

Data is the *New* OIL – Why *Now*?

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10th Oct 2021

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

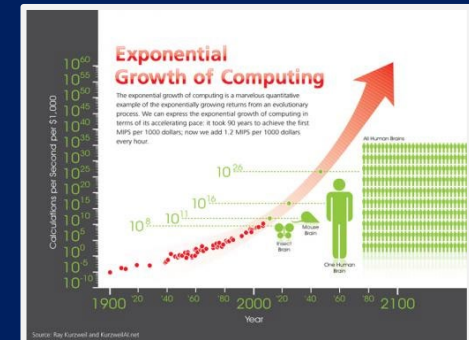
Information is
ADDITIVE



Tech Complexity is
INCREASING



Rate of Change is
ACCELERATING

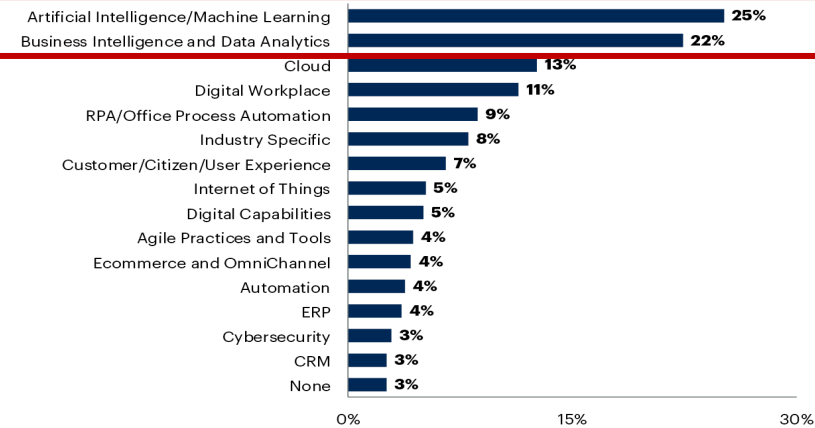


We Keep Adding More and More Data

Data/Analytics Industry Perspectives

Game-Changer Technologies

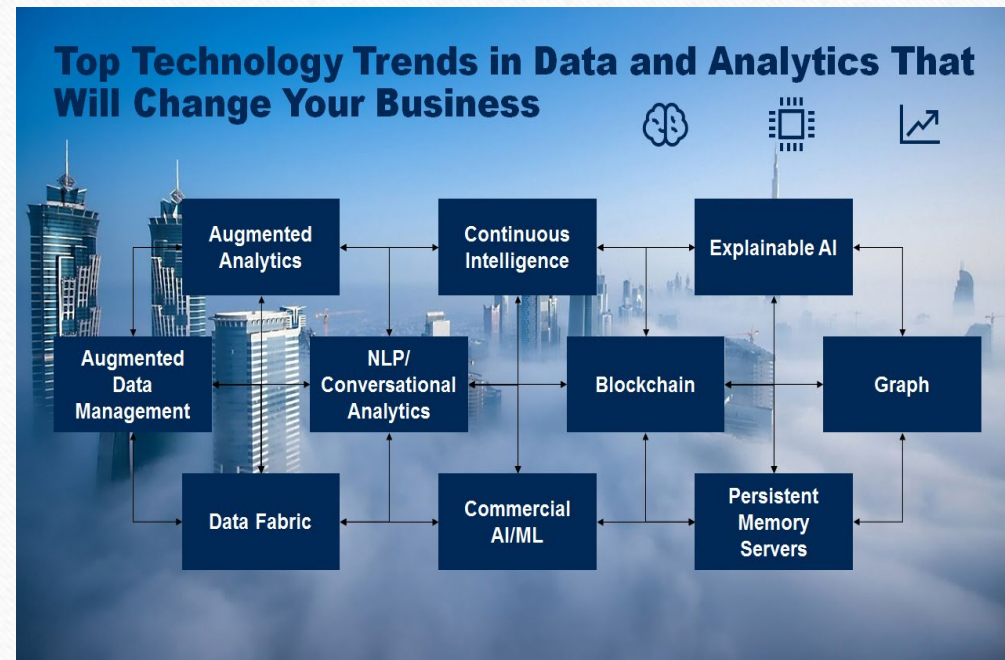
Percentage of Respondents



n = 1,790 all respondents, excludes "don't know/no answer"
Q: Which technology area do you expect will be a "game changer" for your enterprise in 2021?
Source: 2021 Gartner CIO Survey
Note: Showing technologies with at least 3% of respondents mentioning it as a game changer.
Coded open-text responses. Multiple responses allowed.

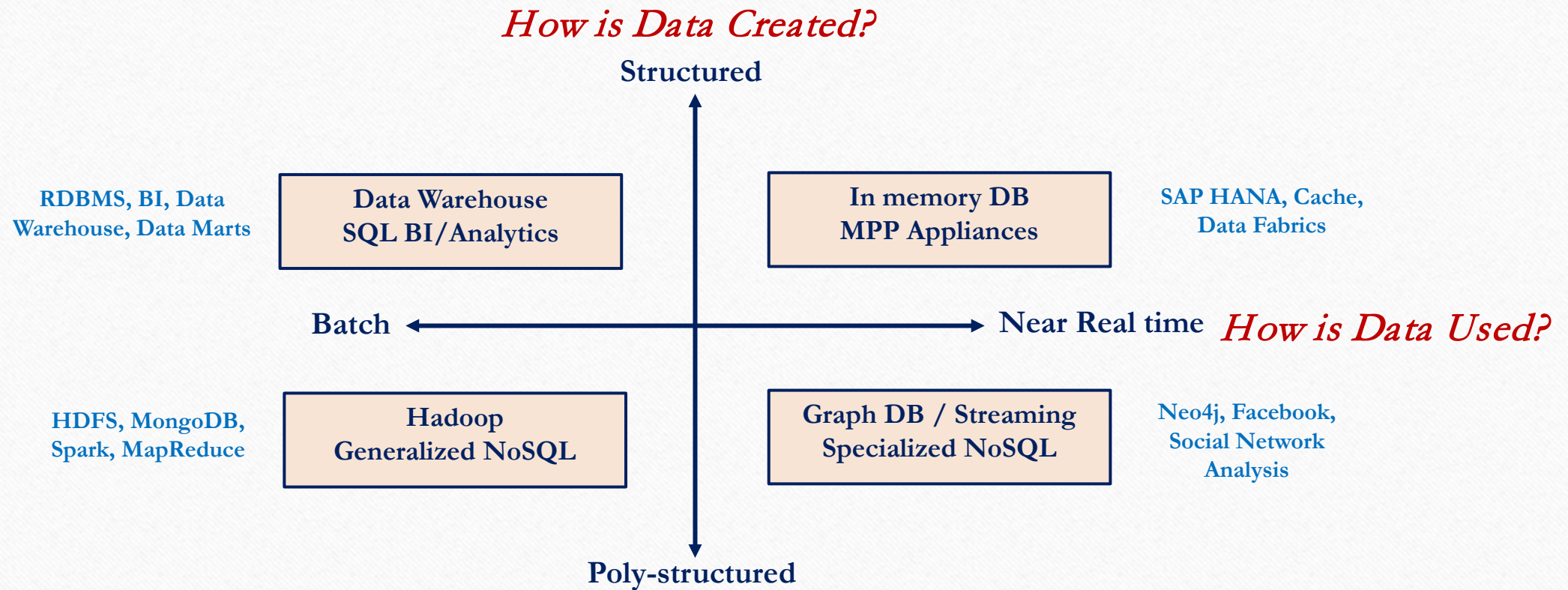
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Gartner

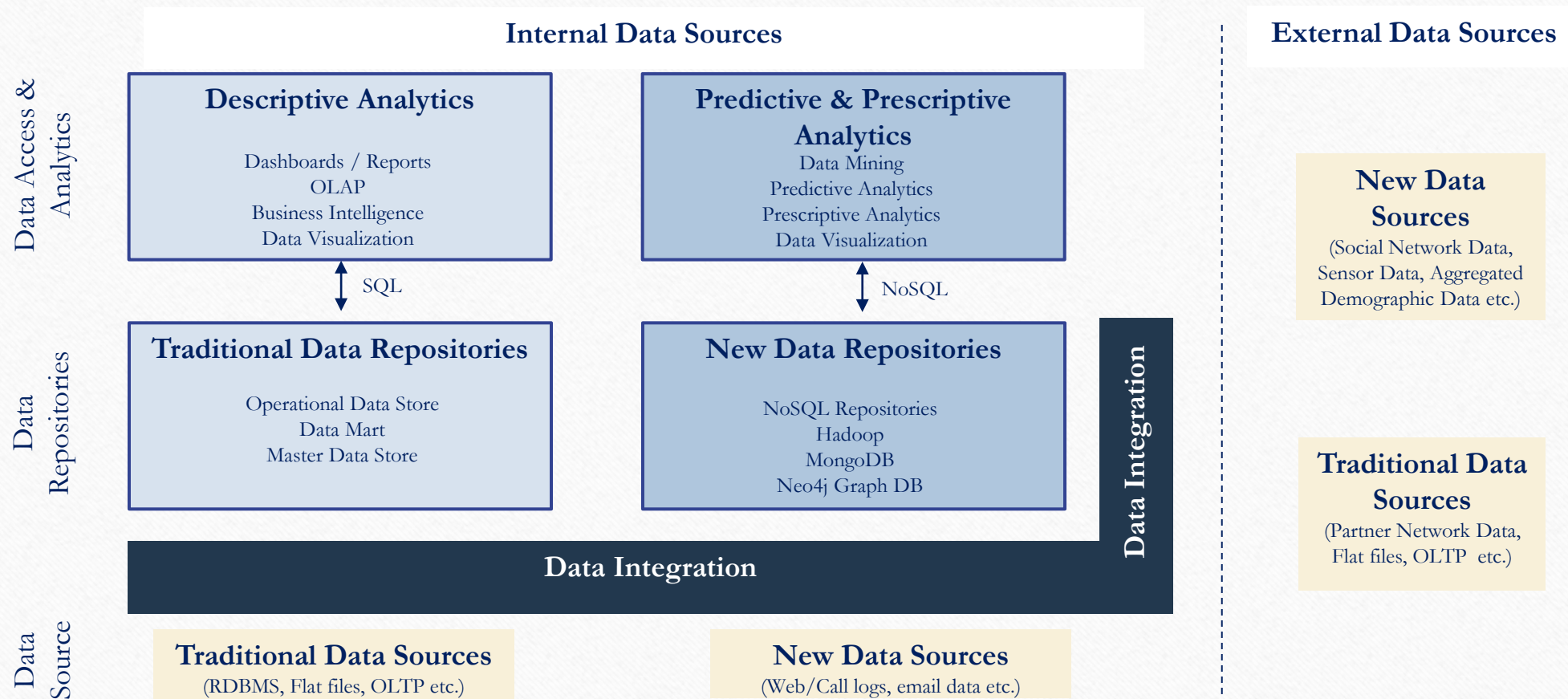


Per Gartner 2021 CIO Survey, Data Analytics and Artificial Intelligence / Machine Learning constitute top 47% of the Game-Changing Technologies list

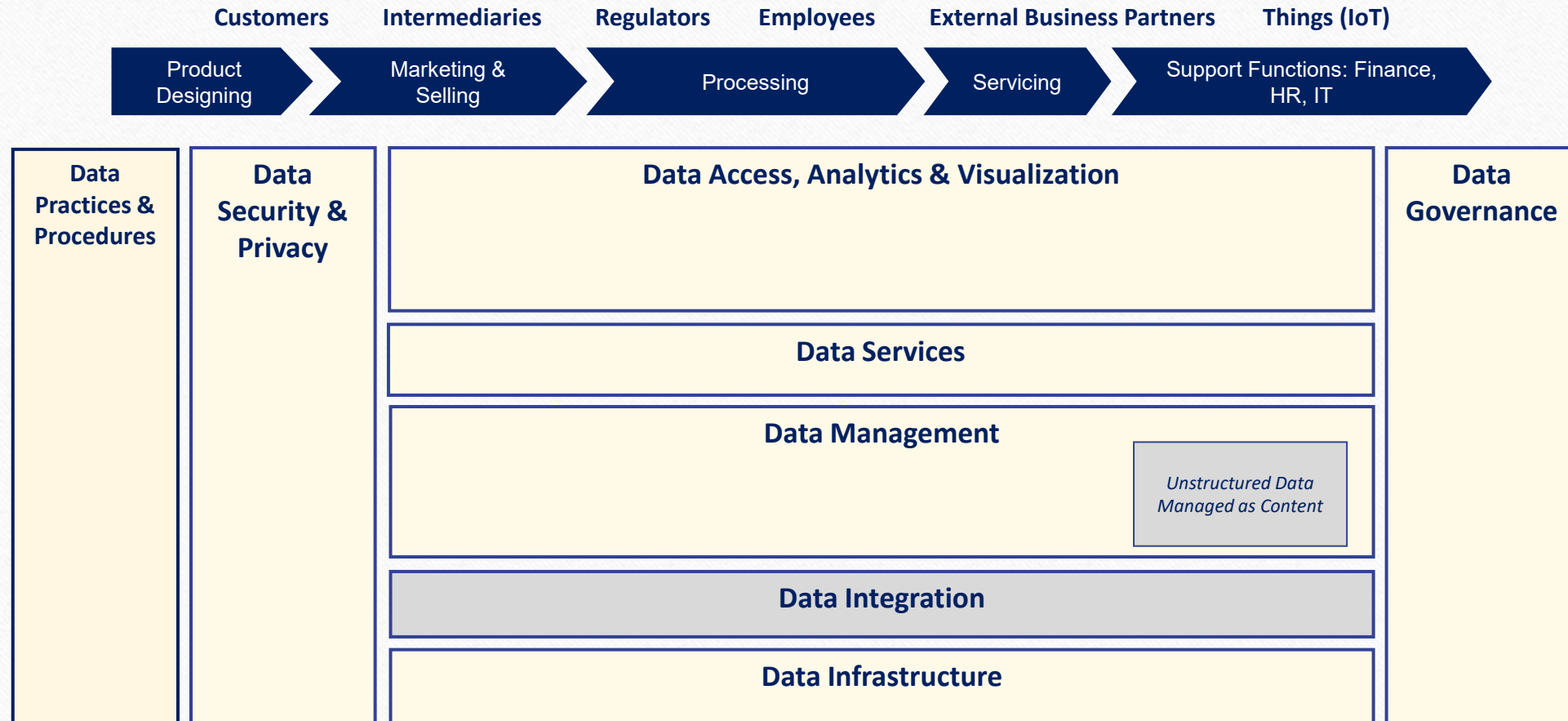
Data Technologies – Contextual View



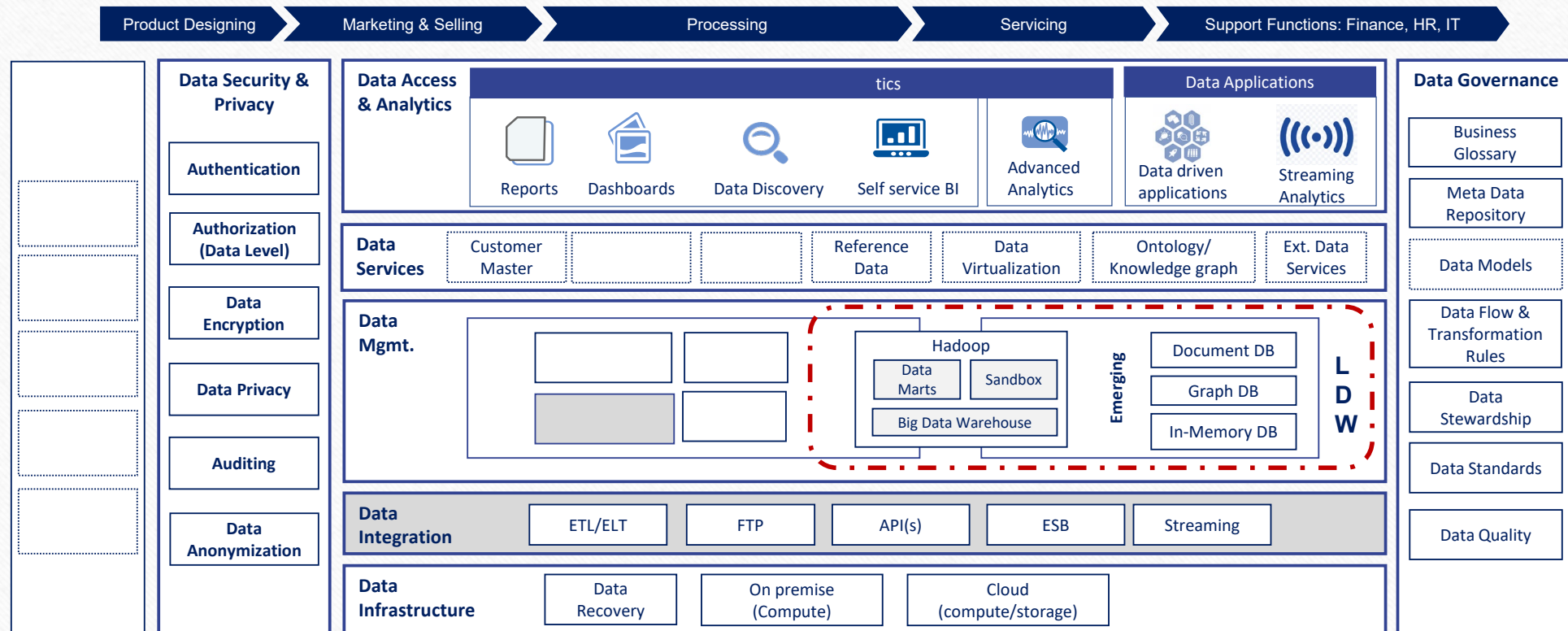
Data Architecture – Contextual View



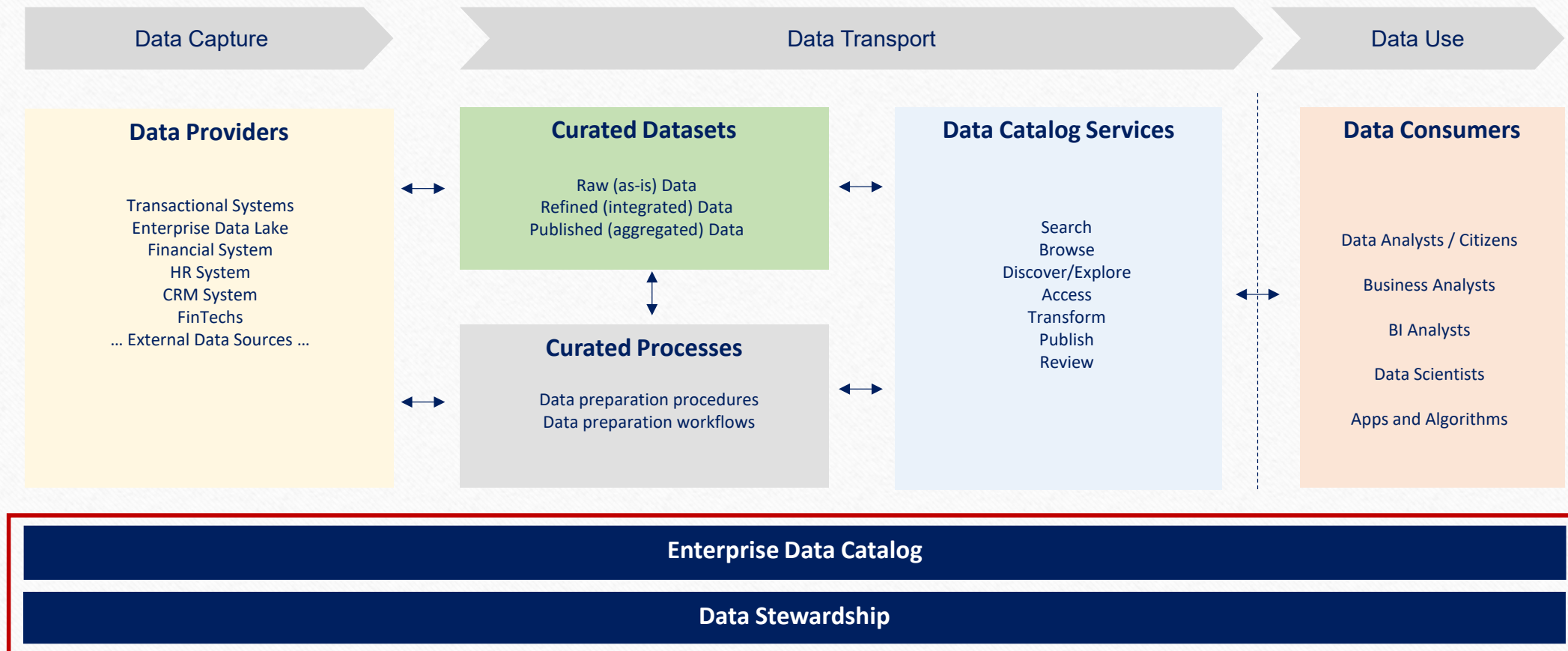
Data Architecture – Domain Model (L1)



Data Architecture - Domain Model (L2)



Data Governance – Context



Data as an Asset

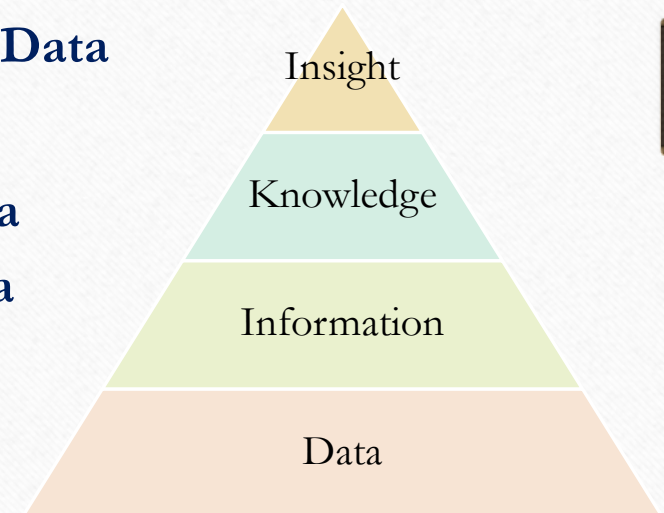
Data is information that is maintained in a form that is convenient to move or process

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