Moderated by **Mike Meriton**
Co-Founder & COO, EDM Council

- Joined EDM Council full-time 2015 to lead Industry Engagement

- EDM Council Co-Founder & First Chairman (2005-2007)

- EDM Council Finance Board Chair (2007-2015)

- Former CEO GoldenSource (2002-2015)

- Former Executive for D&B Software and Oracle

- FinTech Innovation Lab – Executive Mentor (2011 – Present)

Today's Discussion Points

- Evolution of Data Governance

- A Modern Operating Model

- Agile Data Governance and the Data Catalog

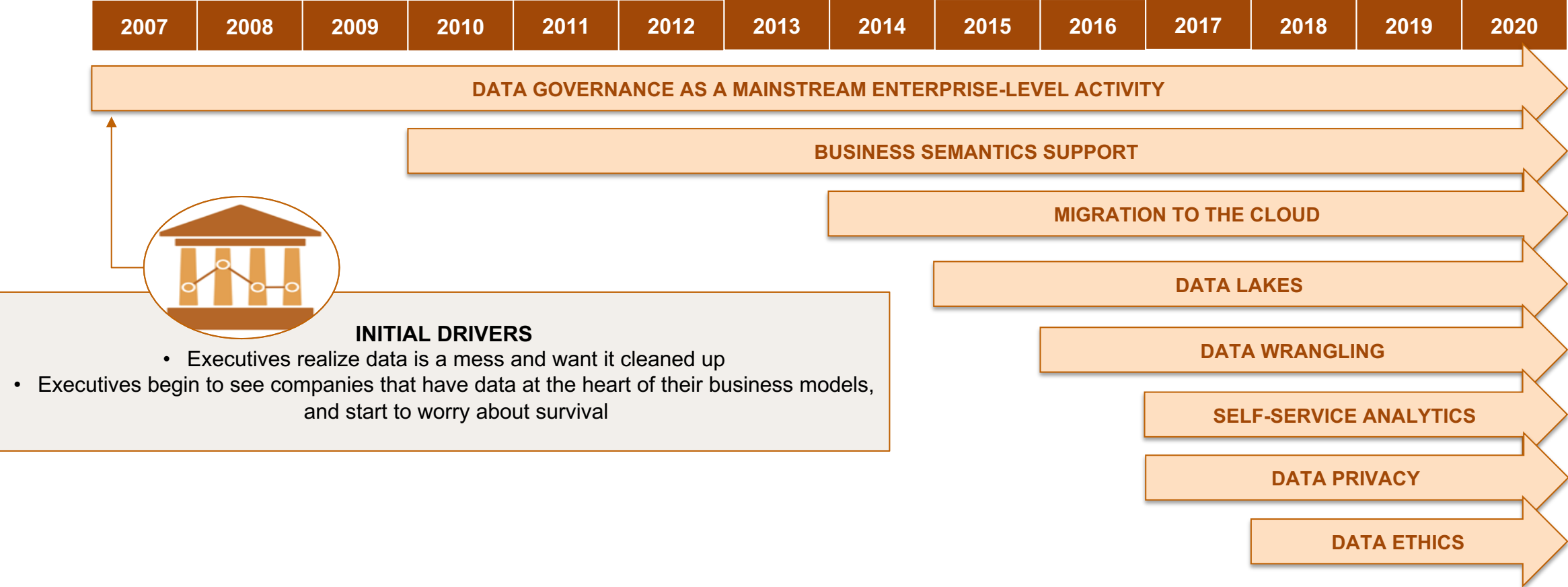- Wrap-up

Evolution of Data Governance

Why Data Governance is Needed

- People are everywhere in the enterprise → *Human Resources creates policies so they are managed consistently*.

- The enterprise has an operating budget that affects everyone → *Finance sets the rules on how it should be managed*.

- Office equipment is used by everyone → *Corporate Facilities plans for how this is done*.
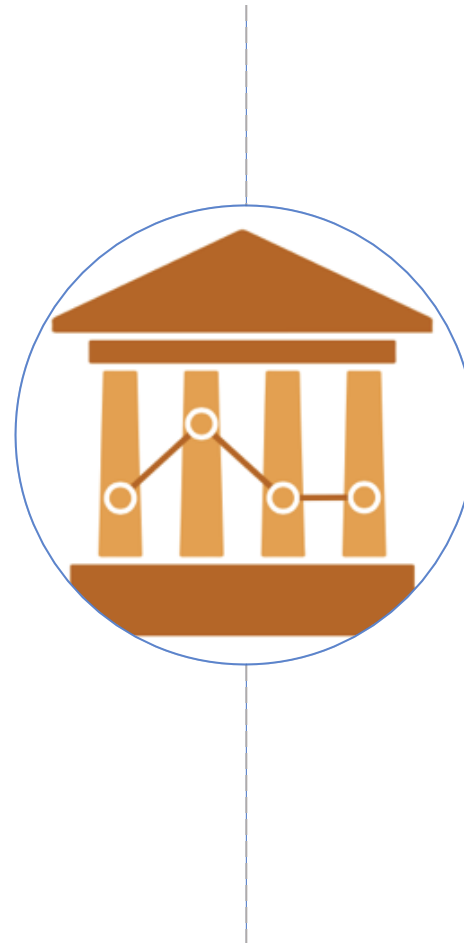
Data is also everywhere in the enterprise and is managed by everyone (or not managed at all), but at the enterprise level there were no rules on how we manage it, and no support for data management...until data governance.
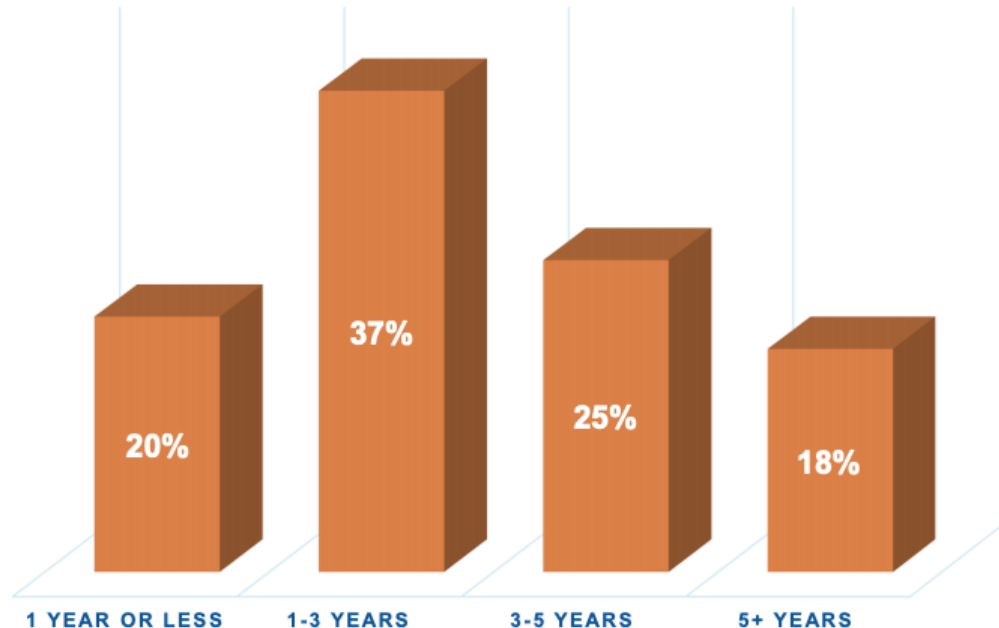
Evolution of Data Governance

2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020

DATA GOVERNANCE AS A MAINSTREAM ENTERPRISE-LEVEL ACTIVITY

BUSINESS SEMANTICS SUPPORT

MIGRATION TO THE CLOUD

DATA LAKES

DATA WRANGLING

SELF-SERVICE ANALYTICS

DATA PRIVACY

DATA ETHICS

INITIAL DRIVERS
- Executives realize data is a mess and want it cleaned up
- Executives begin to see companies that have data at the heart of their business models, and start to worry about survival

Data Programs Continue to Mature/Evolve

First San Francisco
Partners'
Vision of Modern
Governance
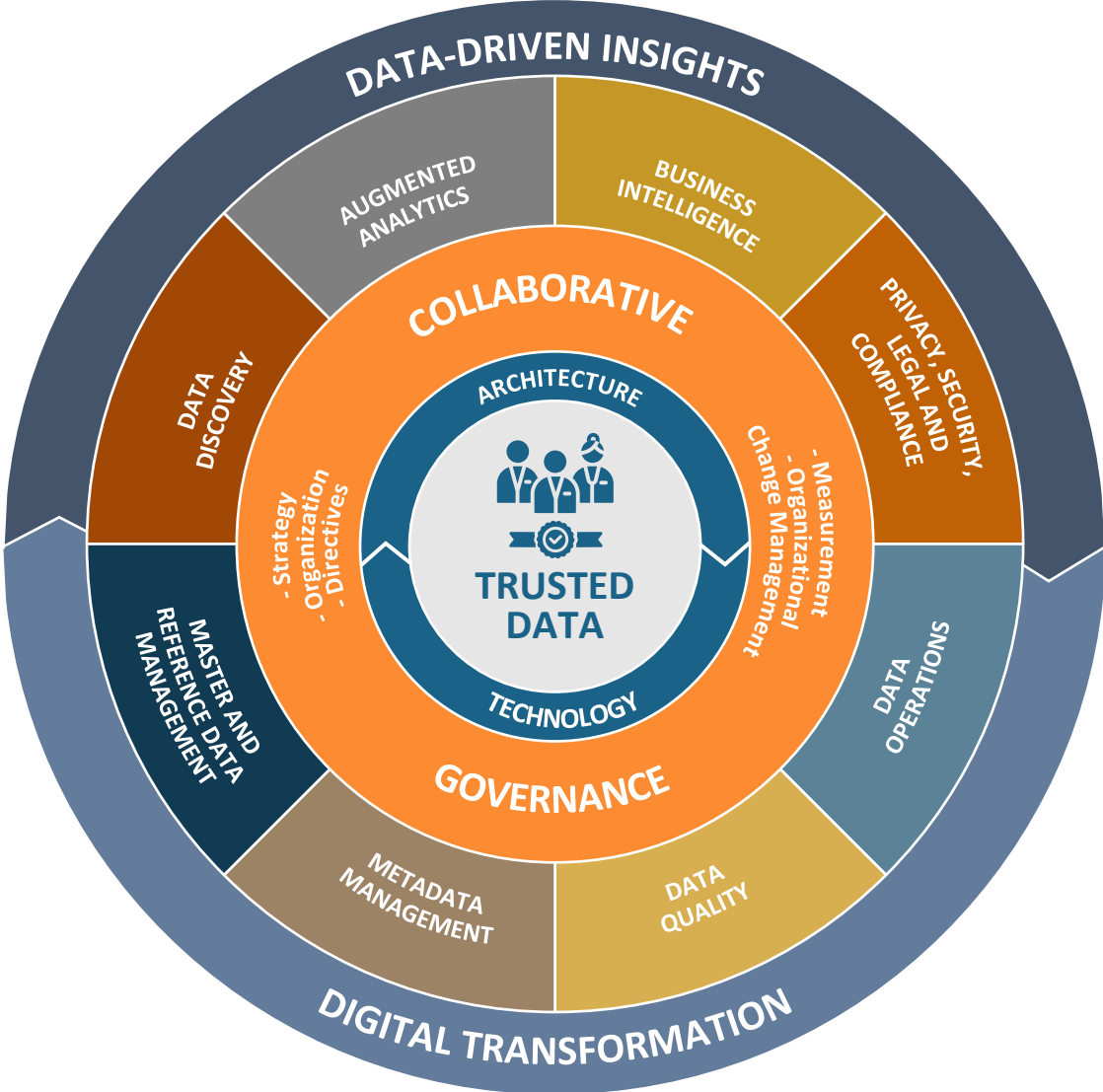
A Modern Operating Model

Why an Operating Model is Important

Ensures ongoing alignment to business value

Includes all stakeholders

Cross-functional, Cross-divisional

Embeds best practices for the enterprise

Enterprise DG Operating Model

Enables decision-making (tactical/management/strategic)

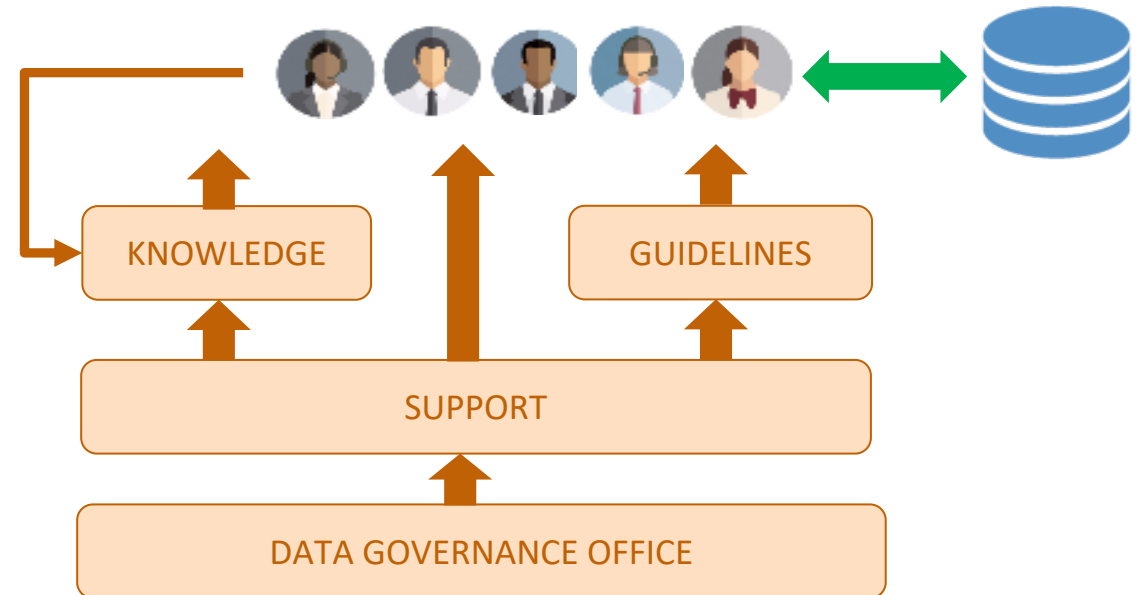Identifies support and staffing needs

Centralized vs. Agile Data Governance
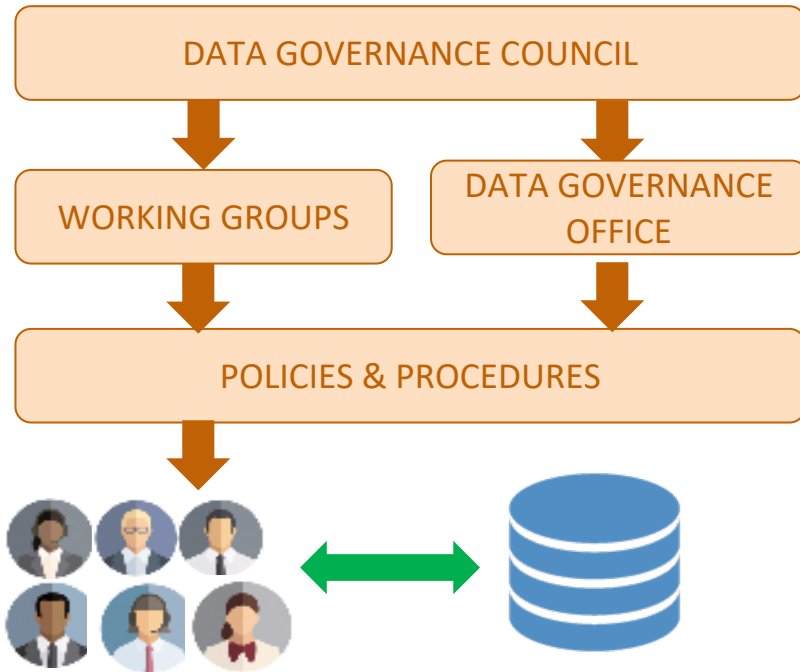
The traditional vision of Data Governance has been defensive — top-down, focused on enterprise risk mitigation, with little concern for the true needs of staff who work with data.

The modern, agile Data Governance approach focuses on providing support to staff who work with data. Staff are empowered, but are expected to contribute to the corpus of knowledge about the data and follow guidelines, rather than rigid, prescriptive procedures.

Best Practices for Agile Data Governance

- Agile Data Governance does not mean there is no need for rules about data emphasized in the Centralized approach

- However, in Agile Data Governance there are principles, including:

  - Push the policies and processes as close to the end user as possible and as close to the point-of-use as possible ("just in time")

  - Enable collaboration between end users

- Executives still have to provide resources and communicate overall strategy

- The Data Governance Office has an expanded role as a true service organization

KNOWLEDGE

GUIDELINES

POLICIES, PROCESSES

SUPPORT

DATA GOVERNANCE OFFICE

RESOURCES, STRATEGY, OVERSIGHT

REPORTING, REQUESTS

DATA GOVERNANCE "COUNCIL" (EXECUTIVE SUPPORT)
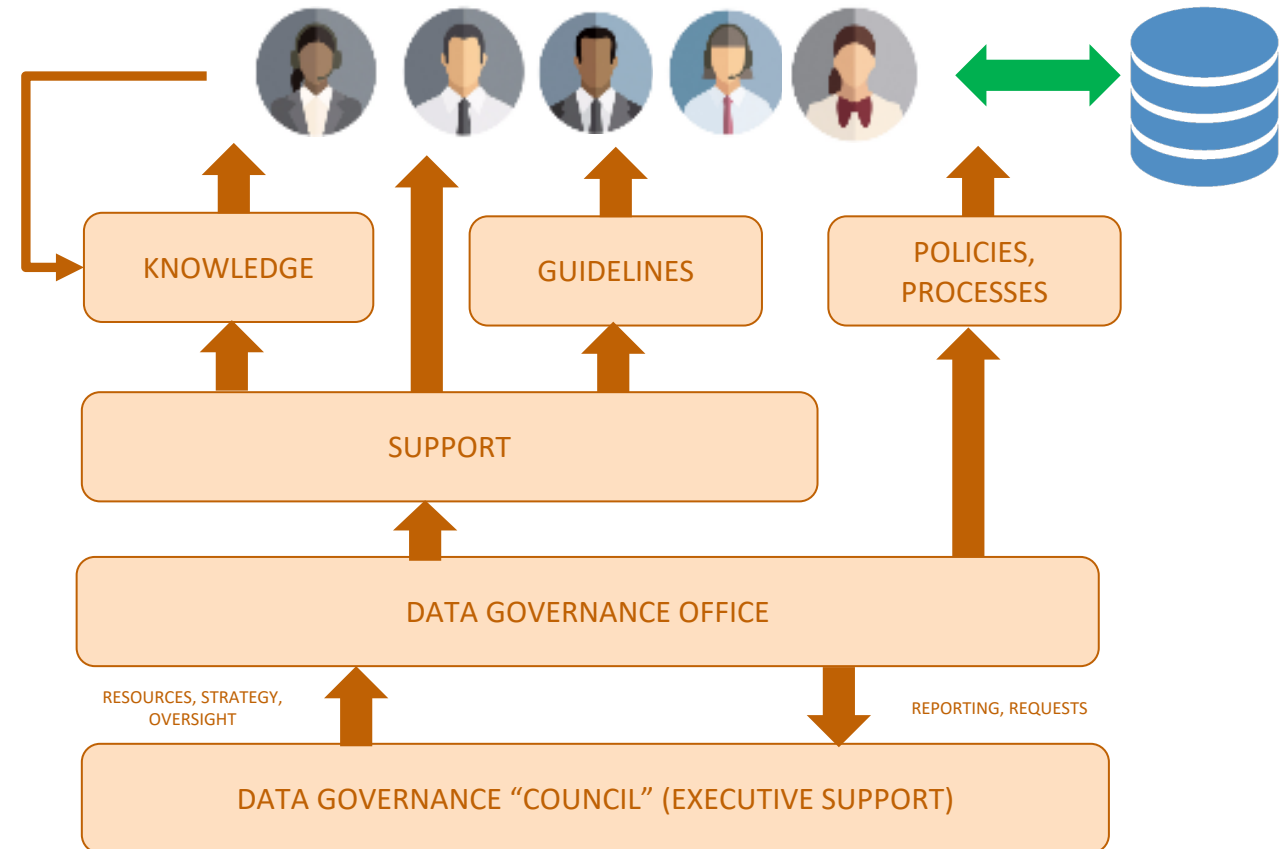
Agile Data Governance in Action

- In the classic centralized model, policies were developed and promulgated to the enterprise.

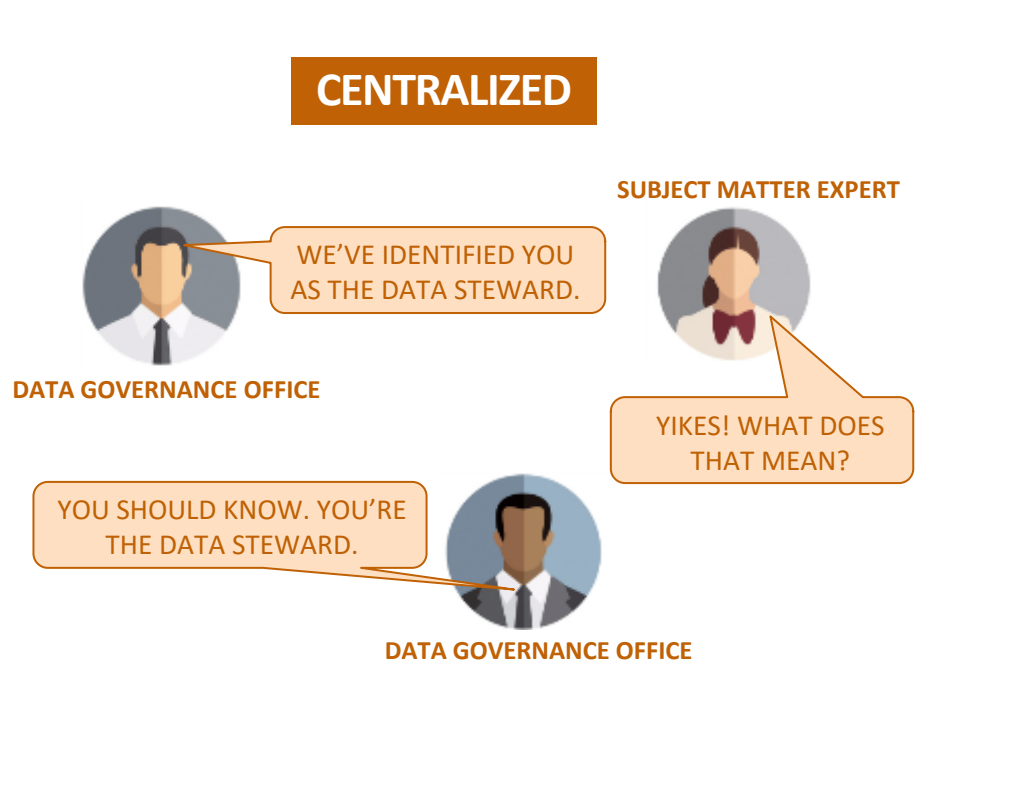- Agile Data Governance also develops policies, but it finds ways to support data end users to make their lives easier, not more difficult.

- This modern approach requires tools.
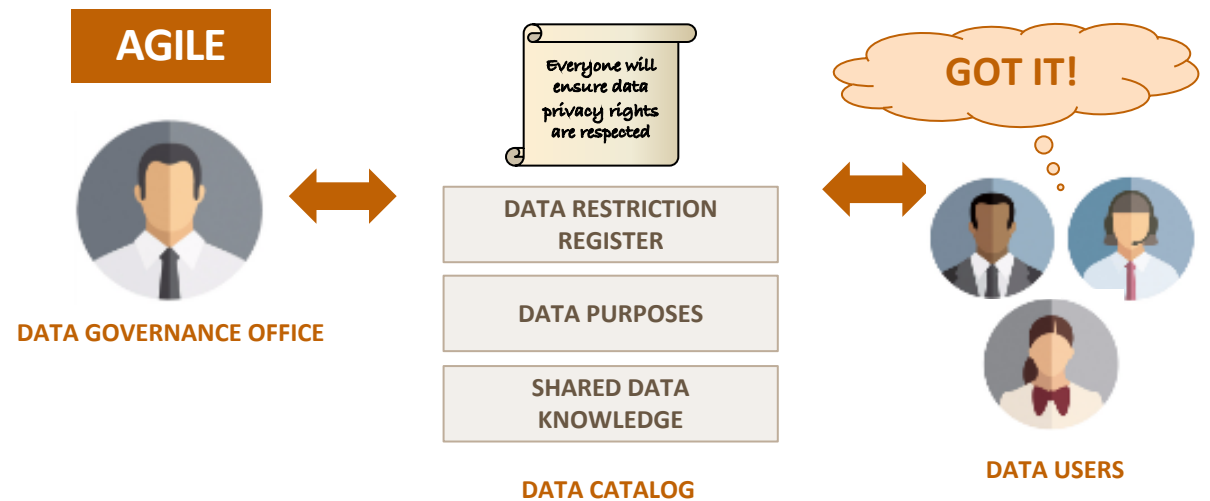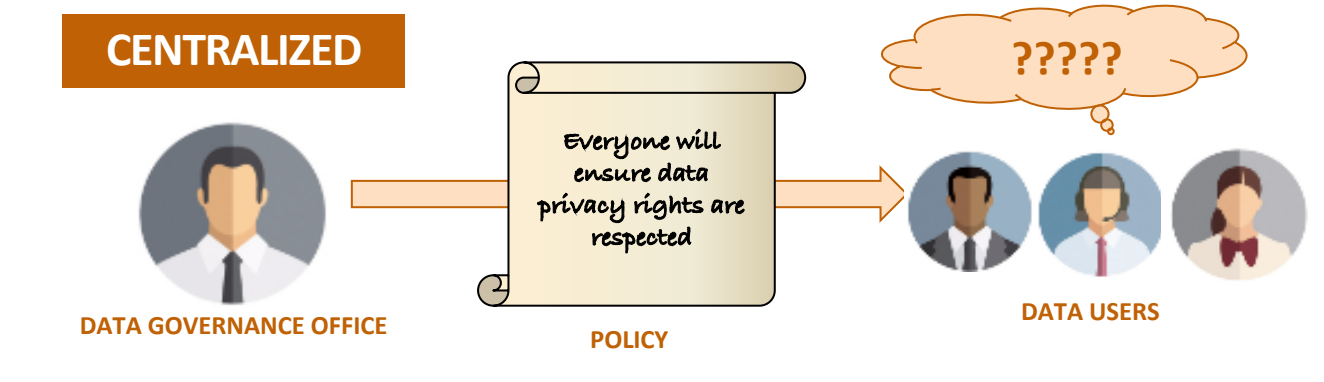
Example – Subject Matter Expert's (SME) Prerogatives

- Agile Data Governance is not about labeling people (assigning roles) without clear expectations of what this means and no resources for them to handle the increased workload.

- Rather, support requirements are figured out. We begin this by thinking about the rights for the individuals put in these roles – and then how they can be supported.

CENTRALIZED

SUBJECT MATTER EXPERT

WE'VE IDENTIFIED YOU AS THE DATA STEWARD.

DATA GOVERNANCE OFFICE

YIKES! WHAT DOES THAT MEAN?

YOU SHOULD KNOW. YOU'RE THE DATA STEWARD.

DATA GOVERNANCE OFFICE

AGILE

DATA SUBJECT MATTER EXPERT PREROGATIVES

1 SME MUST RECEIVE AS MUCH ADVANCE NOTICE AS POSSIBLE OF THEIR PARTICIPATION IN A TASK.

2 SME IS ENTITLED TO A SPECIFIC, WRITTEN DESCRIPTION OF THE TASK ASSIGNED TO THEM.

3 ALL REQUESTS FOR A SME'S SERVICES MUST BE APPROVED BY SME'S MANAGER.

4 SME MUST RECEIVE FORMAL RECOGNTION FOR THE WORK THEY DO AS A SME.

5 ALL KNOWLEDGE OBTAINED FROM A SME MUST BE DOCUMENTED AND MADE ACCESSIBLE FOR GENERAL USE.

6 DO NOT ASK SME FOR THE SAME INFORMATION MORE THAN ONCE.

Example – Information Knowledge Management Manifesto

- The idea of Rights rather than Obligations can be extended much further than just individual roles to across the enterprise as a whole.

- Agile Data Governance thinks about what these Rights are and how the capabilities can be put in place to support them.

- Supporting these Rights involves people and processes – and, of course, technology.

A USER OF DATA SHOULD BE ABLE TO:

KNOW WHAT DATA THE ENTERPRISE MANAGES	**KNOW WHAT THE DATA MEANS** (e.g., calculations and derivations)	**KNOW WHERE THE DATA IS STORED** (at minimum, the authoritative source)	**KNOW HOW TO GET THE DATA**
KNOW PERMITTED USES OF DATA (e.g., privacy / compliance)	**KNOW WHAT DECISIONS HAVE BEEN MADE ABOUT DATA** (e.g., governance and stewardship)	**KNOW WHAT QUALITY ISSSUES EXIST WITH THE DATA**	**KNOW WHO ELSE IS INTERESTED IN THE DATA**
	KNOW ALL FACTS OF BUSINESS SIGNIFICANCE ABOUT THE DATA	**KNOW WHO TO CONTACT IF THERE ARE ISSUES WITH THE DATA**	

Agile Data Governance and the Data Catalog

Data Catalogs Facilitate Data Governance

ENABLE THE VISION OF DATA GOVERNANCE AT THE ENTERPRISE LEVEL

- Not just for some parts of the enterprise (like Analytics) and not others; not just for some roles (like data scientists) and not others.
- Enterprises want holistic Data Governance solutions, and will choose technologies that position themselves to align to this vision.

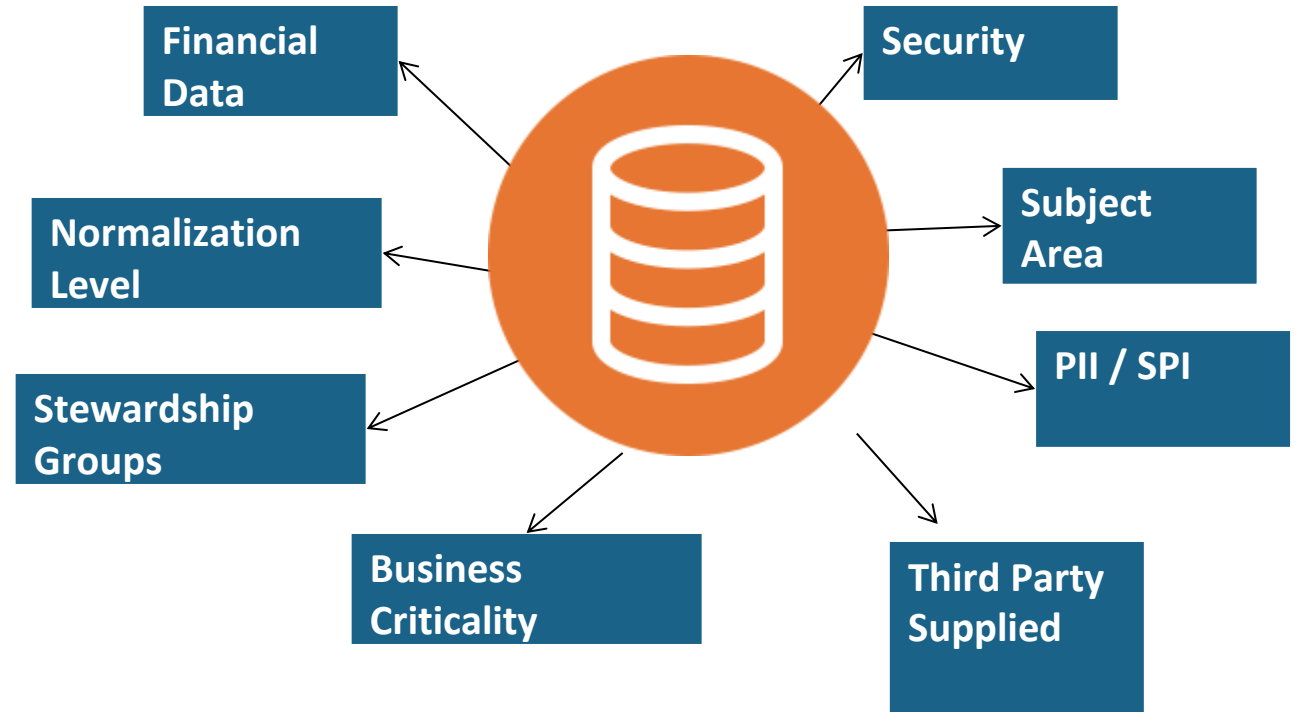## PROVIDE THE CAPABILITIES DATA GOVERNANCE NEEDS TO CARRY OUT ITS MISSION

- This means addressing the different practice areas of Data Governance.
- Enterprises have frameworks that identify the practice areas and will use these to score different technologies.

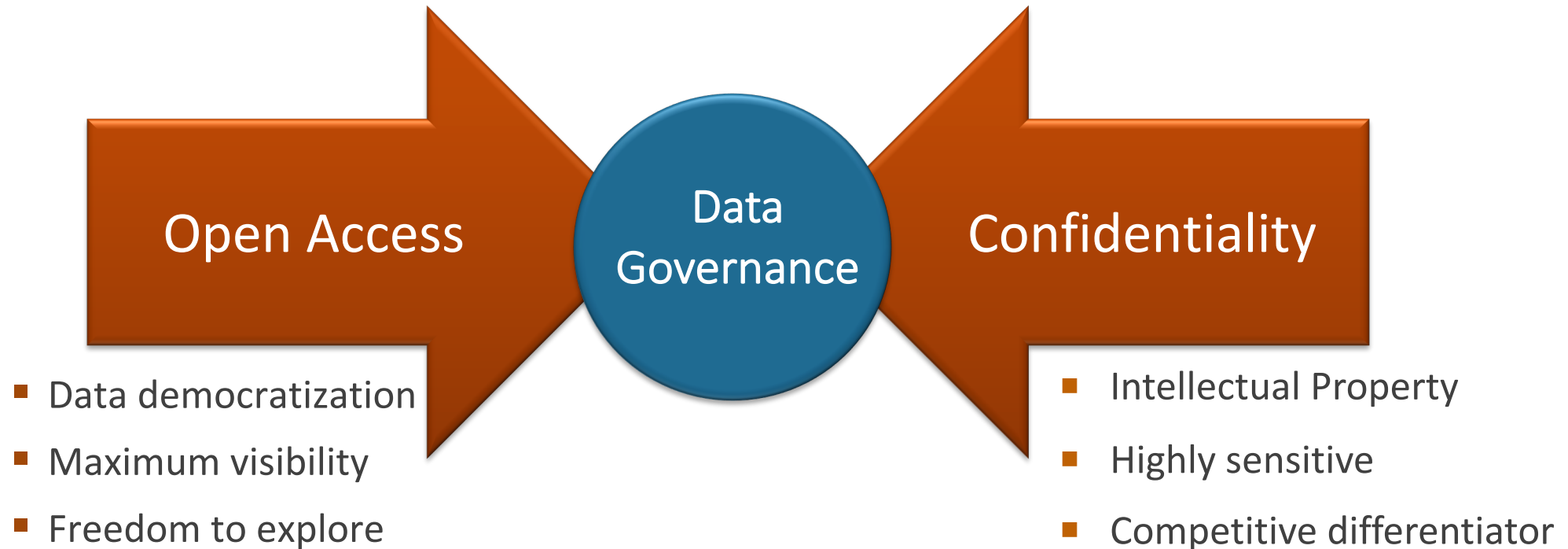## UNDERSTAND AND SOLVE MAJOR DATA GOVERNANCE USE CASES

- There are certain use cases that are repeated across enterprises and which have not been adequately addressed in the past. Enterprises are aware of them, and will want to know how each technology solution addresses them.
- At the same time, Data Governance is changing and this needs to be dealt with.

Catalogs Help to Categorize Data in Many Ways

- There will be many ways that you have to categorize Production Data Assets.

- You must have the right tools to do this – taxonomies and classification criteria

Financial Data

Security

Normalization Level

Subject Area

Stewardship Groups

PII / SPI

Business Criticality

Third Party Supplied

An "Open" Data Catalog Needs Governance

Open Access

Data Governance

Confidentiality

- Data democratization
- Maximum visibility
- Freedom to explore

- Intellectual Property
- Highly sensitive
- Competitive differentiator

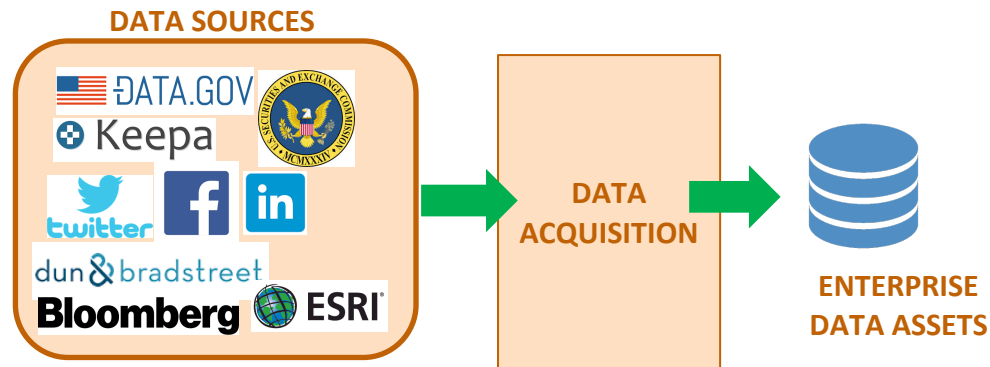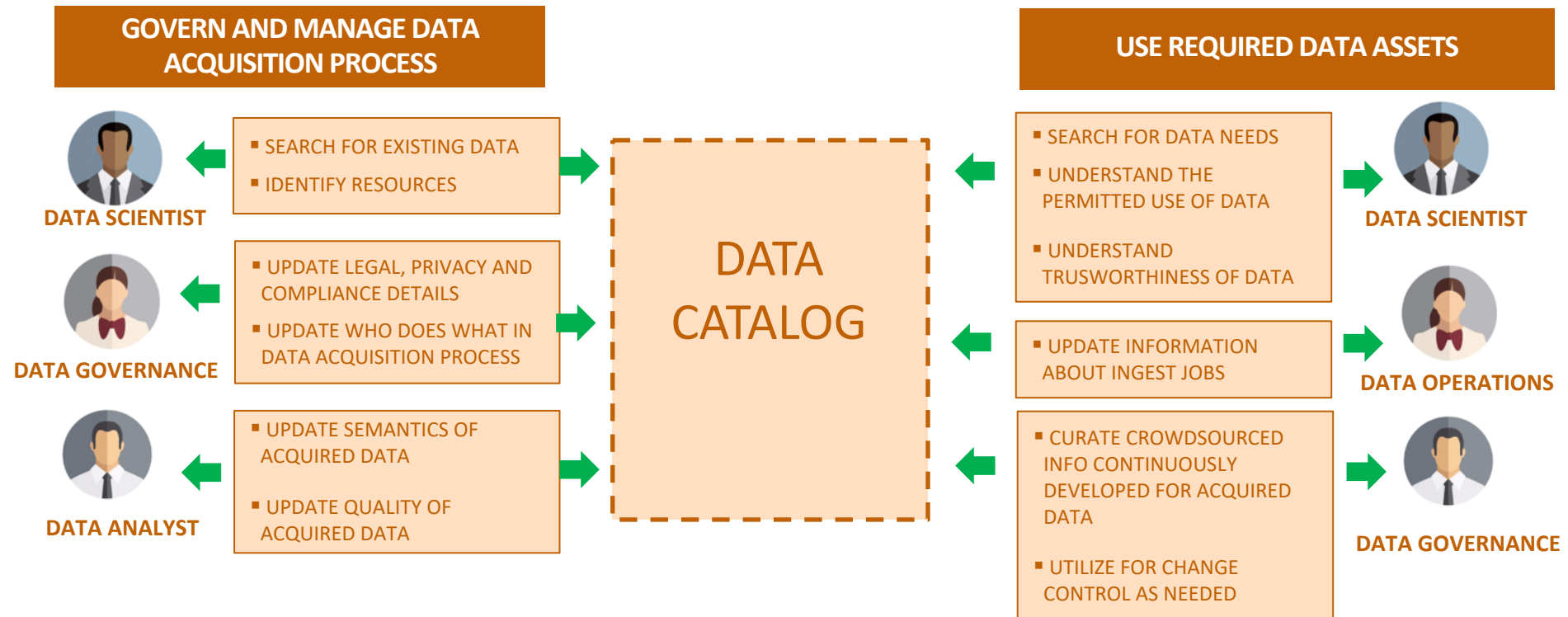# Governing Data Acquisition – Overall Process
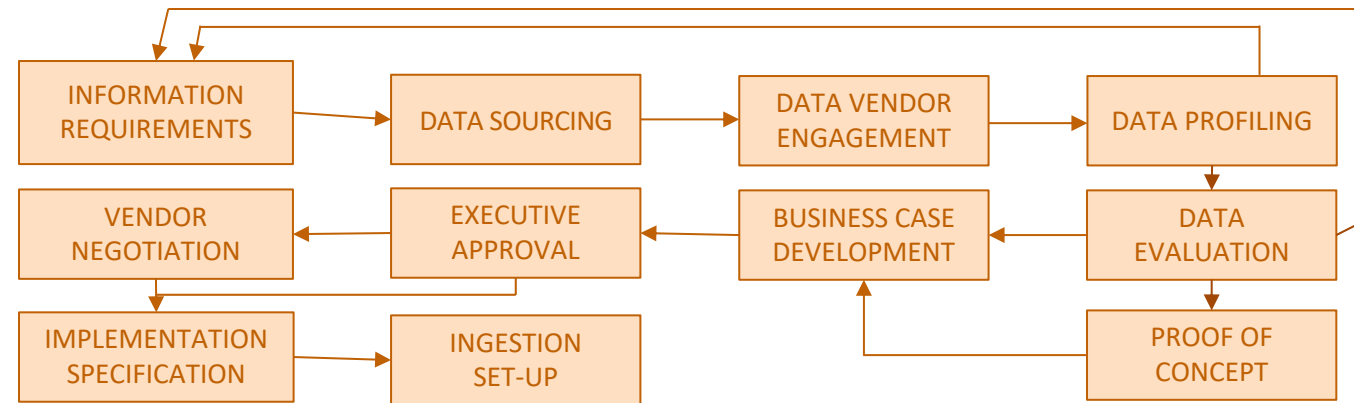
Data Acquisition: the set of activities needed to discover, qualify and obtain external data for the enterprise, and to arrange for the data to be brought into the enterprise.

Governing Data Acquisition – How It's Supported

While Data Acquisition is thought of only in the context of the Data Lake, there is a much broader need for it. Governance is needed around it, in a **flexible way** (due to different variations) that helps users.

GOVERN AND MANAGE DATA ACQUISITION PROCESS

DATA SCIENTIST
- SEARCH FOR EXISTING DATA
- IDENTIFY RESOURCES

DATA GOVERNANCE
- UPDATE LEGAL, PRIVACY AND COMPLIANCE DETAILS
- UPDATE WHO DOES WHAT IN DATA ACQUISITION PROCESS

DATA ANALYST
- UPDATE SEMANTICS OF ACQUIRED DATA
- UPDATE QUALITY OF ACQUIRED DATA

DATA CATALOG

USE REQUIRED DATA ASSETS

- SEARCH FOR DATA NEEDS
- UNDERSTAND THE PERMITTED USE OF DATA
- UNDERSTAND TRUSWORTHINESS OF DATA

DATA SCIENTIST

- UPDATE INFORMATION ABOUT INGEST JOBS

DATA OPERATIONS

- CURATE CROWDSOURCED INFO CONTINUOUSLY DEVELOPED FOR ACQUIRED DATA
- UTILIZE FOR CHANGE CONTROL AS NEEDED

DATA GOVERNANCE

Wrap up

New Agile Data Governance-Inspired Roles

Chief Analytics Officer (CAO)

Data Acquisition Lead

Data Operations / Data Factory

Key Takeaways

- Agile data governance emphasizes support for end users of data as close to the point of data usage and consumption as possible.

- Capabilities are being built to provide this support.

- Technology is really required in this new phase due to the enterprise-wide reach –
  and the increasing complexity of data concerns.

- The best parts of previous phases are being kept and improved.

- Agile data governance is broadly recognized as a need, and enterprises will be moving to it in the next few years.

FSFP: Transforming Data Into Actionable Intelligence

Data is our core competency. We give clients the structure they need to use data as a competitive advantage.

PROVEN EXPERIENCE
- ✓ Referenceable customers for similar engagements in the same industry, with solutions sized specifically to client need

LOWEST RISK, HIGHEST PROBABILITY OF SUCCESS
- ✓ Excel in aligning Business and IT
- ✓ Dedicated to cost-effective delivery and fast time-to-results

UNIQUE EIM FRAMEWORK
- ✓ Methodologies focus on solving business problems leveraging information, proactively considering organizational change and impact to ensure long-term sustainability

ACTIONABLE, PRACTICAL, FOCUSED
- ✓ Results will be easy to grasp, be obvious as to value and actionable within the culture and business environment

Questions?

FOR MORE INFORMATION:

Kelle O'Neal
Founder and CEO
First San Francisco Partners
kelle@firstsanfranciscopartners.com

Different Phases of Data Governance

DG 1.0

Data Governance Council

- Different executives with interests met on a council

- They directed the formation of working groups to address the data needs

- Very limited success, as no dedicated resources, no staff who specialized in Data Governance

DG 2.0

Data Governance Office

- An organizational unit dedicated to governing data, staffed by specialists in Data Governance

- Developed policies, processes to manage the "rules of the road" for data in the enterprise

- Success from a top-down perspective in terms of forcing better behavior (reducing risk) in data management, but not providing needed support and data enablement

DG 3.0

Agile Governance - Data Democratization

- Just beginning: individuals across the enterprise are able to use the data for analytic purposes that drive forward their part of the business (e.g., process improvement) and contribute to the mission of the enterprise, overall (e.g., more customers, new services)

- Individuals begin to naturally understand not only what they do in their jobs, but what data they work with

- But...with empowerment, comes responsibility