

# Information Capital

## *Data as an Asset*



Jake Freivald  
Information Builders  
May 14, 2013

# Information Strategy vs. Buzzwords

“Big Data Is Less About Size, And More About Freedom”

The New York Times

The Economist

THE ERA OF

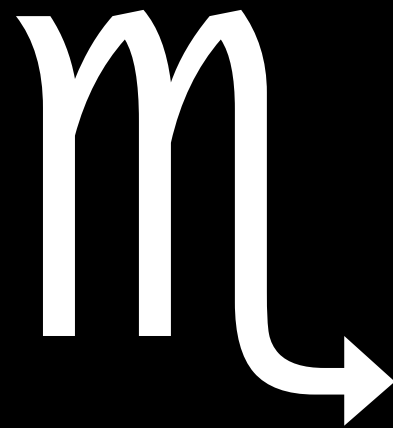
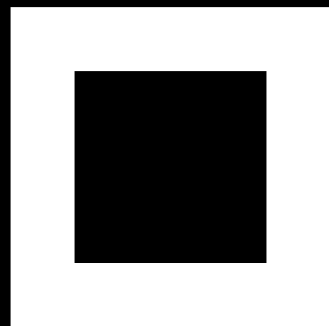
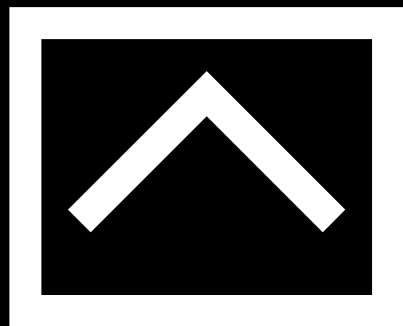
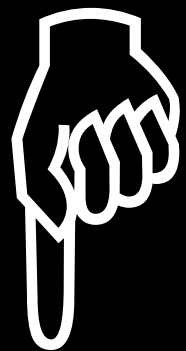
BIG DATA

IS HERE

FORTUNE

It's Real, It's  
, and It's  
Changing  
world”

—IDC





**Joe McKendrick**, Contributor

I track how technology innovations move markets and careers

+ [Follow](#) (181)

TECH | 3/17/2013 @ 9:38PM | 3,280 views

# Cloud and Big Data, Together: A Huge Springboard to Innovation

+ [Comment Now](#) + [Follow Comments](#)

*“Big data is the new cloud computing.”*

This sentiment was recently expressed in an [interview](#) with Motley Fool analyst Tim Beyers, who analyzed the zeitgeist coming out of the [South-by-Southwest \(SXSW\)](#) conference and observed that cloud computing and big data were now one in the same phenomena, converging on enterprises of all shapes and sizes.



Beyers may have meant that the level of industry interest and innovation in big data parallels that seen in the cloud computing space in recent years. But in many ways, the two are becoming one in the same — cloud resources are needed to support big data storage and projects, and big data is a huge business case for moving to cloud. The innovations and buzz around big data

102

[f](#) Share

607

[t](#) Tweet

205

[in](#) Share

0

[su](#) Submit

21

[g](#) +1

Huge Springboard!!!!





**Joe McKendrick**, Contributor

I track how technology innovations move markets and careers

+ [Follow](#) (181)

TECH | 3/17/2013 @ 9:38PM | 3,280 views

# Cloud and Big Data, Together: A Huge Springboard to Innovation

+ [Comment Now](#) + [Follow Comments](#)

*"Big data is the new cloud computing."*

This sentiment was recently expressed in an [interview](#) with Motley Fool analyst Tim Beyers, who analyzed the zeitgeist coming out of the [South-by-Southwest \(SXSW\)](#) conference and observed that cloud computing and big data were now one in the same phenomena, converging on enterprises of all shapes and sizes.



Beyers may have meant that the level of industry interest and innovation in big data parallels that seen in the cloud computing space in recent years. But in many ways, the two are becoming one in the same — cloud resources are needed to support big data storage and projects, and big data is a huge business case for moving to cloud. The innovations and buzz around big data

102

[f](#) Share

607

[t](#) Tweet

205

[in](#) Share

0

[su](#) Submit

21

[g](#) +1

# CHROME RIVER

Dashboard

Clients

Estimates

Invoices

Templates

## Invoice Detail

Easily Duplicate (Clone)  
any Invoice

Your Company Logo

< [Prev](#) | [Next](#) >



### Billing Address

Adam S. Andler  
88 Comedy Lane  
Lafalot, CA 92556

*Lawn Lizards*

Number	9459
Date	05/04/2010
Terms	Net 15
Due Date	05/19/2010

Phone	555-456-7899
Fax	555-456-7898
contact@lawnlizards.com	
www.lawnlizards.com	

Prod. / Svc.	Description	Qty.	Rate	Amount
 Crape Myrtle	15 gal	5.0	\$ 75.00	\$ 375.00
Tree Installation	Crape Myrtles	5.0	\$ 40.00	\$ 200.00
 Mums	1 gal - Assorted colors	25.0	\$ 3.99	\$ 99.75

### Invoice Actions

- View Invoices
- View Sent Invoices
- Add Invoice
- Change Invoice
- Clone Invoice
- Delete Invoice
- Add Payment
- View Payments

### Payment Status



Open [\$682.98]  
 Paid [\$400.00]





**Joe McKendrick**, Contributor

I track how technology innovations move markets and careers

[+ Follow](#) (181)

TECH | 4/15/2013 @ 9:18PM | 109 views

# Cloud Computing Gets Deeper and More Strategic, Survey Shows

[+ Comment Now](#) [+ Follow Comments](#)

**Close to two-fifths of organizations now run private clouds in one form or another, and one-fourth are using public cloud services in an enterprise capacity. Private clouds are being extended deeper into the organizations that have them — a majority expect to be running most of their workloads in the cloud within the next 12 months, especially Platform as a Service middleware. In addition, close to one-third of public cloud users report they are employing hosted services to run their private clouds for them.**

3

Share

121

Tweet

5

Share

“Information is a strategic asset”

“Information is a strategic asset”



Image courtesy of [Wikimedia Commons](#)

**Land is also a strategic asset.**

But how do you use it?

“Information is a strategic asset”



Image: Ninahale, Flickr.com, Creative Commons Attribution License.

**Land is also a strategic asset.**

But how do you use it?

- For a factory?

“Information is a strategic asset”



Image: Public domain, courtesy Winterforce Media

**Land is also a strategic asset.**

But how do you use it?

- For a factory?
- For a farm?

“Information is a strategic asset”



Image: David J. LaPorte, Creative Commons Attribution License.

**Land is also a strategic asset.**

But how do you use it?

- For a factory?
- For a farm?
- For energy?

“Information is a strategic asset”



**Land is also a strategic asset.**

But how do you use it?

- For a factory?
- For a farm?
- For energy?
- For all three?

## “Information is a strategic asset”

The problem isn't collecting information.

- You already have more information than you currently use.
- Figure out why you want the information before you collect it.
- Avoid seeking information that costs more than its likely value.

The problem is maximizing the potential of information.

- Most people spend hours per week looking for information they need.
- Less than 20% of your data is going to fewer than 20% of your people.

Maximizing potential is the aim of strategy.

- Start with your business strategy.
- Create an information strategy that aligns with your business strategy.



## “Information is a strategic asset”

The problem isn't collecting information.

### “Too Big” Data

- You already have more information than you currently use.
- Figure out why you want the information before you collect it.
- Avoid seeking information that costs more than its likely value.

*Not enough of it being used*

The problem is maximizing the potential of information.

### Too Much Data

- Most people spend hours per week looking for information they need.
- Less than 20% of your data is going to fewer than 20% of your people.

*Not enough information for end users*

Maximizing potential is the key to strategy.

### Too Little Strategy

- Start with your business strategy.
- Create a strategy for the data you need to grow your business.

*Not enough management of your asset*

# Information Capital

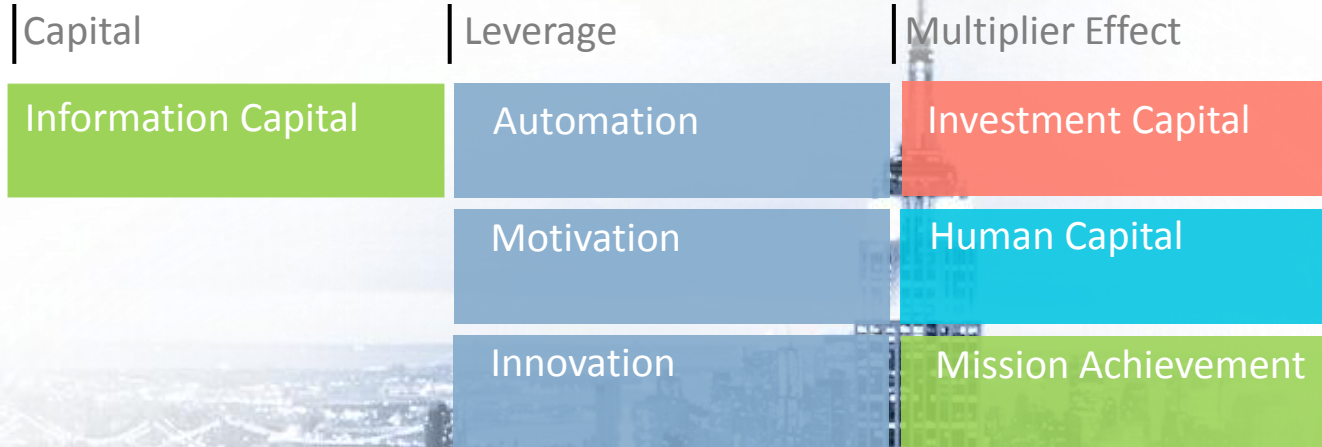
# Enterprise Capital

## Emergence of Information Capital and Information Asset Management

Capital	Assets	Outcome
Investment	Facilities	Products & Services
Human	Employee Programs & Tools	Better Performance
Information	Data & Systems	Better Decisions & Processes

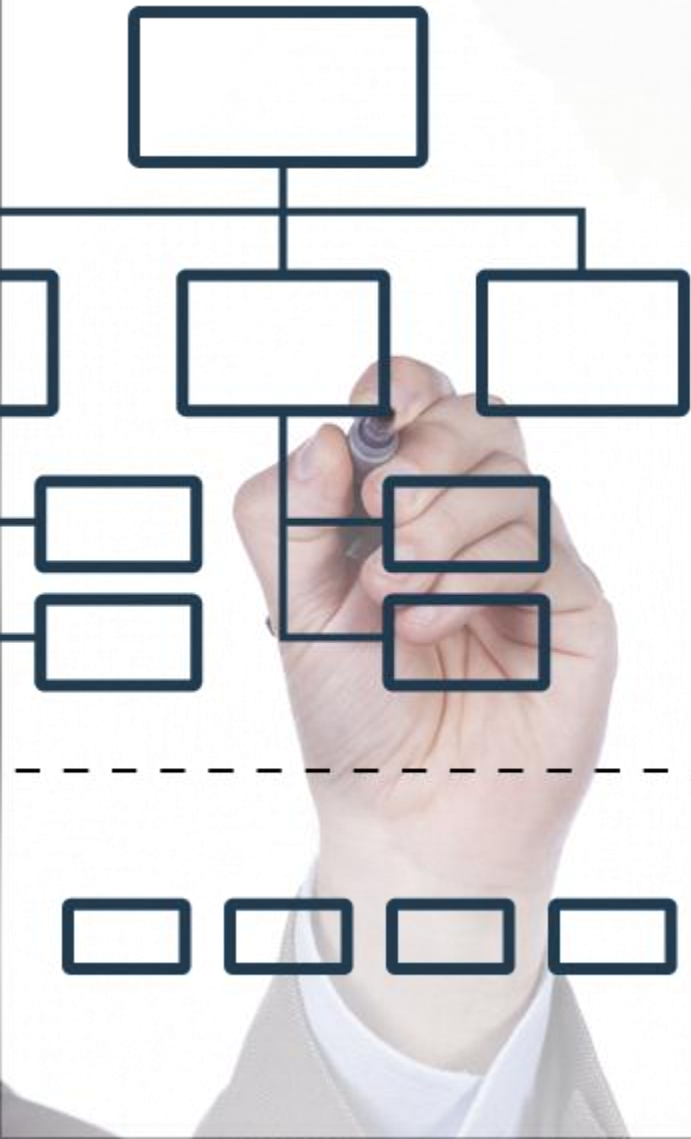


# Enterprise Capital Leverage & Multiplier Effect



# Maximizing Your Information Capital

## Everyone Makes Decisions



Analytical Role

Analytical Goal

Information Capital Gains

### Traditional BI, Analytics, Information Management

Lagging Indicators, Batch

Executive Management	Strategic	Set Strategy & Policy	Provide Investments & Resources
----------------------	-----------	-----------------------	---------------------------------

Mid-Management & Analysts	Analytical	Analyze Performance	Leverage Investment
---------------------------	------------	---------------------	---------------------

### Next Generation BI, Analytics, Information Management

Leading Indicators, Real Time

Proactive Employees	Operational		
---------------------	-------------	--	---

Partners, Suppliers, Customer	Vital		
-------------------------------	-------	---	---

# Maximize Your Information Capital

## Inhibitors and Enablers for Success



### Business Inhibitors

Leadership

Politics

Culture

### Technology Inhibitors

Accessibility  
Of Data

Trust in Data

User Adoption

### Technology Enablers

Integration

Integrity

Intelligence

## Orienting Ourselves to Business Problems

What can't be measured can't be improved.

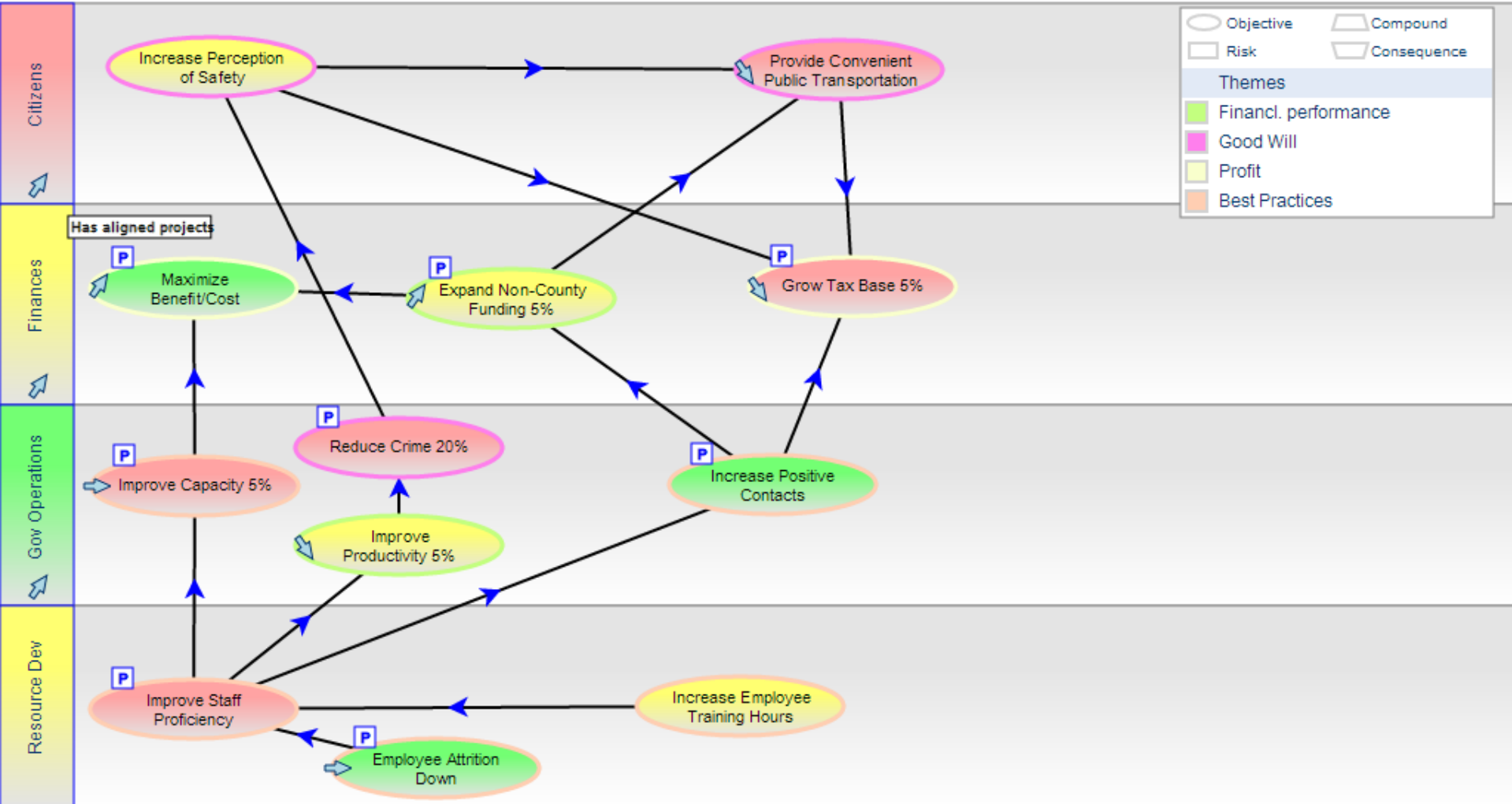
Management without measurement is just harassment.



Ideally: It starts at the top

- Create a ***strategy*** at the corporate level.
- Translate strategy into specific, measurable ***objectives***
- Define ***initiatives*** to meet objectives
- Display ***measures*** to show progress of initiatives

Your Municipality: The mission of Salt Lake County is to provide services which are legislatively mandated, commonly expected, and enhance the quality of life in an effective, efficient, a



Ideally: It starts at the top

- Create a **strategy** at the corporate level.
  - Translate strategy into specific, measurable **objectives**
  - Define **initiatives** to meet objectives
  - Display **measures** to show progress of initiatives
- 
- **Communicate** the strategy – to *everyone*
  - **Align** structure, goals, and incentives
  - **Clarify** roles and responsibilities
  - **Acculturate** employees to performance management

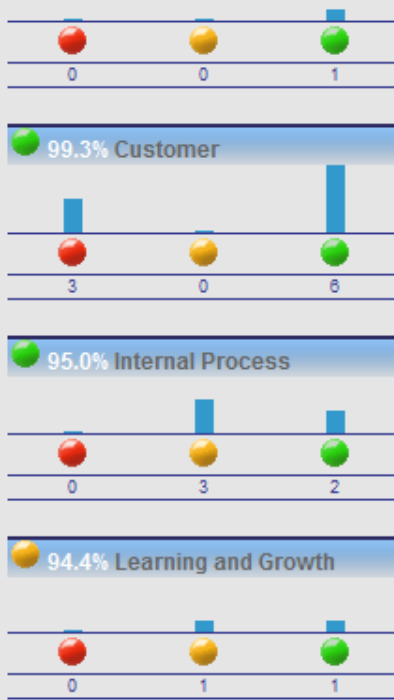
# WebFOCUS Performance Management Framework

Today Analytics Author Strategy Manage

Card: Strategic Performance

- Program Management
- Strategic Performance
- 97.0% Financial

Today Page: Strategic Dashboard - 03



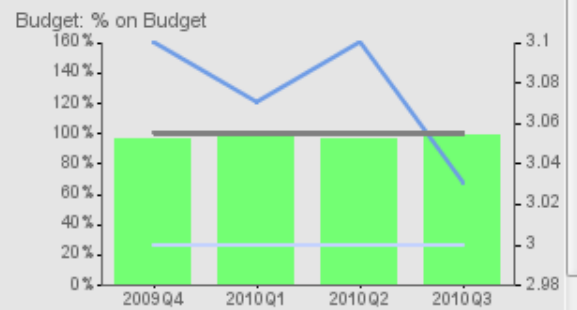
Objective	Current (2010Q3)	Previous (2010Q2)	Trend	Weight
<b>Financial</b>				
Budget Performance	97.0%	105.8%	Down	6.00%
<b>Customer</b>				
Public Trust	.0%	.0%	Flat	.00%
Safety	103.6%	94.7%	Up	.00%
Ensure Preparedness	87.7%	96.9%	Down	6.00%
Protect Infrastructure and Key Resources	101.2%	98.4%	Up	6.00%
Rights and interests of the People	82.5%	105.7%	Down	6.00%
Enforcing Laws	95.8%	102.5%	Down	10.00%
Ensure fair and efficient justice	105.5%	91.9%	Up	10.00%
Improve Safety	111.8%	96.2%	Up	10.00%
Protect Public	99.8%	89.7%	Up	10.00%
<b>Internal Process</b>				
Advance Information Sharing	97.8%	93.9%	Up	6.00%
Improve Process	94.1%	93.6%	Up	.00%
Eliminate Backlog and Prevent Recurrence	95.0%	94.8%	Up	6.00%
Improve Performance	90.6%	96.7%	Down	6.00%
Improve Quality	96.6%	89.3%	Up	6.00%
<b>Learning and Growth</b>				
Advancing Knowledge	90.7%	101.8%	Down	6.00%
Be a great place to work	98.1%	88.6%	Up	6.00%

Fired Alerts

No Fired Alerts found.

Legend:

- On/+ Tgt
- Marginal
- Below Tgt
- Curr. Actual
- Curr. Tgt
- Prior Actual
- Prior Tgt



## Your own people

“Improve **Federal program effectiveness** and public accountability by promoting a **focus on results, service quality and customer satisfaction.**”

“Improve **internal management** of the Federal Government.”

## Congress or other relevant bodies

“Improve **congressional decision-making** by providing more information on achieving statutory objectives and on the relative effectiveness and efficiency of Federal programs and spending.”

## Increasingly: Constituents

“Improve program performance by requiring agencies to set goals, measure performance against those goals and **report publicly** on progress.”

“Improve usefulness of performance and program information by **modernizing public reporting.**”

# Make Customer-Facing Analytics Part of Your Business Model

**Published:** 26 March 2012

---

**Analyst(s):** Kurt Schlegel

Organizations will increasingly use analytics and business intelligence to improve the customer experience. This research explains five ways to deliver customer-facing analytics in a way that is strategic to your business.

## Key Findings

- Personalizing the customer experience, providing comparative benchmarks, and establishing trusted data aggregators will substantially improve transparency and competitive performance across all vertical industries.
- Demand for greater transparency and performance improvement, coupled with protections for consumer privacy, will overcome resistance to the customer-facing analytics trend.
- The customer-facing analytics trend leverages all four of the "nexus of forces" affecting IT: cloud, social, mobile and especially information.

Top-down is generally better than bottom-up; however,

- Measure what *you* manage
- You may not always come to agreement at higher levels
  - Hierarchies may differ by law
  - Like a multi-tenant conglomerate
- Formalize and raise scope where possible
  - Learning experience



# Considerations

# Business/tech alignment for (e.g.) FWA detection/prevention

## Assemble

- Domain experts (business & business-oriented systems)
- Integration specialists (technical)

## Standardize

- Data stewards (business)
- Data cleansing & mastering experts (technical)

## Analyze

- Fraud and business analysts (business / technical)
- Front-line workers (business)
- Statisticians and data scientists (business / technical)

## Big Data:

*Anything measured in lottabytes.*

- Structured or unstructured
- Real-time or slow
- From disparate systems / sensors / interactions

Big Data: *A collection of data so large and complex that it becomes awkward to work with. Difficulties include capture, storage, search, sharing, analysis and visualization.*

— Wikipedia

What is the result of search, analysis,  
*small data.*  
and visualization of big data?

What kind of information gets shared?

## Assemble

- No silos
- Big Data becomes small data before it becomes useful
- Analysis is part of the assembly process:  
predictive, sentiment, text, audio, video, image analytics

## Standardize

- “No silos” means big data artifacts must be mastered
- Great deal of variety, error types, etc. surface in Big Data
  - Could be a benefit (e.g., surfaces alternate spellings)

## Analyze

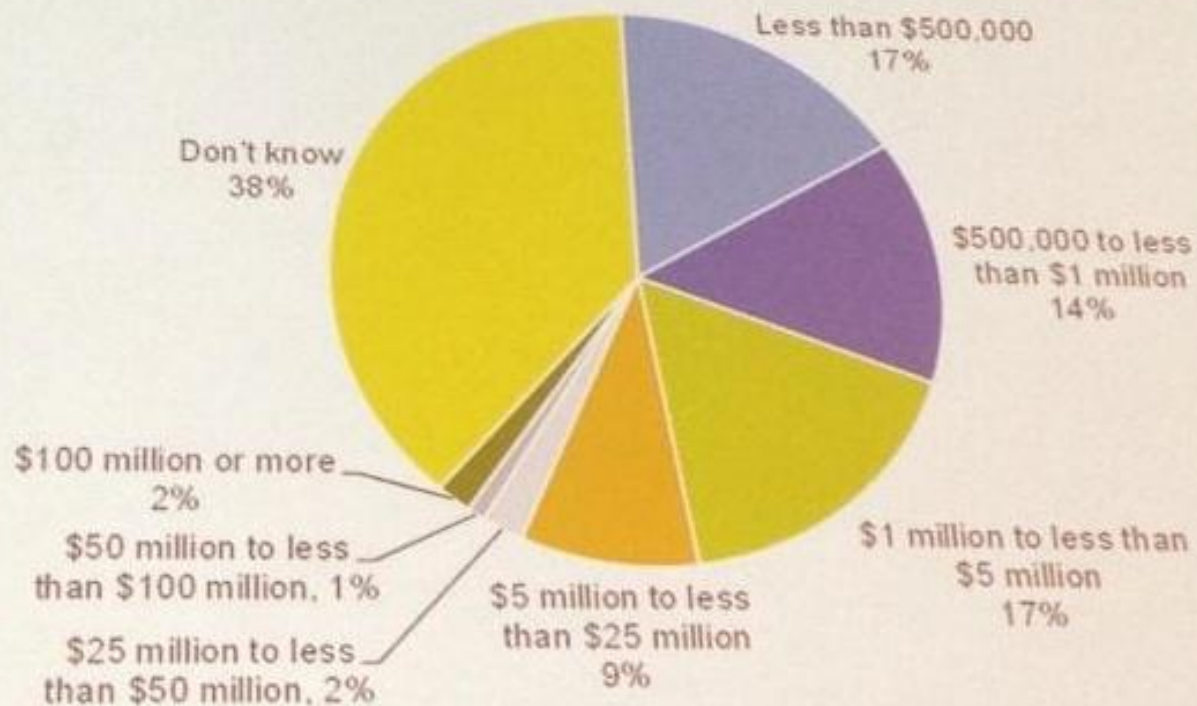
- Distill, distill, distill – then deploy as widely as possible
- Creative visualizations, e.g., GIS (mapping)

# Mastering Big Data Can Catch Fraud, Waste, & Abuse



## What's The Impact? With Big Data, It Can Be Huge and "I Don't Know" Is Unacceptable

### Estimated Annual Cost Impact of Data Quality Issues



N = 334



# Analysis and Visualization

The screenshot displays the Information Builders software interface, which is used for data analysis and visualization. The interface is divided into several sections:

- Top Navigation:** Includes filters for Product Category, Manufacturing Plant, Store Name, State, and Return Ratio.
- Network Diagram:** A network graph showing relationships between nodes, with a red dashed circle highlighting a specific node labeled 'LA'.
- Legend:** A legend for the network diagram, showing categories like Sales Re, Branche, Regions, Country, and Century.
- Customer Profile:** A detailed view for 'Hewlett-Packard Company' with fields for Address, Phone, and Website. It also includes a 'General' section with company details.
- Support View:** A section with various metrics and a table of customer notes.
 

Date	Author	Notes
2011/05/20	Rep 2	This customer is high risk. Made promotional offer
2011/05/23	Rep 2	Have not yet heard back from the customer in regards to the recommended Solutions Assessment. Sales Person should follow up immediately.
	Rep 2	Have not yet heard back from the customer in regards to the recommended Solutions Assessment. Sales Person should follow up immediately.
- Product Mix:** A pie chart showing the distribution of products, with 'WebFOCUS' at 44% and 'Iray' at 53%.
- Cases by Severity:** A bar chart showing the number of cases for each severity level (1, 2, 3).
- Recommended Promotions:** A section with a red dashed circle highlighting a 'LIKELY FRAUD TRANSACTION' warning.
- Overall Customer Health:** A gauge chart showing the customer's health score.
- Customer Satisfaction Score:** A gauge chart showing the customer's satisfaction score.

Tax Collection – Improved targeting of past-due tax collections can help increase revenue

Fraud Detection – More accurate view of patterns in food stamp benefit transactions makes illegal activity easier to detect

Unemployment – Classify new claims as fraudulent or legitimate enables claims to be processed more quickly

Crime Rate Reduction – Accurately predicting when and where crimes are likely, allocating the appropriate resources

Child Welfare – Better matching with foster parents by identifying factors that contribute to successful placements

Student/Faculty Attrition – Improving student attrition and graduation rates, identify trends in keeping your best faculty

Hospital Administration – Internal fraud detection, reduce mortality rates, improve patient satisfaction

# About Information Builders

A leading independent global software provider

- **Integration** technology
- Data **integrity** and governance solutions
- Business **intelligence**

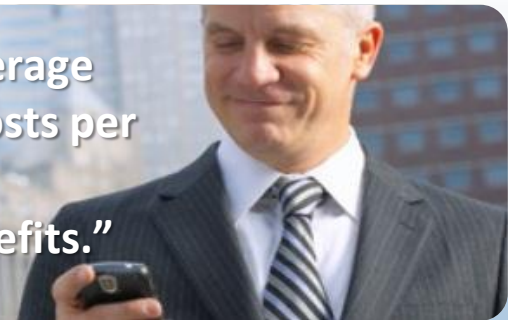
Our top priority is **customer partnership & success**

- Superior engineered software
- Highest-rated customer service

- **36 years of expertise**
- **1,350 dedicated professionals**
- **60 offices worldwide**
- **Tens of thousands of customers**
- **Millions of users**



“Only Information Builders achieves above-average ease of use, below-average implementation costs per user, above-average support for complex deployments and above-average business benefits.”



# Follow Information Builders



[twitter.com/infobldrs](https://twitter.com/infobldrs)



[facebook.com/informationbuilders](https://facebook.com/informationbuilders)



[linkedin.com/company/information-builders](https://linkedin.com/company/information-builders)



[youtube.com/user/informationbuilders](https://youtube.com/user/informationbuilders)

**IB Blog**

[informationbuilders.com/blog](https://informationbuilders.com/blog)



[bit.ly/ibgplus](https://bit.ly/ibgplus)