Data is the *New* OIL – Why *Now*?

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Agenda

Introduction

Industry Perspectives

Data Technologies Overview

Data Architecture Approach

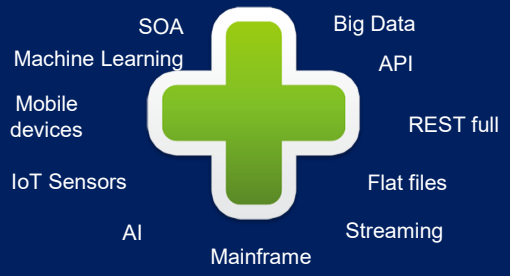
Data as an Asset

Introduction

- My Name is Arnab Mukhopadhyay
- Live in NY/NJ area for 25 years
- Masters in Electronics Engineering & Enterprise Architecture
- Director of Enterprise Architecture at Valley Bank
- Hobbies – reading & cooking
- Two daughters
- Passionate about data

Industry Trends

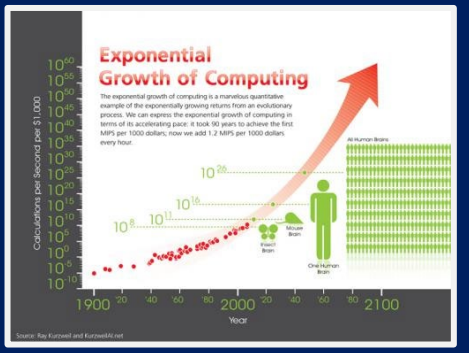
Information is *ADDITIVE*



Tech Complexity is *INCREASING*

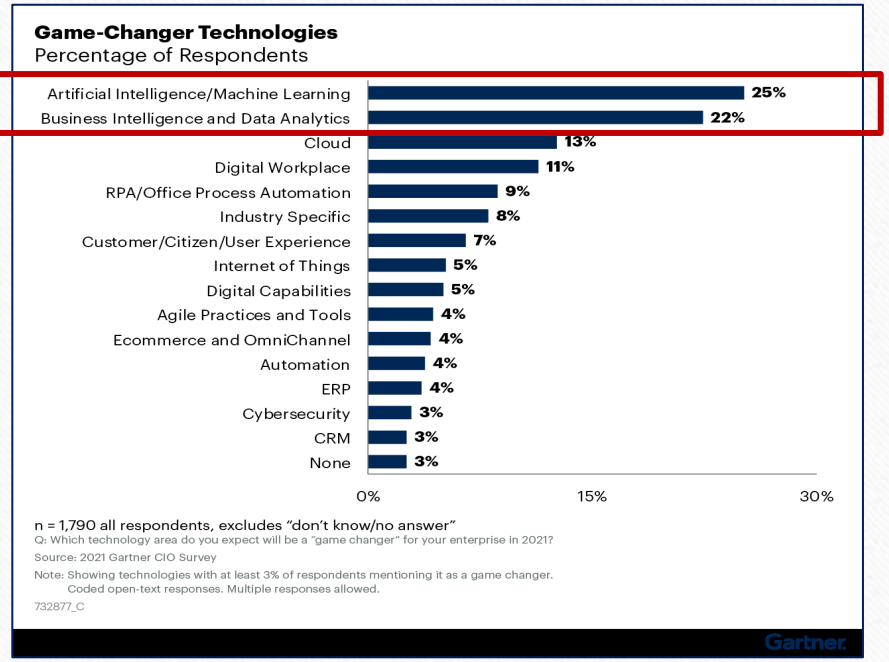
15,000x in 15 years

Rate of Change is *ACCELERATING*



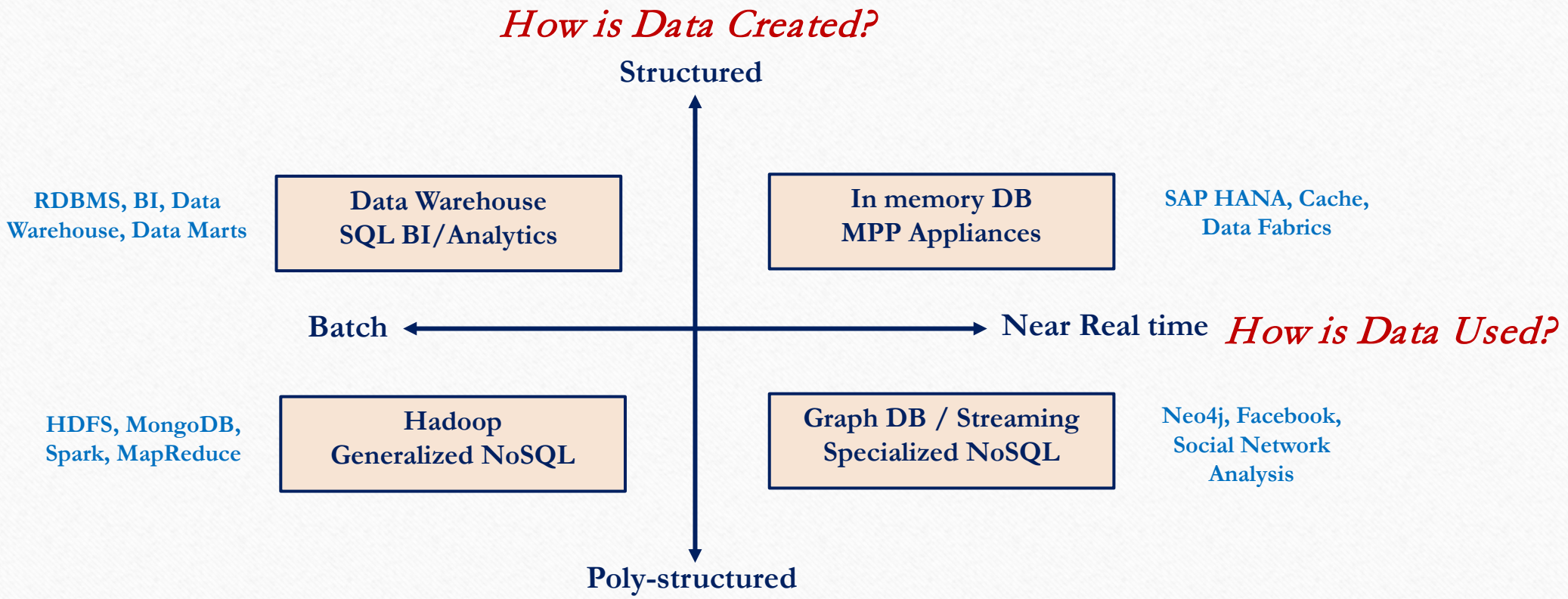
We Keep Adding More and More Data

Data/Analytics Industry Perspectives

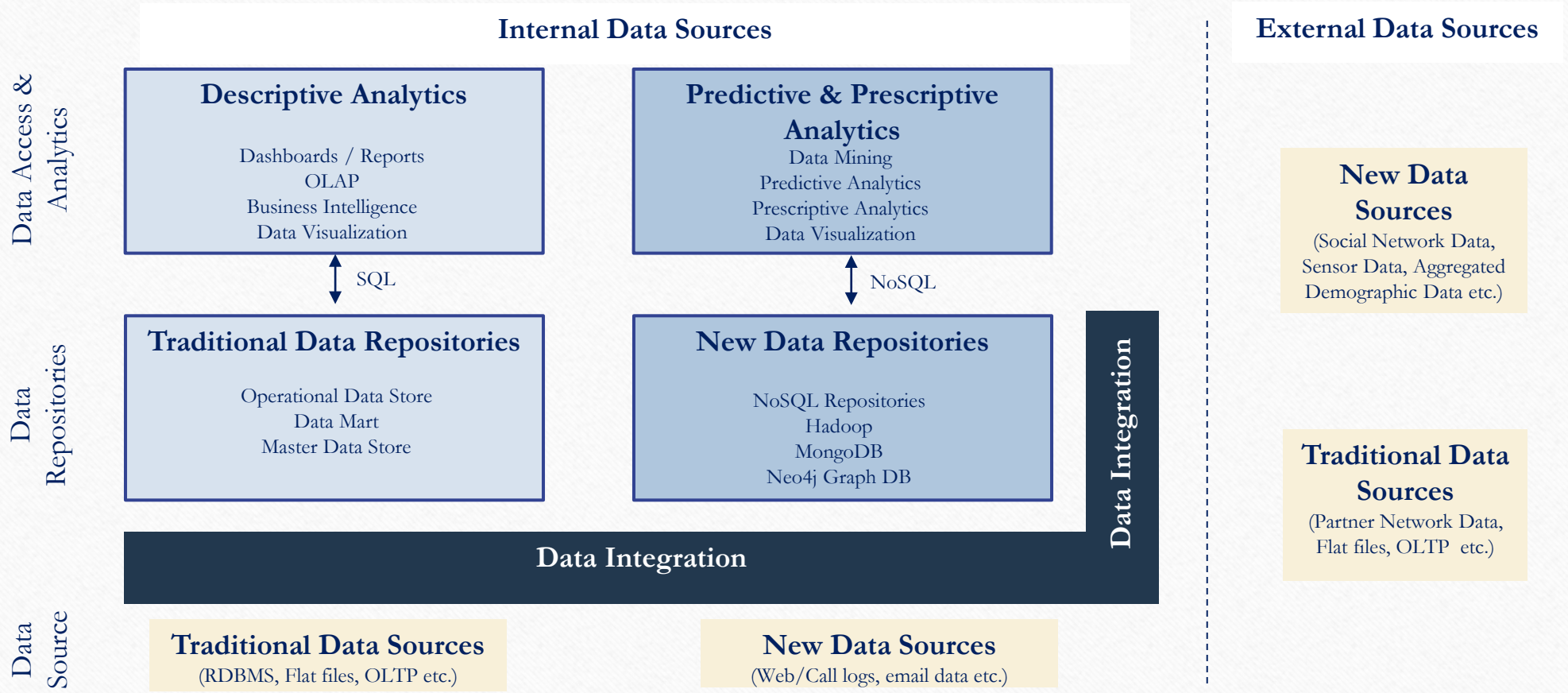


Per Gartner 2021 CIO Survey, Data Analytics and Artificial Intelligence / Machine Learning constitute top 47% of the Game-Changing Technologies list

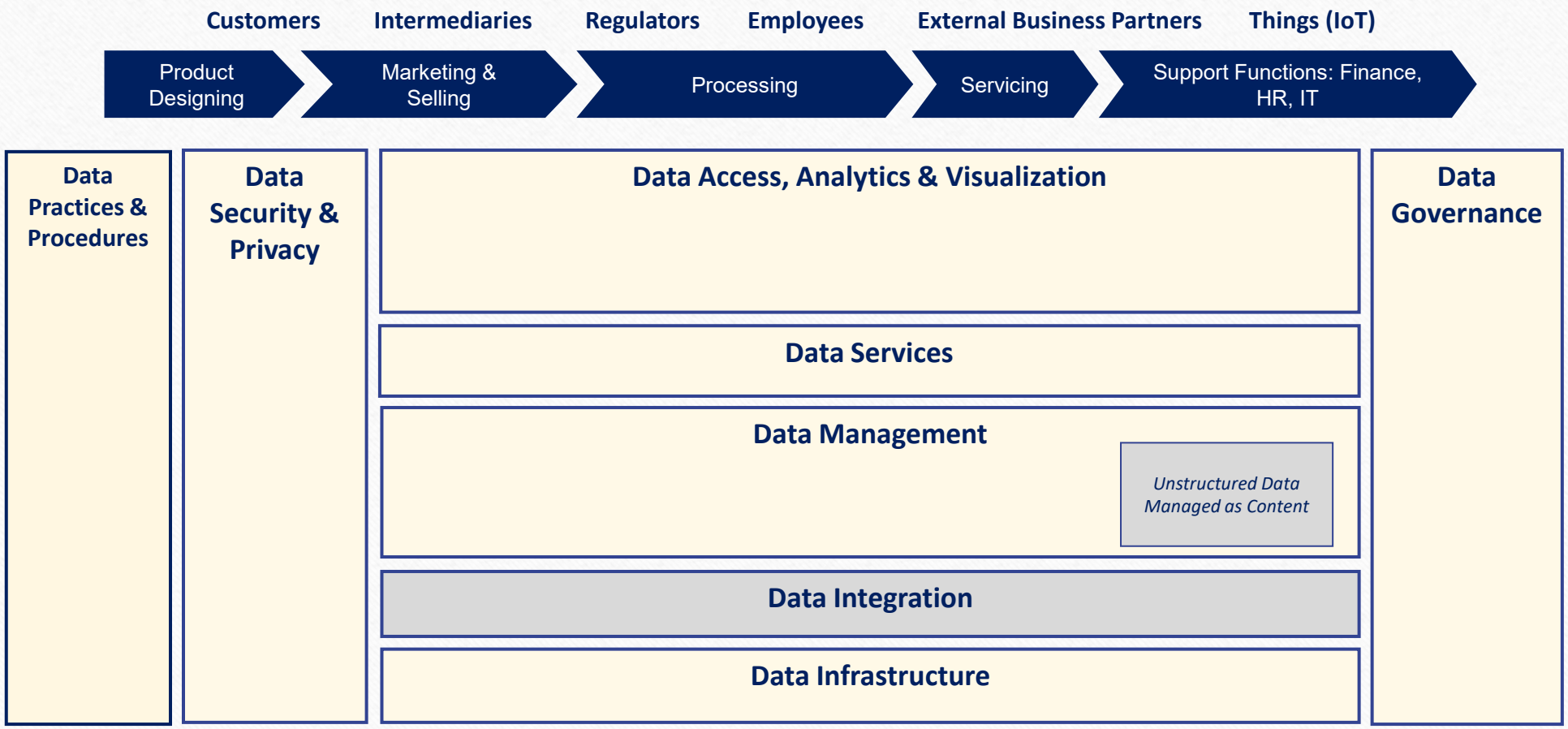
Data Technologies – Contextual View



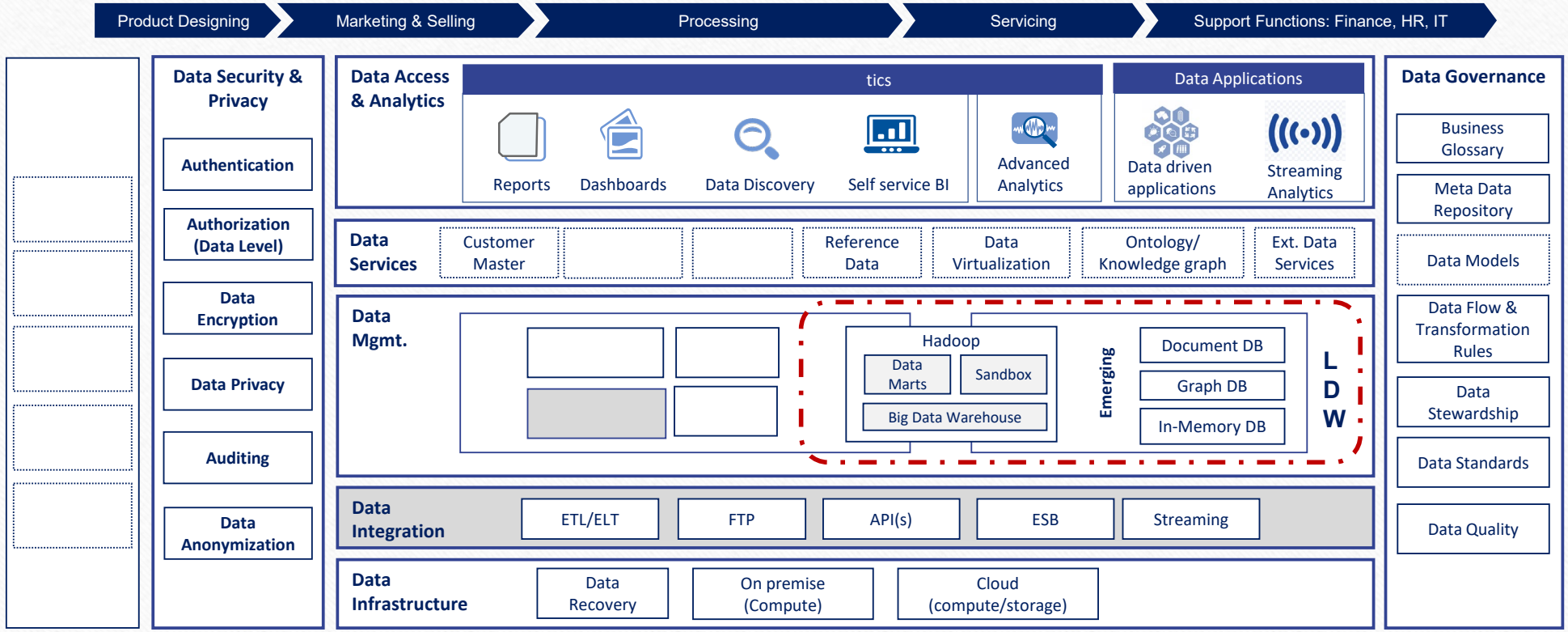
Data Architecture – Contextual View



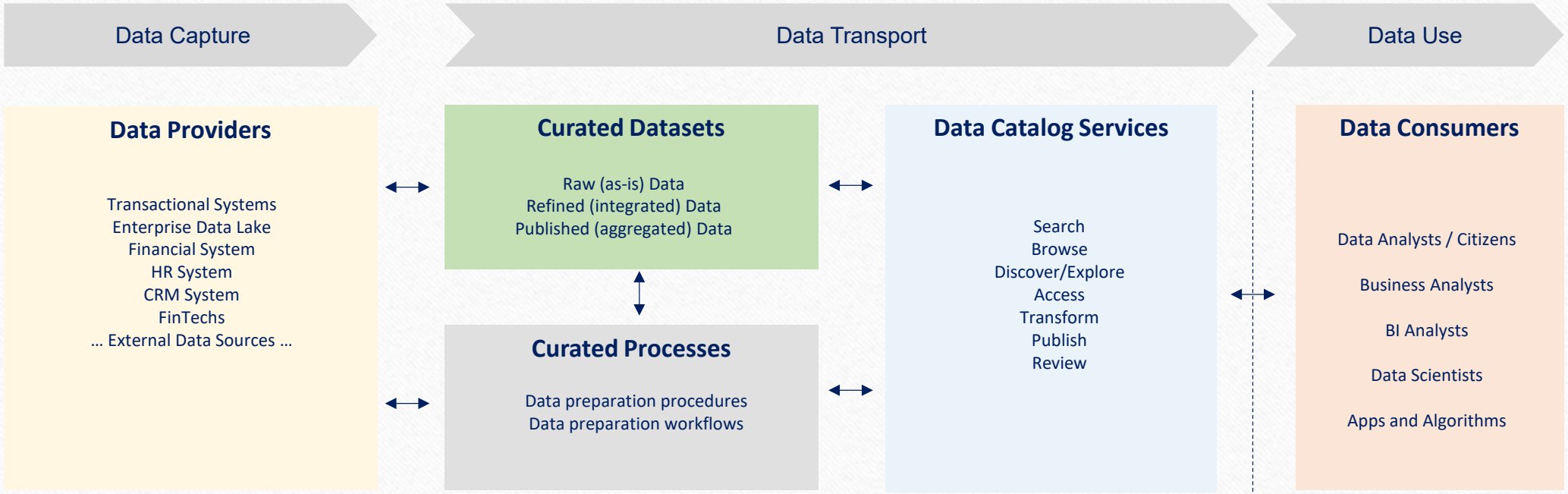
Data Architecture – Domain Model (L1)



Data Architecture - Domain Model (L2)



Data Governance – Context



Data as an Asset

Data is information that is maintained in a form that is convenient to move or process

Data is growing at an exponential rate – Big Data to Smart Data

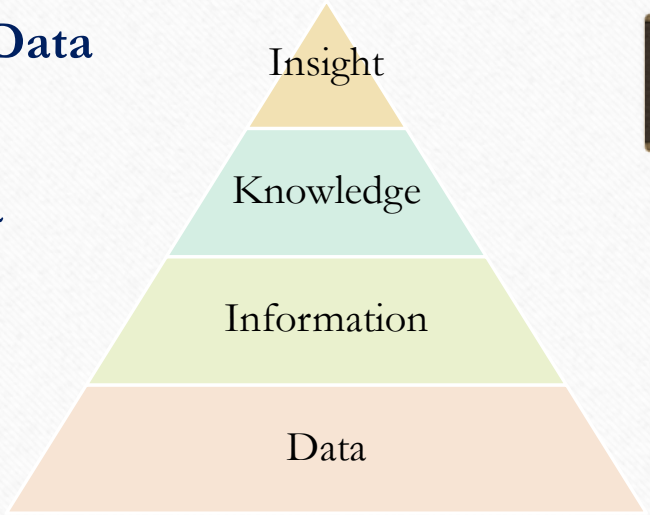
Data is the new Oil (Raw data is not valuable by itself, but its value is generated when refined and aggregated)

An organization's most important asset is Data

Transaction Data

Interaction Data

Behavioral Data



In God we trust, for everything else there is Data

Q&A

Thank You