

# Best Practices in Data Governance



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# Agenda

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- Define Data Governance
- Problem of Data Ownership
- Tyranny of the Project Orientation
- Begin with Principles
- Annual Report on State of Data Governance
- Data Content Management and Data Governance

# Define Data Governance

# What is Data Governance? Starter Definitions

From the Data Governance Institute

”The exercise of decision-making and authority for data-related matters.”

”A system of decision rights and accountabilities for information-related processes, executed according to agreed-upon models which describe who can take what actions with what information, and when, under what circumstances, using what methods.”

[www.datagovernance.com](http://www.datagovernance.com)

# Data Governance is about Processes

## Processes for...

Deciding who has what rights regarding data

Making decisions about data

Implementing decisions about data

## In other Words...

Identifying the processes needed to manage data

Identifying the actors in these processes

Designing these processes

And designing the processes to design these processes

And designing the processes to ensure compliance with these processes

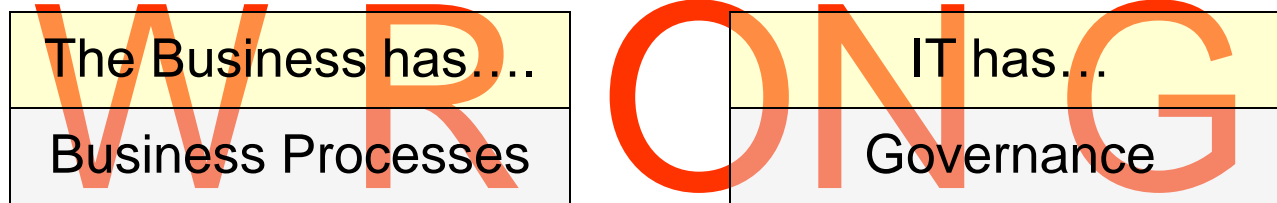
# “The Business” versus IT

The Business has....
Data
Business Processes
Databases
Operational Systems
Warehouses & Marts

IT has...
Metadata
Governance
Repositories
Repositories/Nothing
?

- We have inherited a false distinction between “the business” and IT.
- What if HR, Finance, Facilities Administration thought like this?
- This mindset pervades EVERYTHING in IT.
- EIM must overcome it, and start aligning to the enterprise – NOW.
- IT staff desperately cling to this belief that they are “special” – a relic of the heroic age.

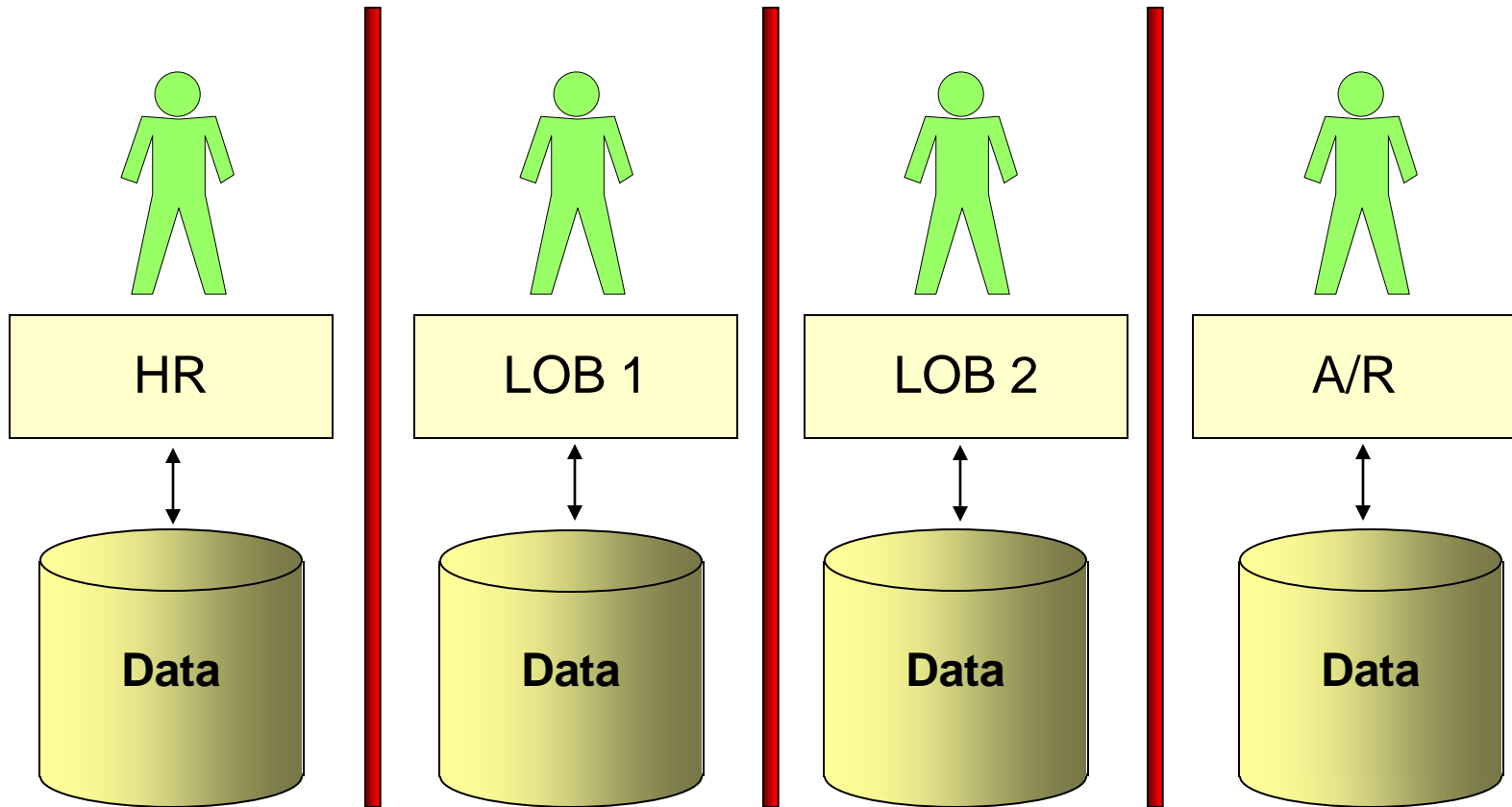
# Data Governance



Data Governance is the design, building, and operation of formal business processes to manage the enterprise data resource.

- The decision rights of actors are defined within the context of these business processes
- There is no real distinction between the processes of “data governance” and the “business processes” of the business . [Compare HR].
- A distinction that identifies the set of business processes that manage the enterprise data resource as “data governance” is valid. [Compare HR].
- Use of the term data governance to further the pretence that IT is universe totally outside of the enterprise is invalid.
- Therefore, the processes of data governance are truly business processes

# Governance is Simpler in Silos



- Silo bosses can more easily take decisions
- Consequences are limited to silo
- Silos produce and consume their own Master Data



# The Rush to Integration: 2005-Present



- A data “gold rush”.
- Demand for integrating data and making “systems talk to each other”
- Requirements for operational systems largely satisfied
- Huge spike in BI, MDM
- Realization that problems of integration lie in the data – need for DG

# Problem of Data Ownership

# Data “Owner”



**The term “Data Owner” is often an excuse for not identifying the set of tasks needed to govern data.**

**It implies we simply identify an individual of unit that is accountable for all aspects of managing a set of data.**

**If someone owned the data they could take it away and sell it. Would this really be allowed? But that is true ownership. Using “owner” as an analogy is really bad.**

# RACI Matrices

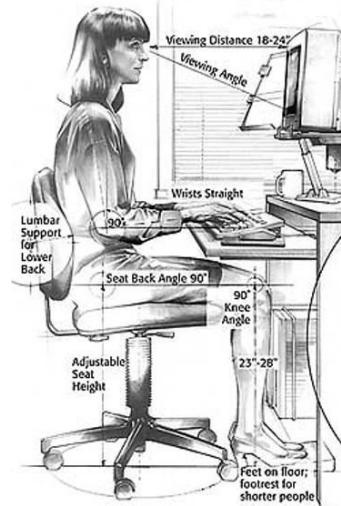
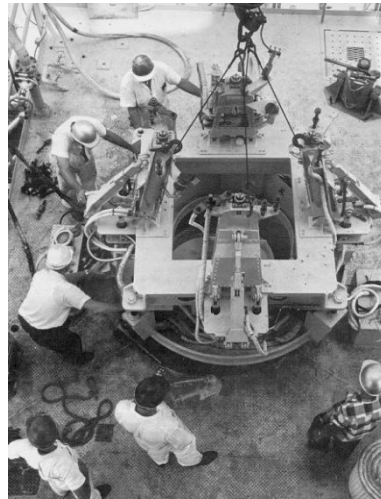
<b>R</b>	Responsible
<b>A</b>	Accountable
<b>C</b>	Consulted
<b>I</b>	Informed

	Sales	Marketing	Accts Receivable	Accts Payable	IT
Data Definitions for Customer Table / Columns	R	A,R	C	I	
Archiving Rules for Customer Data	C	A,R			I
Data values in Customer Type Table	R,A	C	R		
Data values in Customer Credit Status Table	I		R,A	R	

- RACI Matrices are well-accepted and easily understood by users
- They decompose responsibilities for data to atomic levels that can be implemented. Much better than “Data Ownership”.

# Tyranny of the Project Orientation

# What is IT?

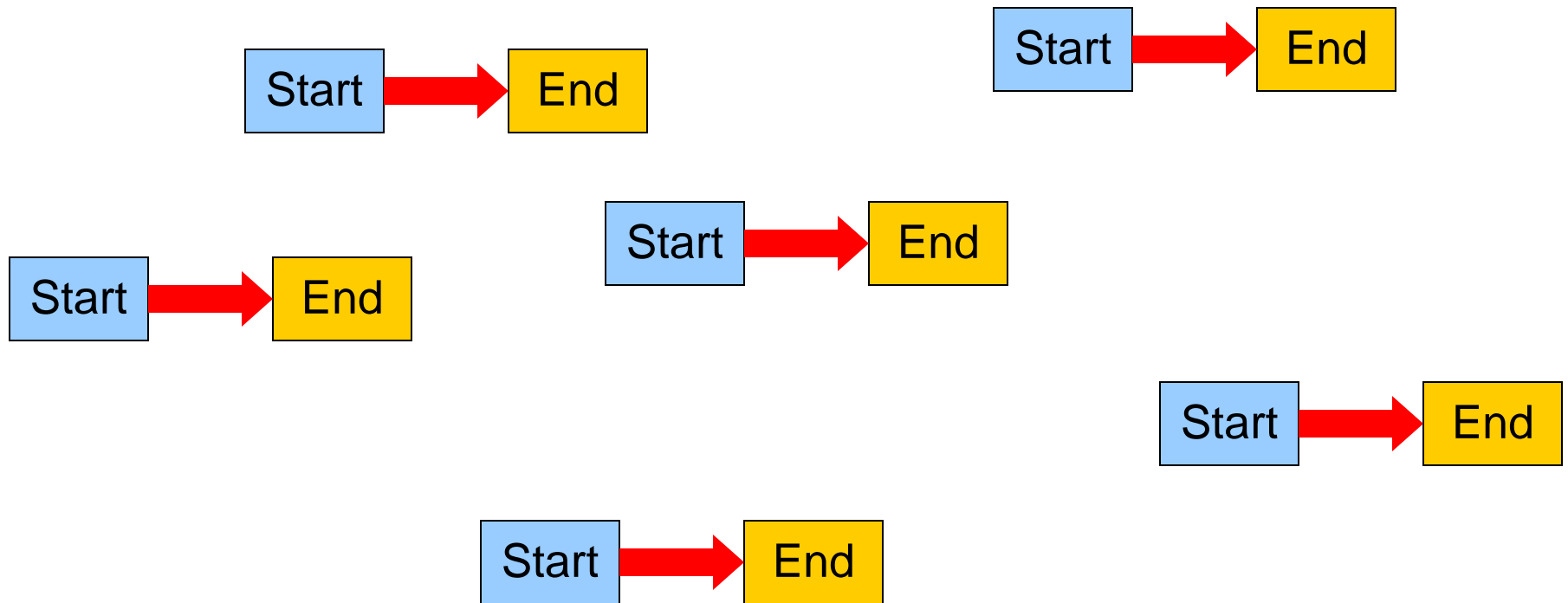


IT Acquires Technology...    ...to build infrastructure...    ...for other people to use...    ...but which IT still manages and controls

**Information technology (IT)** is "the study, design, development, implementation, support or management of information systems". *Information technology* is a general term that describes any technology that helps to produce, manipulate, store, communicate, and/or disseminate information. ([http://en.wikipedia.org/wiki/Information\\_technology](http://en.wikipedia.org/wiki/Information_technology))

- IT is not oriented to understanding the operational usage of applications as they relate to the business
- If something new has to be built, or an existing application modified, IT gets involved – otherwise it is not interested in the users' problems
- IT keeps the infrastructure running, and if it breaks, fixes it – but this is not directly dealing with business problems

# The Tyranny of Projects



- No services set up, no infrastructure built – nothing permanent
- Everything oriented to projects and delivered within projects
- Little shared across projects
- No sustained activities, no business processes for DG

# Data Governance vs. Projects

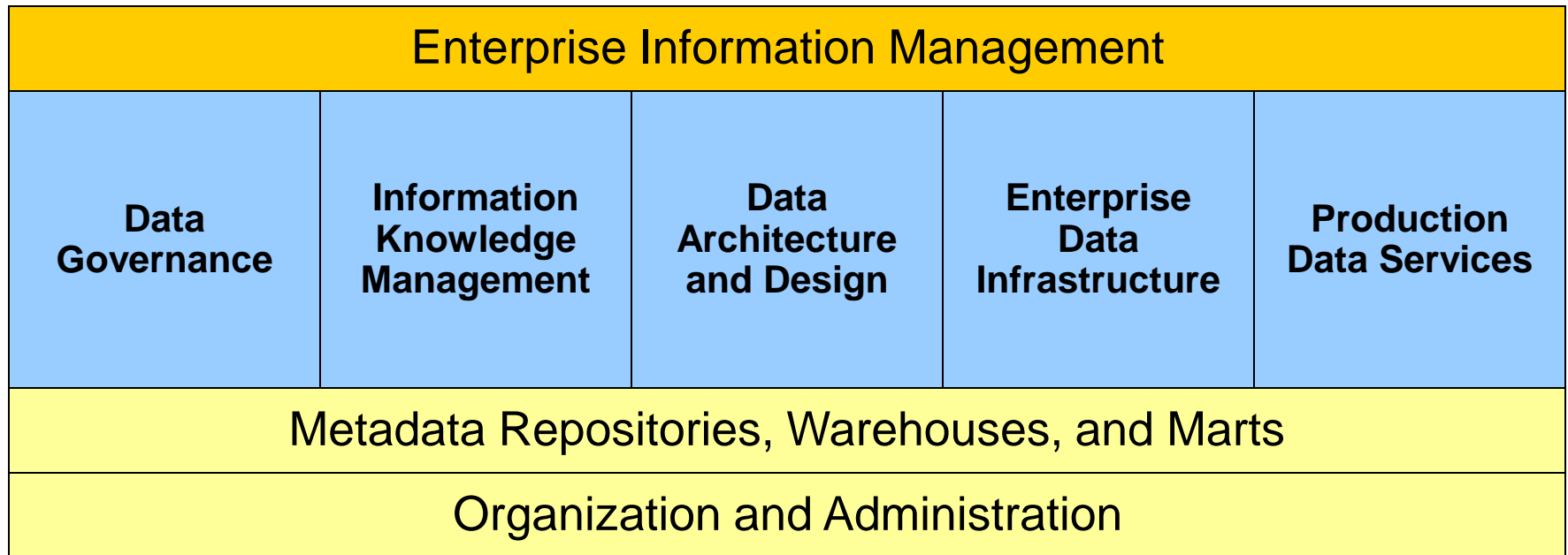
Traditional Project
Design, build, walk away
Oriented to producing one major artifact
Serves user needs
Done just one time / Temporary
Incremental to add bits, get stuff right
Analysis artifacts thrown away

Data Governance
Operational
Multidimensional
Enterprise-wide
Service-Oriented
Incremental in terms of increasing quality and scope
Analysis artifacts sustained

- Data Governance does not map to a project, but is a Target Operating Model.
- The building of components of it can be projects, but not the operating of it.



# Enterprise Information Management



Enterprise Information Management (EIM) is the function within an organization responsible for guaranteeing that reliable data is available for any process, or other context, where it becomes information. EIM seeks to minimize the risk inherent in data, maximize the return on the investment in data, and ensure that the enterprise data resource always supports business goals.

# Begin with Principles

# What Are Principles?



- Principles are propositions that are to be accepted as true, but not further analyzed.
- We may not be able to further analyze them, or we may choose not to as they appear “self-evident” to us.
- Principles allow use to build a consistent set of governance rules. It is important that these rules do not contradict each other.
- Principles – if they are clear enough – allow us to quickly judge if what we are doing is in accordance (or not) with them. This is very useful.

# Principles in Practice

What's the code for "Hedge Fund"?



It doesn't matter. If I don't know the code I just put in "999"



What's the code for "Hedge Fund"?



You'll have to ask our manager. We're all responsible for data now you know.



Principles do not set rules, but they also mean people have to rely on their own initiative

# Examples of Principles

P1. There will be no point-to-point data transfers among applications.

P2. No master data will be stored outside of the applications that produce and distribute it.

P3. Every individual is responsible for the data they produce.

P4. All data owned by the enterprise is to be available for use anywhere in the enterprise unless security or privacy dictate otherwise

# Your Enterprise Already Has Principles

Like it or not, every enterprise has principles of data governance. These can also be thought of as “absolute presuppositions” - it is one of the tasks of metaphysics to discover what these are in any context. Principles tend to be formally articulated (and rare) whereas absolute presuppositions tend to be unarticulated (and much more common). Try to discover what the absolute presuppositions are in your enterprise (unless you already have a statement on principles).

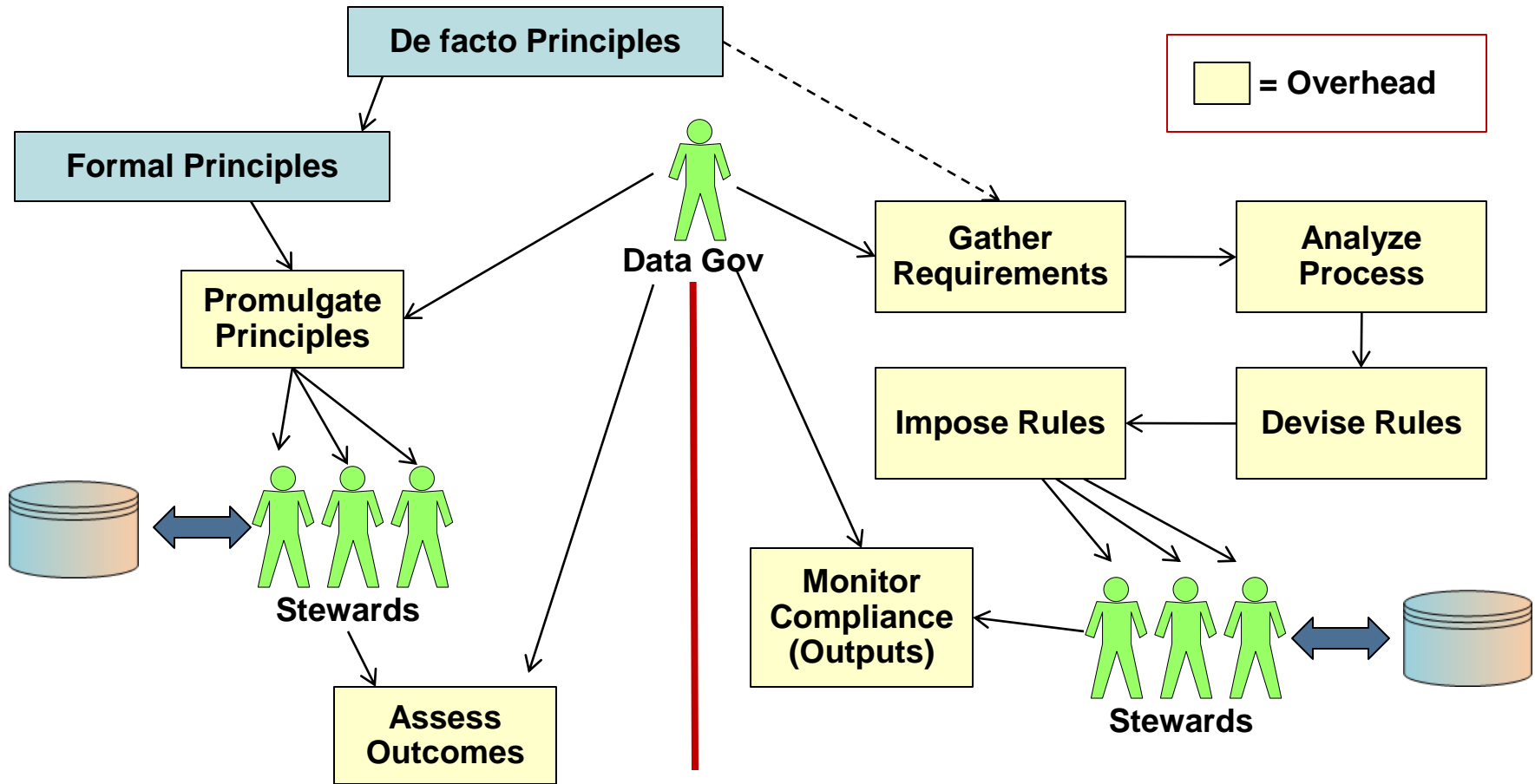
P1. No individual is to be held accountable for data quality problems

P2. Data transfers are to be decided between the teams responsible for source and target applications

P3. Every application can decide what data it will store.

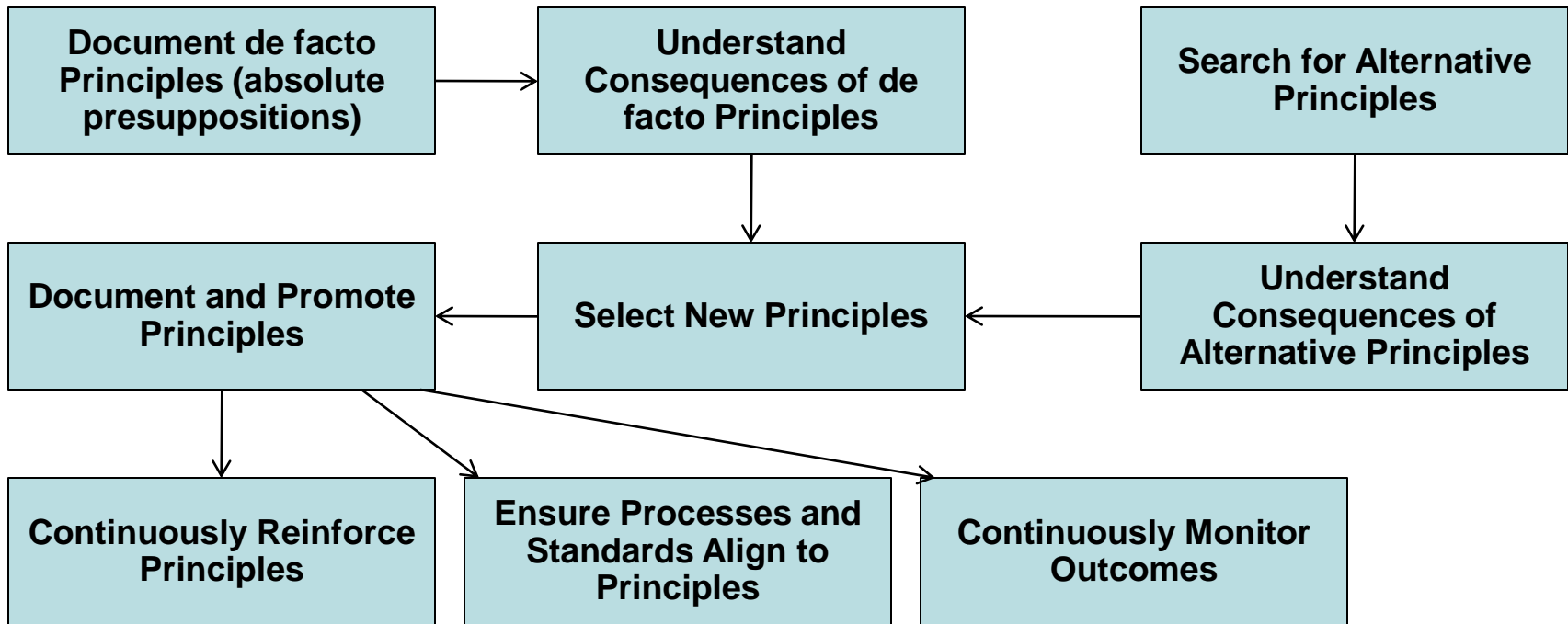
P4. An application team can decide whether to make data stored in the application available to any other area of the enterprise.

# Principles vs. Rules



- Rules = More overhead to develop and implement; restrict what stewards can do; need to completely understand processes involved
- Principles = Less overhead to develop and implement; do not need to know process details; but have to assess outcomes

# Develop and Promulgate Principles

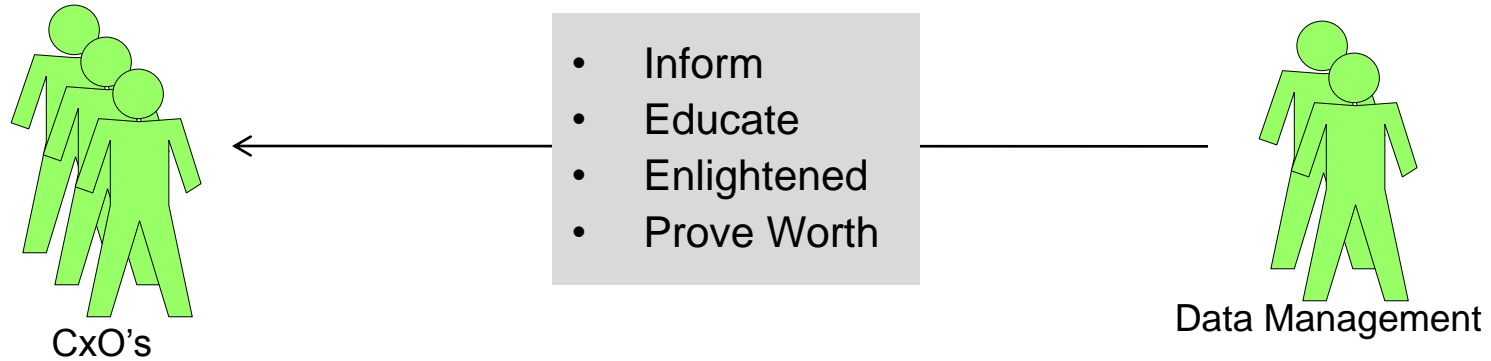


- Principles are not a project
- Require continuous monitoring across all aspects of governance
- If do not do this, will have to revert to rules



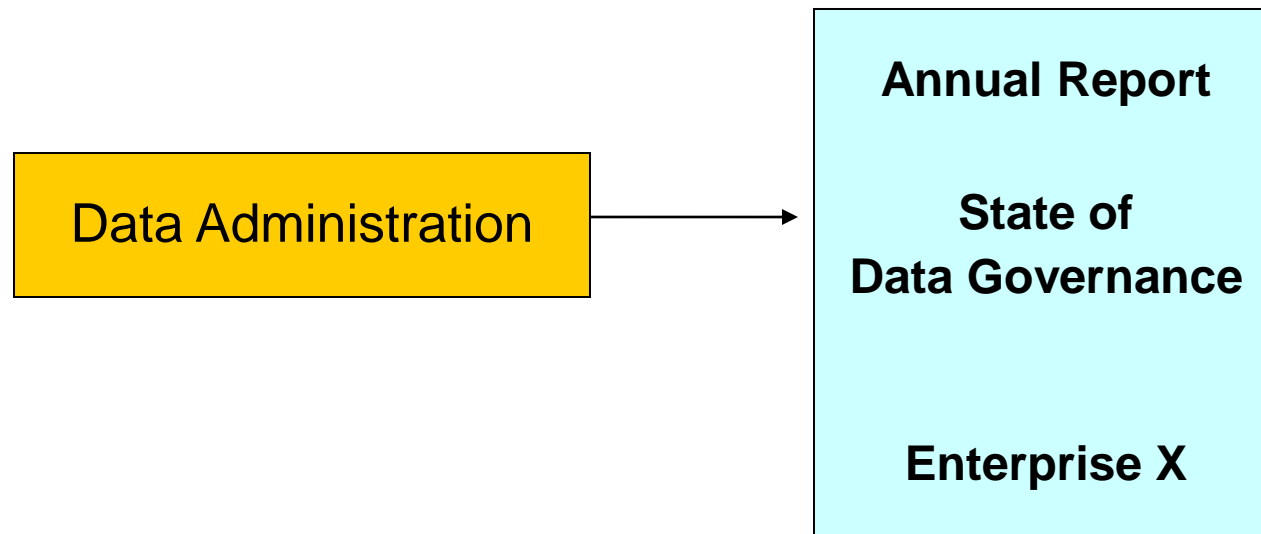
# Annual Report on The State of Data Governance

# Executive Management



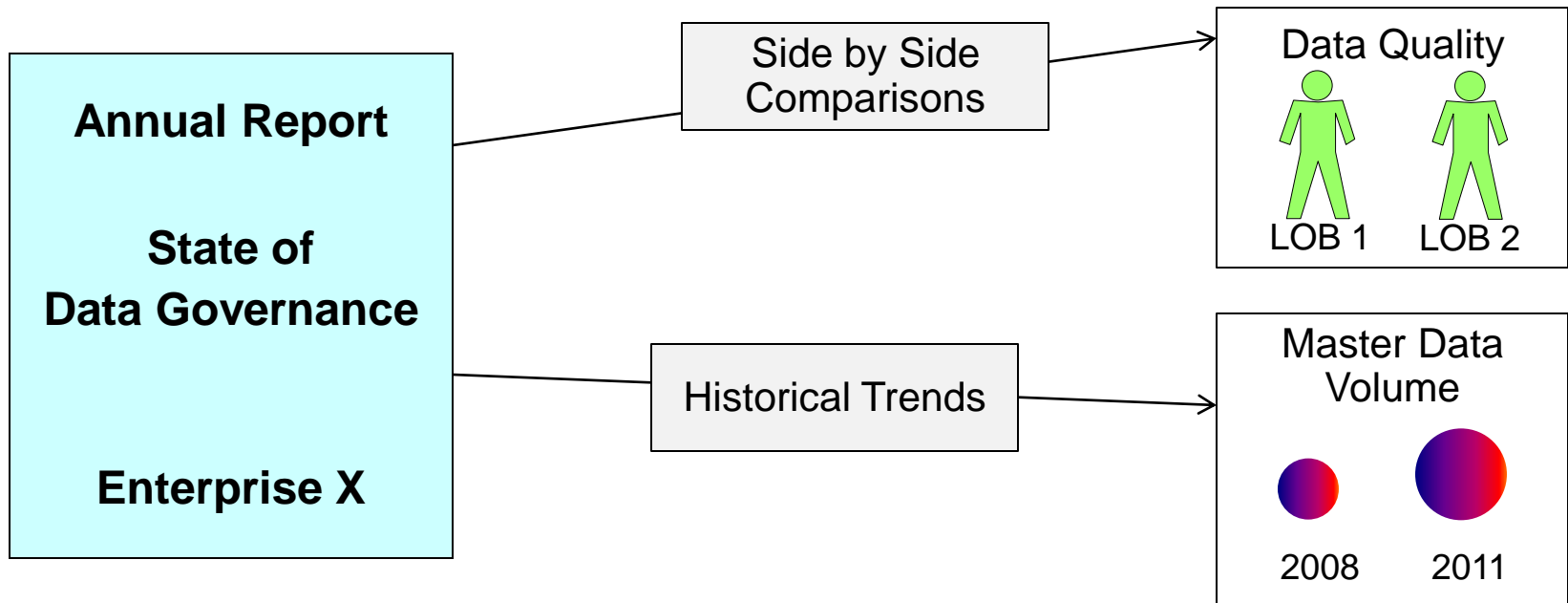
- Executive management is the most important set of stakeholders for Data Governance
- They must be made to understand what Data Governance is and how it will help the enterprise

# Produce an Annual Report



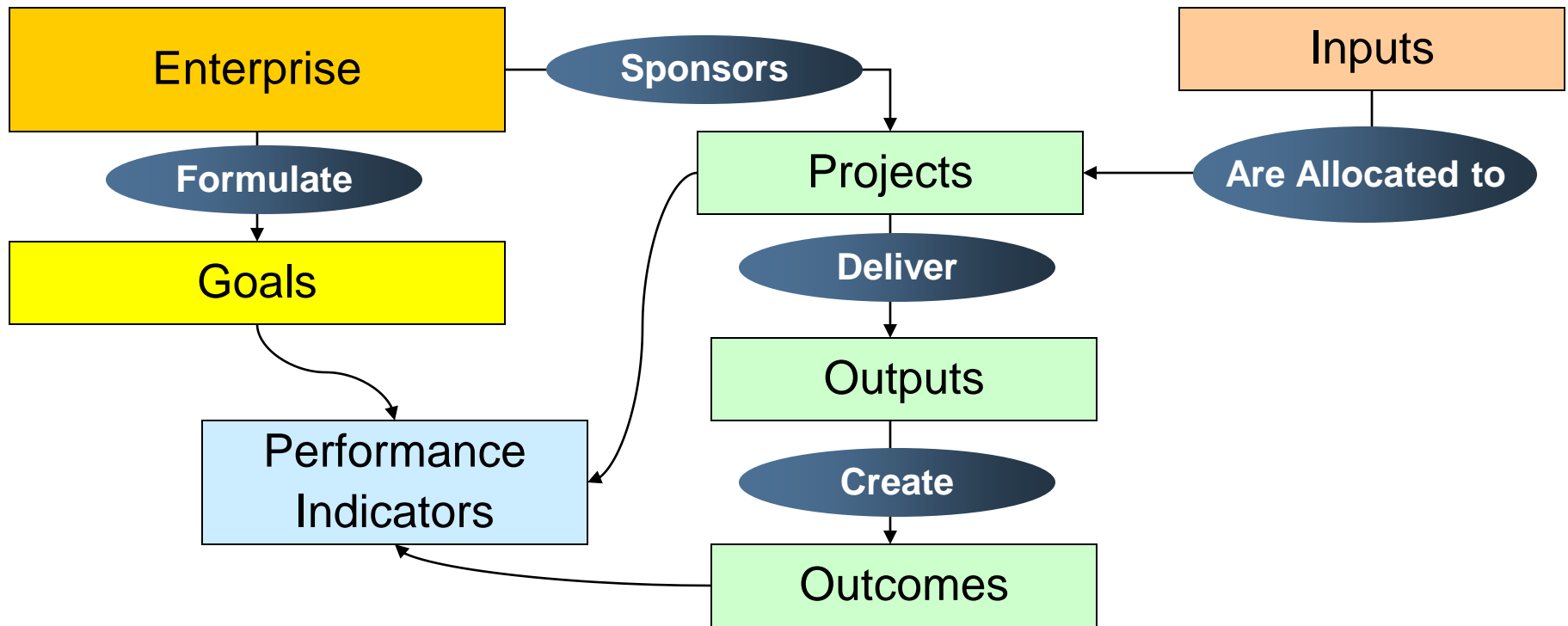
- An annual report can provide quantitative information on the state of data governance for MDM
- It must be factual, not based on opinion
- It must track measurable indicators in a multi-year framework
- Does not require a huge amount of resources to produce

# Impact of Annual Report



- An annual report can provide quantitative information on the state of Data Governance
- It must be factual, not based on opinion
- It must track measurable indicators in a multi-year framework
- Does not require a huge amount of resources to produce

# Results Based Management (RBM) Approach



- Data Administration may have no control over many projects
- These projects may have important data governance implications
- Measure the effect of these projects on the enterprise via performance indicators that match the outcomes (“changes for the better”) produced by each project to stated goals of the organization

# Data Content Management and Data Governance

# In Every Master Data Subject Area There are Questions only Humans can Answer

## Example: Company (“Business Entity”)

Who do *Company X* say they are?  
- And who are they really?

Who is *Company X* part of?

Who is part of *Company X*?

Who did *Company X* used to be?  
- And when, and for how long?

Who used to be *Company X*?  
- And when, and for how long?

Is *Company X* really in existence?

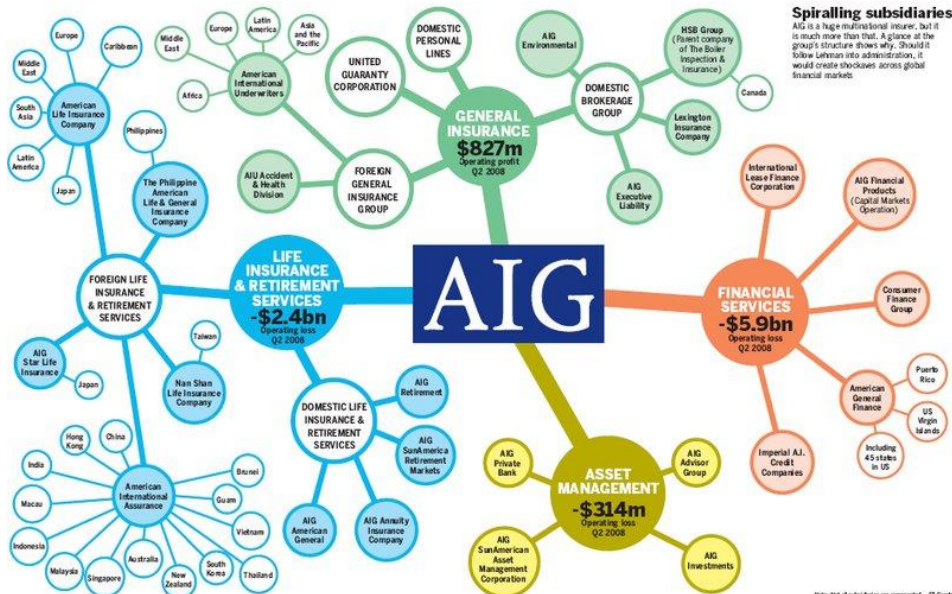
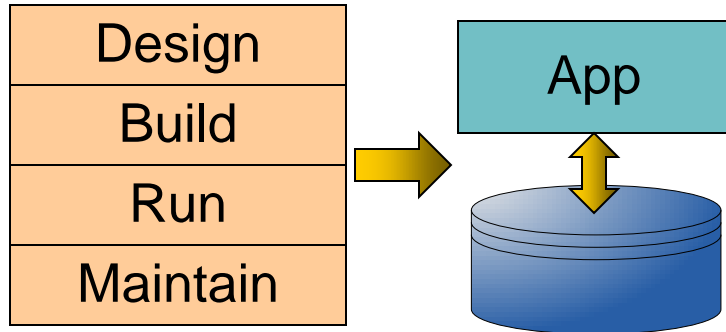
Who is behind *Company X*?

Who told us all this about *Company X*?

What can *Company X* do?

Different question sets exist for other Master Data entities

# What IT Does and Produces Cannot Answer These Questions for Master Data

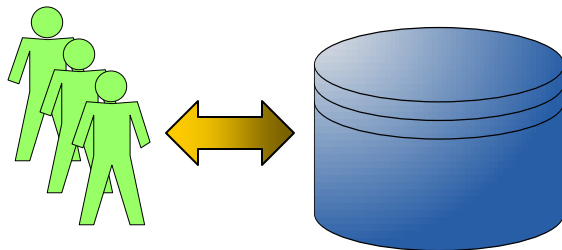


[http://www.democraticunderground.com/discuss/duboard.php?az=view\\_all&address=114x59388](http://www.democraticunderground.com/discuss/duboard.php?az=view_all&address=114x59388)



# The Realm of Data Content Management

Data Content Mgmt



## DCM Tasks

Make sure the data is accurate

Make sure the data is complete

Make sure the data is up to date

Capture all relationships in the data

## Business Impact

Does lack of trust in data delay new business?

Will different reports give different answers to the same question from clients and regulators?

How often do business users have to double check data – and what is the cost of this?

## Financial Sector Entities

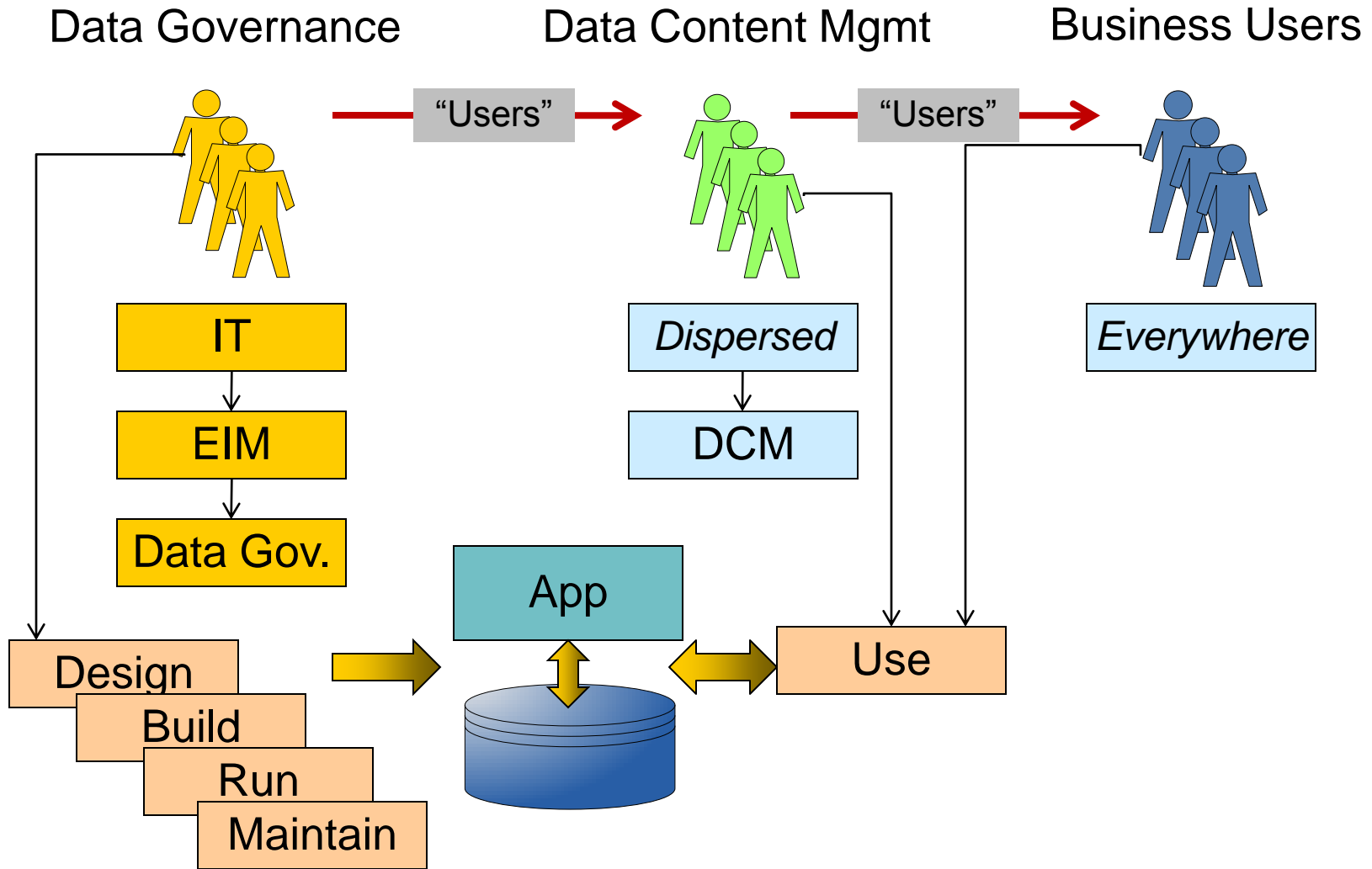
Organization

Person

Financial Instrument

Corporate Action

# Three Areas

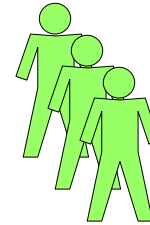


# Who Does What?

Data Governance



Data Content Mgmt



**Subscription Management (e.g. Bloomberg, Reuters)**

**Data Usage Chargeback Management**

**Data Contract Negotiation and Issue Resolution**

**Define Ways of Working with Particular Content. E.g. How to notify business users if particular content changes**

**Data Content Managers will have more knowledge about the above than EIM-based Data Governance function.**

**Bring DCM and Data Governance into one unit?**

**Scope for friction here**

# Questions and Answers

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