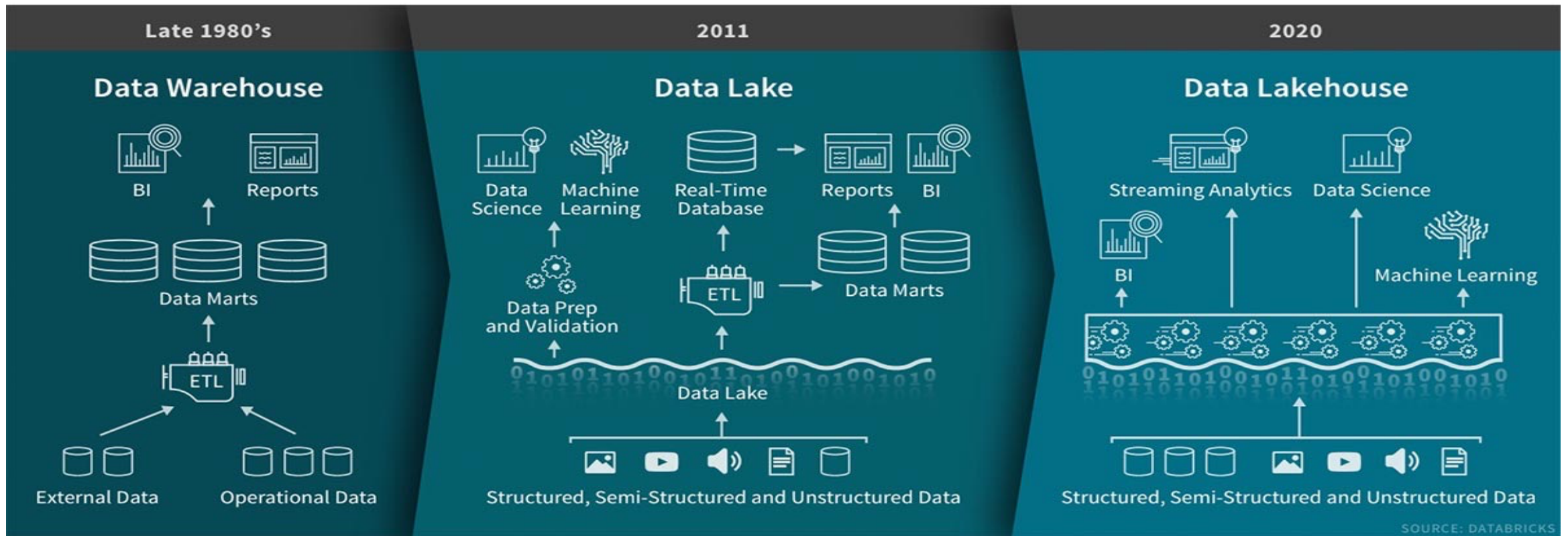
- Common Challenges
    - Scalability
    - Dedicated Resources
    - Traditional challenges with Databases
    - Billing based on Department
    - Semi structured data
    - Network and Security
  - Enterprise ecosystem
    - Speed to Insights
    - User Experience (Performance)
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# Quick Intro to Snowflake




Source Snowflake

# Snowflake – Storage/Compute Optimizations






# Snowflake - Storage/Compute Optimizations


- SaaS Provider
  - Snowflake Share
  - Event driven loading (SnowPipe)
  - Scheduler and Tasks
  - Storage and Compute separated
  - Pick your size & speed
  - ANSI SQL Support and Stored Procedure
  - Time Machine
  - Advanced SQL example (HLL, Grouping Sets)
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# Snowflake - Data Modeling & Data Structure

- Support for Semi Structure
  - Columnar Database
  - Snowflake Partitions
  - Query Profile and Explain
  - Clustering
  - Supports Wide and Vertical Rows
  - Supports multiple inserts
  - Metadata including query history and snowflake usage
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# Snowflake - Engineering perspective

- Warehouse, Session and Account customization
  - Caching
  - Regularly monitor queries as behavior will change over time
  - Sharing AWS resources and Roles
  - Clearly define Snowflake roles and access at the beginning
  - Keep reading Snowflake release notes as world moves
  - Setup additional billing or monitoring solution to avoid surprise costs
  - Lookout for Incidents both Snowflake and Cloud Infrastructure
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# What to look for during Migration

- Determine right warehouse size
  - Understanding data loading patterns
  - Forklift existing SQL to SF with manageable changes
  - No direct migration of TSQL/PLSQL convert into SQL Scripts
  - Go small to large, scale horizontally as needed
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# Q & A



Coming to a screen  
near you in May  
2020

