Real-World Data Governance

Build Your Own Data Governance Framework

Monthly Webinar Series Hosted by DATAVERSITY
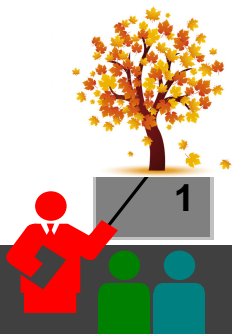
Robert S. Seiner – KIK Consulting
October 19, 2023 – 11:00 a.m. PT / 2:00 p.m. ET

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DATAVERSITY™

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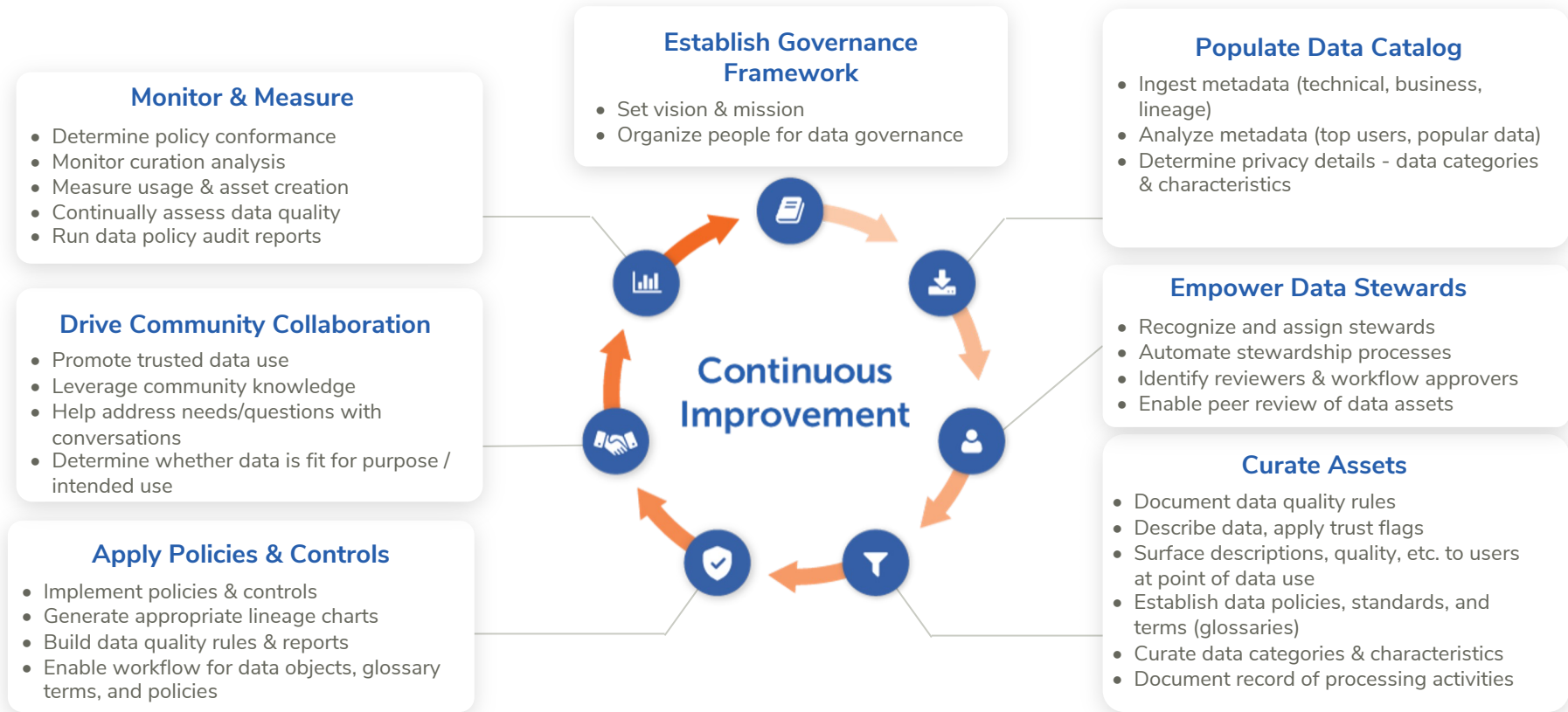# Data Driven: People, Process, Technology

Customers ask

- What do I do?
- Where do I start?
- How do I get to success?
- How do I measure that success?
- How do I build to get to the next milestone?
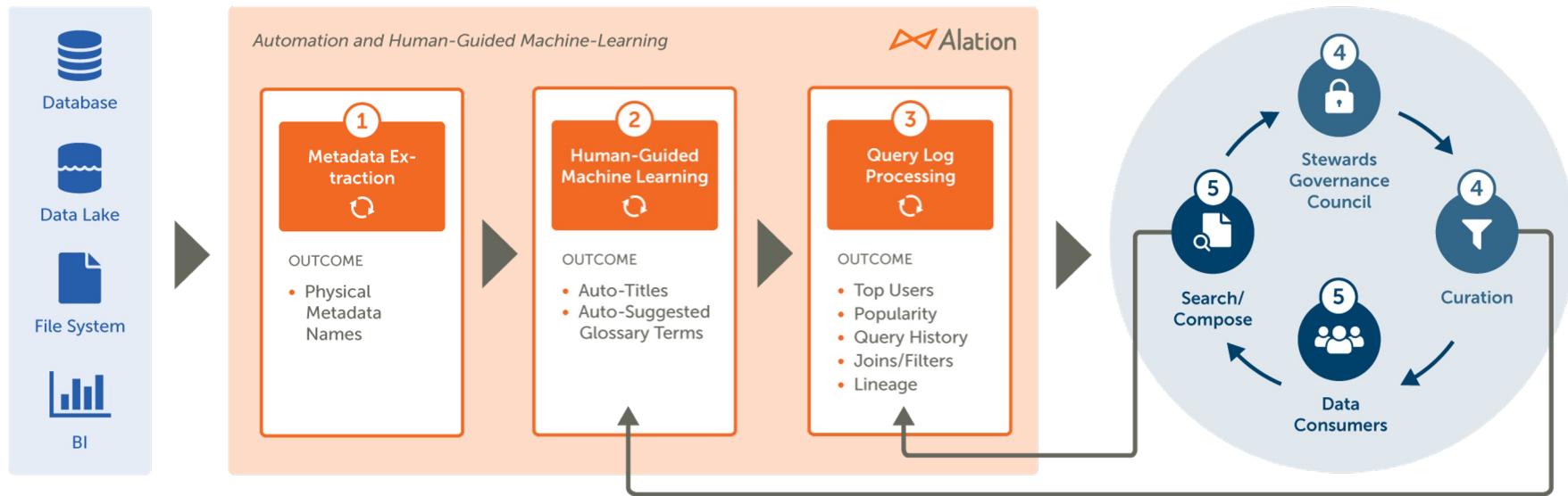
Our solution

- **Active Data Governance Methodology:** Our autonomous, continuous improvement methodology guides organizations to help create a data-driven culture through data governance.

Alation

How Alation Powers Active Data Governance

Monitor & Measure

- Determine policy conformance
- Monitor curation analysis
- Measure usage & asset creation
- Continually assess data quality
- Run data policy audit reports

Drive Community Collaboration

- Promote trusted data use
- Leverage community knowledge
- Help address needs/questions with conversations
- Determine whether data is fit for purpose / intended use

Apply Policies & Controls

- Implement policies & controls
- Generate appropriate lineage charts
- Build data quality rules & reports
- Enable workflow for data objects, glossary terms, and policies

Establish Governance Framework

- Set vision & mission
- Organize people for data governance

Populate Data Catalog

- Ingest metadata (technical, business, lineage)
- Analyze metadata (top users, popular data)
- Determine privacy details - data categories & characteristics

Empower Data Stewards

- Recognize and assign stewards
- Automate stewardship processes
- Identify reviewers & workflow approvers
- Enable peer review of data assets

Curate Assets

- Document data quality rules
- Describe data, apply trust flags
- Surface descriptions, quality, etc. to users at point of data use
- Establish data policies, standards, and terms (glossaries)
- Curate data categories & characteristics
- Document record of processing activities

Continuous Improvement

Alation

Active Governance Methodology

Build Your Own Data Governance Framework
Introduction

Real-World Data Governance – Monthly Webinar Series
November 16, 2023: How to Select the "Right" Metadata to Govern

Third Thursday each Month @ 2pm EST – Register at TDAN.com, KIKconsulting.com, DATAVERSITY.net

Upcoming Events
Data Governance and Information Quality East: Dataversity Conference – Washington, DC – December 4th – 8th

Non-Invasive Data Governance / Non-Invasive Data Governance Strikes Again Books
2014: ISBN 9781935504856 / Technics Publications / Amazon.com
May 2023: ISBN 9781634623599 / Technics Publications / Amazon.com

Non-Invasive Data Governance / Metadata Governance Online Learning Plans
Latest: Business Glossaries, Data Dictionaries and Data Catalogs

DATAVERSITY Training Center – https://training.dataversity.net

KIK Consulting & Educational Services
KIKConsulting.com: Knowledge is King

The Home of Non-Invasive Data Governance™

Carnegie Mellon University (CMU)
Adjunct: Heinz College Chief Data Officer (CDataO) – Executive Education
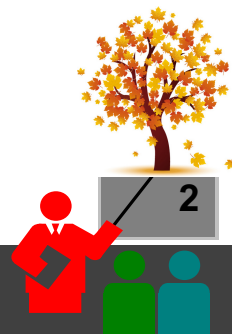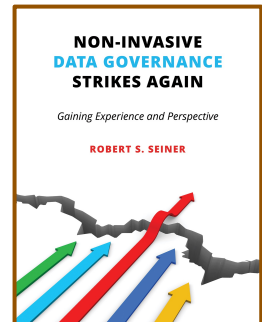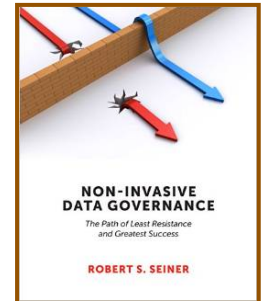
Build Your Own Data Governance Framework
Abstract

- In this webinar, I will share …
    - A Customizable Data Governance Framework
    - How to Determine Appropriate Components
    - How to Determine Appropriate Levels
    - Getting Specific: Filling in the Boxes
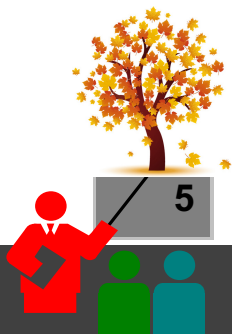   - Leveraging Your New Framework to Govern Data

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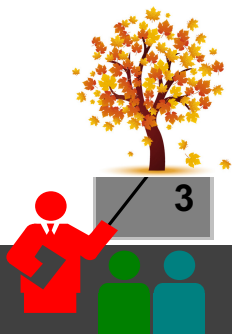
Build Your Own Data Governance Framework
Definitions

- **Data Governance** – The execution and enforcement of authority over data.

- **Data Stewardship** – Formal accountability for data.

- **Data Steward** – A person held formally accountable for their relationship to the data.

- **Data Governance Framework** – A basic conceptual structure for Data Governance.

NON-INVASIVE DATA GOVERNANCE™ FRAMEWORK

Components

	DATA	ROLES	PROCESSES	COMMUNICATIONS	METRICS	TOOLS
COMPONENTS DATA – ASSETS BEING GOVERNED ROLES – FORMAL ACCOUNTABILITY PROCESSES – APPLICATION / ENFORCEMENT COMMUNICATIONS – EDUC, TRN, AWARENESS METRICS – MEASUREMENTS and KPIs TOOLS – ARTIFACTS PURCHASED / DEVELOPED **LEVELS** EXECUTIVE – SENIOR LEADERSHIP TEAM STRATEGIC – BUSINESS & TECHNOLOGY MGMT TACTICAL – SUBJECT MATTER EXPERTISE OPERATIONAL – DAILY JOB FUNCTION SUPPORT – FUNCTIONAL MANAGEMENT						
EXECUTIVE	Leadership Dashboard KPIs	Leadership Steering Committee	Endorse Enforce Authorize	Support Sponsor Understand	Approve Act	Policy Directive Audit
STRATEGIC	Enterprise Performance	Preside DG Program DG Council	Direct Approve Prioritize Resolve	Status Evaluate Commend	Acceptance Participation Performance	Charter Best Practices Guidelines Roadmap
TACTICAL	Subject Area X-Business Unit	Domain Stewards Data Owners SMEs	Facilitate Mediate Promote	Standards Subject Area Project	Subject Quality Metrics	Standards Requirements Workflows
OPERATIONAL	Business Unit Function	Operational Data Stewards Users	Operate Manage Handle	Orientation Onboard Ongoing	Accountability Efficiency Effectiveness	Glossary Dictionary Catalog Repository
SUPPORT	Accountability Inventory Metadata	Prog Mgmt Admin Work Groups Partners	Formalize Adhere Enforce	Plan Develop Deliver	Collect Report	DG Tools Metadata Tools KIK Artifacts

Levels

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NON-INVASIVE DATA GOVERNANCE™ FRAMEWORK

Components

COMPONENTS

DATA – ASSETS BEING GOVERNED
ROLES – FORMAL ACCOUNTABILITY
PROCESSES – APPLICATION / ENFORCEMENT
COMMUNICATIONS – EDUC, TRN, AWARENESS
METRICS – MEASUREMENTS and KPIs
TOOLS – ARTIFACTS PURCHASED / DEVELOPED

LEVELS

EXECUTIVE – SENIOR LEADERSHIP TEAM
STRATEGIC – BUSINESS & TECHNOLOGY MGMT
TACTICAL – SUBJECT MATTER EXPERTISE
OPERATIONAL – DAILY JOB FUNCTION
SUPPORT – FUNCTIONAL MANAGEMENT

Levels	DATA	ROLES	PROCESSES	COMMUNICATIONS	METRICS	TOOLS
EXECUTIVE	Leadership Dashboard KPIs	Leadership Steering Committee	Endorse Enforce Authorize	Support Sponsor Understand	Approve Act	Policy Directive Audit
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Instructions: Click on

- Daily Operations & Reporting
- Executive
- Strategic
- Tactical
- Operational
- Support

Tools

Executives use executive-level reporting tools to monitor the overall health of data governance efforts.

Utilize data profiling and analytics tools for strategic data analysis.

Employ data quality tools and metadata management systems for project-specific tasks.

Use data quality, data lineage, and data governance tools for daily operations.

Use ticketing systems and data catalog tools for support tasks.

Hit [ESC] to Exit Fr

Build Your Own Data Governance Framework
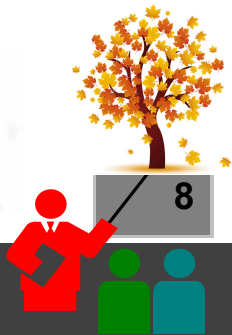## A Customizable Data Governance Framework

- Core Components and Levels

- Framework Structure

- Color Coordination with Other Templates

- Getting the Terminology Correct

Build Your Own Data Governance Framework
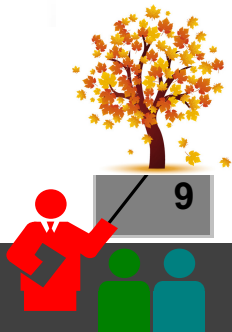## A Customizable Data Governance Framework

- Core Components and Levels
  - Two Dimensional to Start
  - Key Considerations for a Successful Data Governance Program
  - Meant to be Adjusted Per Your Organizational Requirements
  - Who, What, Why, Where, When, and How
  - Who Cares / Who Needs to Care

Build Your Own Data Governance Framework
A Customizable Data Governance Framework

- Framework Structure
  - Matrix (6 x 5)
  - Multi-Dimensional View
  - Templates
  - Assessment Directs to Bridges

Build Your Own Data Governance Framework
A Customizable Data Governance Framework

- Color Coordination with Other Templates
  - Operating Model of Roles and Responsibilities
  - Common Data Matrix
  - RACI (Process) Matrix
  - Communications Plan

Build Your Own Data Governance Framework
A Customizable Data Governance Framework

Build Your Own Data Governance Framework
A Customizable Data Governance Framework

- Getting the Terminology Correct
  - Are the Core Components Complete?
    - Do They Accurately Describe What They Represent?
  - Are the Levels Complete?
    - Do They Accurately Describe Your Organization?
  - Use Language That Makes Sense to Your Organization
  - Don't Be Afraid to Add or Eliminate Components or Levels
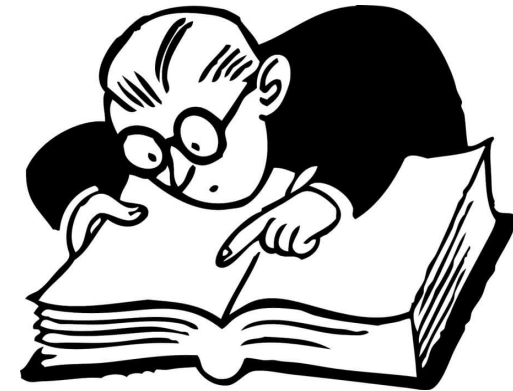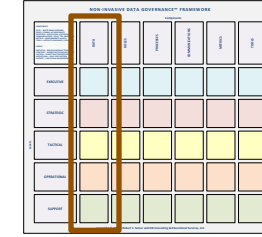
Build Your Own Data Governance Framework
How to Determine Appropriate Components

- Data – Assets Being Governed and Quality Improved

- Roles – Formal Accountability Data Governance and Information Quality

- Processes – Application / Enforcement

- Communications – Education, Training and Awareness

- Metrics – Measurements and Key Performance Indicators (KPIs)

- Tools – Artifacts Purchased & Developed
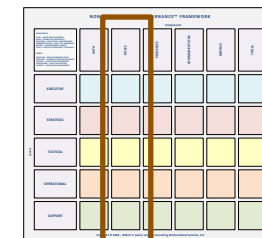
- Business Value – Outcome & Results, Expectations
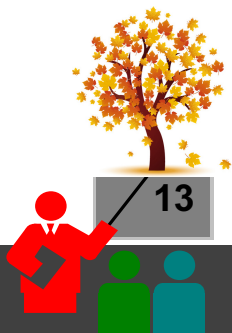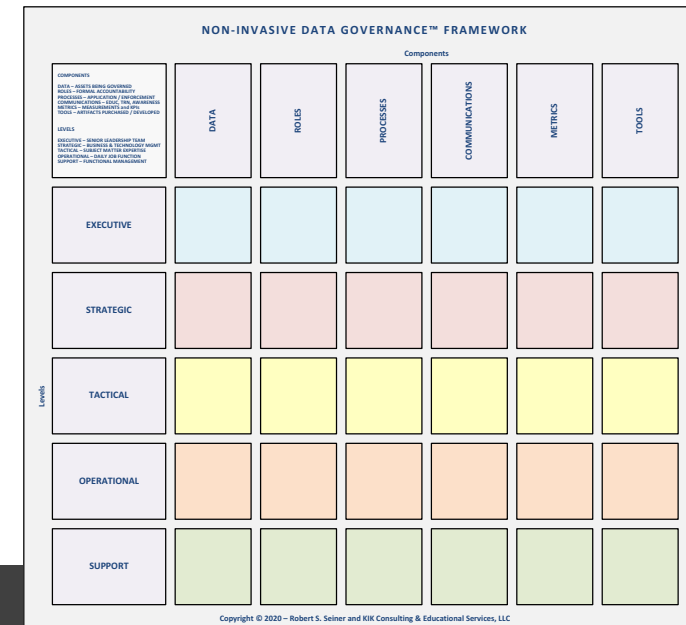
NON-INVASIVE DATA GOVERNANCE™ FRAMEWORK

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Build Your Own Data Governance Framework
## How to Determine Appropriate Components

- **Data – Assets Being Governed and Quality Improved**
    - The scope of the resources that are being governed is the first core component of a Data Governance Framework.
    - Organizations with formal programs can learn from, and should differentiate between data, information, records and knowledge.

- **Roles – Formal Accountability Data Governance and Information Quality**
    - The way people are associated with the roles they play is a significant predictor of the effort required to govern the data.
    - Roles are a back-bone (core component) of many governance and quality tools.
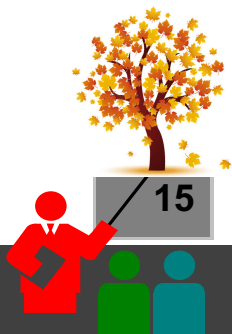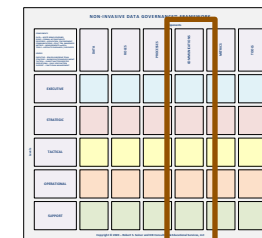
Build Your Own Data Governance Framework
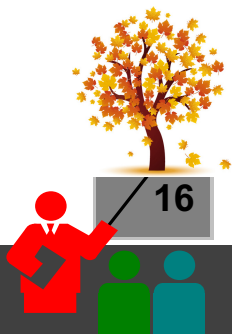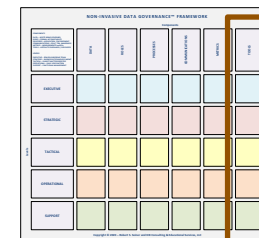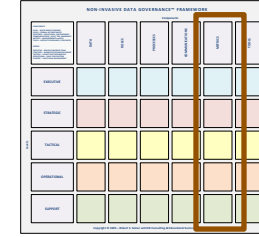## How to Determine Appropriate Components
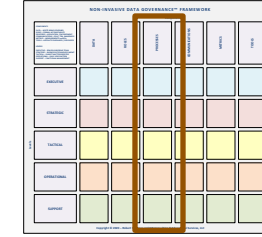
- Processes – Application / Enforcement

  - The notion of a singular "Data Governance process" misrepresents the fact that processes are a primary component of DG program success.

  - There is not a single process that is governed, rather there are a series of processes to which governance will be applied.

- Communications – Education, Training and Awareness

  - Raising the data awareness of the governance and quality perspective of every person that defines, produces, and uses data is critical to achieving program success.

  - Elevating Data Literacy by helping people to tell stories "about data". Tell stories "with data".

  - Education must focus on policies, handling rules, best practices, standards, processes, and role-based governance activities.

Build Your Own Data Governance Framework
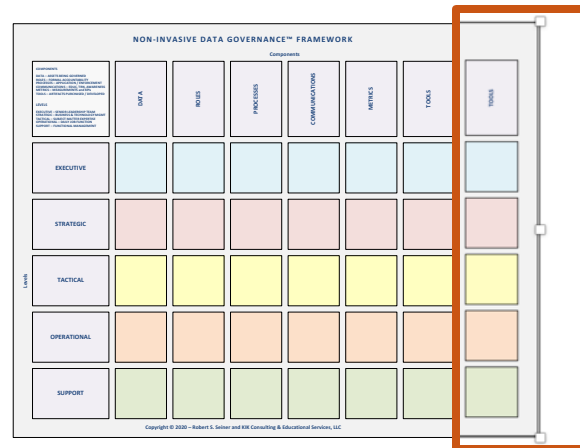## How to Determine Appropriate Components

- Metrics – Measurements and Key Performance Indicators (KPIs)
  - The impact and value may be financially quantifiable, but this may not always be the case.
  - Measuring efficiency and effectiveness improvements require benchmarks of present state and the governed activity of measuring and reporting results.
  - Requires understanding what needs to be measured at each of the Levels.

- Tools – Artifacts Purchased & Developed
  - Tools of DG & DQ enable the program to deliver value to the organization.
  - Organizations use tools they develop internally as well as tools that they've purchased to fill specific needs of their programs.
  - The tools that are developed or purchased are based on practicality, ease-of-use, and the specific goals of the DG & DQ program.

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Build Your Own Data Governance Framework
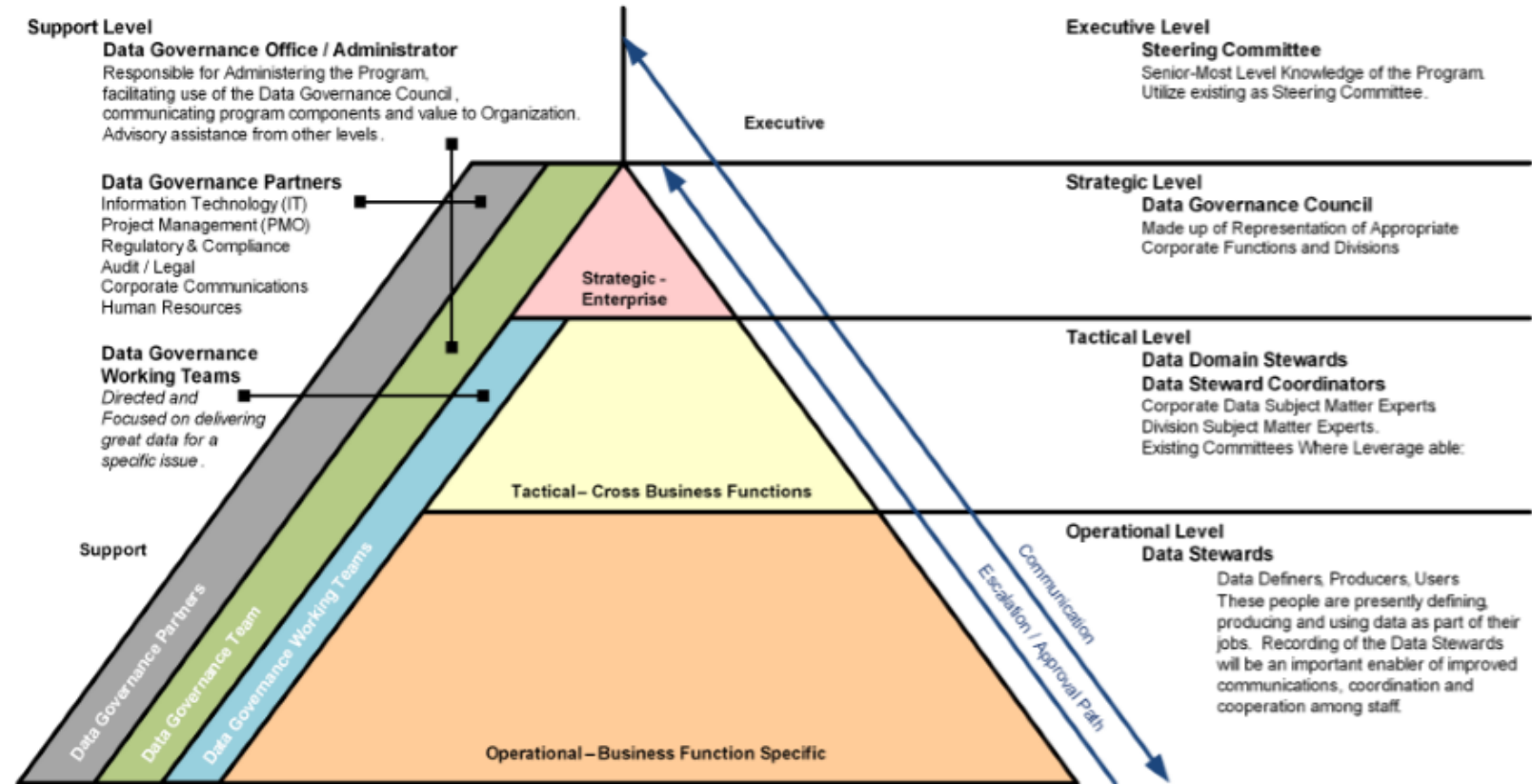## How to Determine Appropriate Components

- Business Value – Outcome & Results, Expectations – New Column?
  - Executive Level – Aligns with Business Goals
  - Strategic Level – Identifies Valuable Data Assets
  - Tactical Level – Establishes Standardized Processes
  - Operational Level – Empowers Staff
  - Support Level – Ensures Compliance, Mitigates Risks, Protects Reputation

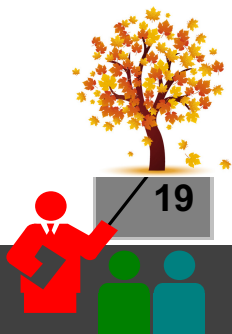# Build Your Own Data Governance Framework

How to Determine Appropriate Levels

- Executive
- Strategic
- Tactical
- Operational
- Support
- Administrative

Support Level

Data Governance Office / Administrator
Responsible for Administering the Program, facilitating use of the Data Governance Council, communicating program components and value to Organization. Advisory assistance from other levels.

Data Governance Partners
Information Technology (IT)
Project Management (PMO)
Regulatory & Compliance
Audit / Legal
Corporate Communications
Human Resources

Data Governance Working Teams
Directed and Focused on delivering great data for a specific issue.

Support

Strategic - Enterprise

Tactical – Cross Business Functions

Operational – Business Function Specific

Data Governance Partners
Data Governance Team
Data Governance Working Teams

Executive

Communication

Escalation / Approval Path

Executive Level

Steering Committee
Senior-Most Level Knowledge of the Program.
Utilize existing as Steering Committee.

Strategic Level

Data Governance Council
Made up of Representation of Appropriate Corporate Functions and Divisions

Tactical Level

Data Domain Stewards
Data Steward Coordinators
Corporate Data Subject Matter Experts
Division Subject Matter Experts.
Existing Committees Where Leverage able:

Operational Level

Data Stewards
Data Definers, Producers, Users
These people are presently defining, producing and using data as part of their jobs. Recording of the Data Stewards will be an important enabler of improved communications, coordination and cooperation among staff.

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Build Your Own Data Governance Framework
How to Determine Appropriate Levels

- Executive

  - The Executive level typically consists of people at the highest level.

  - This includes Presidents, Chairs, Senior Vice Presidents, and CXO level positions (meaning CEOs, COOs, CIOs, CDOs, CROs, CMOs, etc.).

  - The Executive Level of an organization often has regular or scheduled meetings as the Steering Committee for the enterprise.

- Strategic

  - The Strategic level typically consists of people that report directly to and are delegated by the Executive level to oversee and direct specific initiatives.

  - This can include Senior Vice Presidents, Vice Presidents, and the people that are recognized as being second-in-command or as representing their part of the organization in the initiative.

  - The Strategic level is accountable to the Executive level for the success of the initiative.

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Build Your Own Data Governance Framework
## How to Determine Appropriate Levels

- Tactical
    - The Tactical level typically consists of people that are subject matter experts, facilitators, and potentially decision makers for specific domains of data and information.
    - The Tactical level is delegated or recognized by the Strategic level as people that must be included in and drive decisions that are made regarding data in their domain.

- Operational
    - The Operational level typically consists of every person in the organization that has a relationship to data and that is (or will be) held formally accountable for that relationship.
    - The relationships include the definition, production, and/or use of data and information.
    - If an individual does any or all of these activities as part of their job, it is a requirement that these people follow policy, best practices and standards for that relationship.

Build Your Own Data Governance Framework
How to Determine Appropriate Levels

- Support
  - Data Governance Partners
  - Data Governance Working Team
  - Data Governance Administration
- Administrative
  - Data Governance Administrator
  - Data Governance Manager
  - Data Governance Lead
  - Data Governance Team or Office
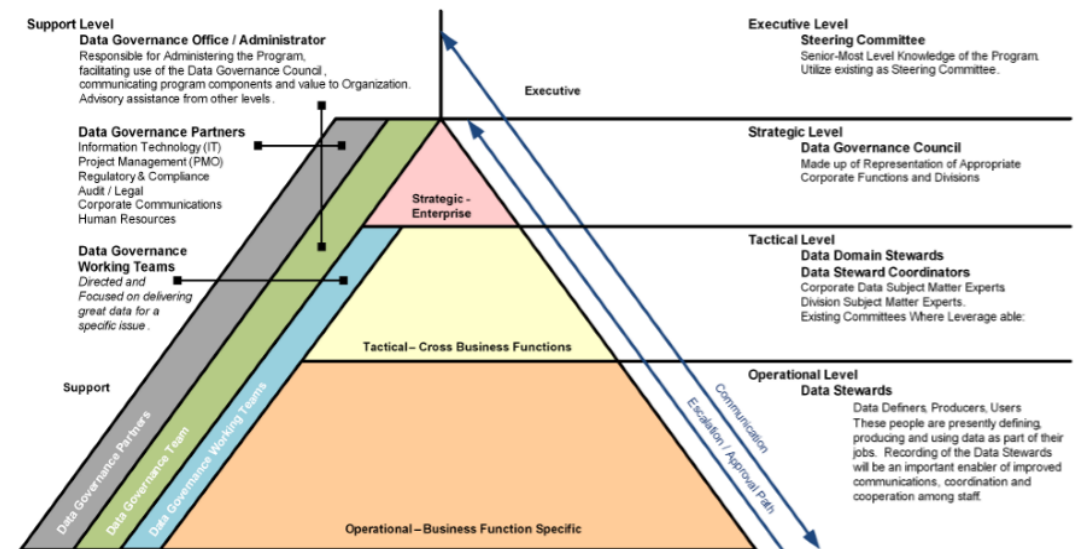
Build Your Own Data Governance Framework
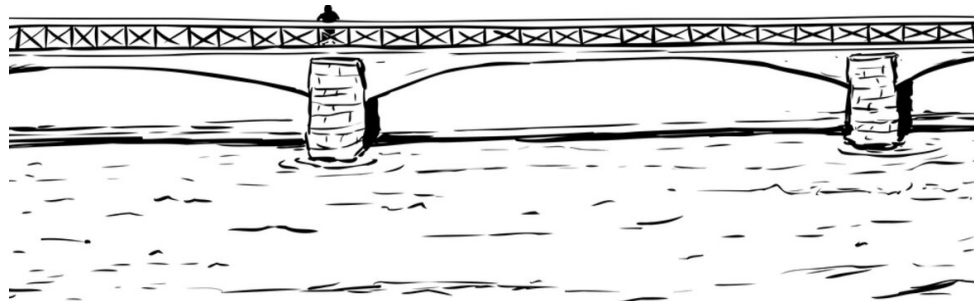## Getting Specific: Filling in the Boxes

- Bridges

- Components at Each Level

- At Some Point … You Will Need to Know This Information.

- Multiple Dimensions

- Artifacts and Templates

Build Your Own Data Governance Framework
Getting Specific: Filling in the Boxes

- Bridges
    - A Framework is a "Basic Conceptual Structure" *Merriam-Webster Dictionary*
    - Application of a Framework Must Address Where the Rubber Hits the Road
    - Planning for Each Component at Each Level (Bridge)
    - Knowledge-Base and Intelligence for Each Bridge
    - Dimensional Views of Each Bridge
    - Artifacts and Templates for the Appropriate Bridges

Build Your Own Data Governance Framework
Getting Specific: Filling in the Boxes

- Components at Each Level

  – Data Component at Each Level – Data Strategy

  – Roles Component at Each Level – Operating Model

  – Process Component at Each Level – Governance Activ

  – Comm   ll

  – Metri

  – Tools   e

Additional Bridge Questions to Consider: Data

What data is critical for decision-making at each level?

How should data be accessed, shared, and used at each level?

What data quality/integrity standards are required at each level?

Additional Bridge Questions to Consider: Roles

What are the data-related responsibilities and accountabilities?

How should data-related communication and collaboration be facilitated?

What skills, knowledge, and training are required for each role?

Additional Bridge Questions to Consider: Tools

What are the data governance tools needed at each organizational level?

How should the data governance tools be integrated and interoperable?

What are the training and support needs for using tools?

Additional Bridge Questions to Consider: Processes

What are the data-related processes and workflows?

How should data-related decision-making and escalation occur?

What are the data governance compliance and audit mechanisms?

Additional Bridge Questions to Consider: Metrics

What are the KPIs and metrics relevant to each level's objectives?

How should the data governance metrics be collected, analyzed, reported?

What are the thresholds and targets for data governance metrics?

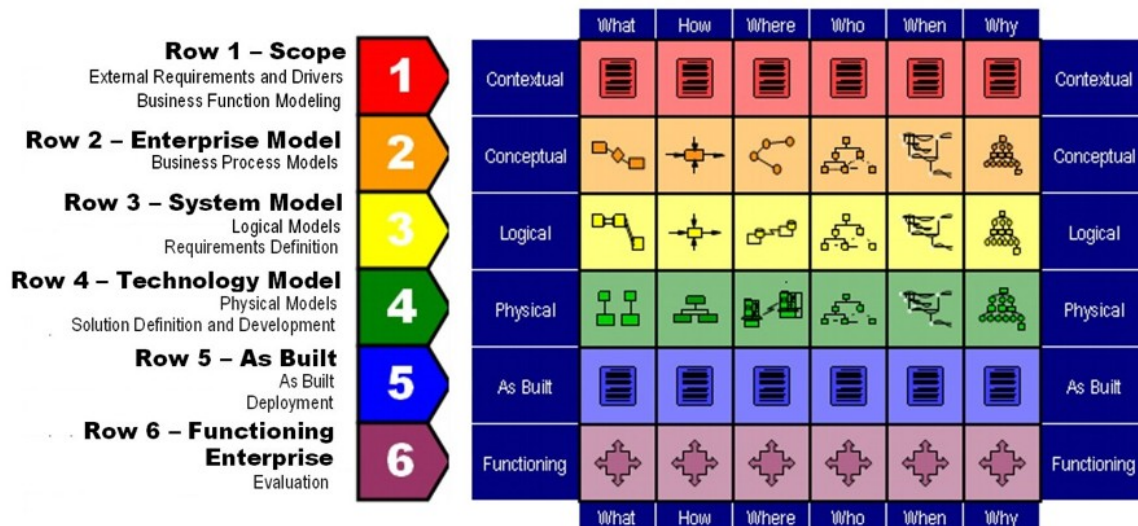**Additional Bridge Questions to Consider: Communications**

What are the data communication needs and requirements?

How should data-related information be disseminated and shared?

What is the data governance communication plan and strategy?

Build Your Own Data Governance Framework
Getting Specific: Filling in the Boxes

- At Some Point … You Will Want to Know the Information …
  - "… Every Component from Every Perspective"
  - John Zachman … about the Zachman Framework for Enterprise Architecture
  - You Will Want to Know About Every Data Governance Component from Every Level

*The Veterans Affairs Zachman Framework w/an explanation of its rows.*

https://commons.wikimedia.org/wiki/File:Zachman_Framework_Basics.jpg.

Build Your Own Data Governance Framework
Getting Specific: Filling in the Boxes

- Multiple Dimensions
  - Organization Industry - Finance, Education, Manufacturing, Services, Retail, …
  - Organization Size - Large >400, Medium >200, Small <200, …
  - Organization Type - Public, Private, For Profit, Not For Profit, …
  - Governing Style - Command-and-Control, Traditional, Non-Invasive, …
  - Organizational Age - Established >5, Young <5, Start Up <1, …
  - Location - United States, Nation, …
  - Worldreach - Global, National, Regional, …
  - Affiliations - Parent Organization, Child Organization, Partnership, …
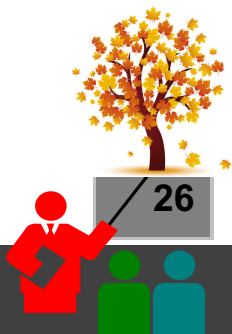
Build Your Own Data Governance Framework
## Getting Specific: Filling in the Boxes

- Artifacts and Templates
  - Specific to Each Bridge
  - Links to Important Documents
  - Links to External Content
  - Links to Other Parts of the Framework
  - Additional Intelligence
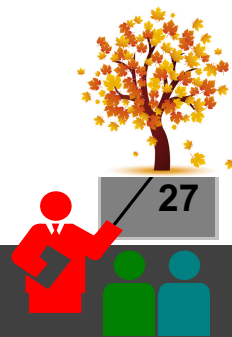
Build Your Own Data Governance Framework

Leveraging Your New Framework to Govern Data

- Face of Your Data Governance Program

- Why the Selection of Framework and Approach is Critical

- How to Select the Appropriate Framework and Approach

- Leveraging Your Framework to Govern Data
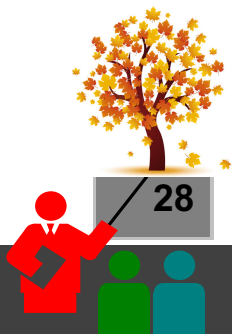
Build Your Own Data Governance Framework
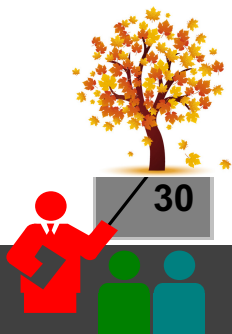## Leveraging Your New Framework to Govern Data

- Face of Your Data Governance Program
    - Interface for Access to Data Governance Information
    - Interface to Improve Data Literacy
    - Interface to Improve Engagement
    - Repository of Data Governance Artifacts and Intelligence

Build Your Own Data Governance Framework
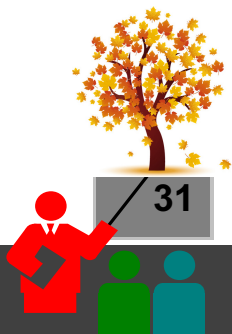## Leveraging Your New Framework to Govern Data

- Why the Selection of Framework and Approach is Critical
  - The Approach Will Impact How the Program is Perceived / Accepted
  - People Have Day Jobs and May Push Back on "More Work"
  - "Non-Invasive" May Be Misunderstood … Explain It Well
  - "Everybody is a Data Steward" May Be Misunderstood … Explain It Well

Build Your Own Data Governance Framework
Leveraging Your New Framework to Govern Data

- How to Select the Appropriate Framework and Approach
  - Understand What Will Be Acceptable to Your Organization
  - Consider Putting Significant Effort Toward Messaging
  - Consider What Has Worked / Has Not Worked in the Past
  - Disruption (or Being Viewed That Way) is a Risk Proposition

Build Your Own Data Governance Framework
Leveraging Your New Framework to Govern Data

- Leveraging Your Framework to Govern Data
  - Assessment Directed Use of Framework
  - Align Framework to Present Artifacts
  - Stoplight (Red/Yellow/Green) Your Bridges
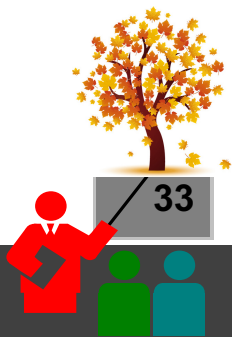 - Maturity Evaluation Based on Framework

Build Your Own Data Governance Framework
Summary

- In the webinar, I shared …
  - A Customizable Data Governance Framework
  - How to Determine Appropriate Components
  - How to Determine Appropriate Levels
  - Getting Specific: Filling in the Boxes
  - Leveraging Your New Framework to Govern Data

Build Your Own Data Governance Framework

Q & A - Contact Information

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