

The background features several circular gauges and arrows. One large gauge on the left has a scale from 140 to 260. Other smaller gauges and arrows are scattered across the dark grey background, some with dashed lines and some with solid lines, suggesting a technical or data-related theme.

# AGILE DATA GOVERNANCE

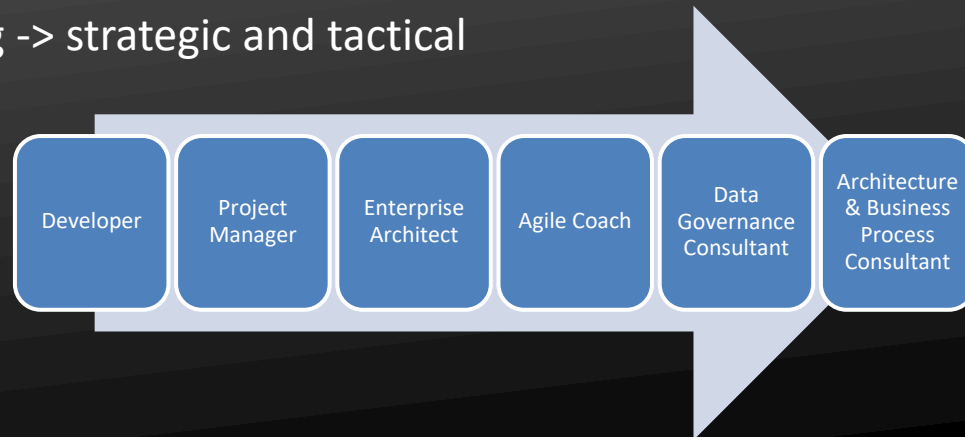
TAMI FLOWERS

METAGOVERNANCE

DGIQ – JUNE 3, 2019

# WHO AM I?

- Tami Flowers
- Director, Governance Solutions at MetaGovernance
- PMI-PMP, PMI-ACP, and Certified Scrum Master
- Agile Coach
- Business Process Modeling -> strategic and tactical



# TODAY

- The importance of a Data Governance Framework
- Agile, commonalities with all flavors, and how they apply to data governance
- How to break down and execute Data Governance via projects
- How to integrate Data Governance with projects
- How to write governance stories, including real world examples
  
- Will be a mix of learning, experiences and debrief/reflection

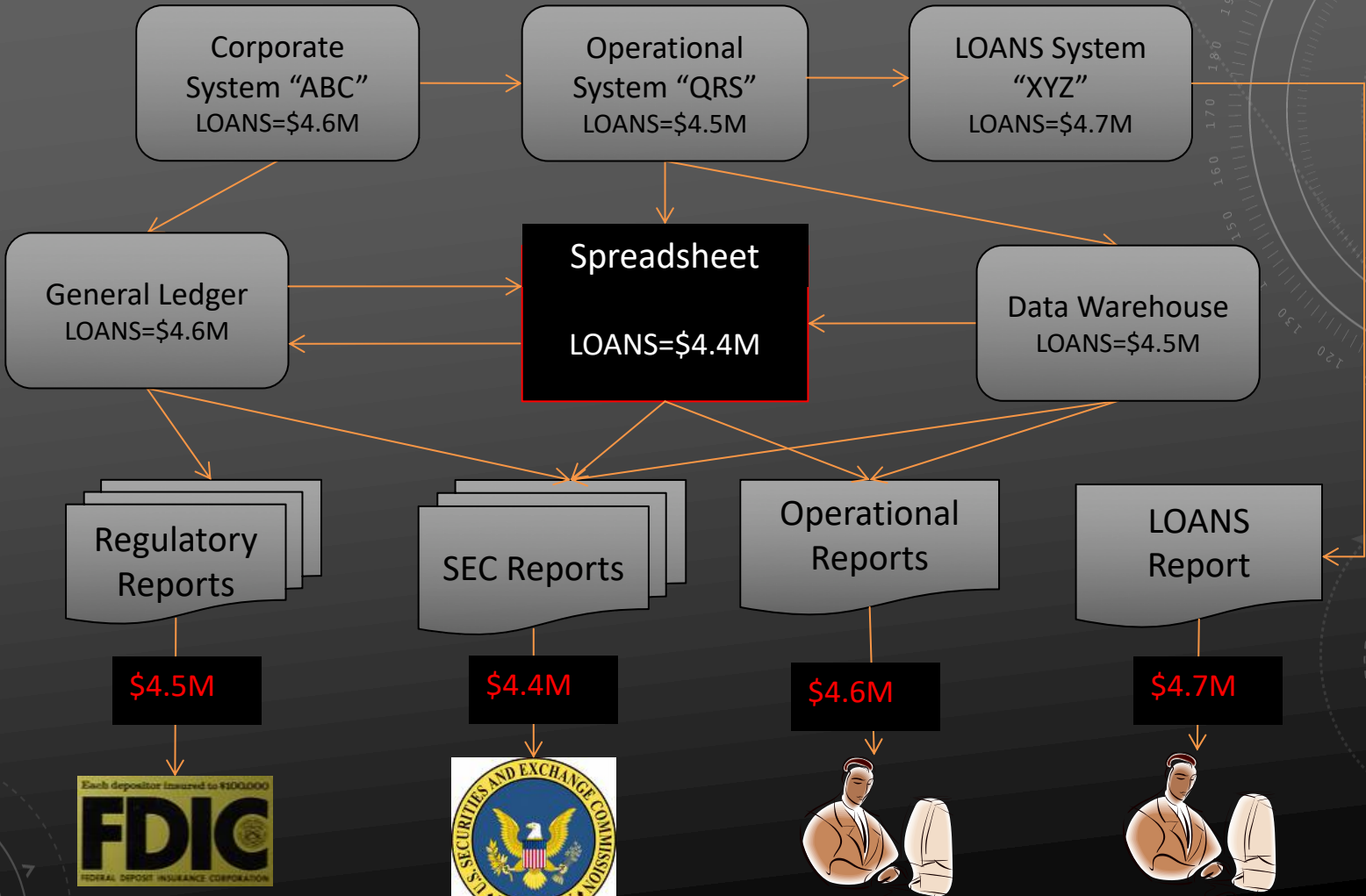


# EXPERIENCE

- What questions are you hoping to get answered today?
- What are you hoping to learn today?



# THE PROBLEM - MANY VERSIONS. WHICH IS CORRECT?



# GRASSROOTS DATA GOVERNANCE

- Governance often starts with a few passionate people who see the need
  - Limited authority to implement on a large scale
  - Low buy in
  - May be from the business, so not technical
  - Must start small then grow outward



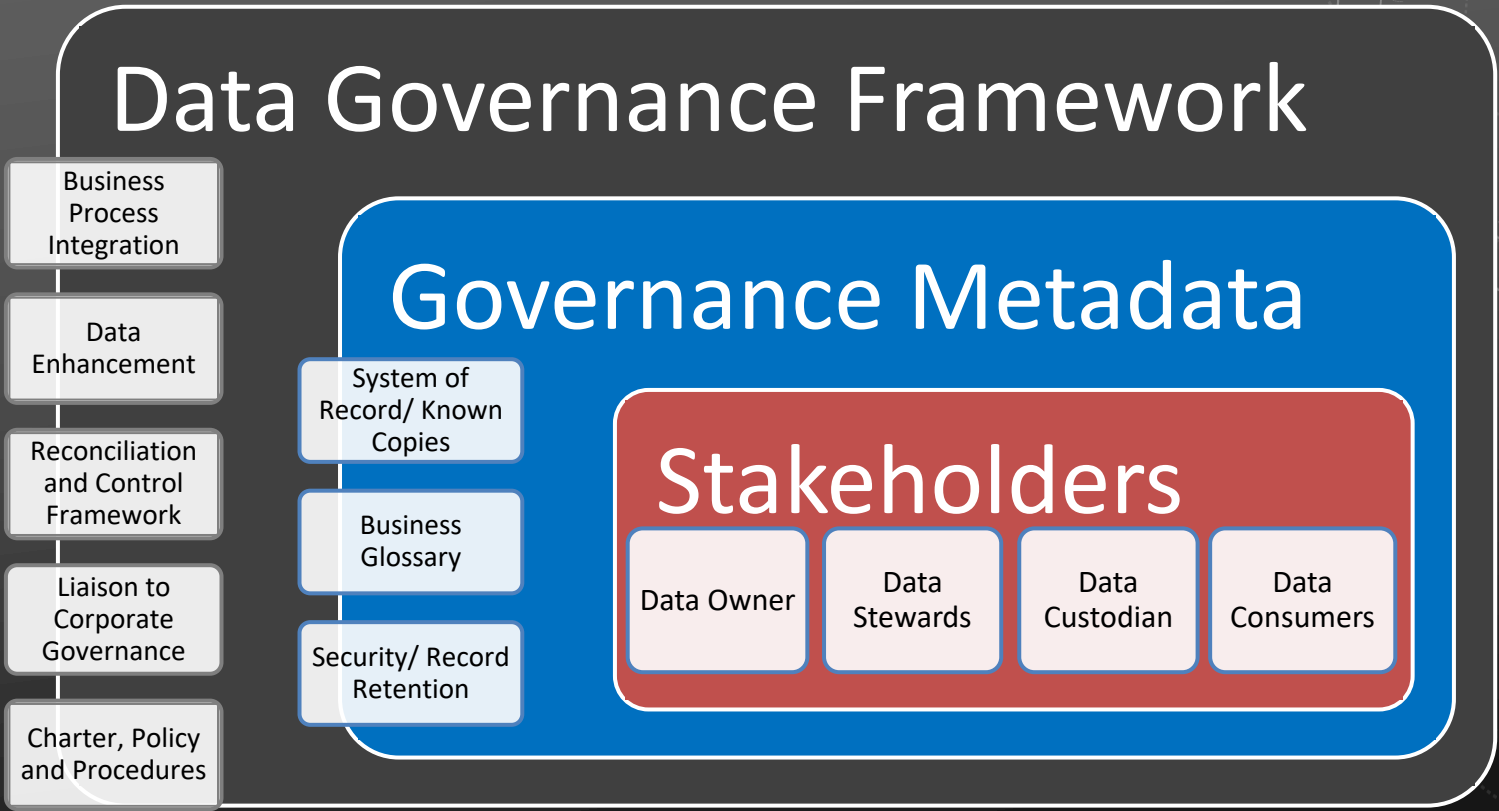
# GETTING STARTED WITH DATA GOVERNANCE

- Is there a data strategy in place?
- Has a data governance roadmap been defined?
- Has a Data Governance Framework been established?
- Has a pilot project been identified?

## Data Governance Framework

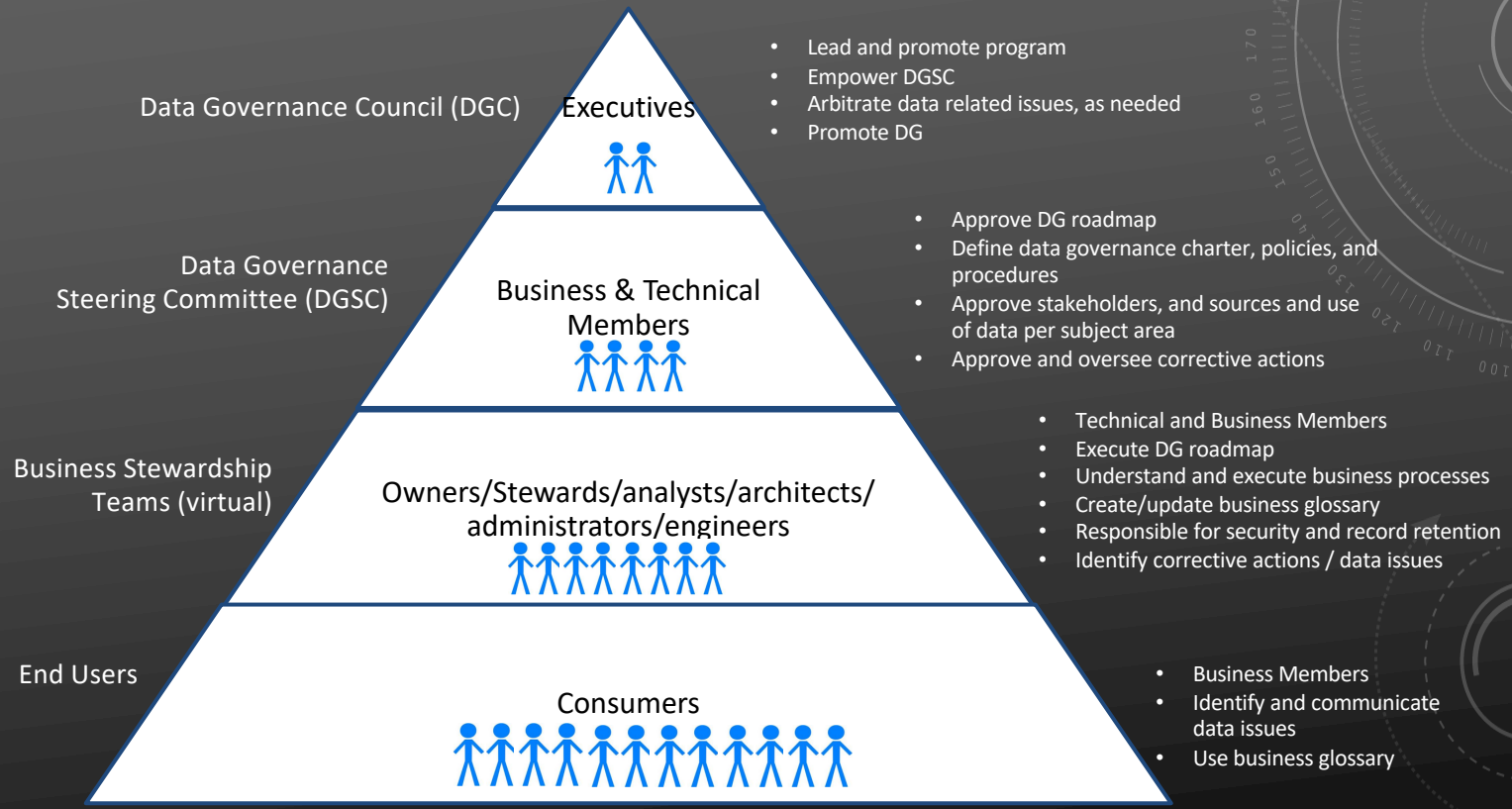


# IDEALIZED END STATE





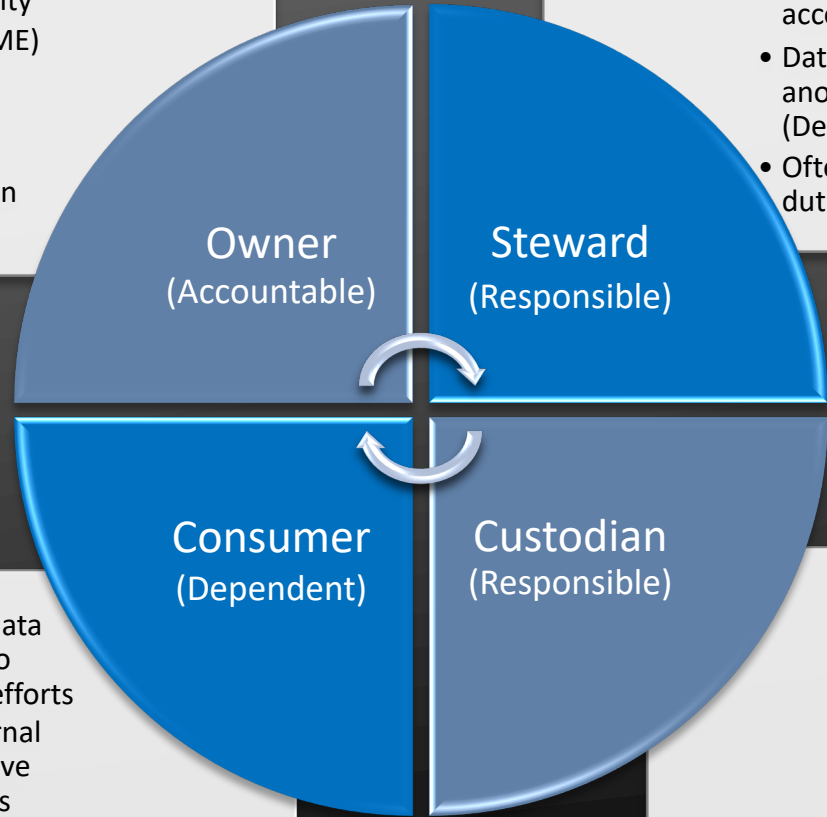
# DATA GOVERNANCE FRAMEWORK



# BUSINESS STEWARDSHIP MODEL

- Accountable for Data Quality
- Subject Matter Experts (SME)
- Follows process workflow
- Data Owners are normally tasked with data entry / collection unless there is an overriding reason

- Responsible but not solely accountable
- Data maintenance on behalf of another Business Unit (Delegates)
- Often driven by separation of duties issues



- Vested stakeholders of data
- “Missing puzzle piece” to most Data Governance efforts
- Business Units and external entities that use or receive data are Data Consumers
- Registered consumers of data

- Responsible for safeguard of physical data assets
- Custodians are IT or external vendor
- Custodian may be a business unit in the case of End-User Computing



# EXPERIENCE & DEBRIEF

- 1) You have been tasked to start data governance for your organization. A pilot project has been identified that will bring customer data into the data warehouse. What tasks can you add to the pilot project work to help get the data governance framework started?
- 2) You have been tasked to start data governance for your organization because of data quality issues impacting quarterly reporting to an outside agency. While working through how to best address these issues, what steps can you take to get the data governance framework started?
- 3) You have been tasked to start data governance for your organization because there are multiple sources for (patient) data, none match, and nobody claims to own any of the sources. While working through how to best address these issues, what steps can you take to get the data governance framework started?
- 4) Your boss just got back a fabulous conference and wants you to start data governance for your organization. What steps can you take to get the data governance framework started?



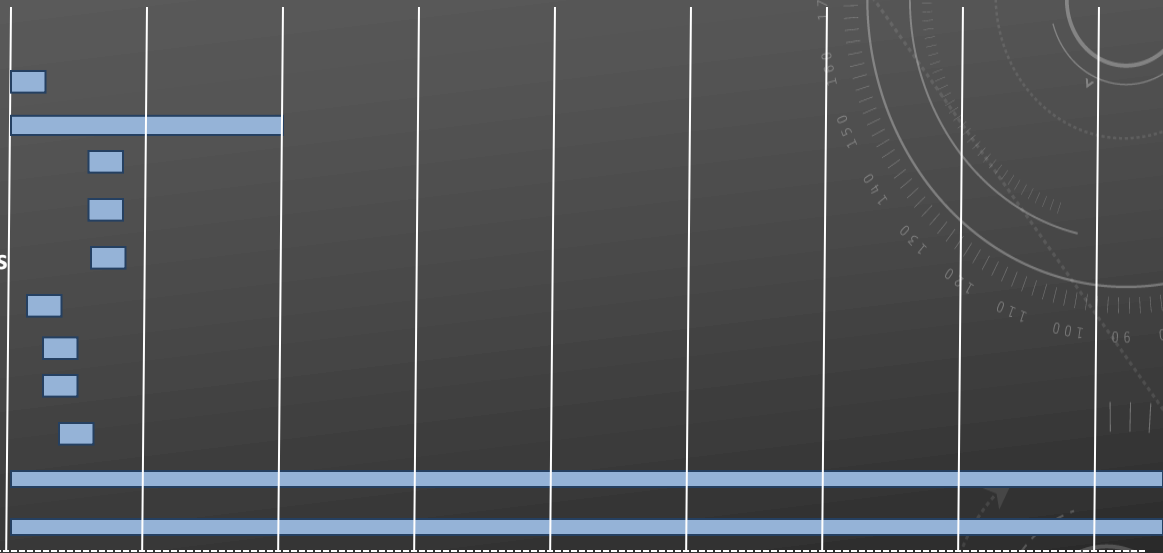
# DATA GOVERNANCE FRAMEWORK TIMELINE

Q1 Q2 Q3 Q4 Q5 Q6 Q7 Q8

## Data Governance (DG) Framework

### Establish Data Governance Council (DGC)

- Identify and appoint members
- Train and educate DGC
- Agree on common data governance vocabulary
- Agree on common DG stakeholder roles
- Agree on roles and responsibilities for stakeholders
- Agree on scope, authority and structure of DGC
- Agree on initial DGSC members
- Define DGC charter and guiding principles
- Agree on key metrics to evaluate governance
- Participate in recurring DGC meetings
- Champion and promote DG



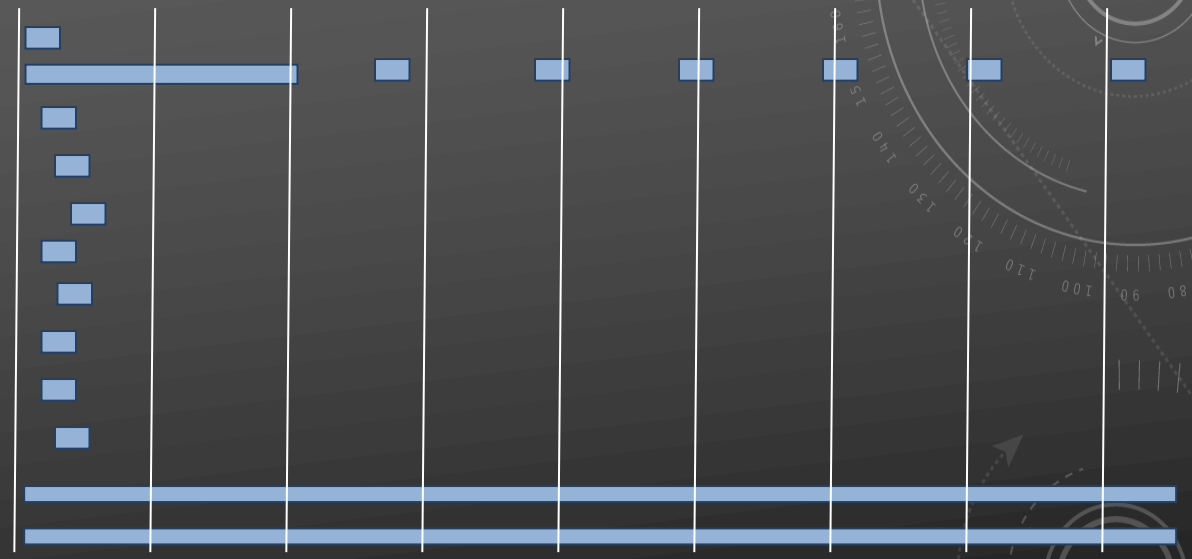
# DATA GOVERNANCE FRAMEWORK TIMELINE

Q1 Q2 Q3 Q4 Q5 Q6 Q7 Q8

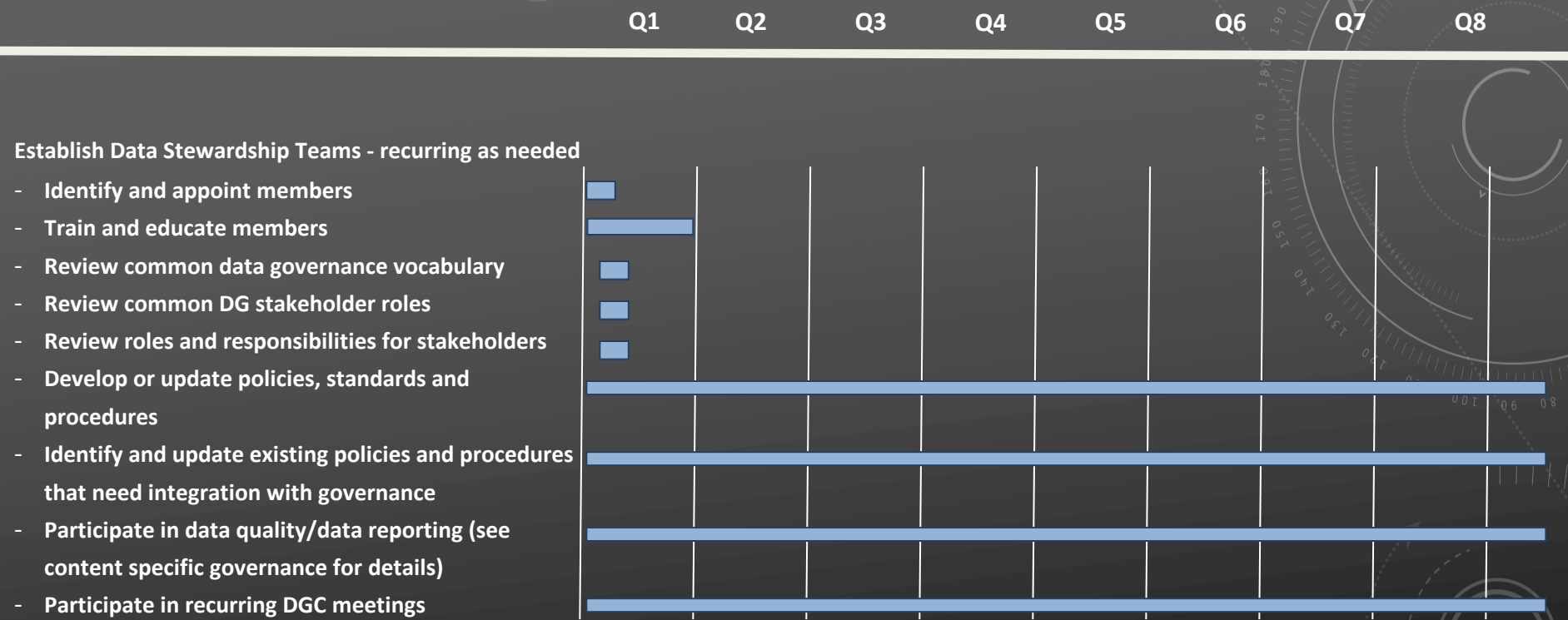
## Data Governance (DG) Framework

### Establish Data Governance Steering Committee

- Identify and appoint members
- Train and educate DGSC
- Define common data governance vocabulary
- Define key DG stakeholder roles
- Define roles and responsibilities for DG roles
- Define scope, authority and structure of DGSC
- Identify and appoint data stewards
- Agree on DGSC charter and guiding principles
- Define objectives of DGSC
- Identify Governance Coordinator for DG activities
- Participate in recurring DGSC meetings
- Champion, communicate and promote DG



# DATA GOVERNANCE FRAMEWORK TIMELINE

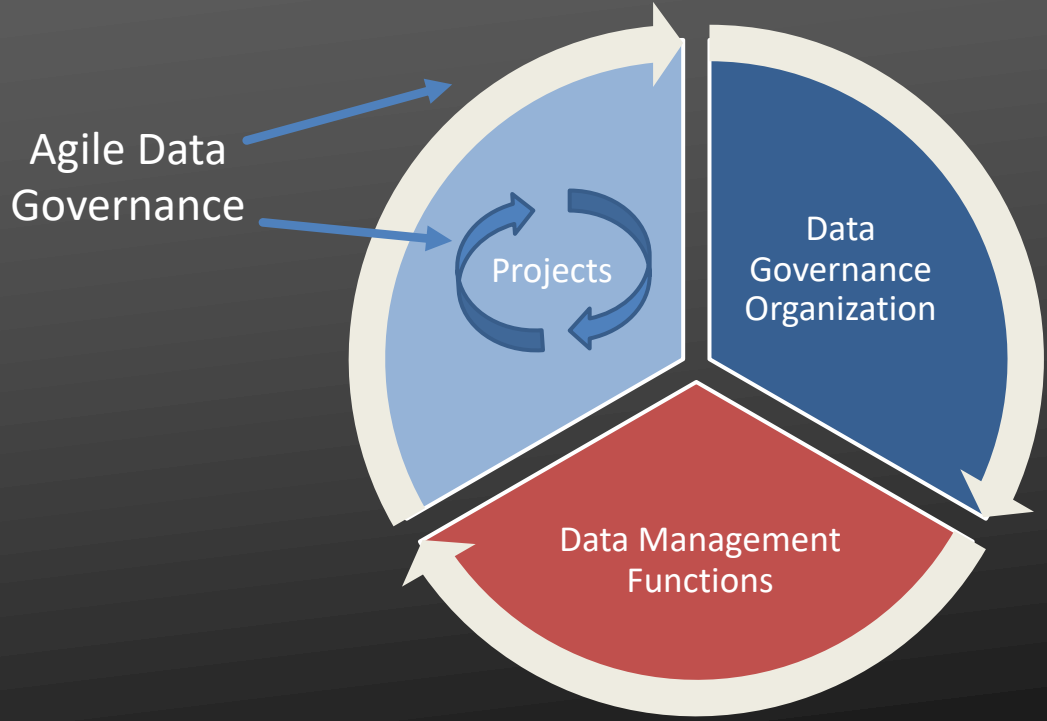


# WHAT DOES A SUCCESSFUL GOVERNANCE PROGRAM LOOK LIKE? EMPLOYEES UNDERSTAND:

- Where to get specific data.
- Data ownership and responsibility is known.
- There is only one source for each type of data (consistency).
- Data is accurate.
- Data is timely.
- Data is easily accessible (with appropriate security).
- Data is defined (data dictionary).
- Data issues are actively communicated.
- Manual data collection / verification processes are significantly reduced or eliminated.



# AGILE DATA GOVERNANCE





# THE AGILE MANIFESTO

*We are uncovering better ways of developing software by doing it and helping others do it. Through this work we have come to value:*

**Individuals and interactions** over Processes and tools

**Working software** over Comprehensive documentation

**Customer collaboration** over Contract negotiation

**Responding to change** over Following a plan

*That is, while there is value in the items on the right, we value the items on the left more.*

In February 2001, 17 software developers met at the Snowbird resort in Utah to discuss lightweight development methods. They published the Manifesto for Agile Software Development.



# AGILE PRINCIPLES

- Our highest priority is to satisfy the customer through early and continuous delivery of valuable **software governance and governance processes**.
- Welcome changing requirements, even late in development. Agile processes harness change for the customer's competitive advantage.
- Deliver working **software governance** frequently, from a couple of weeks to a couple of months, with a preference to the shorter timescale.
- Business people and developers must work together daily throughout the project.
- Build **projects governance** around motivated individuals. Give them the environment and support they need, and trust them to get the job done.

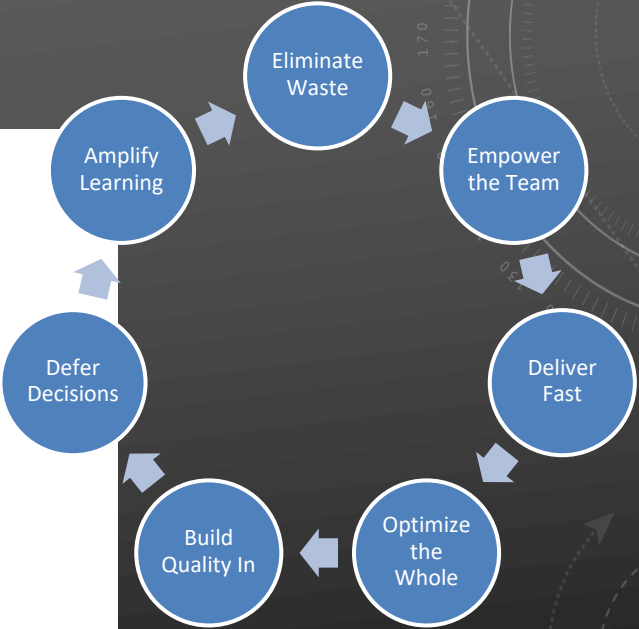
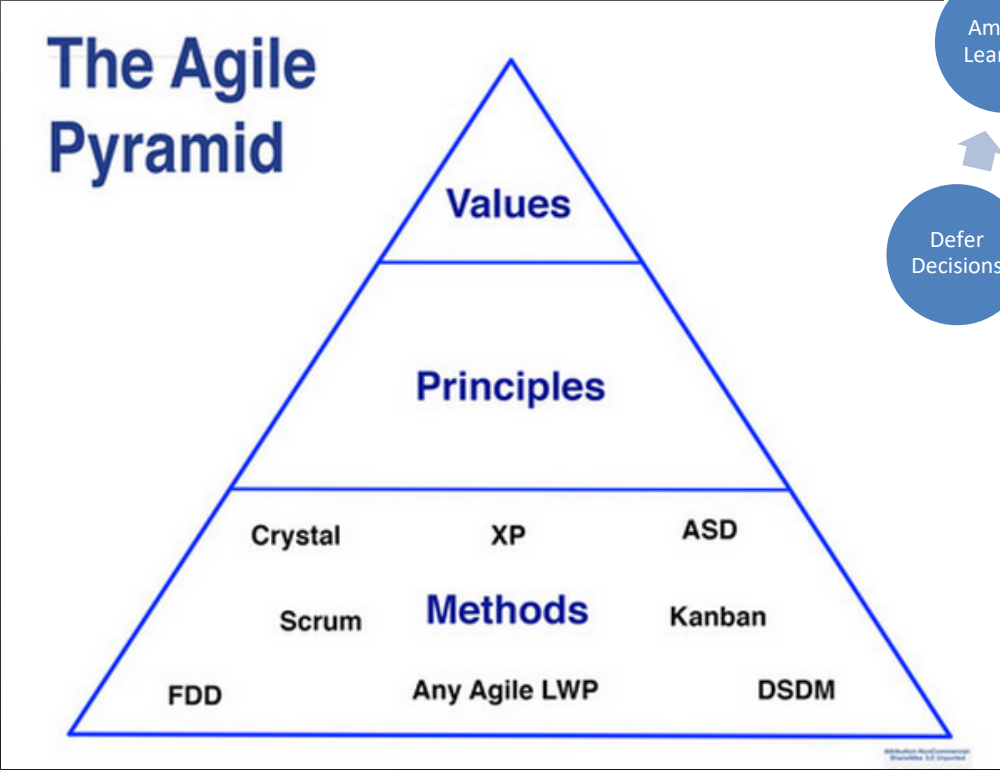


# AGILE PRINCIPLES

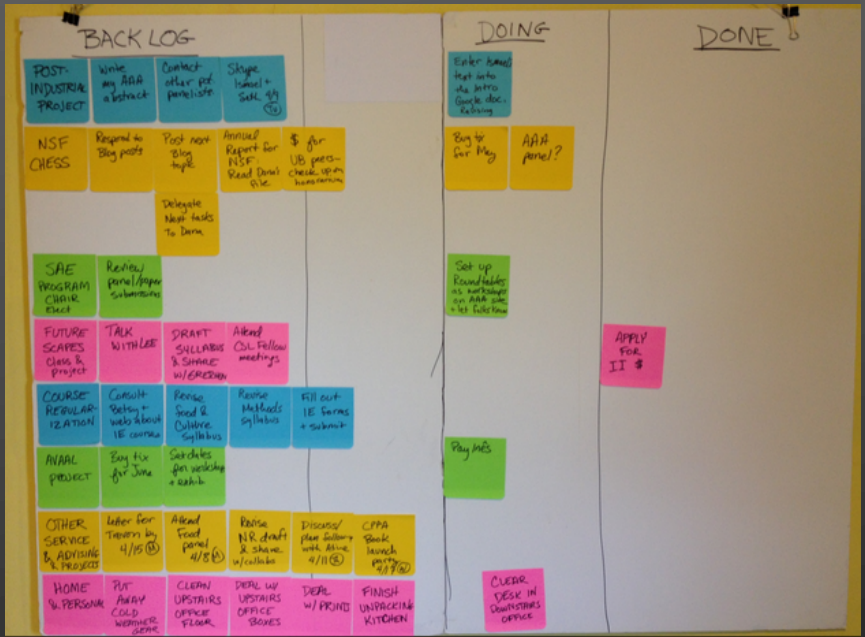
- The most efficient and effective method of conveying information to and within a development team is face-to-face conversation.
- Working software (and sustainable) governance is the primary measure of progress.
- Agile processes promote sustainable development. The sponsors, developers, and users should be able to maintain a constant pace indefinitely.
- Continuous attention to technical excellence and good design enhances agility.
- Simplicity--the art of maximizing the amount of work not done--is essential.
- The best architectures, requirements, and designs emerge from self-organizing teams.
- At regular intervals, the team reflects on how to become more effective, then tunes and adjusts its behavior accordingly.



# THE MANY FLAVORS OF LEAN/AGILE



# COMMONALITIES OF ALL AGILE/LEAN FLAVORS



- Capture the work
- Make it visible
- Minimally Viable Product (MVP)
- Engage the owner/customer/stakeholders
- Have owner prioritize the work
- Work on the highest priority work first
- Iterate
- Continually retrospect and improve



# CEREMONIES



Ceremonies	Traditional Agile/Lean Project	Establishing Data Governance Framework	Actionable Data Governance within a Project
<b>Planning Meetings</b>	Start of every sprint/iteration	DGSC or subgroup meetings	Start of every sprint/iteration
<b>Scrums/Stand Ups</b>	Daily, 15 minutes	1-3 times a week	Daily, 15 minutes
<b>Review meetings</b>	End of every scrum/iteration	DGSC or subgroup meetings	End of every sprint/iteration
<b>Retrospectives</b>	End of every sprint/iteration	End of every sprint/iteration	End of every sprint/iteration
<b>Backlog Grooming</b>	In the week between sprints/iterations	In between sprints/iterations	In the week between sprints/iterations



# ARTIFACTS

Artifacts	Traditional Agile/Lean	Establish Data Governance Framework	Actionable Data Governance within a Project
<b>Stories (a particular business need)</b>	Created from conversations with stakeholders	Created from Data Governance Roadmap	Created from DG policies and procedures in context of subject area
<b>Product Backlog (all stories needed to satisfy scope of project)</b>	Created from conversations with stakeholders	Created from Data Governance Roadmap	Created from DG policies and procedures in context of subject area
<b>Sprint/Iteration Backlog (prioritized stories to be completed)</b>	Prioritized by product owner during planning meeting	Prioritized by DGSC chairperson during planning meeting	Prioritized by product owner during planning meeting



# BREAKING DOWN GOVERNANCE WITHIN A PROJECT

- Stories
  - As a <role> I want <what> so that <business value>
- If not a story, include data governance as acceptance criteria in stories
  - As an accountant, I want current balances for loans, so that I can complete daily reporting
    - The system of record for loan data is defined. Known copies are identified.
    - All data elements are defined in the business dictionary.
    - An automated control is added so the current balance is automatically reconciled between the G/L and Loan System. Known stakeholders receive daily notification of success or failure of the control.

As a chief data steward I want to define governance roles for loan data so I know all governance stakeholders

As a consumer of loan data, I want to know if the loan data in the datawarehouse reconciles with the General Ledger so I do not produce incorrect reports

As a collateral analyst, I want the address associated with home loans to be valid and accurate so that when doing property value updates and verification the right information is available

As the Chief Security Officer, I want PII data related to loans protected and secure so that unauthorized users cannot access it





# DATA GOVERNANCE AWARENESS MATRIX

<u>Major Subject Area</u>	<u>1st Sub Group</u>	<u>2nd Sub Group</u>	Accounting	Financial Reporting	Credit / Financing	Customer Services	Sales	Compliance	Information Technology
Trade	Loan	Loan Terms	S	C	O	C	C	C	u
Trade	Loan	Current Balances	O	C		S		C	u
Entity	Applicant	Credit and Financial	C	C	O	C	S	C	u
Entity	Applicant	Address			C	S	O	C	u
Entity	Applicant	Qualification			O	S	C	C	u
Entity	Applicant	Application			S	C	O	C	u
<b>Legend</b>									
<u>Owner</u>	O								
<u>Steward</u>	S								
<u>Custodian</u>	u								
<u>Consumer</u>	C								



# EXPERIENCE AND DEBRIEF

- What Data Governance Stories are Needed if a New Data Source for loans is Brought into Warehouse?
  - Think about stakeholders and their needs



# STORIES

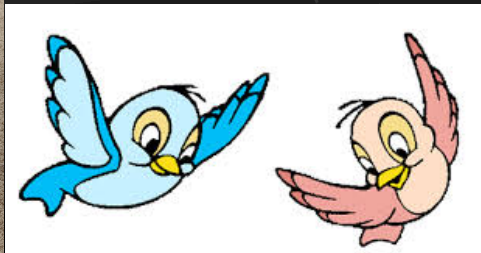
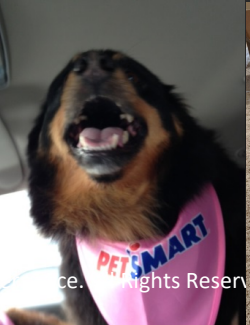


# REVIEW AND OUTSTANDING QUESTIONS



# REALITY CHECK

- Agile won't magically fix everything
  - New, unexpected challenges will occur
    - Teamwork
    - Soft skills
    - Growing pains
    - Will surface ineffective processes
    - Will surface under-performing team members



# REALITY CHECK

- Data Governance won't magically fix everything or be easy to quickly implement
  - Must include the business
  - Must be added to existing processes to be successful
  - Lots of training and education is needed
  - Executive support is critical
  - Data governance framework must be in place
  - Will uncover data issues that some don't want uncovered



# WAYS AGILE CAN HELP

- Increased communication and visibility
- Increased teamwork
- More frequent delivery of business value
- Implement governance on high priority items first, show success, move on...continuous improvement



# CONTINUOUS IMPROVEMENT

- Use retrospectives to make your process better
- It's ok to add just 1 or 2 new things at a time
- Get help if you need it, lots of resources and experts are out there
- Mentoring and coaching will be critical





# LESSONS LEARNED

- There isn't one definition of Agile; all companies tend to do it differently. That's ok. Make it what works best for your organization.
- If you are setting up governance for the first time, get the Data Governance Framework in place first. Then determine low hanging fruit, such as data quality issues, and implement governance starting there.
- Data Governance MUST involve the business; it can't just be an IT focus.
- A lot of training and education is needed for governance.
- Data Governance must be added to existing processes and procedures in order to give it teeth.
  - Look at existing areas such as SDLC / Project Process, Architecture reviews, etc.



# GOOD RESOURCES FOR AGILE AND TEAM BUILDING

- Mike Cohn – MountainGoatSoftware.com
- PMI-ACP Exam Prep – Mike Griffiths
- Johanna Rothman books: <http://www.jrothman.com/books/>
- The Human Side of Agile, Gil Broza
- Agile Retrospectives: Making Good Teams Great, Esther Derby and Diana Larsen
- Crucial Conversations, Kerry Patterson
- Crucial Confrontations, Kerry Patterson
- Influencer
- The Deadline: A Novel about Project Management, Tom DeMarco
- Teamwork is an Individual Skill, Christopher Avery
- Behind Closed Doors: Secrets of Great Management, Johanna Rothman and Esther Derby



# EXPERIENCE

## Temperature Reading

- Appreciations
- Puzzles
- Complaints with Recommendations
- Hopes and Wishes
- New Information



# THANK YOU!

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