Data as an asset

bakertilly DIGITAL

March 5th, 2024

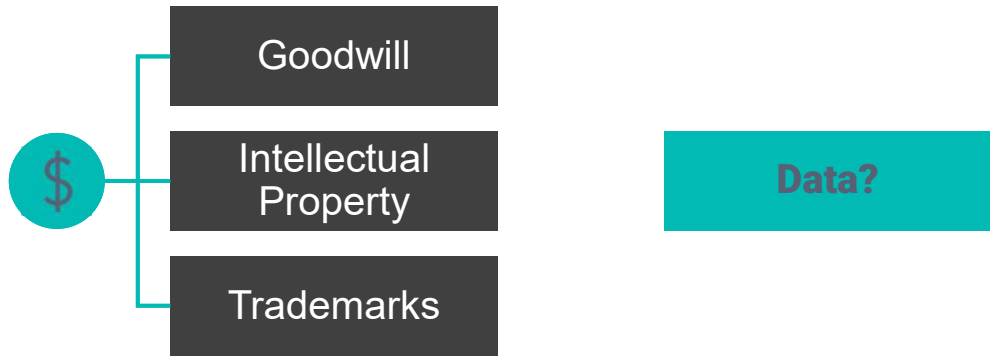## Meet your speakers

Dave DuVarney
PRINCIPAL
BAKER TILLY DIGITAL
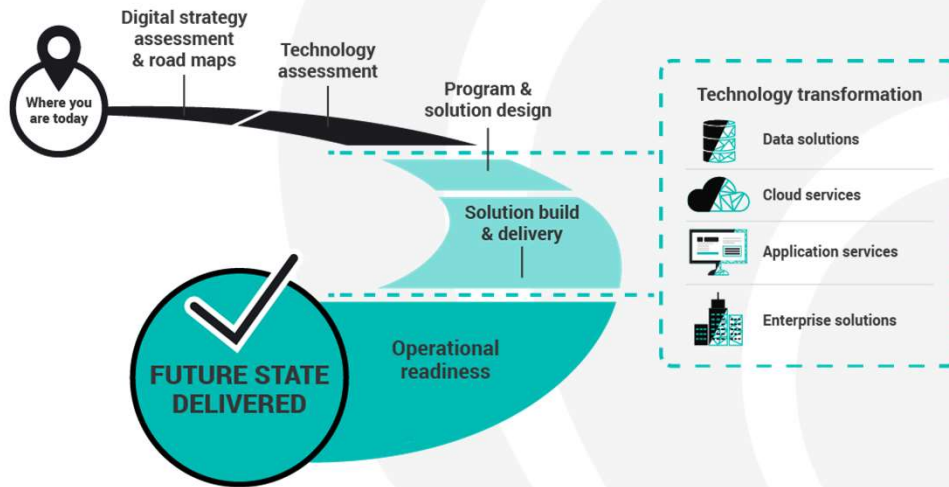
DD0 [@Anderson, Jordan] , this section should be done. I might still try to slip in some use cases. Let's see where it lands when you've got your updates in.

DuVarney, Dave, 2023-04-18T22:28:59.590

Intangible Assets

Goodwill

Intellectual Property

Trademarks

$

Data?

Tangible Versus Intangible Assets
S&P 500

Year	Intangible	Tangible
1975	17%	83%
1985	32%	68%
1995	68%	32%
2005	80%	20%
2015	84%	16%
2020	90%	10%

■ Intangible   ■ Tangible

Chart Source: https://www.oceantomo.com/intangible-asset-market-value-study/
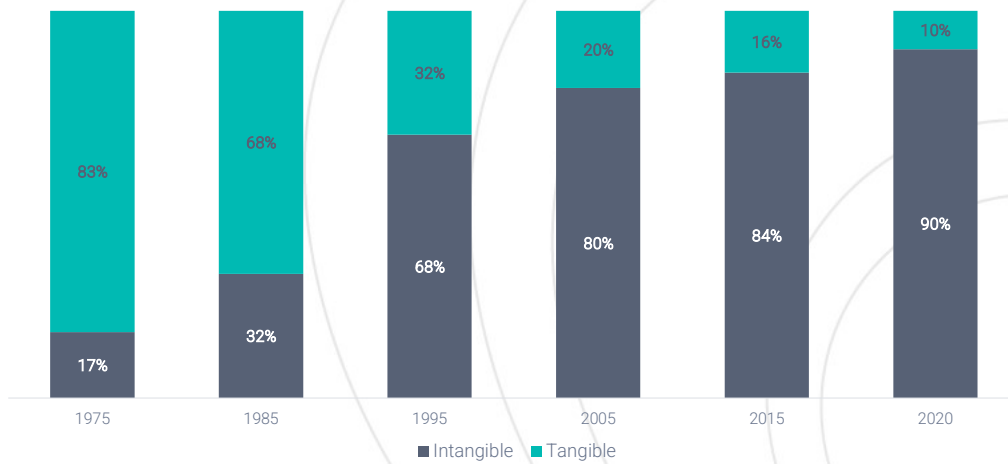
Top US Companies by Market Capitalization

Rank	1975	2000	2010	2020
1	IBM	Microsoft	Exxon Mobil	Apple
2	AT&T	General Electric	Apple	Microsoft
3	Exxon	Cisco Systems	Microsoft	Amazon
4	Eastman Kodak	Walmart	Berkshire Hathaway	Alphabet
5	General Motors	Intel	General Electric	Facebook (Meta)

1975: https://born2invest.com/articles/the-differences-in-market-capitalization-between-1975-and-2019/
2000: https://en.wikipedia.org/wiki/List_of_public_corporations_by_market_capitalization#2000
2010: http://media.ft.com/cms/253867ca-1a60-11e0-b003-00144feab49a.pdf
2020: https://en.wikipedia.org/wiki/List_of_public_corporations_by_market_capitalization#2020

7

Investors view data as an asset

- Organizations that leverage data as an asset, have a CDAO, data science, an enterprise data governance function, have a market to book value that is 2x the market average
- Those that generate data/information products have a market to book value that is 3x the market average

Gartner

8

4

Investors view data as an asset

Market-to-Book Value

Average Companies

2X
Data Savvy Companies

3X
Data Product Companies
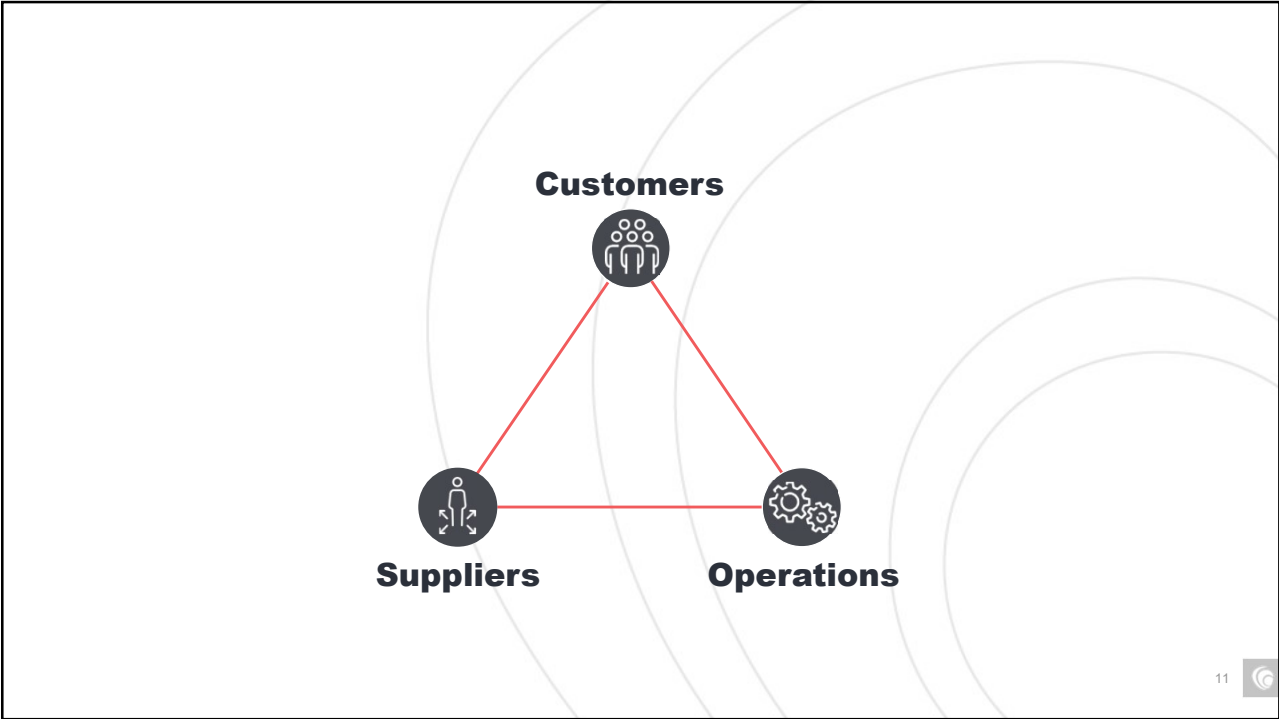
Triangulating on Data Value

Triangulating on data value

Customers

- Improving acquisition and retention
- Introducing or enhancing products services
- Bartering for the exchange of information

Triangulating on data value

Suppliers

- Negotiating more favorable terms, conditions and relationships
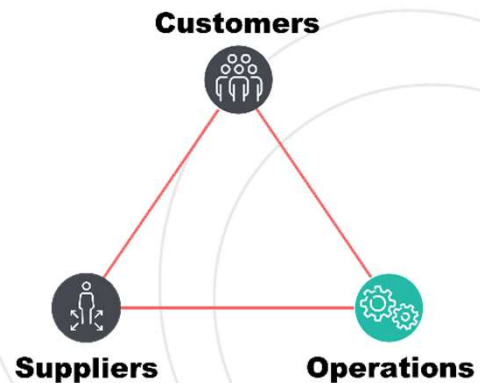- Improved analysis of spend and collective buying power

Triangulating on data value

Operations

- Reduced maintenance costs
- Improved identification of risk and fraud

Byproducts of Treating Data like an Asset

1 Investment in people, technology, and other resources

2 Improved governance and accountability

3 Increased data quality and availability

4 Quicker turnaround for new analysis

15

Polling question #1

How would you describe your organization's ability to monetize data?

a. We are excited but haven't started
b. We have a data foundation but haven't monetized it
c. We have started monetizing but see an opportunity to do more
d. We are monetizing and doing great

16

Approach

Multiple strategies support the organization

Primary	Secondary	Tertiary
		Data Governance
	Data Strategy	Data Monetization
	Technology Strategy	Data Management
	Digital Strategy	
Corporate Strategy	HR Strategy	
	Marketing Strategy	
	Other Strategies	

18
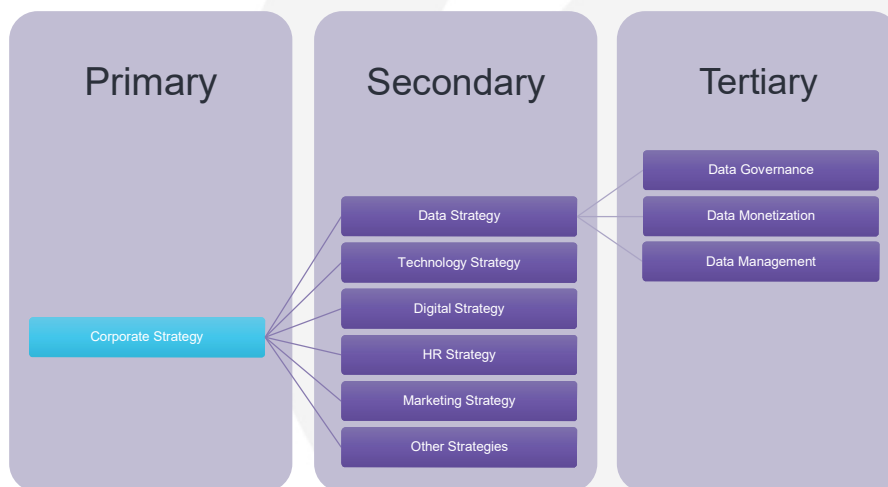
DATA MONETIZATION
Lifecycle

Corporate Strategy

- Data Strategy
- Technology Strategy
- Digital Strategy
- HR Strategy
- Marketing Strategy
- Other Strategies

Ideate and prioritize
1. Identify areas where data assets can be leveraged to drive innovation
2. Evaluate the potential impact, feasibility, market (users/buyers)
3. Categorize and prioritize ideas

Identify and assess
4. Conduct an inventory of internal and external datasets
5. Identify relevant data assets, assess quality, usability, fitness, and risk
6. Define key success metrics, goals, targets, projections

Build
7. Prototype, test, and prove the value in a small market (user group)
8. Acquire, curate, cleanse, and prepare data assets for consumption
9. Define requirements for governance, infrastructure, analytics, distribution, etc.
10. Develop and test the data/analytics/information product

Deploy and support
11. Architect and implement the infrastructure required to deliver (if necessary)
12. Deploy data product to users via portal, catalog, API, analytics platform
13. Evangelize across market (users)
14. Implement monitoring, alerting, support, and maintenance plans

Evaluate and evolve
15. Measure performance against targets
16. Evaluate impact
17. Scale, refine, enhance

19

Criteria for monetizable datasets

- Low cost structure
- High intrinsic value
- High quality index
- High business value

Cost basis vs. economic value

20

Aligning Priorities

It's key to align business overall business priorities to analytical initiatives. Below are typical scoring criteria to develop a four-square priority matrix of requests.

Business Impact
Weighted Number of Anticipated Users
Existing Alternatives
Achievement to Financial Goals
Strategic Significance and Alignment
Frequency of Use

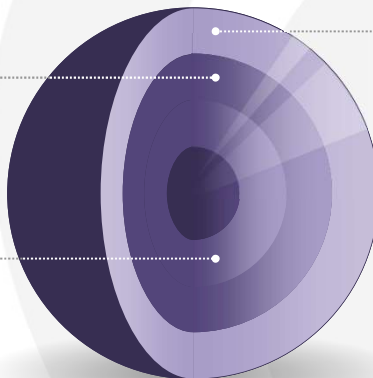| Technical Feasibility |
| --- |
| Data Availability |
| Transformation Complexity |
| Infrastructure Impact |
| Maintenance and Support |
| Data Quality |

Consider your "datasphere"

External

Social, macro trends, census, climate, education, energy, science & research, health, government, financial markets

Partners

Inventory, venue, demographic, promotional, orders, supply chain, demand, data exchange

Internal

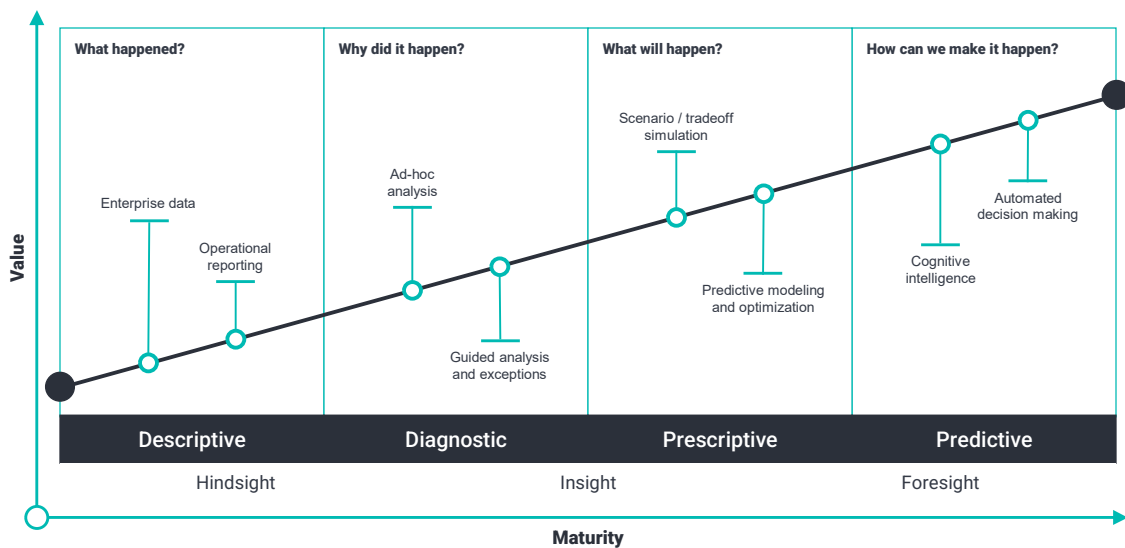Customer, inventory, operations, sales, marketing, finance, HR

The importance of the CDAO

- Capitalizing on big data opportunities
- Creating a competitive advantage through data
- Having a consistent approach to minimize risk in data-driven projects

CURRENT STATE

FUTURE STATE

Digital transformation
Strategy
Risk mitigation
Cybersecurity
Governance

Chief Data and Analytics Officer

Analytics-led organization

23

Analytical Maturity Model

bakertilly
DIGITAL

Value

| What happened? | Why did it happen? | What will happen? | How can we make it happen? |

Scenario / tradeoff simulation

Ad-hoc analysis

Enterprise data

Automated decision making

Operational reporting

Predictive modeling and optimization

Cognitive intelligence

Guided analysis and exceptions

| Descriptive | Diagnostic | Prescriptive | Predictive |

Hindsight   Insight   Foresight

Maturity

Architecture

Consider different forms of data

Structured data	Semi-structured data	Unstructured data
Databases	XML	Audio
	JSON	Video
	CSV, TSV	Documents
	Email	Photos
	Web Pages	

Synthetic Data

Natural Data

26

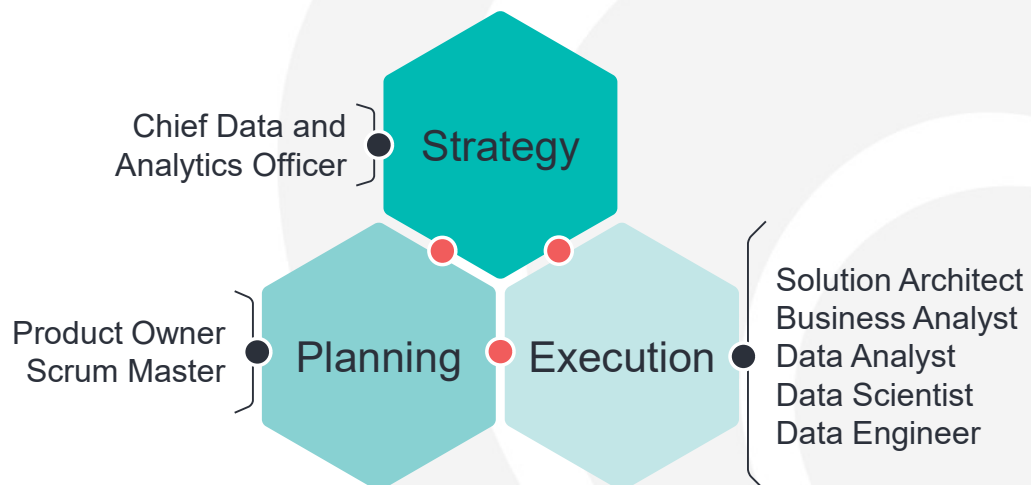13
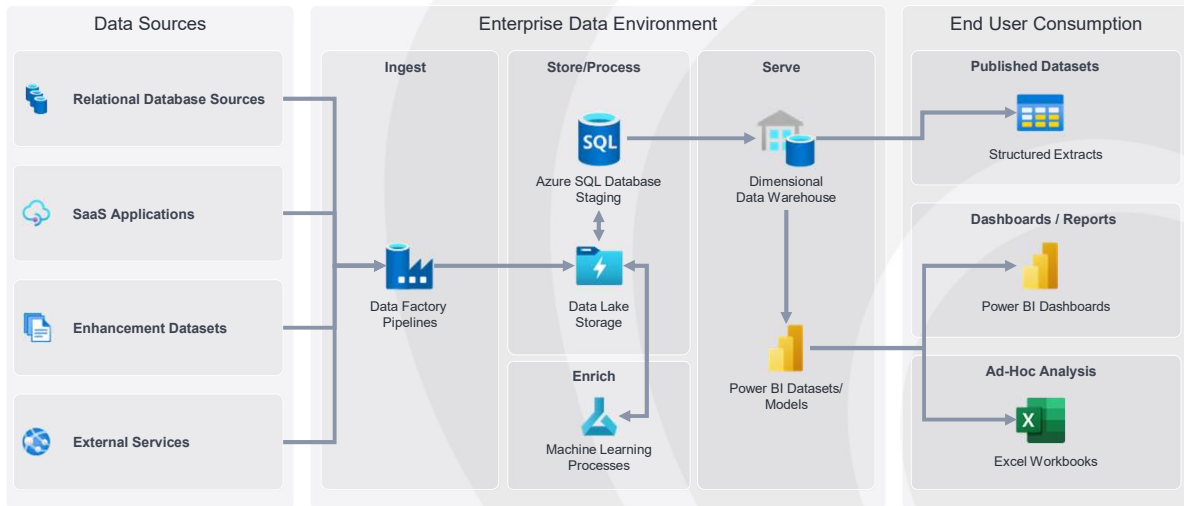
Data Governance and management

Data governance to enable monetization

Key Activities
- Business Stakeholder Interviews
- Analysis and Consolidation
- Establish Guiding Principals
- Set Goals and Objectives
- Define Roles and Responsibilities
- Design Organizational Framework
- Create Standard Operating Procedures
- Develop Change Management Plan
- Develop Communication and Training Plan
- Data Governance Committee Review
- Monitoring of Quality Metrics

29

Consider strategic and tactical team roles

Chief Data and Analytics Officer — Strategy

Product Owner / Scrum Master — Planning

Execution — Solution Architect / Business Analyst / Data Analyst / Data Scientist / Data Engineer

30

15

Measure opportunity against risk

- Data breaches, data sprawl, copy data, data synchronization
- Mitigation strategies through data management programs
- Regulatory compliance (e.g., CCPA, GDPR, CDPA)
- Technical debt

Questions?