

Data Governance Service

The Fundamental Question.....Get the Conversation Started!

Is your organization getting the information needed to run the business easily, timely and accurately?.....

OR

Do the following challenges hinder this goal?...



- Ease of Use
- Poor Performance
- Staleness of Data
- Errors & Omissions
- Accuracy of Data
- Too Much Excel
- Manual Data Processes
- Security Issues
- Incomplete Data
- Incomplete Correlation
- Too many tools
- Tools don't meet needs
- Internal Skills

Data is core to any business; and without it, businesses could not function.

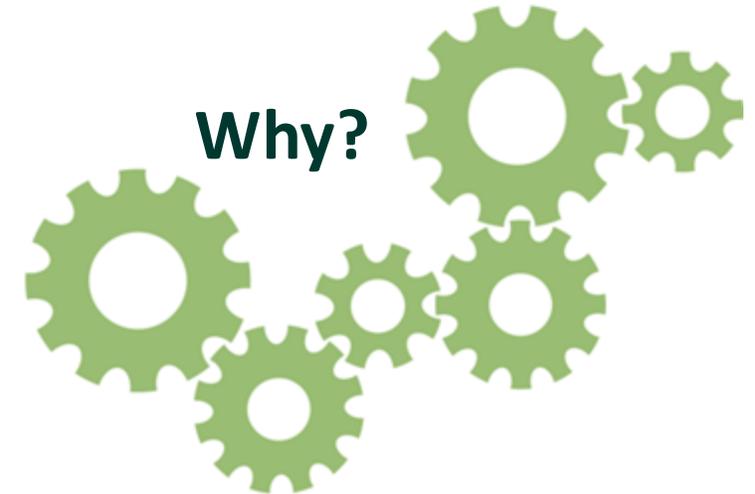
Reliability and accuracy are critical to avoiding costly mistakes and errors

Without data governance the risks are great including but not limited to.
regulatory penalties,
brand degradation,
customer churn,
faltering financial performance,
and loss of market share.

Your data can be valuable asset or an expensive liability.

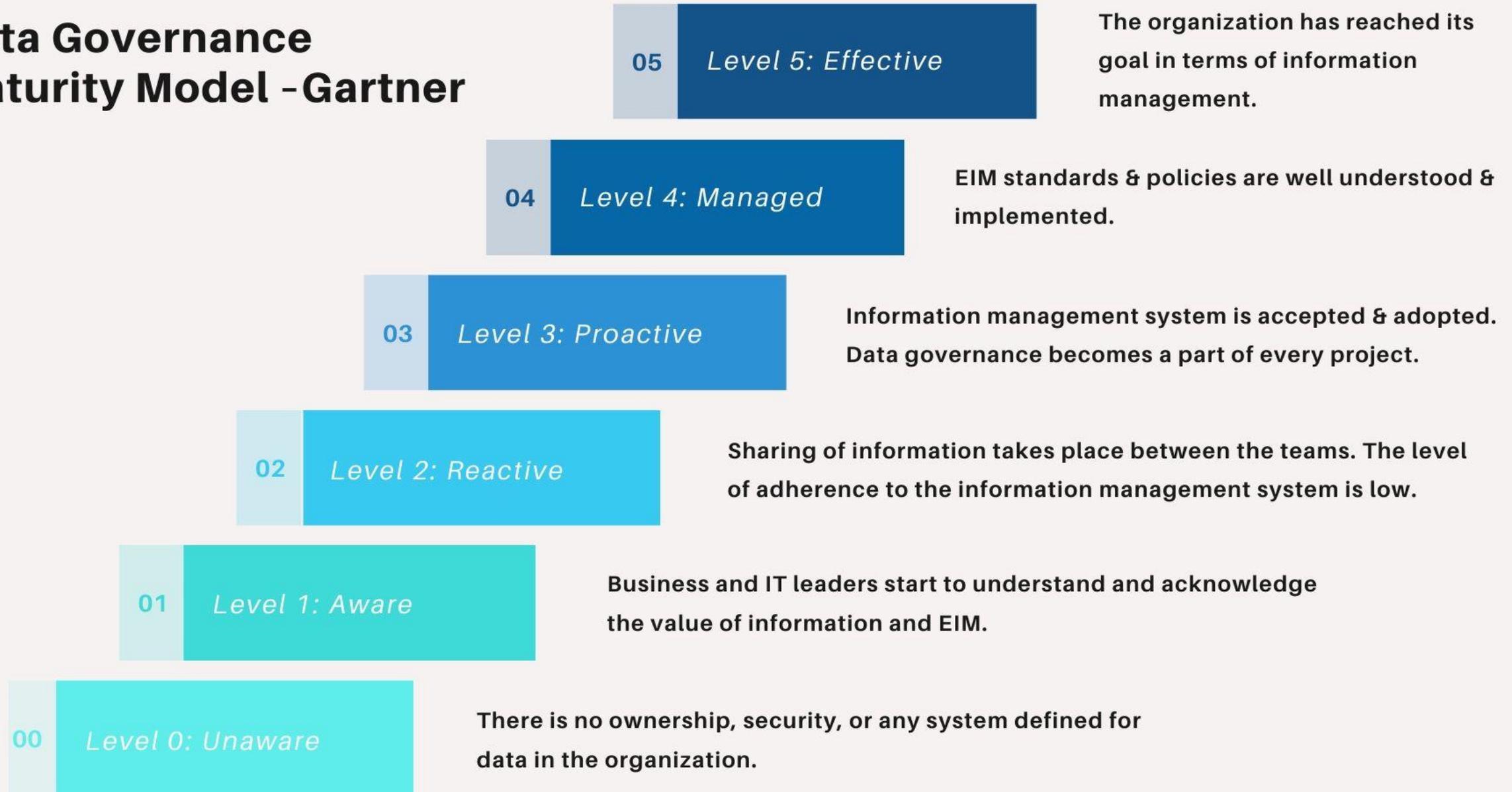
Data is a strategic edge. Proper data governance can lead to becoming more competitive, better decisions resulting in better performance, and improved strategic business insight.

Data Governance

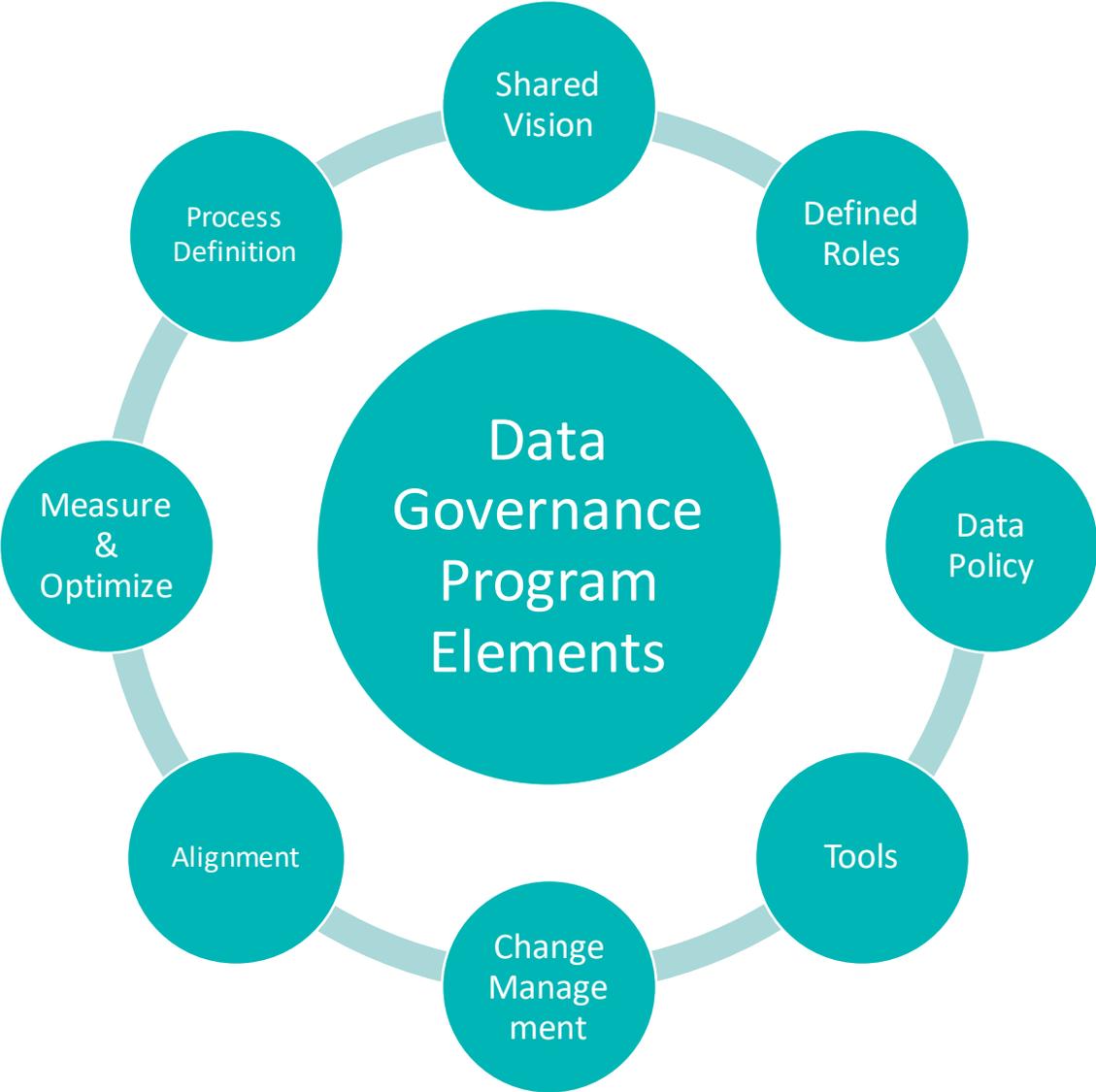


Data is now recognized as one of the most important strategic corporate assets.

Data Governance Maturity Model - Gartner



Data Governance Key Elements



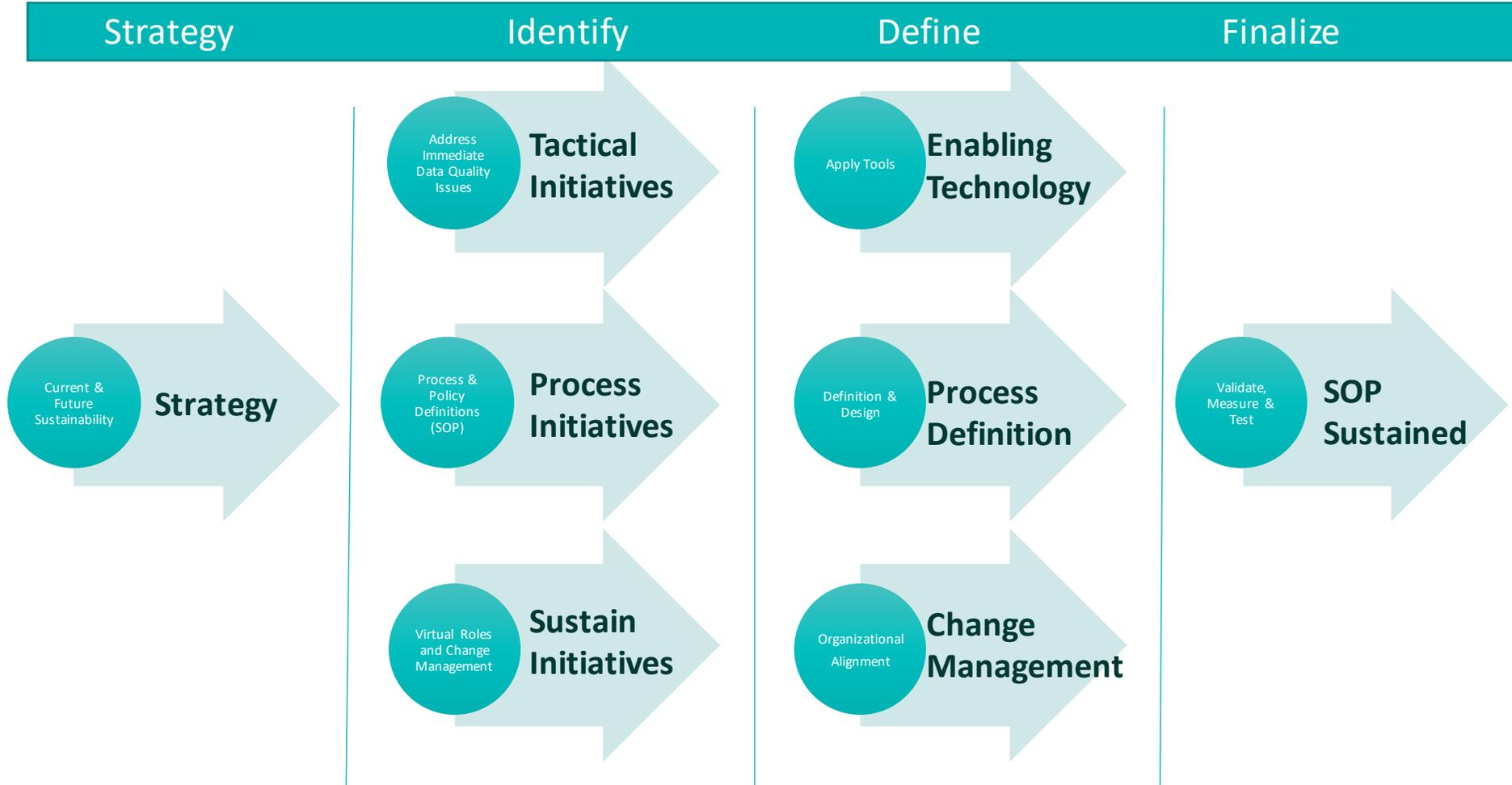
Sparkhound Data Governance Service can address issues on an enterprise or address areas of interest individually.

Sparkhound recognizes that data quality and governance is as much a process as it is enabling technology

Sparkhound has a proven approach to setting up both small and large data quality and governance processes.

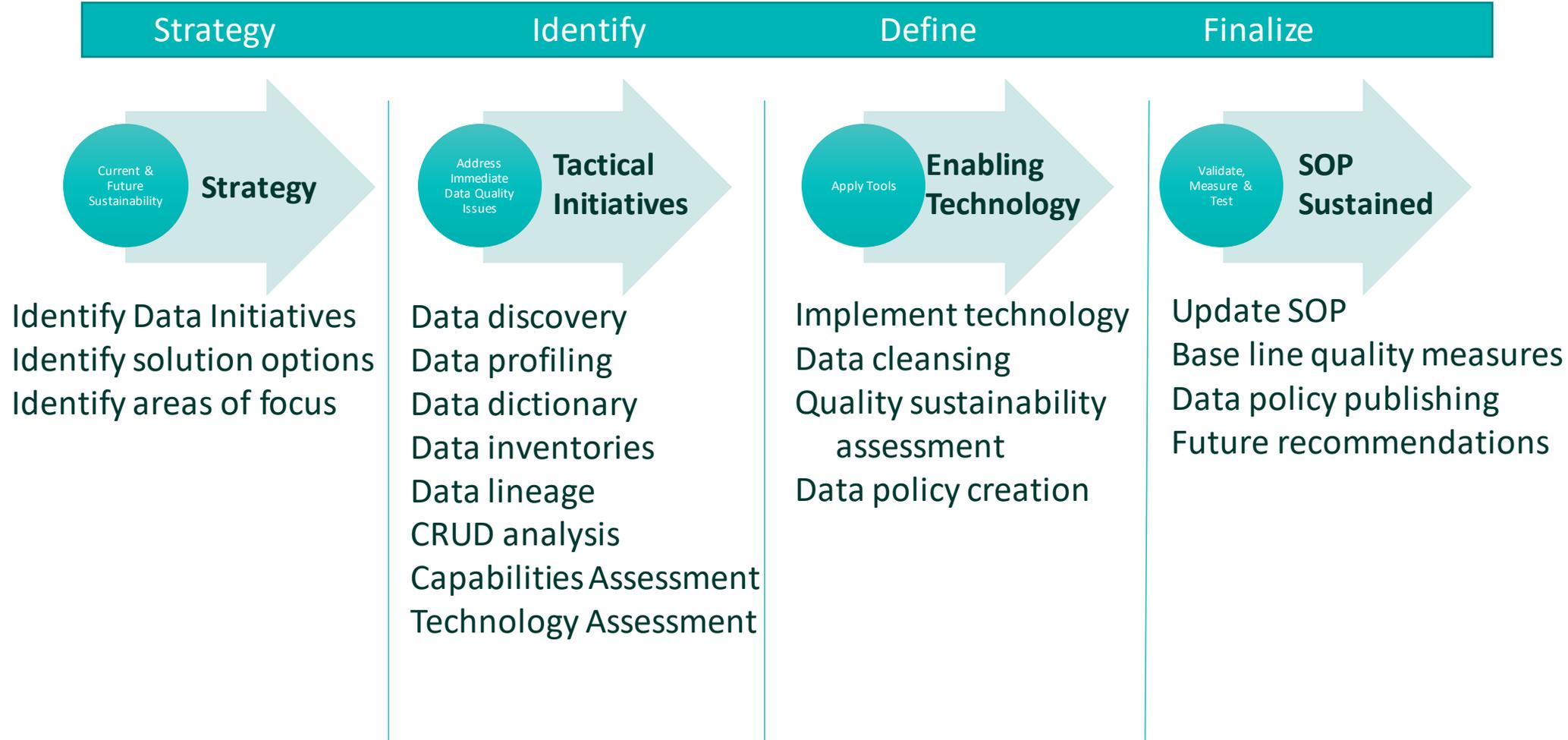
Data Governance Flexible Approach

Sparkhound Multi Workstream Approach to Data Governance



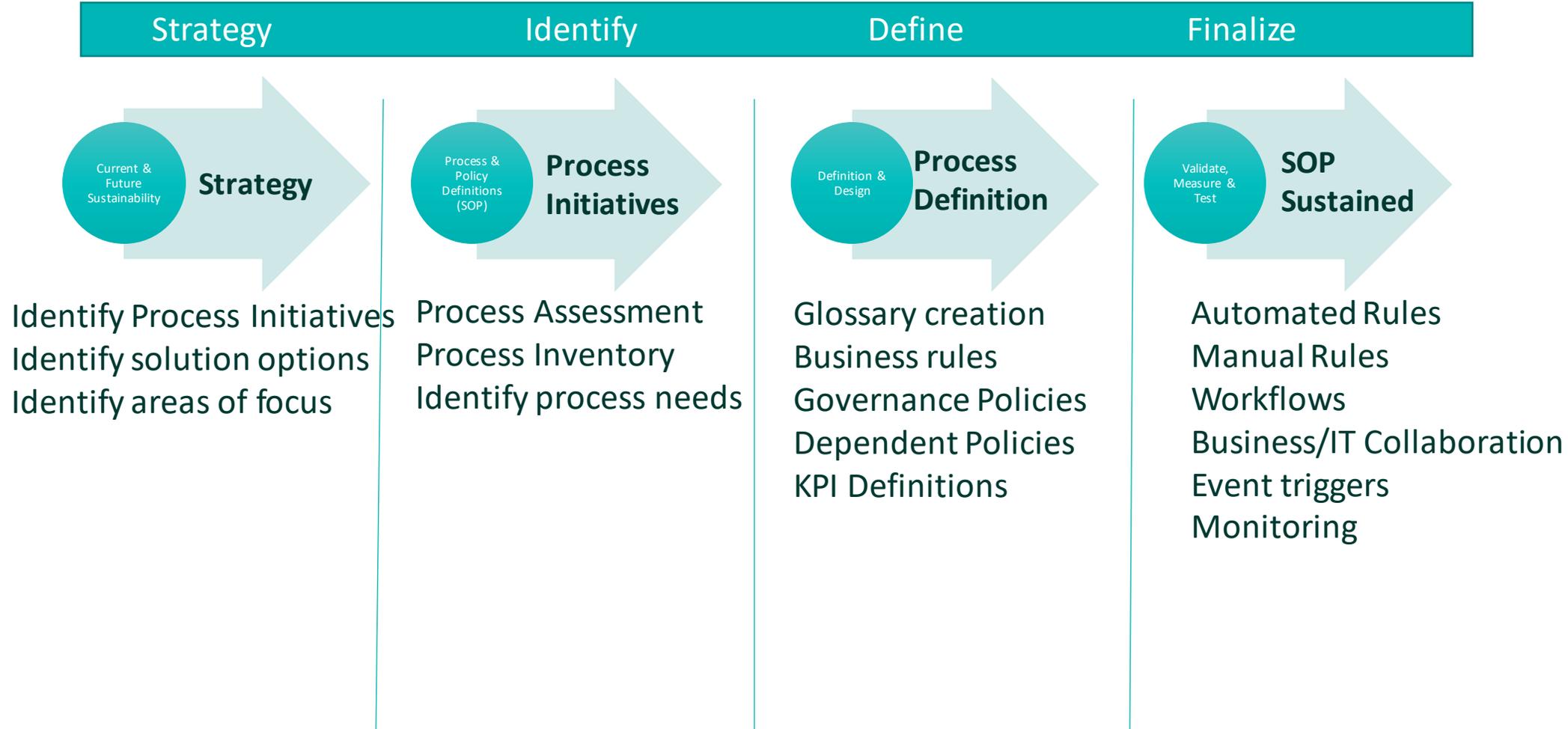
Depending where you are in your data journey each workstream can be addressed separately.

Sparkhound Multi Workstream Approach to Data Governance - *Tactical*



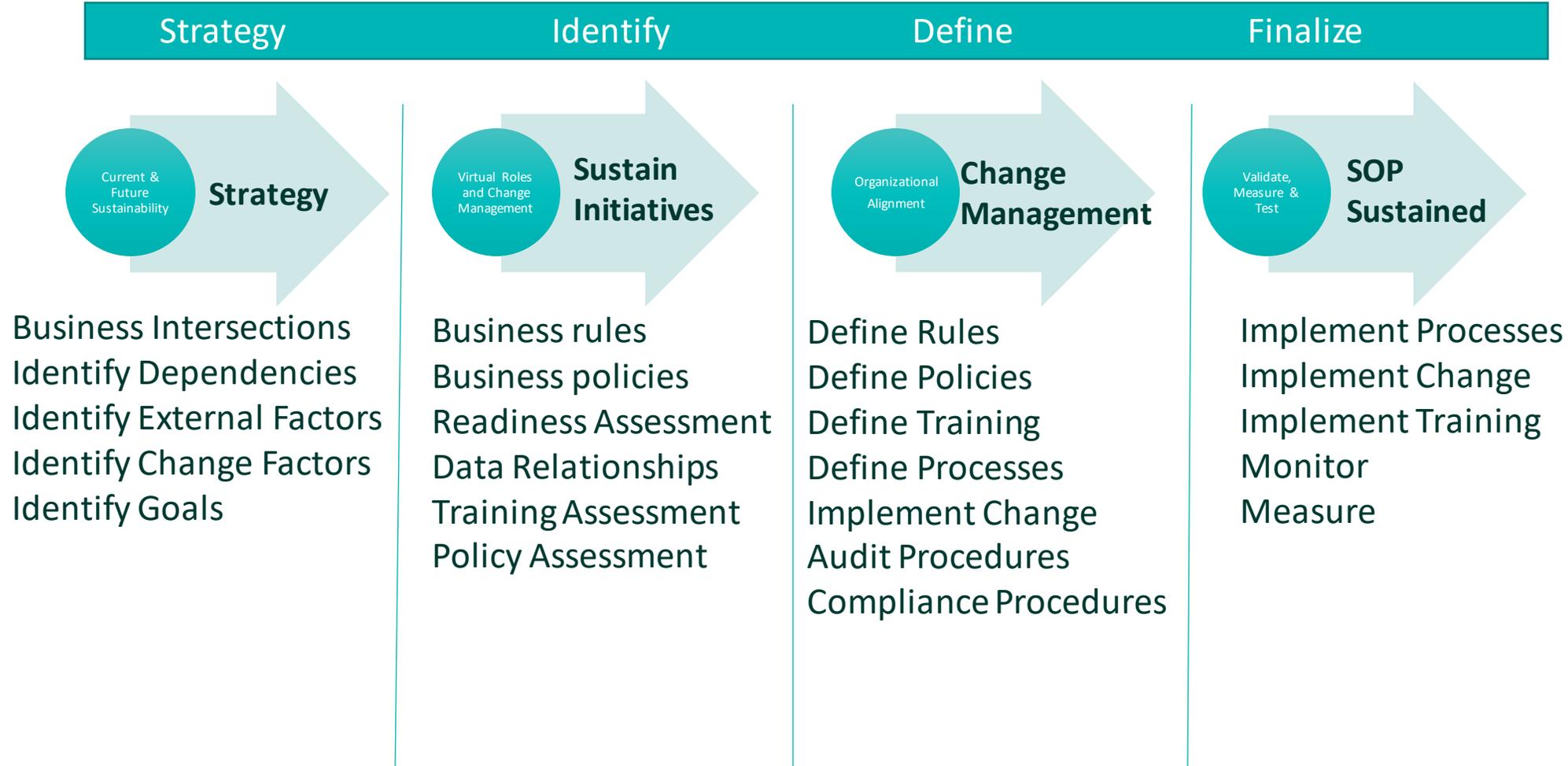
Depending where you are in your data journey each workstream can be addressed separately.

Sparkhound Multi Workstream Approach to Data Governance - *Process*



Depending where you are in your data journey each workstream can be addressed separately.

Sparkhound Multi Workstream Approach to Data Governance - *Sustain*



Depending where you are in your data journey each workstream can be addressed separately.

Sparkhound Data Governance Structure

	Order	Efficiency	Control
Organization	Recently Chartered Data Governance Board	Data Stewards trained & deployed within Material Domain only	Legal Liaison assigned from Compliance for Data Standards Development in Regulated Fields
Process	Data Stewards trained fro CRUD process facilitation in Materials Domain	Early Forms implementations underway leveraging Winshuttle	Data Validation checks organized for forms at an Enterprise level, planned downstream development of Governance Rules
Business Execution Knowledge	Data Standards compiled at the Enterprise level for Material Domain	Planned – Kaizen workshops for New Product Creation process	Planned – Build out of Governance Rules to support Information Trust Monitoring

Sample Deliverables

Sparkhound Data Quality Assessment Criterion

Quality Dimension	Description
Comparability	Are the data from different systems, regions, product lines etc. comparable to each other (equivalent)?
Coherence	Do the data form a coherent body of information that can be rearranged or combined with other data?
Relevance	Do the data meet the requirements of the users?
Accuracy	Are the data describing the phenomena that they were designed to measure; that is, is the data context correct in each functional area
Timeliness and punctuality	How much time has elapsed between the end of the data collection and when the data are available for analysis? Are the data available when expected, based on specifications?
Accessibility	Can users easily obtain and analyze the data?
Interpretability	Do the data make sense in terms of users' hypotheses? Are supplementary data available to facilitate analysis, e.g., data that describe the major characteristics and structure of the data as well as data about the survey processes

Sample Roles and Responsibilities by Phase

Ensuring standards in data collection and quality

Data development Life Cycle	IT		Data Model Design & Functional area				
	System SMEs	Data SMEs	Data Domain	Data Defining	Data Collection/ Production	Data User/Usage	Activities Co-ordination
1. Information Gathering	Co-ordinate and manage all system integration information	Co-ordinate and understand all current data gathering mechanisms. Assure that appropriate technical meta data is recorded	Identifying ,recording & verifying that ALL the raw data source is available & data is recorded	Participate in data definition discussions	Interact with technical and FA to develop data extraction methods, timings and quality checks	Participate in data usage information gathering	Work with the team (s) to complete the system configuration and integration on time
2. Planning and Analysis	Co-ordinate with rest of the team (data SMEs, Users etc) and provide input in system planning	Manage and share all technical aspects of data collection & processing to data SMEs for approval/process changes (if any)	Co-ordinate, analysis & provide steps on reaching a high level data flow design	Provide data definition guide to build/start solution packages	Develop data production/processing guidelines and implement that with help of tools (IS)	Provide data usage and tool guidance on an appropriate solution	Co-ordinate and support in setting up project timelines, status reporting and tactical decision making
3. Solution Design	Co-ordinate system design & usage methods and get approvals from various stake holders	Co-ordinate for any changes at the source system level	Develop data model, quality rules and exception along with Data SMEs and Data users. Finalize the des	Proposed best options/alternatives based on requirements and technical limitations	Propose alternatives for data production (if required) which fits best to the data definition and over all architecture	Provide alternatives (if required) that best fit for the requirements	Co-ordinate activities including various teams and <u>accept/resolve</u> the solution with in the project timeline

Sample Roles and Responsibilities by Phase (Cont..)

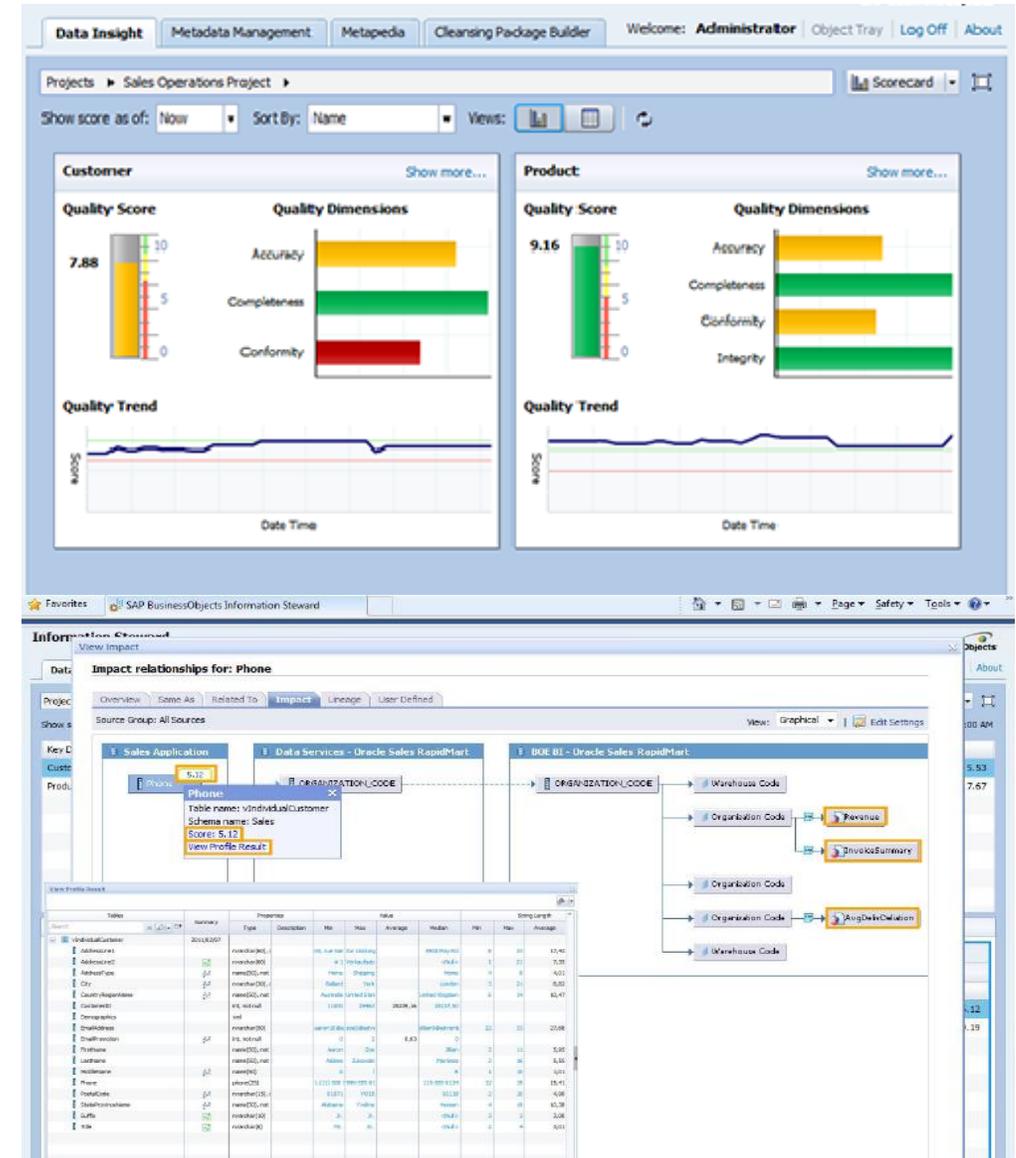
Ensuring standards in data collection and quality

Data development Life Cycle	IT		Data Model Design & Functional area				
	System SMEs	Data SMEs	Data Domain	Data Defining	Data Collection/ Production	Data User/ Usage	Activities Co-ordination
4. Solution Development	Configure the ETL and Data Management system	Assure that the required meta data and transactional data is captured from systems	Assure that the required meta data and transactional data is captured from systems		Validate the ETL output from various systems to the meta data and transactional layer in data model		Work with the team (s) to complete the solution design
5. Solution Testing	Perform integrated system testing. Ensure that the performance criteria is met	Ensure the appropriate data set is captured and verify with help of SMEs		Test data solution from a definition perspective using developers or limited user base	Co-ordinate any bug fixing as part of user testing	Test data solution from a production perspective	Co-ordinate and support in developing test plans, fix timelines and status monitoring
6. Solution Implementation	Co-ordinate the system solution roll out along with system SMEs	Co-ordinate the technical aspect of data solution implementation	Co-ordinate business tasks associated with solution implementation				Co-ordinate activities including various technical teams & business users.
7. Solution Monitoring and Maintenance: <u>Feedback Loop</u>	Develop a system maintenance work plan for system SMEs	Develop	Identify the operational data load issues and other quality issues			Provide a template for data issues pertaining to their domain of data	Solution and Data quality maintenance with Data/System SMEs and <u>accept/resolve</u> the dataset

Sample Role Definition – *Data Steward*

Increase the value of data assets

- **Manage the Data Standard and Policies** – IS allows to document the clear ownership of data at different stages.
- **Root Cause Analysis** – IS allows to track down where the (defective) data come from. Also allows to define “fit for use” rules for the data which allows to monitor the credibility of data before end users come back
- **Creating Data Scorecards** data quality levels at multiple score cards are developed on how well we are doing against the metrics over time
- **Enforcing Data Quality Business Rules at point of entry.** With SAP Data Services, we can create validation rules while loading data as well as execute these rules at ERP/CRM level
- **Compliance** As IS allows data flow tracking, you can operationalize SLAs for individual data stakeholder



Identified Data

Data to be Governed					
Subject Area	Table and/or Fields (new is okay)	Primary System	Linage / Providence / Dataflow from original source to target	Data Volume	Freq of Change (Hourly, Daily, monthly, quarterly, annual)
<i>Technical Team</i>	<i>Technical Team</i>	<i>Technical Team</i>	<i>Technical Team</i>	<i>Technical Team</i>	<i>Technical Team</i>

Action

Technical Support			
Remedy Solution(s) of Issue(s)	Date of Remedy	Remedy Owner	Notes
<i>Technical Support / Data Steward / OCM depending on the issue</i>	<i>Technical Support / Data Steward / OCM depending on the issue</i>	<i>Name</i>	<i>All</i>

Policies

Data Steward						
Owner(s)/Data Stewards (if more systems in data linage there may be more than one owner)	Owner Supported by	Used by	Freq of Data Quality Monitoring (Daily, Weekly, Monthly, Quarterly, Annually)	Change Process	Any Current Issue(s)	Data Issue(s) CRUD
<i>Product Owner/OCM</i>	<i>Product Owner/OCM</i>	<i>Product Owner/OCM</i>	<i>Product Owner/OCM</i>	<i>Data Steward</i>	<i>Data Steward</i>	<i>Data Steward</i>

Data Categorization

Reference	Team Reported	Source System	Table	fields	Description		
		Source System identification	Table of the source system suspected of data quality issues	List of fields if the issue is field specific	Description in "English" of the nature of the issue	Business Process of Data	Data Flow/Data Providence

Action

Agile Story	Agile Story Ref Id	Assigned to
As a end user I want quality data with [xxxxx] so that I can count on a single version of the truth	Enter reference ID	Enter Sprint Assigned to be remedy

Data Profiling

Source System	Type of Issue	Describe Data Issue	One Time/Ongoing	Impact of the data Issue	System Redundancy of Data	Is this Global or Order Only	Recommendation	Description of effort	Prioritization
System Of Origin Key System Identified as Master	Is this a technical, process, OCM, Training issue or other (specify)	Describe the technical issue. Transofrmation/S QL can be included	Is this a one time clean up or requires regular monitoring	Describe the business impact of the data issue	Where else does the data exist (other systems eg. Cognos)	What regions, departments etc. are imacted	Recommended course of action (Include Tools, Training, Process, Transactional System Mods, data integration mods etc.)	Describe the level of effort - resources required, complexity - number of estimated hours etc.	Determine prioritization and scoring

Data Governance Sample Time Line

Note this is a complex example with multiple areas

DQ - Study & Workshop Timeline		Week #	1	3	4	5	6	7	8	9	10	11
Strategy	Identify Areas of Focus		█									
Area	Study -Process and Use Case		█	█	█							
	Post Market				█	█	█	█	█			
	Customer Service					█	█	█	█			
	Quality					█	█	█	█			
	Sales & CRM						█	█	█	█		
	Manufacturing						█	█	█	█		
	SFDC							█	█	█	█	
	Agile							█	█	█	█	
Client	Techo Functional Analyst							Manufacturing, Notificati				
	Techno Functional Analyst 2							CRM, SFDC, Remote FE				
								Agile				
IT	Product Hierarchy and Install Base					█	█	█	█	█	█	
Findings												█
Agile Stories												█

Thank You

