

Data Strategy and Success

An Executive Workshop

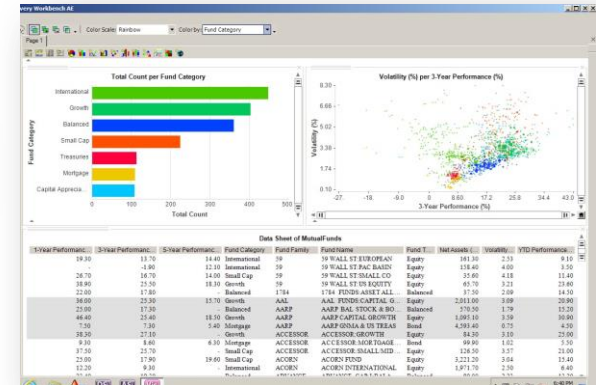
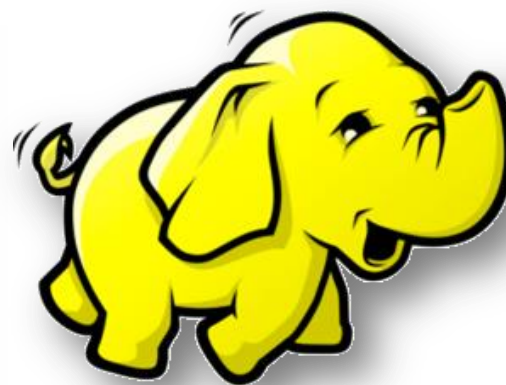
Introduction

Searching for better ways
to manage and use data

Trying to think
about data Strategically

Trying to
cope with Change

You're Probably Already Dealing With Some Business Pain



A good data strategy helps you eliminate this pain.

Vision

Align: *The best-tasting pizza, consistently, nationwide.*

Goals

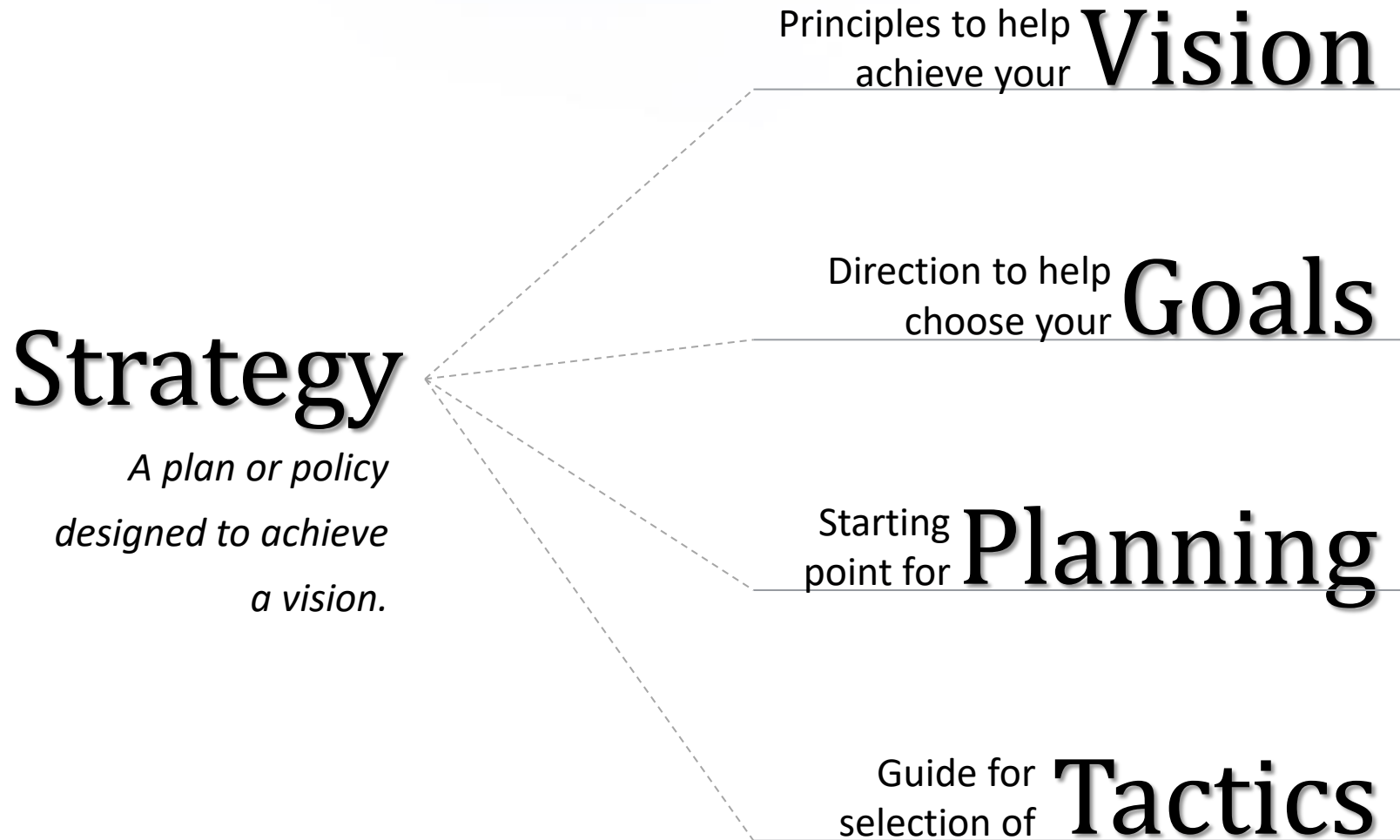
Measure: *Increase sales in premium markets by 30%.*

Planning

Initialize: *Increase budget in target markets by 30%.*

Tactics

Respond: *Buy locally for “local fresh” campaigns.*



Example: Napoleon Bonaparte's Five "Policies"



1. The primary objective is the destruction of the enemy's armies or the main army.
2. All forces must concentrate on the task of attaining the objective.
3. Operations must be designed to surprise and confuse the enemy.
4. Every effort must be made to render the enemy helpless through the severance of his lines of supply, communications, and retreat.
5. The security of French forces must be guarded to prevent surprise.

Example: Napoleon Bonaparte's Five "Policies"



Principles and strategy lead to subordinate requirements.

E.g., focus on the main army led Napoleon to use as little force as possible against non-critical objectives.

"There are in Europe many good generals, but they see too many things at once. I see only one thing, namely the enemy's main body. I try to crush it, confident that secondary matters will then settle themselves."

Depends, as yours will, on:

People

Foot soldiers, cavalry
Line officers to lead troops in tactical maneuvers
Staff officers to plan and communicate

Process

Mobilizing troops
Disrupting lines of supply, communication, retreat
Protection of French forces

Technology

Heavy and light infantry
Cheap small arms
Horse-drawn artillery

*Asset: a resource with economic value that
an individual, corporation or country owns or controls
with the expectation that it will provide future benefit.*

Gartner: Information is an under-managed, under-utilized asset
because it's not a balance-sheet asset.

Not all data is equal. Prioritize based on:

- Criticality and value to the business
- Legal obligations
- Risk to the company

How Will This Help Your Company?

Higher business value

Alignment between business and IT, leading to
better prioritization and organization

Fewer project failures in both business and IT

Faster time to value / time to market

Fewer people going around IT

Greater cost effectiveness

More technical innovation

Less shelfware

An interactive eStatement InfoApp from Information Builders allows investors to glean important insights at a glance, such as how this month's financial position compares to last month and how they are progressing toward their savings and retirement goals – from either a desktop or mobile device.



- Interactive eStatement benefits two million 401(k) and pension plan participants
- Provides secure, interactive online insights vs outdated static statements
- Reduced call center activity and hardcopy mailing costs
- Increased customer satisfaction and retention



- Major health insurer covering the State of Tennessee serving 3.3M members
 - Lacking 360 view of their members for better plans management
 - Improvement required of regulatory measures
 - Needed more Interactivity with partner Providers to create a more comprehensive member record
 - IBM enterprise client, their MPI solution was not complete enough

A message from TODD RAY



Todd Ray,
Vice President &
General Manager,
Senior Products

Together We Earned 4-STARs for Medicare Advantage

I am proud to announce that the BlueCross PPO Medicare Advantage plan has earned a 4-STAR quality rating for 2016 from the Centers for Medicare and Medicaid Services.

Congratulations! This is a great accomplishment not only for Senior Products, but for everyone at BlueCross and most importantly, for our members. We should all take pride in that today.

Our new quality rating is a sign that we're helping members manage their health conditions and get the right care at the right time. It also means we're providing them with an excellent service experience. This would not have been possible without the hard work and collaboration among teams from all lines of business and every part of our great company.

But let's remember this rating is not a destination; it's a milestone on our mission-focused journey. We will continue working to improve the lives of our members as their partner in better health.

To learn more about how we achieved this goal together, [read today's story on web@work](#). Then look for a public announcement on Oct. 8.

And stay tuned for information on a company-wide 4-STAR celebration – you've earned it.

- Results
 - Stars rating improved to 4 stars equating to \$40M in federal incentives
 - Application in production within one year
 - Data harmonization with providers creating better health management & relationships, more revenue

Think big, start small

- Strategy can be exemplified by, and anchored in, individual projects: *Napoleon won a lot of battles*
- You don't have to "conquer Europe", but as you refine your strategy you may get the capability to do so

Long-term

- Even strategy may shift, because vision and goals can shift
- Learn to constantly find out:
 - What's strategic in your company
 - How you can achieve it
 - How to avoid Waterloo

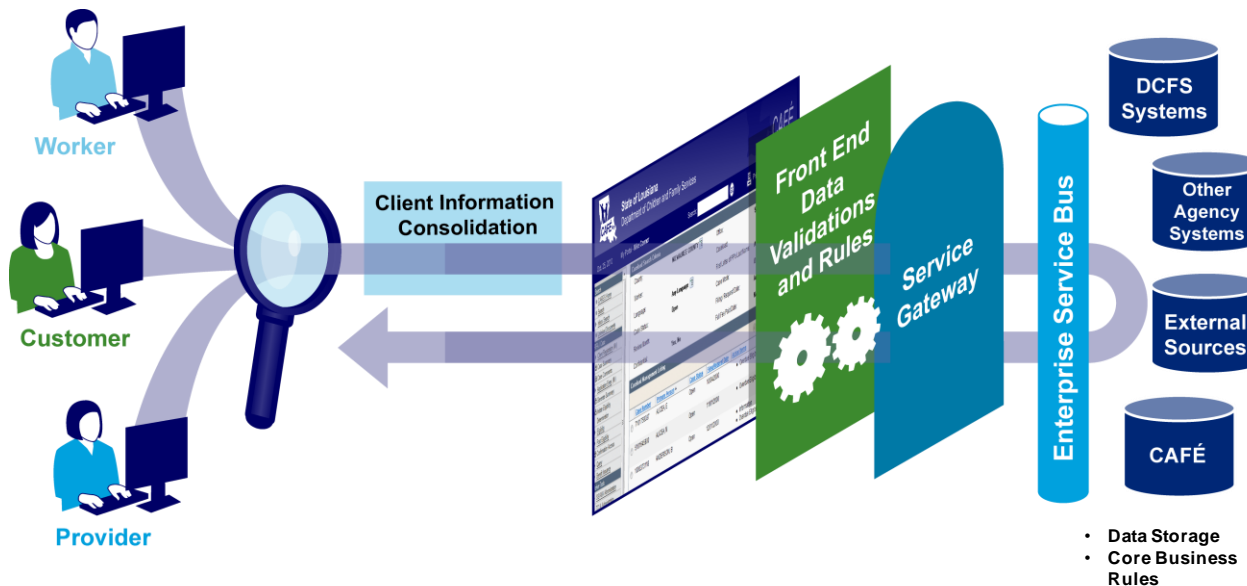
It's Not Any Strategy: It's Data Strategy

	Organize	Govern	Share
People	How do I structure data to	How do I manage data to ensure its	How do I provide data in ways that
Process	ensure that it meets company needs?	suitability for its purpose?	systems or people can apply it to
Technology			business problems?

People

Alignment between business and IT

- **Organization:** The Louisiana Department of Children and Family Services is a state agency that includes more than 4,500 staff members supporting approximately one million constituents.
- **Challenge:** Increase the efficiency of fraud detection, foster care, disaster recovery, and other reporting initiatives within the state's social services department.
- **Strategy:** Create a web-based analytical tool that can access transactional data and display results in a variety of formats, including map-based displays.
- **Results:** A more accurate view of patterns in SNAP benefit transactions and assisted child care programs to make illegal activity easier to detect; enhanced disaster recovery planning; and simplified IT structure.



Vision or mission helps keep people aligned in the abstract

Strategy identifies specific ways the organization will align...

- IT / Business
- Different levels
- Different Business Units
- Policy bodies / CDO

Helps identify mutually reinforcing goals that organizations should set for themselves

Comprehensive can be overwhelming

- Communication of strategy is more like marketing than like technical documentation
- Simplicity is key - KISS
- Especially important to overcome fear of change

Communication is in the service of

- Team building
- Developing skills
- Sharing information needed for success



Considerations for *People, Organize*

Think about business pain, sponsors, and strategic initiatives

Regarding your current strategic projects:

- Is there a business sponsor?
- If not, why do you think this is strategic?

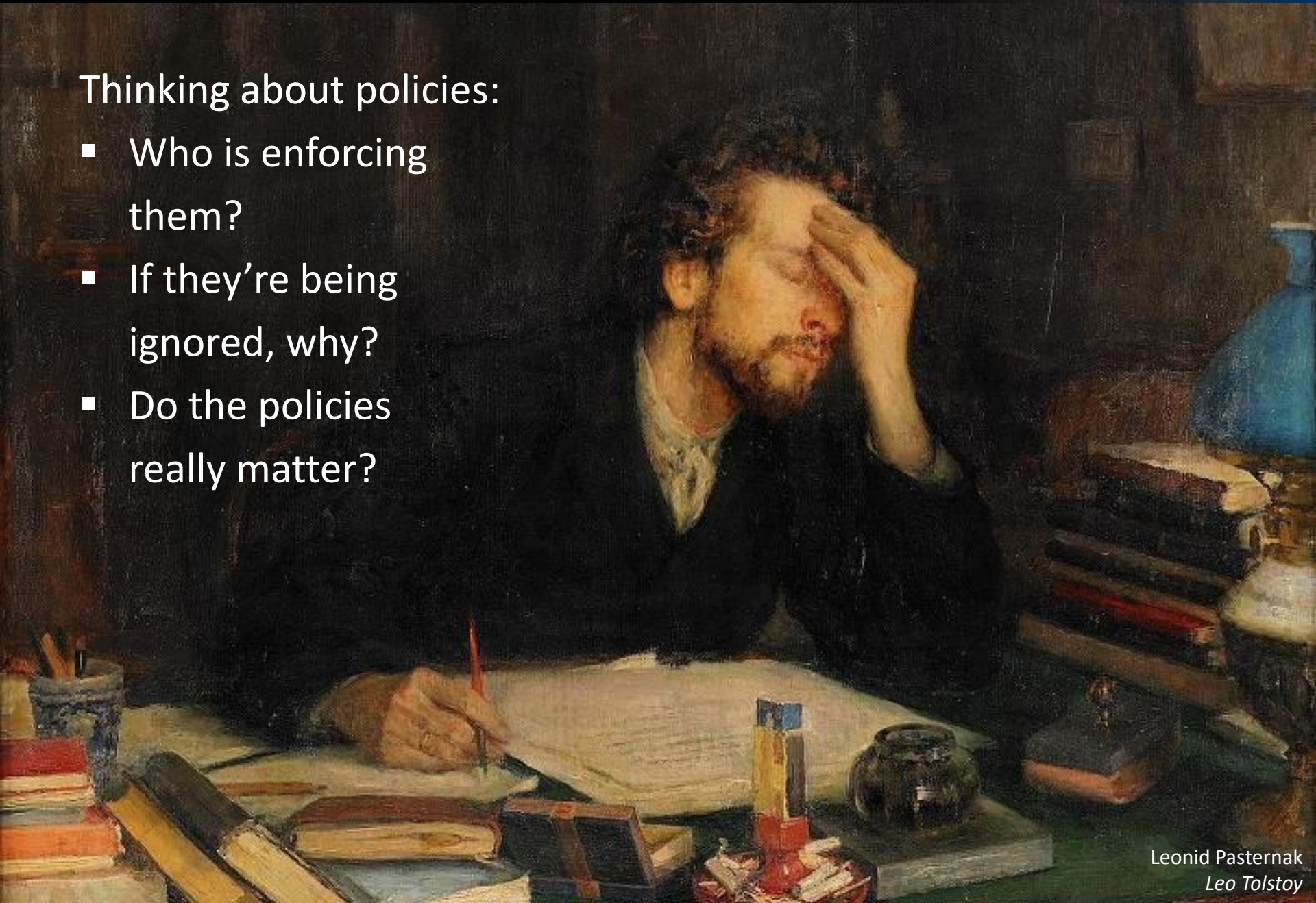
*If you can't get sponsorship, then even if it's important, **run!***



Considerations for *People, Govern*

Thinking about policies:

- Who is enforcing them?
- If they're being ignored, why?
- Do the policies really matter?



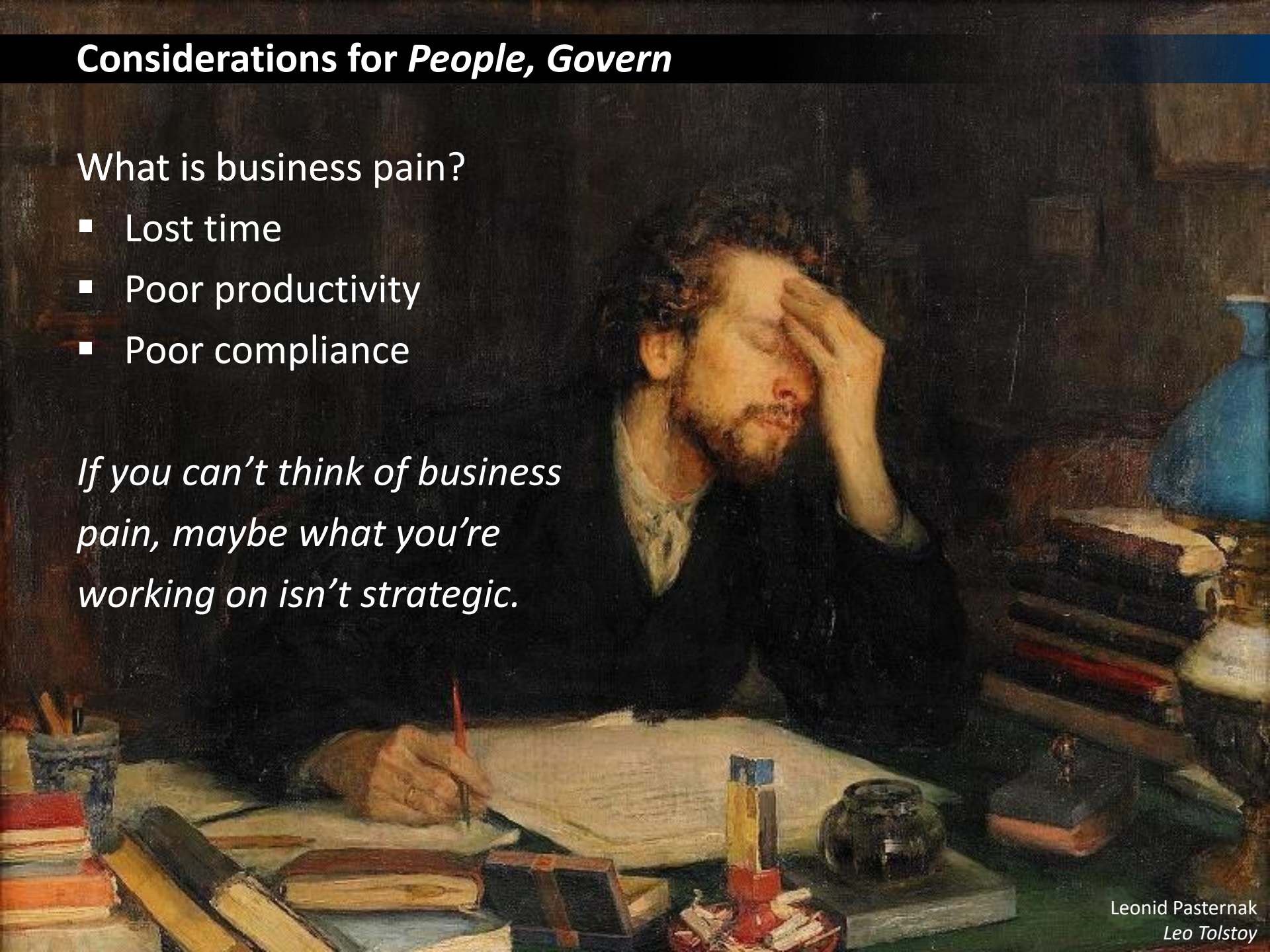
Leonid Pasternak
Leo Tolstoy

Considerations for *People, Govern*

What is business pain?

- Lost time
- Poor productivity
- Poor compliance

If you can't think of business pain, maybe what you're working on isn't strategic.



Considerations for *People, Share*

You share info to help your champions and sponsors as well as businesspeople.

You're sharing information about your processes as well as business processes.

Why are these processes important to them?



Stakeholders:

- Anyone affected by the policy and change in policy

Questions you need to answer:

- How will their role change?
- What are their mental or actual roadblocks?
- What do you need to get from them?
- How do you hold out a carrot to them?

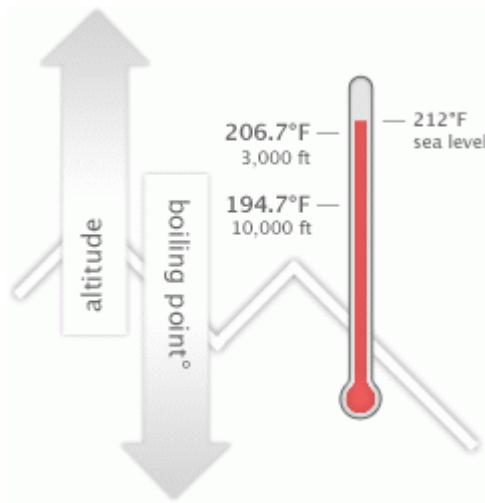






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Provide a Plan







- Google “how motivation is driven by purpose”

Narrowing in

Where is your organization?

Early

Executed

Replicated

Governed

Early	Executed	Replicated	Governed
Pockets of DG.	Consistent in Single Processes	In place to repeat	Utopia
Little Consistency		Still Reactionary in nature	Where you want to be. Vacation time!

5 Roles of a Data Steward

Lead

Promote and drive practical governance guidelines

Map

Work with the business to understand data needs and find better or more efficient processes.

Define

Define new Requirements (part of the new processes)

**Be an
Expert**

Know the Space

Advocate

Market! Build Relationships! Build Understanding!

Process

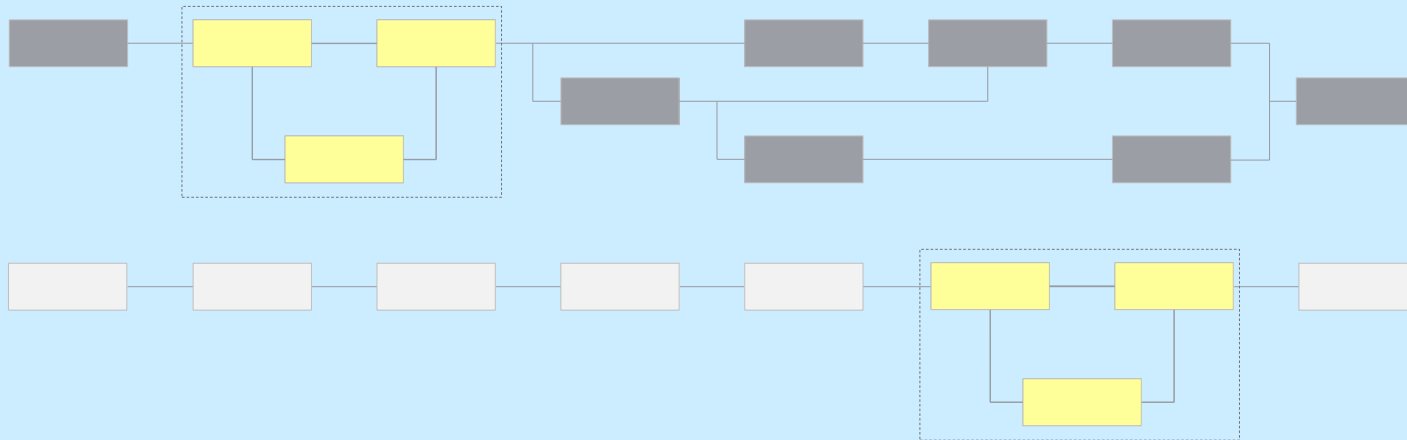
Challenge: Help small-business clients view their debit, Visa, and MasterCard transaction data online and run aggregate reports to track corporate spending.

Strategy: Create BI dashboards that present a customized view of card payment activity along with one-button access to consolidated statements and reports.

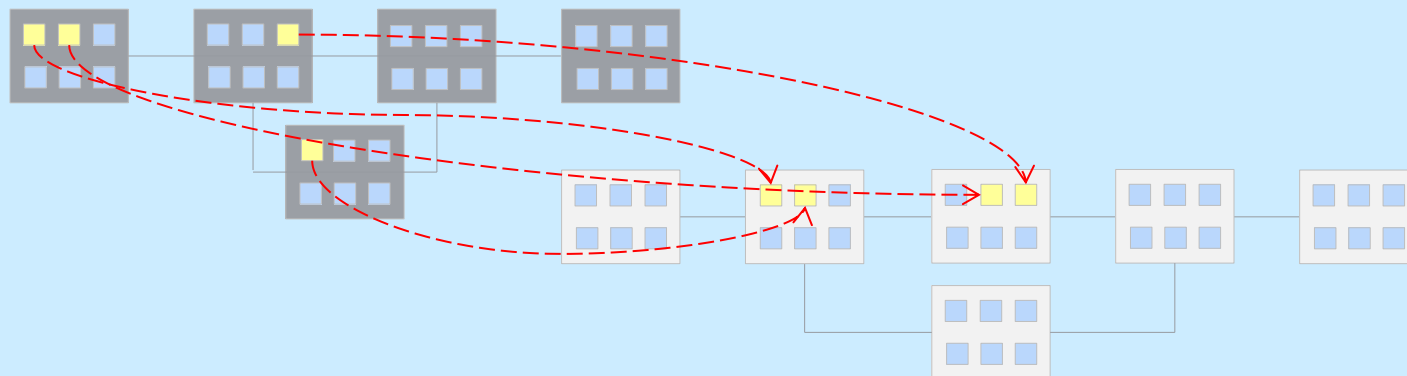
Results: A robust customer-facing BI application allows clients to easily monitor corporate credit card spending over various time periods and compare payment data with peer companies to discern industry trends.



Redundancy in cross-functional business processes



Same data and data types in different business processes



Goal: Transparency

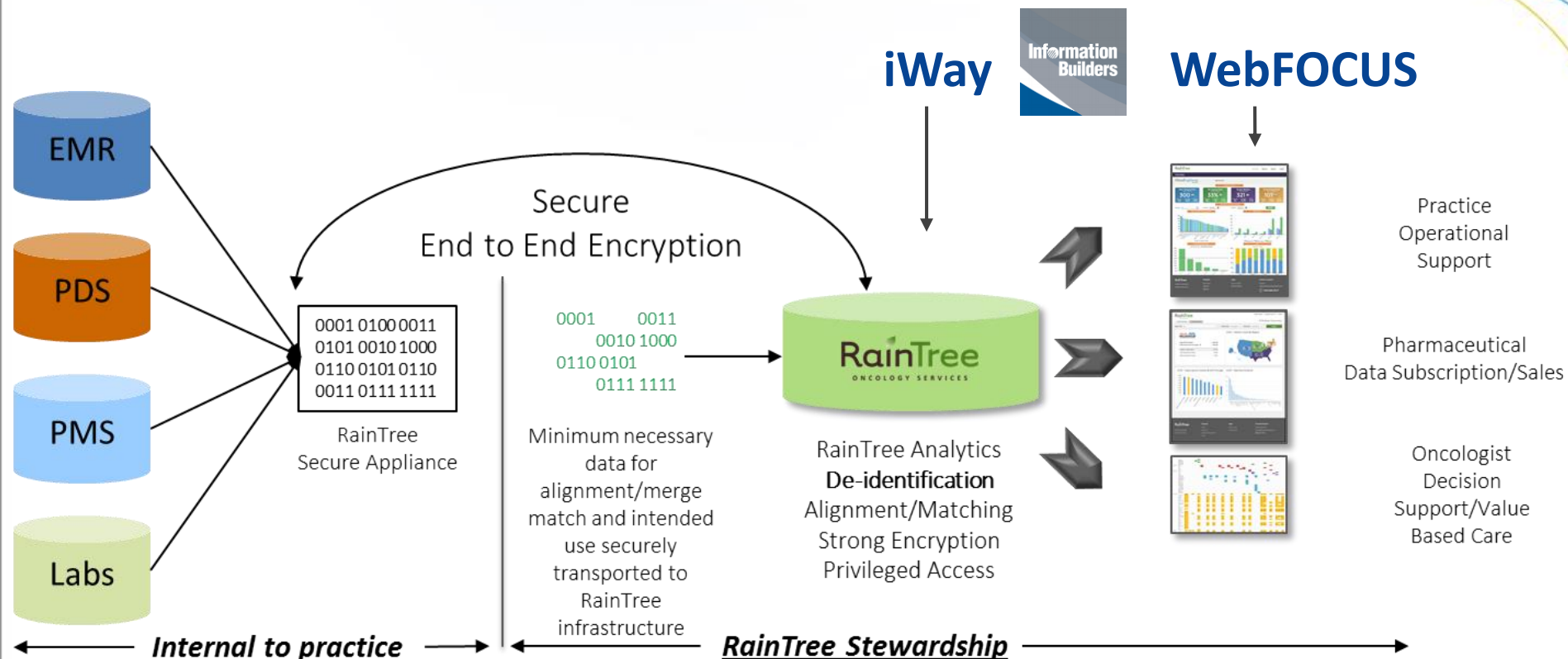
Savvy businesspeople don't trust black boxes.

bit.ly/1IORdd2

Monitor what matters most to the business

Create trust metrics to ensure validity and value

Document fully to make sure people know how to use data



Considerations for *Process, Organize*

Consider current requirements and likely future ones

- Think big, start small
- 3rd-party or other data integration?
- Real-time? Batch?
- Additional processes needed to support the project?



A Woman Thinking

Photo credit:
bit.ly/1COMqI3

Considerations for *Process, Govern*

Why are certain processes being circumvented?

What can you re-use or share?

What can you measure to increase trust in data?

Can business and IT work together to improve trust, processes, remediation?



Polyhymnia
Detail from a sarcophagus at the Louvre
bit.ly/Zg8ebh

Considerations for *Process, Share*

What information do you have and who can benefit from it?

- Customers
- Partners
- Suppliers
- Regulators

Don't be afraid of management by embarrassment – but play the game well.

Hans-Jörg Limbach
Denkpartner, 1980.
Börsenplatz, Stuttgart.
Photo by Julian Herzog.

Deciding on the right “Process”

Current data
knowledge

Company
culture

Data
reputation

Who thinks
they don't
own the data?

Maturity of
KPI Culture

Reusability of
data.



Allocating Resources to the Governing Process

By Subject Area

By Function

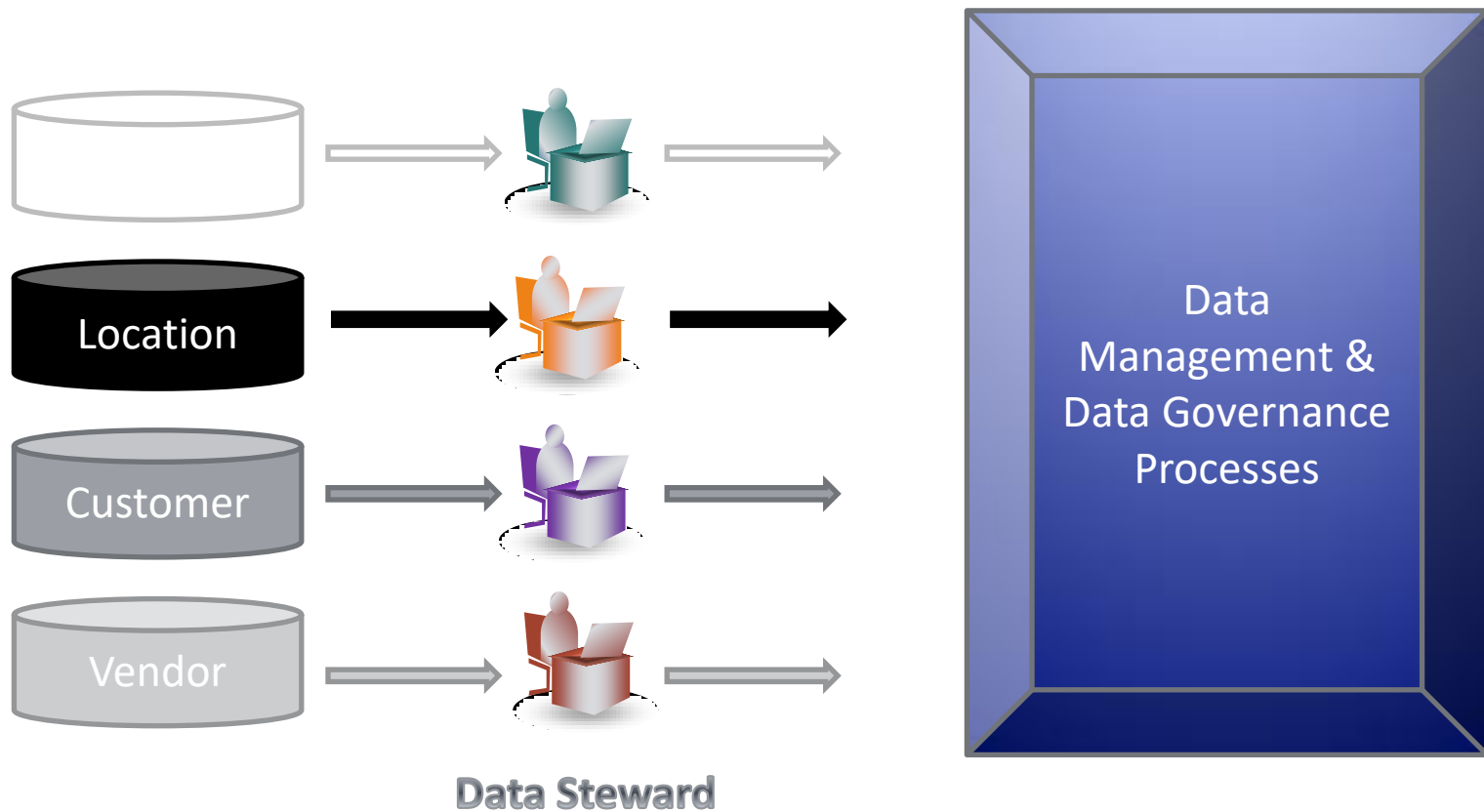
By Business Process

By System

By Project



- Each Data Steward is in charge of their own subject area. One is in charge of customer and another is in charge of product.



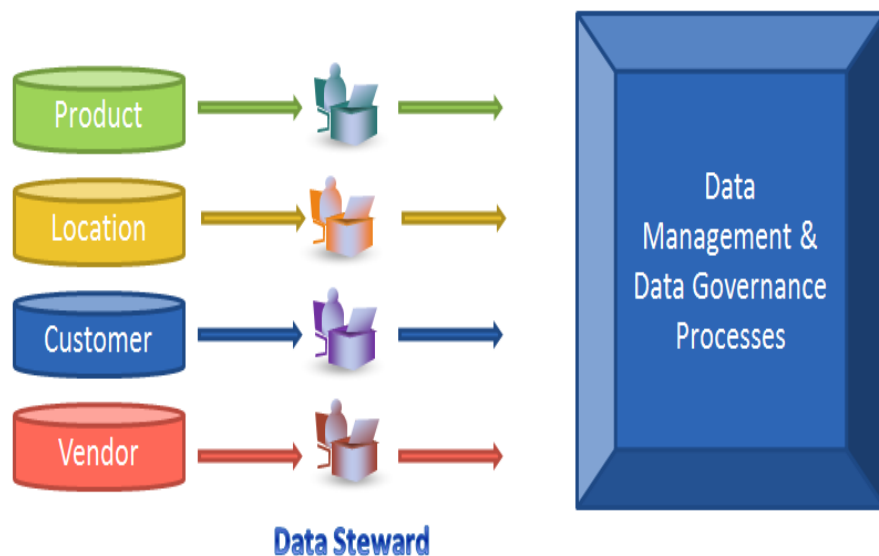
Stewardship by Subject Area

■ Pros

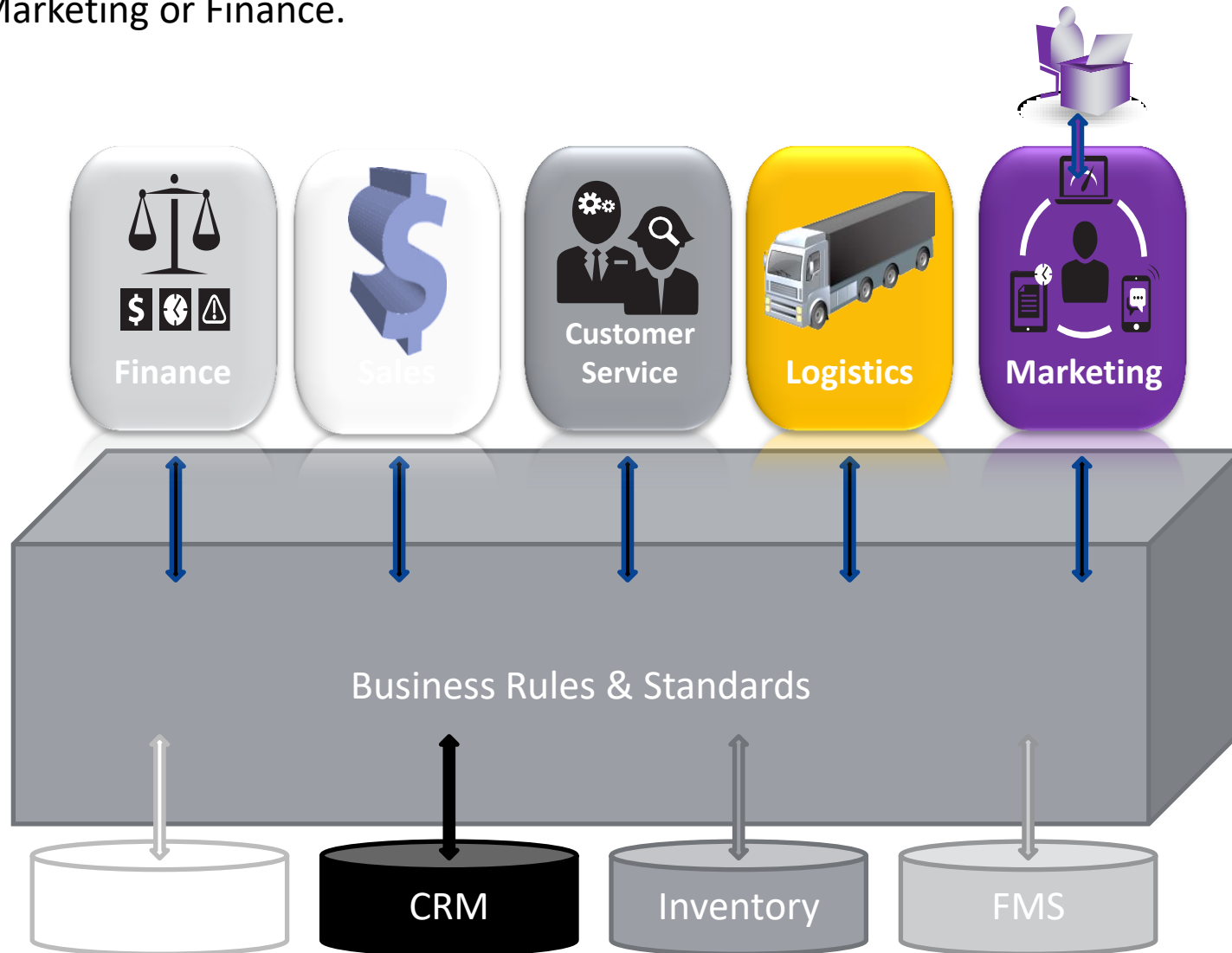
- Boundaries are clear
- Subject Knowledge Grows over time

■ Cons

- Focus may be at expense of broader business benefits (Customer Retention for example).
- Size differences of Domains.
- Might be difficult to tie Data Steward back to business initiatives.



- Each Data Steward focuses on their line of business or department. Such as Marketing or Finance.



Remediation by Function

■ Pros

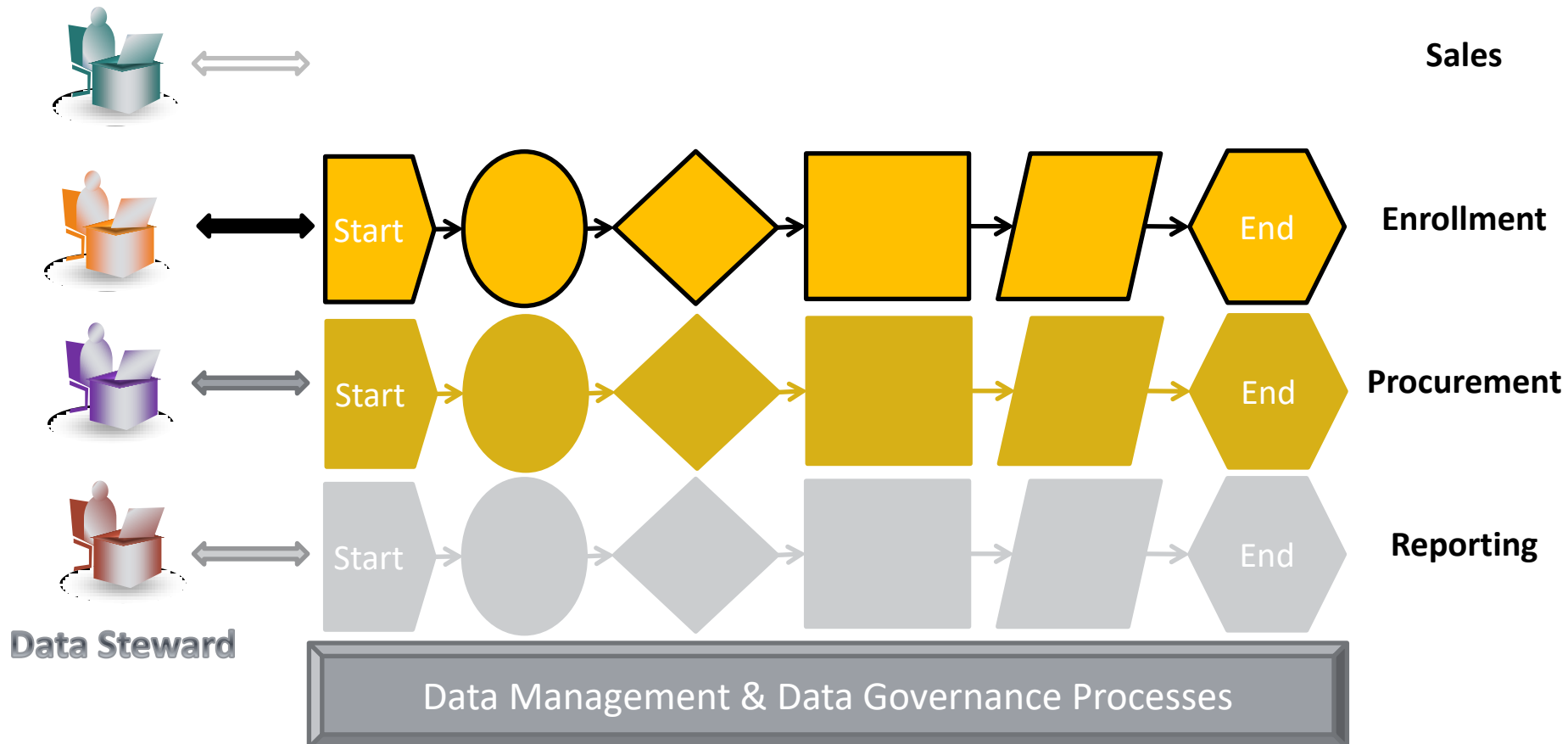
- Bounded by the organization means easier to establish definitions and rules.
- Will be business-savvy and familiar with the data's context
- They know the team

■ Cons

- Multiple data stewards in different departments may be managing and manipulating the same data.
- The nature of this model means that data stewards are rarely motivated to collaborate across functional boundaries
- Functional data stewardship won't work in companies that have prioritized enterprise-class "single view" initiatives or consolidation programs.



- Each Data Steward is assigned to a single business process. For example Sales or Enrollment.



Tip : For very mature data-driven organizations

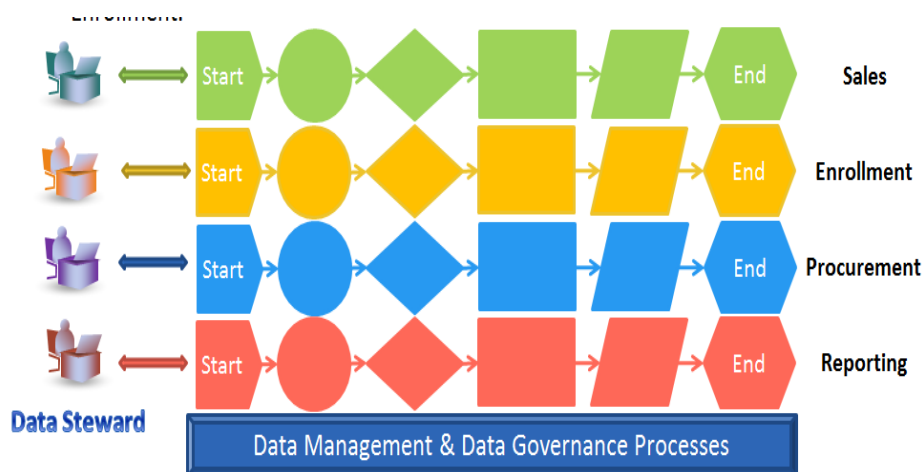
Remediation by Business Process

■ Pros

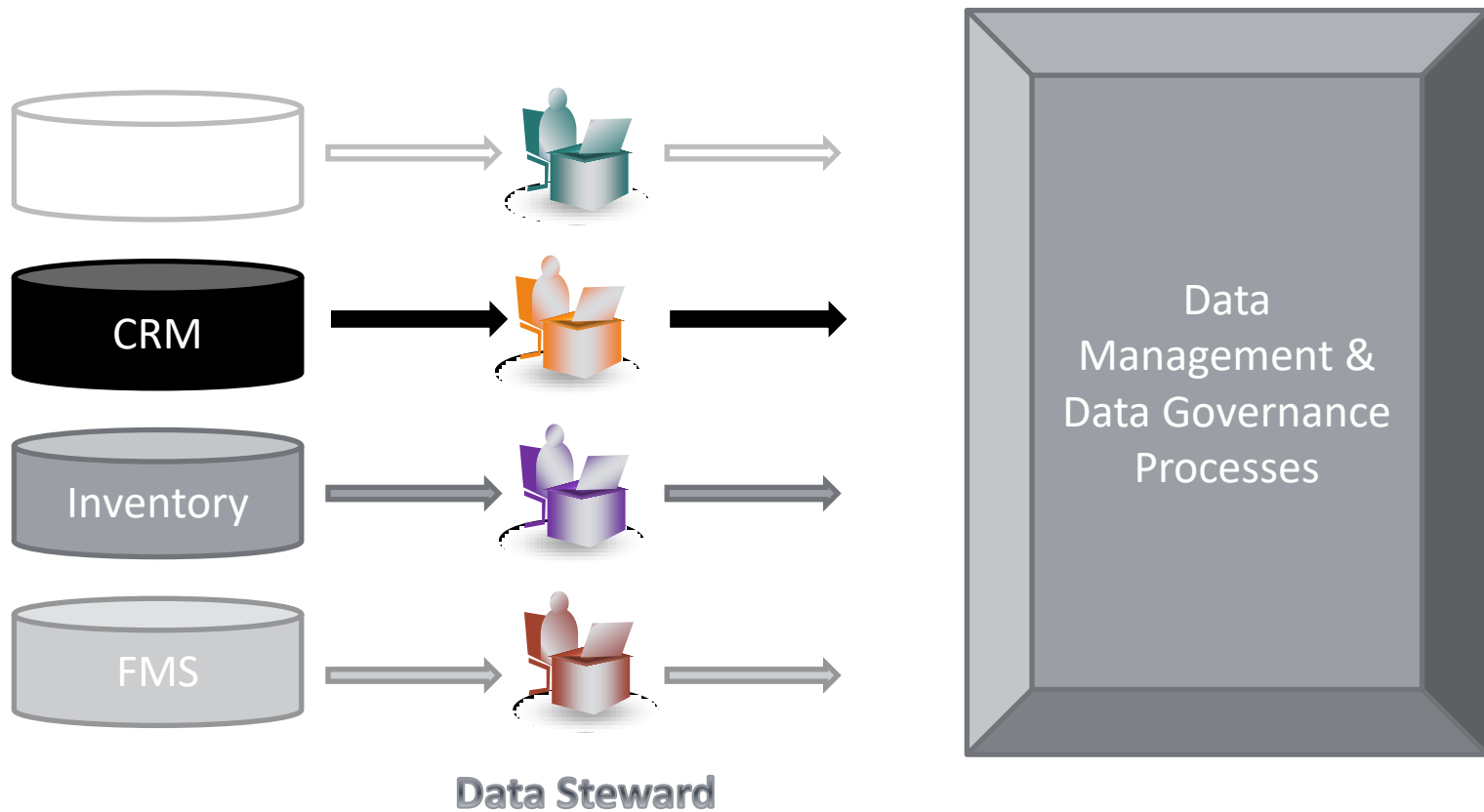
- Extension of exiting processes
- Success measurement is more straightforward
- The process oriented model is a very effective way to entrench data stewardship.

■ Cons

- Data ownership is more difficult to assign. A broader data governance program is critical for managing such situations.
- Business constituents can get confused. Consistency around similar types of data.
- In this model, data stewardship is only as effective as the company is clear about its processes.



Data Steward is assigned to the system that they manage the data for. Such as SAP ERP or Salesforce.



Tip : This may have caused some of the data quality issues in the first place.

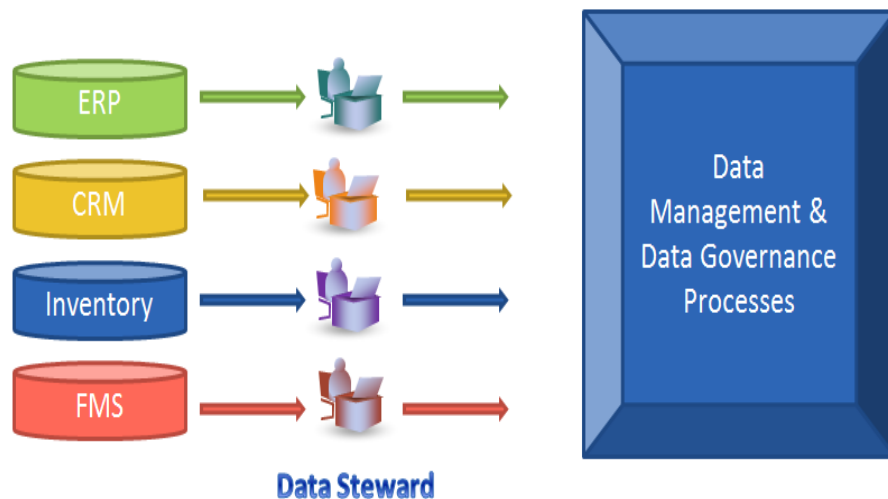
Remediation by System

■ Pros

- IT can take a leadership role
- Drives from a Bottom Up approach
- Assigning multiple data stewards at once is more realistic: “each core system will have a data steward” becomes an established practice.

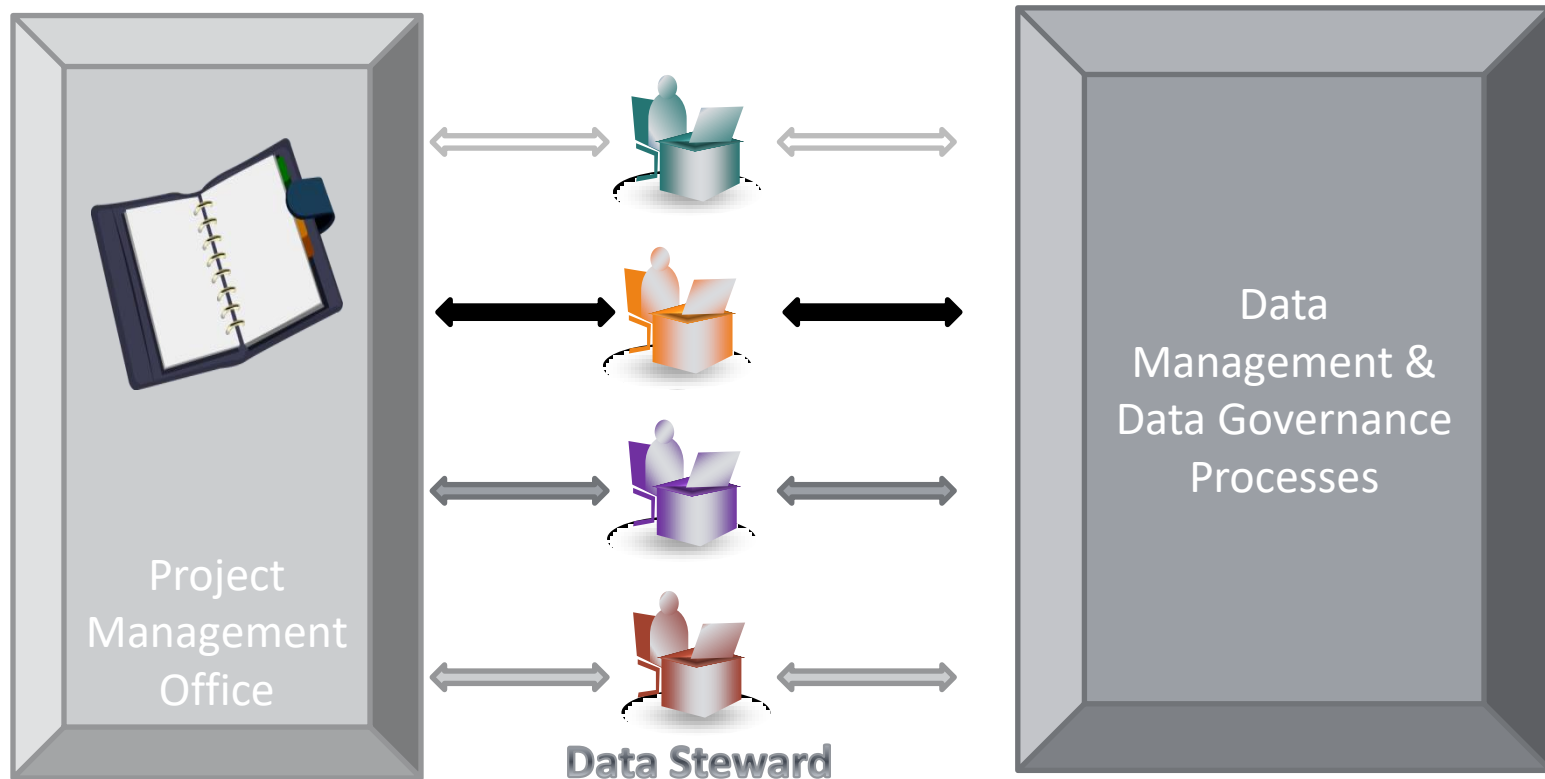
■ Cons

- Business people may equate data ownership with data stewardship, thus assuming stewardship to be “an IT issue”
- Data stewards can become myopic as they maintain the integrity of the data on their systems
- A systems orientation doesn’t ensure data sharing or reconciliation.



Tip : This may have caused some of the data quality issues in the first place.

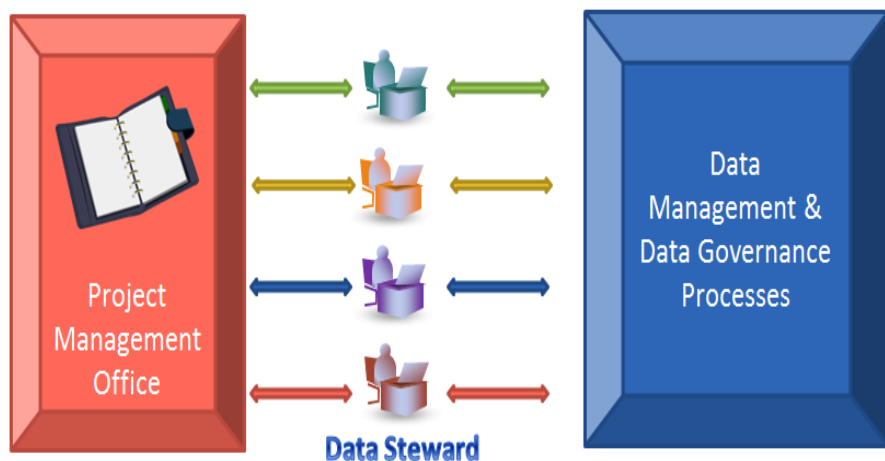
- Data Steward is assigned to a project that they will manage the data for. Can be assigned through the PMO office. Examples are a Data Warehouse Implementation or ERP Migration.



Tip : This can be the fastest way to introduce the role to the organization

Remediation by Project

- Pros
 - Speed! It is part of the Project and most organizations can add that as part of a process easily.
 - Start with Project then Grow
 - Clear definition of success
- Cons
 - “Project” implies ‘ending’
 - Are skills in house?



Tip : This can be the fastest way to introduce the role to the organization

Technology



Challenge: Create a high-performance process orchestration environment that automates data cleansing and transfers.

Strategy: Automate the scheduling, loading, and cleansing of e-commerce data for both batch and interactive interfaces, with complete support for data quality, queue management, web services, and ERP integration.

Results: Complete production loads in five to seven minutes that used to take nearly three hours using other integration tools.

This was not just a technology project. It was about creating business value by making our employees more productive and more satisfied, so they can focus on what matters most: our customers.

Mike Henry
SVP

Challenge: An outdated sales information infrastructure was creating delays in the delivery and validation of key information needed to support critical growth strategies.

Strategy: Create a comprehensive sales reporting environment with automatic data feeds from a variety of financial product lines; use iWay to capture data from multiple retail banking systems.

Results: Scotiabank's developers spend less time on integration projects with less code to maintain; the business can open new channels more quickly and sales staff gain faster access to results.



Alignment: Business Requirements First

Functional Requirements

Automate process ALTO

*Automate handoff from
ALTO to BARON*

*Improve satisfaction scores
for chat-based customer
support*

*Reduce response times from
supply chain partners*

*Improve UX for customer-
facing app COMPASS*

Technical Requirements

*Integration and process
automation technology*

*Data enrichment (ALTO
output → BARON input,
B2B integration, UX)*

*Customer-centric dashboards
(chat staff, COMPASS)*

B2B integration, enrichment

*Cleansing requirements at
each point, all projects*

Align
functionally
and
technically

Prioritize

Look across
all parts of
organization

Inventory

*Bulk/batch integration tools,
not great for real-time /
transactional, B2B tooling
inflexible*

*Customer enrichment: ref
tables updated nightly*

*Dashboards: Good internal,
not great for external*

No cleansing tools

*Good skills: bulk integration,
process management (SI),
B2B formats (vendor)*

Inventory vs. Reqs

- What do I have? Who is it for?
- SI, vendor rel'nships
- Skills

Purpose is to share skills and technology knowledge

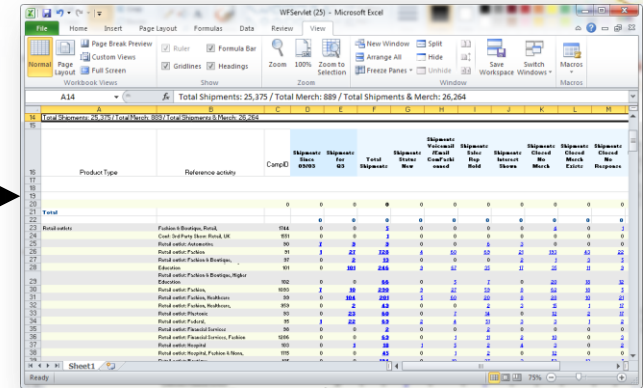
Easy to communicate

- What's available in the company now? What training?
- What's in the market? How does it differ from what we have?
- What's successful internally? What's being adopted?

Harder to communicate, requiring more collaboration

- What am I buying, and what other requirements do you have that might influence that? What could we leverage together?
- Looking for alignment across all business units

Case Study – Before Strategy was Developed

A screenshot of a Microsoft Excel spreadsheet titled 'WFSendit (25) - Microsoft Excel'. The spreadsheet displays shipping data with columns for Product Type, Reference activity, and various shipment metrics. The data is organized into rows, with a 'Total' row at the bottom. The spreadsheet shows a detailed breakdown of shipping activities, including product types, reference activities, and various shipment metrics such as quantity, value, and status. The data is presented in a clear, tabular format, allowing for easy analysis and comparison of different shipping activities.

Most work here



**Information
Builders**

here,

A magnifying glass is positioned over a file explorer window. The window displays a directory tree with folders such as 'Adapters', 'Applications', 'Channels', 'Ebbies', and 'Flows'. The magnifying glass is centered over the 'Svn Repository' folder, which is highlighted. The word 'here,' is written in a large, black, sans-serif font to the left of the magnifying glass handle.

Company database



Considerations for *Technology, Organize*

Technology adoption is critical. If IT buys something and it isn't used, there's no benefit.

What's your culture?

- Build
- Custom code
- Buy

I'm thinking...

Igor Mitoraj

Hokkaido

Photo credit:

bit.ly/1nQrZMb

Considerations for *Technology, Organize*

People and skills:

What's the cost of people to run the technology? How many people does it take to run it?

What skills do you have? Do you tend to hire consultants or do everything in house?

I'm thinking...

Igor Mitoraj

Hokkaido

Photo credit:

bit.ly/1nQrZMb

Considerations for *Technology, Organize*

Strategy to deal with latency, volumes, flexibility, licensing.

Do you know what current latency requirements are?

Can the data volumes you want be handled by your existing database and integration tech?

I'm thinking...

Igor Mitoraj

Hokkaido

Photo credit:

bit.ly/1nQrZMb

Considerations for *Technology, Govern*

Are data quality implementations being driven by particular technology groups (e.g., data warehousing, CRM, ERP)?

What do your business people care about?
Be prepared to respond to their needs as much as your own, to ensure that everyone supports the effort.



Considerations for *Technology, Share*

How do you share the impact of change?

- With line workers?
 - With executives?
 - With managers?
 - With partners?
- *If that makes sense*

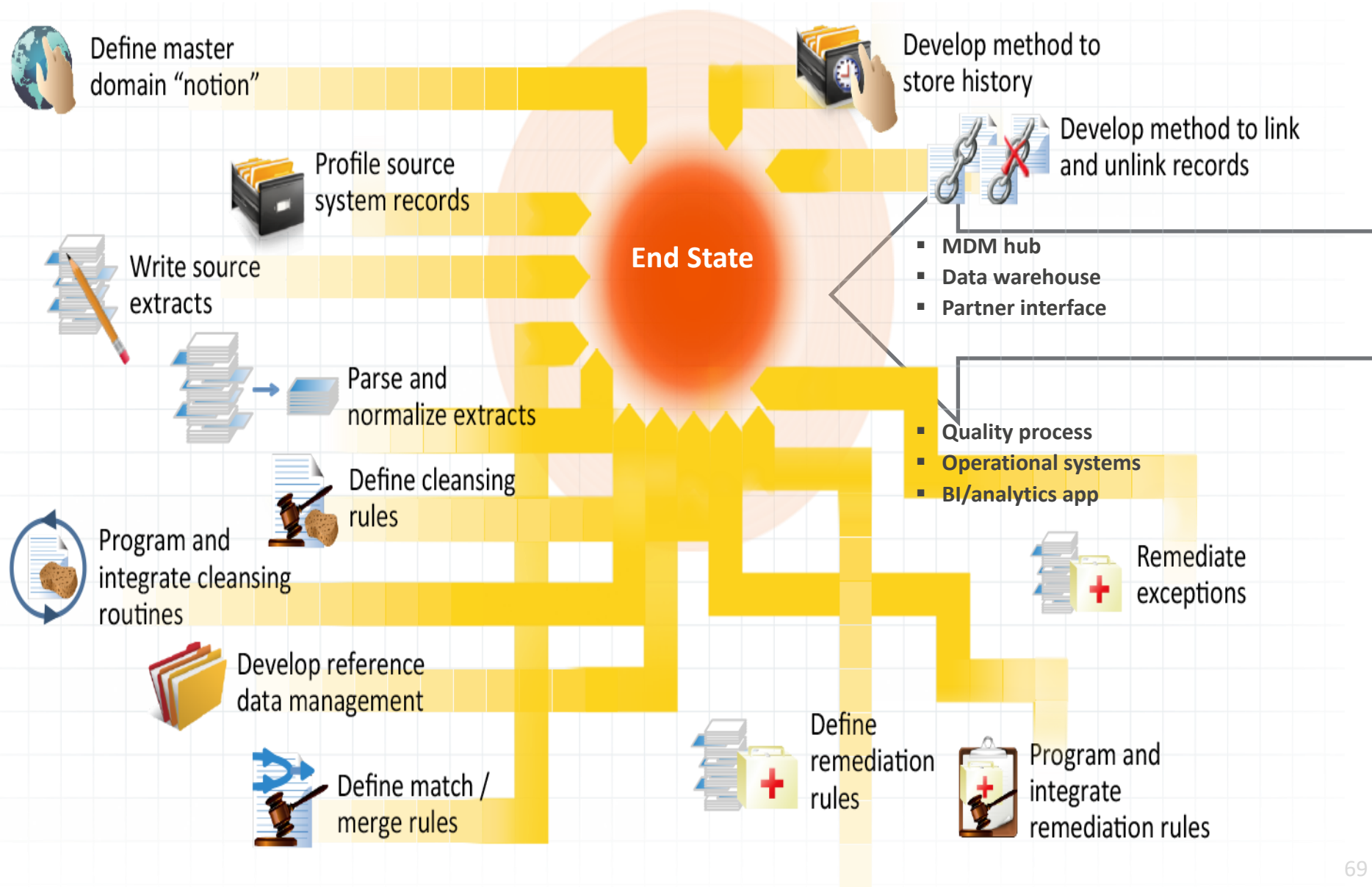


Jimmy Wales
Wikipedia founder
Photo credit:
bit.ly/WSWtFT

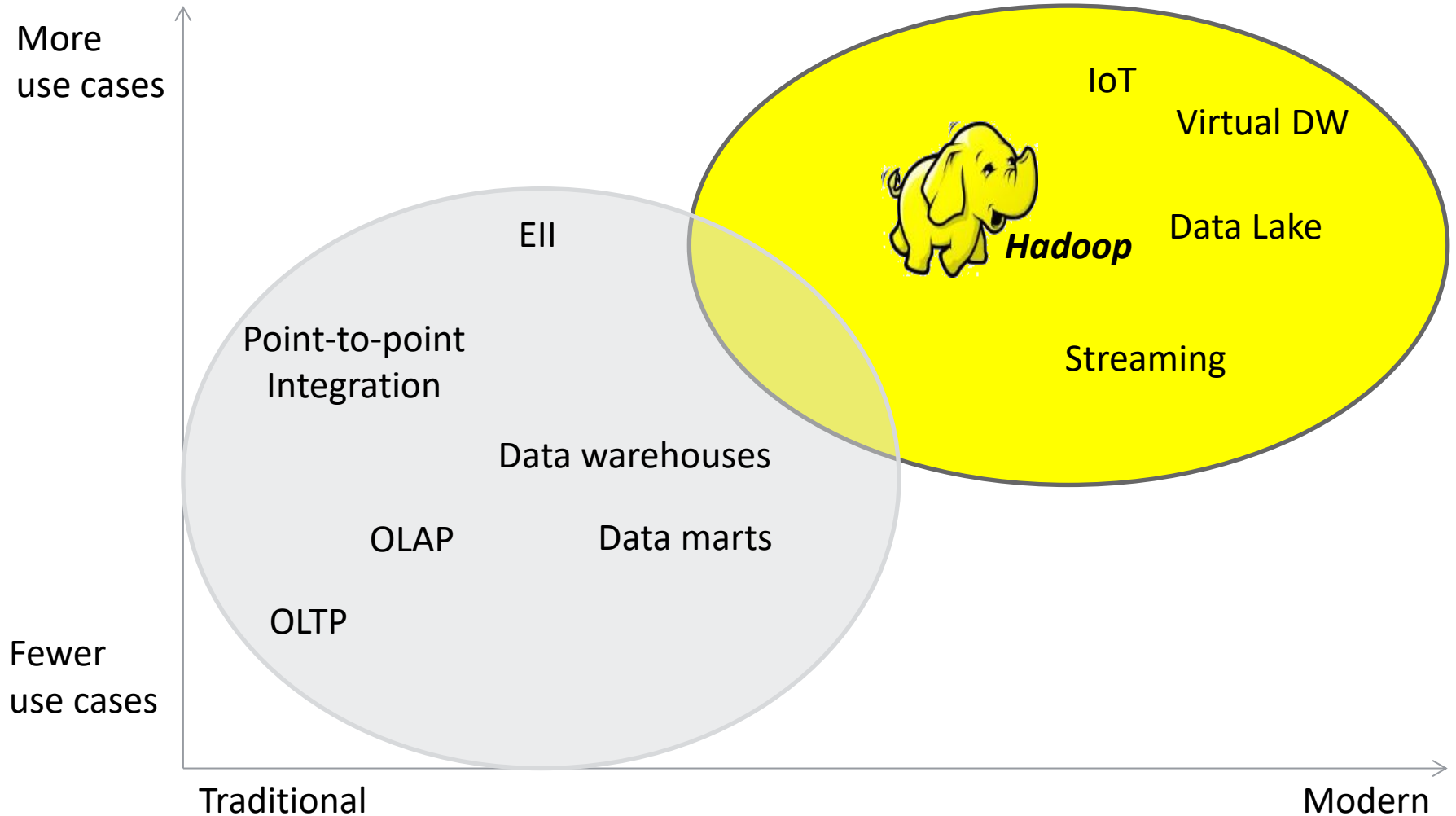
Changing the landscape

Data Integration, Quality, and Mastering

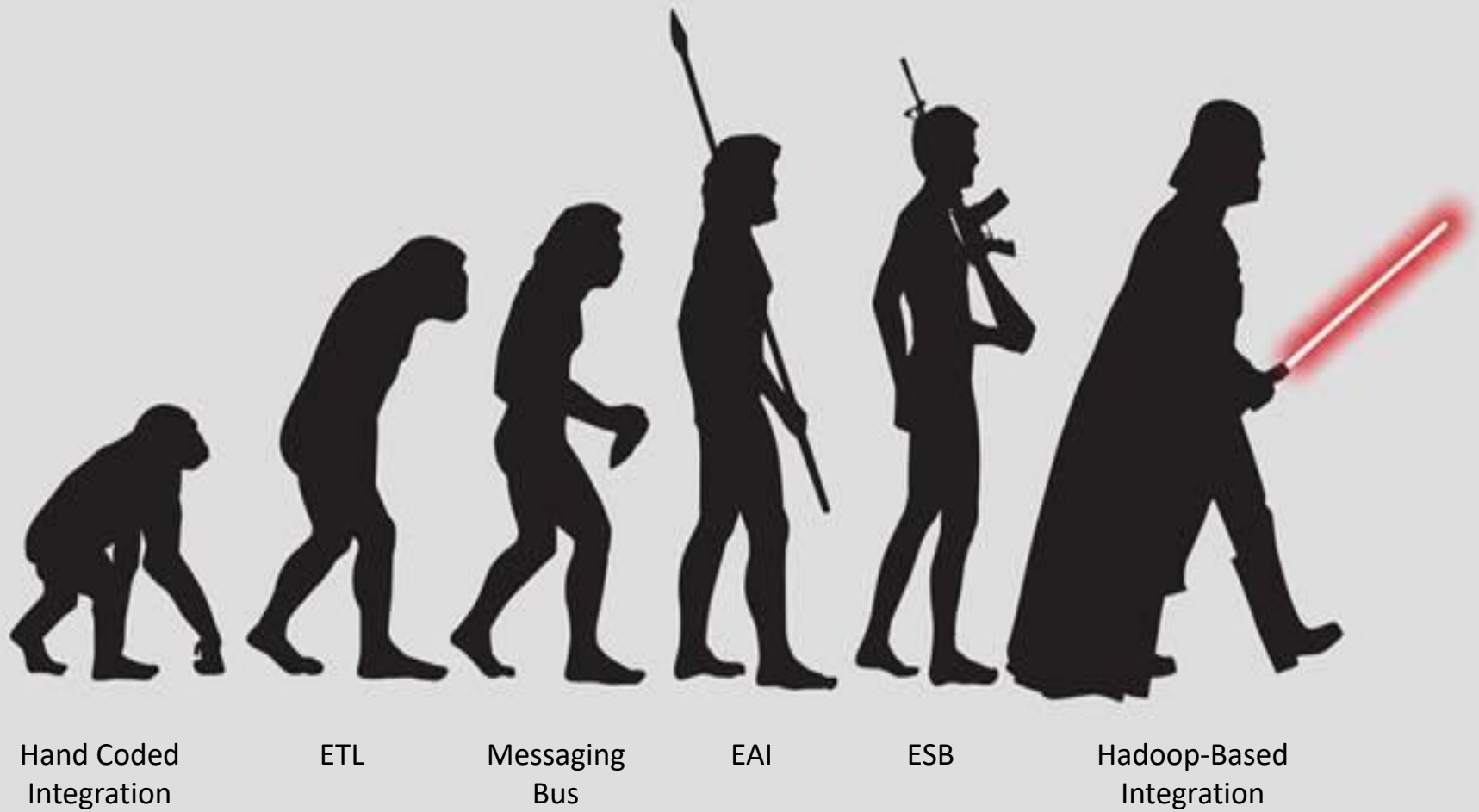
Typical Historical Approach



Traditional in Transition to Modern



The Evolution of Integration



- According to a May 2015 Gartner Survey...
 - 26% are deploying Hadoop, 11% in 12 months, 7% in 24 months
 - 49% cite trying to find value as their biggest problem
 - 57% cite the Hadoop skills gap as their biggest problem
- To summarize...
 - Companies are investing in Hadoop, but not sure why
 - Companies are investing in Hadoop, but don't know how to use it

Big Data Under the Control of Master Data

Hadoop can be:

- Staging area for application data
- Source for mastered subjects
- Source for transactional subjects

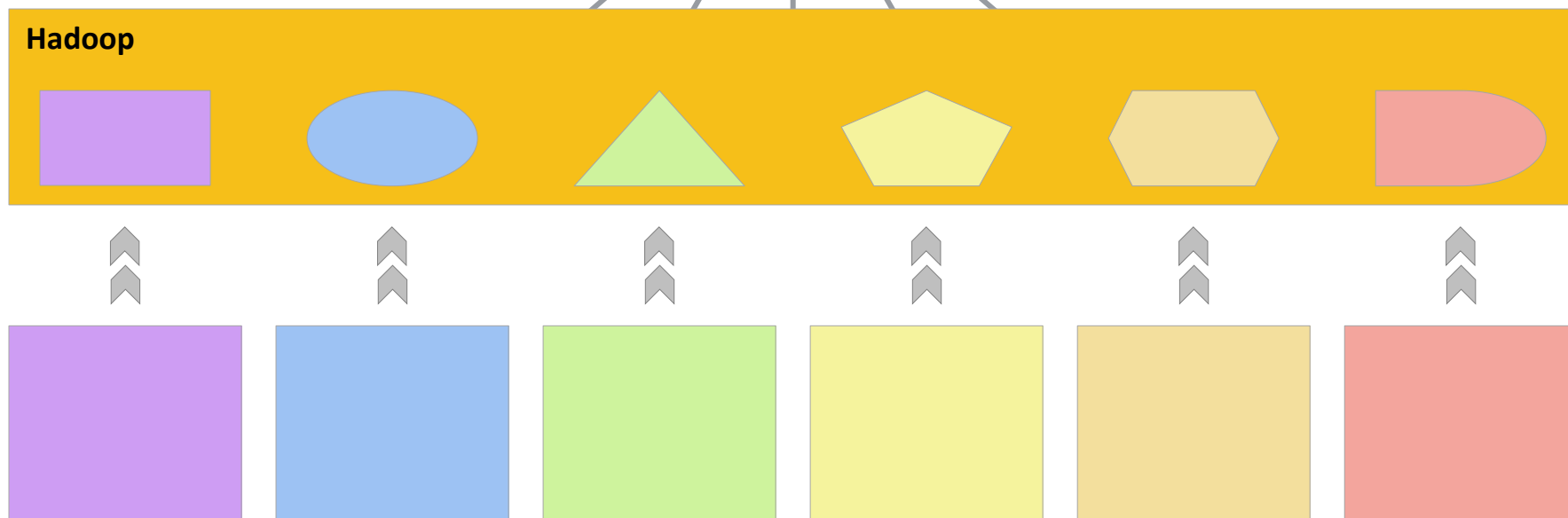
Master Data Repository



Master data can:

- Provide context to Hadoop data
- Establish trust in big data
- Guide extraction of Hadoop data

Hadoop





	Organize	Govern	Share
People			
Process			
Technology			

Wrap-Up

Final Considerations

Data strategy arises from uncovering strategic principles that work *at your company*

- What's consistent across successful projects?
- What fits your culture?
- What can you control?
- Lather, Rinse, Repeat



People, Organize

- High Score (30+) Properly aligned
- Medium Score (10-30) Some work to do
- Low Score (0-9) Lots of work to do!

People, Govern

- High Score (15+) Very good position
- Medium Score (8-14) Keep working to make data strategic
- Low Score (0-7) Develop a plan

People, Share

- High Score (35+) Great job getting information out!
- Medium Score (13-34) OK, can get better
- Low Score (0-13) Create a plan to share information better

Process, Organize

- High Score (10+) Highly abnormal (in a good way)!
- Medium Score (5-9) Pretty typical, can improve
- Low Score (0-4) Highly abnormal (in not so good a way)!

Process, Govern

- High Score (15+) Can you tell the difference?
- Medium Score (7-14) Pretty typical, can improve
- Low Score (0-6) Consider governing your data

Process, Share

- High Score (20+) Yes! Data drives behavior / value
- Medium Score (12-19) Scratching the surface
- Low Score (0-11) Develop a data sharing plan

Technology, Organize

- High Score (8+) Rare, but great!
- Medium Score (4-7) Good technology start
- Low Score (0-3) You need to talk to us!

Technology, Govern

- High Score (20+) Governance technology is aligned
- Medium Score (12-19) Trying, but may need help
- Low Score (0-11) You need to talk to us!

Technology, Share

- High Score (35+) Poised for greatness!
- Medium Score (18-34) Started, but may need help
- Low Score (0-17) You need to talk to us!

Information Builders' 3i Platform

Transforming Data Into Business Value

Intelligence

Portal, Embedded, and InfoApps™

Performance
Management



Predictive
Analytics



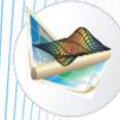
Social
Intelligence



Search-Based
Apps



Geographic
Intelligence



Mobile
Apps



Write-Back
Apps



High Performance
Data Store



Data
Discovery



Reporting



Dashboards



Casting and
Archiving



Microsoft and
Adobe



Active
Technologies



Integrity

Data
Profiling



Master Data
Management



Data
Stewardship



Data Quality



Integration

Batch ETL



Real-Time ESB



Incremental



Legacy Systems



Applications



Relational/
Cubes



Big Data



Columnar/
In Memory



Unstructured



Social Media



Web Services



Trading Partners

