

BusinessConnect

A New Era of Smart

June 12 2014

Data – the world's new *natural resource*

Ferdinand Prezenski
Vice President Europe
Information Management & Big Data





The Role of Data Is Rapidly Expanding



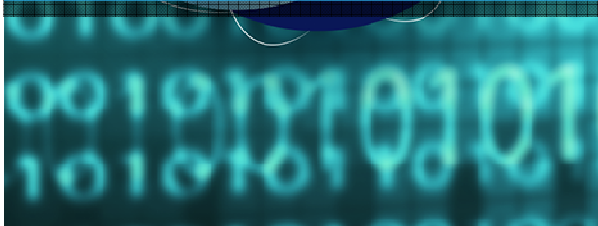
Untapped Resource



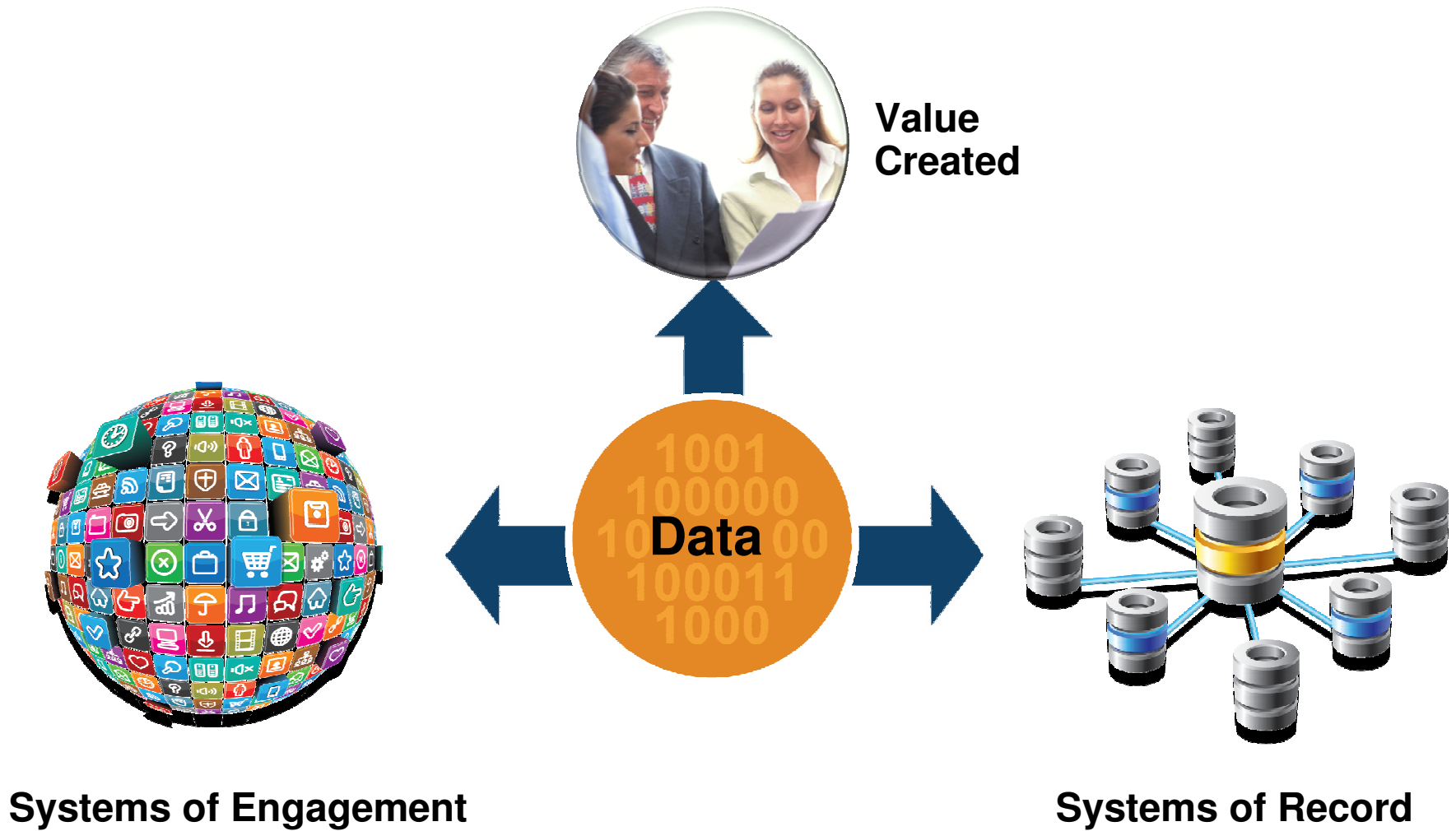
Empower Everyone



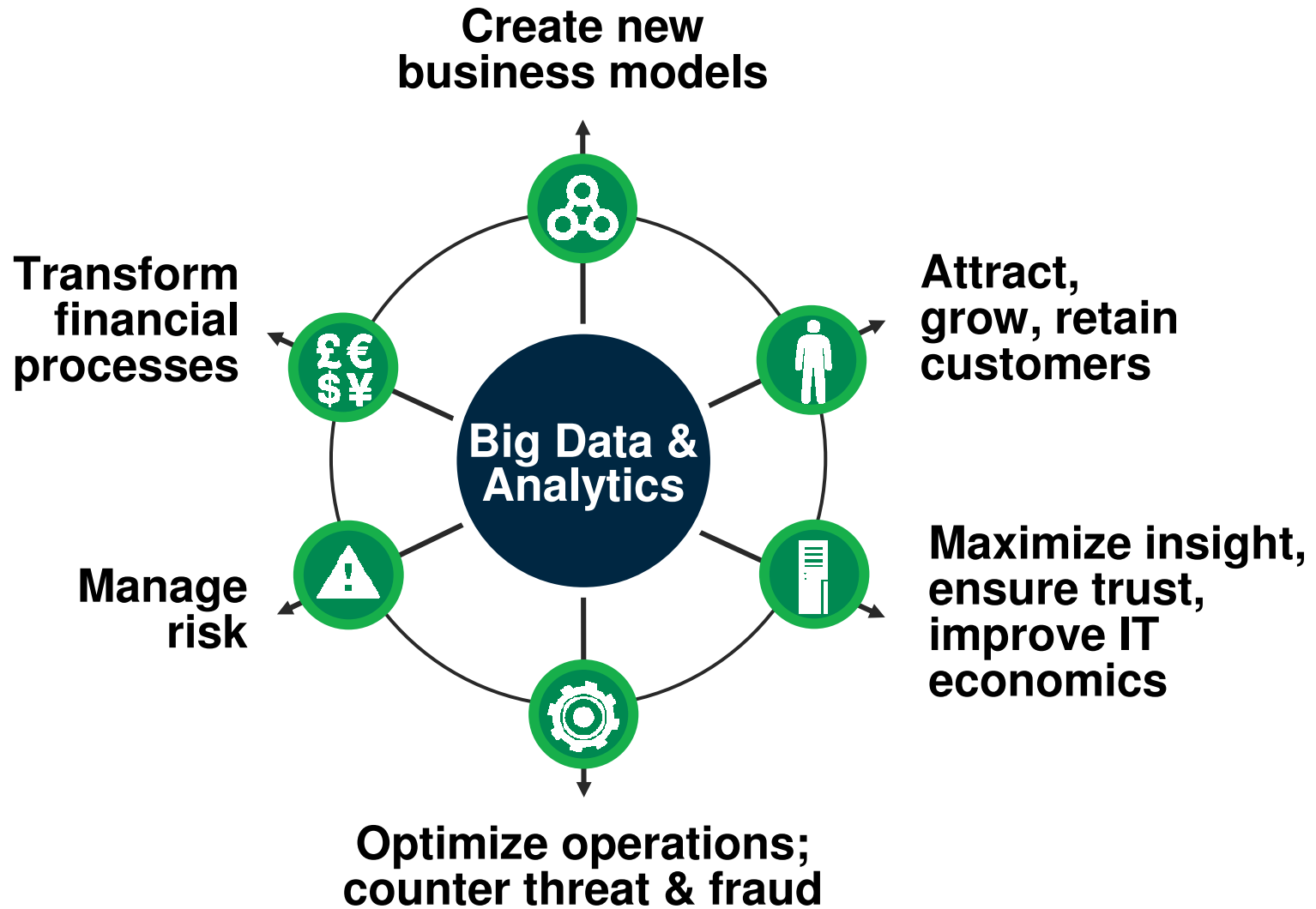
Increased Value



Data and Systems of Engagement Change How Value is Created



Insight Drives Key Business Imperatives



Why Act Now?

Outperform



Of leaders cite growth as the key source of value from analytics

Manage Risk



Of respondents were impacted by a cyber security breach over the past 24 months

Create IT Agility



Only 1 in 5 organizations allocate more than 50% of IT budget to new projects

Source:

1 - IBM IBV Study: Analytics: A blueprint for value, October 2013

2 - IBM Global Study on the Economic Impact of IT Risk, 2013

3 - IBM Global Data Center Study, 2012



The New Competitive Advantage



What is needed...



Mine multiple data sets,
apply range of analytics

Capture time-value of data

Embrace cognitive computing



The Opportunities from Big Data & Analytics Are Infinite

80%
Reduction in serious accidents



150%
Revenue growth rate



START TODAY CO.,LTD.



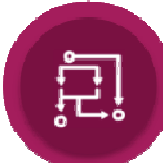
95%
Accuracy monthly sales forecasts



98.5%
On-time delivery target achieved



Use Cases for Big Data and Analytics

-  **1 360 View of Customer**
-  **2 Operations Analysis**
-  **3 Risk & Security Intelligence**
-  **4 Business Model Innovation**
-  **5 Data Warehouse Modernization**





1 Customers

Understand your customers better



Customers

Understand your customers better

Questions you can answer better with Big Data

- What do customers want and need?
- Why are customers leaving?

Value of Big Data

- Sell more products and services
- Reduce customer churn

Additional data you can leverage

- Transaction details
- Interaction details
- Social media



Banks Continue to Struggle Delivering Relevant Offers to Customers

Today they treat Aki like any other customer in her segment...but Aki is an individual



By using limited data, they treat Aki like anyone else



Aki holds a mortgage, a checking account, and a US



Action	Impact on Retention	Impact on Customer Value	Positive response likelihood
Cash Management Acct.			
Set meeting with Private Banking & Wealth Mgt. Advisor for a Portfolio Review			
Equity Bank Line / Secured Line-of-Credit			
Preferred Gold Credit Card			

qualifies her for a preferred rate



There is a lot of other information about Aki's transactions and interactions that could provide valuable insights...



Aki holds a mortgage and a checking account with us

Gas and convenience purchases in new zip codes

Aki used the mortgage calculator on the website

Large ticket discretionary spend is lower over past two months

Recent purchases at hardware and furniture stores inconsistent with typical spend

Aki's current credit score & profitability qualifies her for a preferred rate

Multiple transactions similar to others prior to applying for mortgages

Aki tweeted a link to an article about buying a second home & posted photos to Facebook



...which could be used to deliver more relevant offers



Aki holds a mortgage and a checking account with US



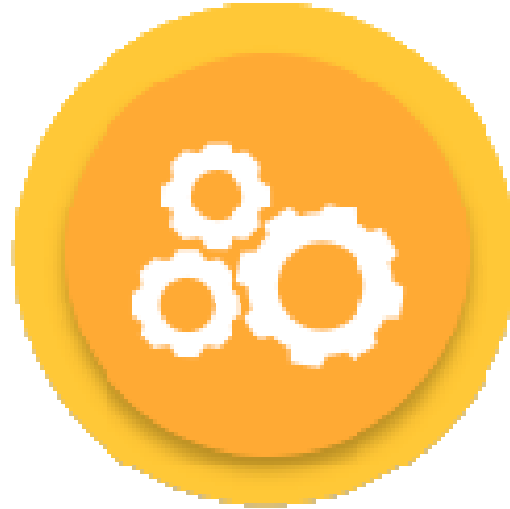
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Similar to others prior to applying for mortgages

second home & posted photos to Facebook

Action	Impact on Retention	Impact on Customer Value	Positive response likelihood
Cash Management Acct.			
Preferred Gold Credit Card			
Equity Bank Line / Secured Line-of-Credit			
Mortgage special rate discount 25 basis points			





2 Operations

Understand your operations better



Operations

Understand your operations better

Questions you can answer better with Big Data

- What is the true condition of my equipment?
- What does the operating environment look like right now?

Value of Big Data

- Identify potential problems earlier
- Reduce impact of outages
- Improve efficiency and output

Additional data you can leverage

- Machine generated data
- Sensor data



Analyze Power Usage to Optimize Capacity and Avoid Outages

Leverage Machine Generated Data

- Real-time view of conditions and output
- True asset age and residual life
- Predictors of asset failure
- Potential mitigation actions based on conditions
- Better plan inspection, maintenance and replacement

Increase Grid Efficiency and Reliability

“One town avoided a potential power outage by using a two-way advanced meter system to shut off home water heaters during peak periods”

Leverage Machine Generated Data

- Identified root cause of equipment failure
- Avoided multi-million dollar replacement





3 Risks and Threats

Improve ability to identify risks and threats



Risks and Threats

Improve ability to identify risks and threats

Questions you can answer better with Big Data

- What are potential security threats?
- Who may be trying to commit fraud?
- What are my true financial risks?

Value of Big Data

- Protect lives
- Reduce losses
- Protect your business

Additional data you can leverage

- Video feeds
- Internet and click stream data
- Social media



Live Video Streams, Social Media and Internet Traffic Used for Rapid Response to Fraud, Criminal and Terrorist Activity



Monitor Internet to Identify Illegal Activities

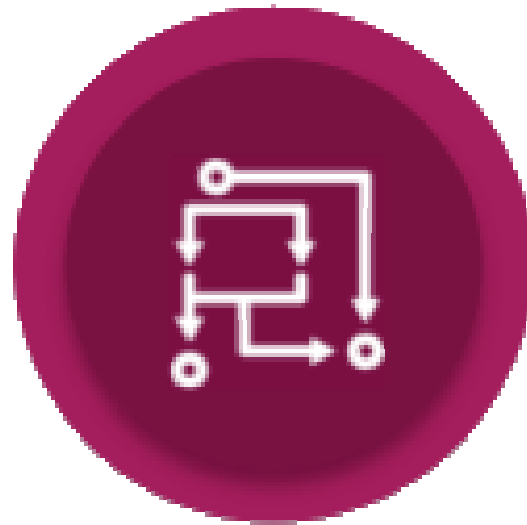
- Financial fraud, terrorists, drug & sex traffickers

Municipality and Event Security

- Support police, city operations and private security

Protect High Value Targets

- Power plants, research labs, government facilities



4 Business Model

Develop new products & business models



Business Model

Develop new products & business models

Questions you can answer better with Big Data

- How can we use information in new ways to transform our business?

Value of Big Data


- Create new products and services
- Develop new, non-traditional partnership

Additional data you can leverage

- Transaction details
- Interaction details
- Geospatial/location data
- Sensor and machine generated data



Agricultural equipment manufacturer uses Big Data to engage with clients in new ways



Predictive Asset Maintenance

- Capture equipment sensor data to identify potential service needs and offer pre-emptive maintenance

Precision Agriculture

- Leverage weather, soil sample and GPS location data to help farmers determine where and when to best plant and harvest crops

Business Benefits

Deliver services directly to customers

Optimize output of fields

Avoid equipment downtime

Reduce spare parts inventory



5 Economics of IT

Reduce cost and time to deliver insight



Economics of IT

Reduce cost and time to deliver insight

Questions you can answer better with Big Data

- How can we leverage evolving Big Data technologies?

Value of Big Data

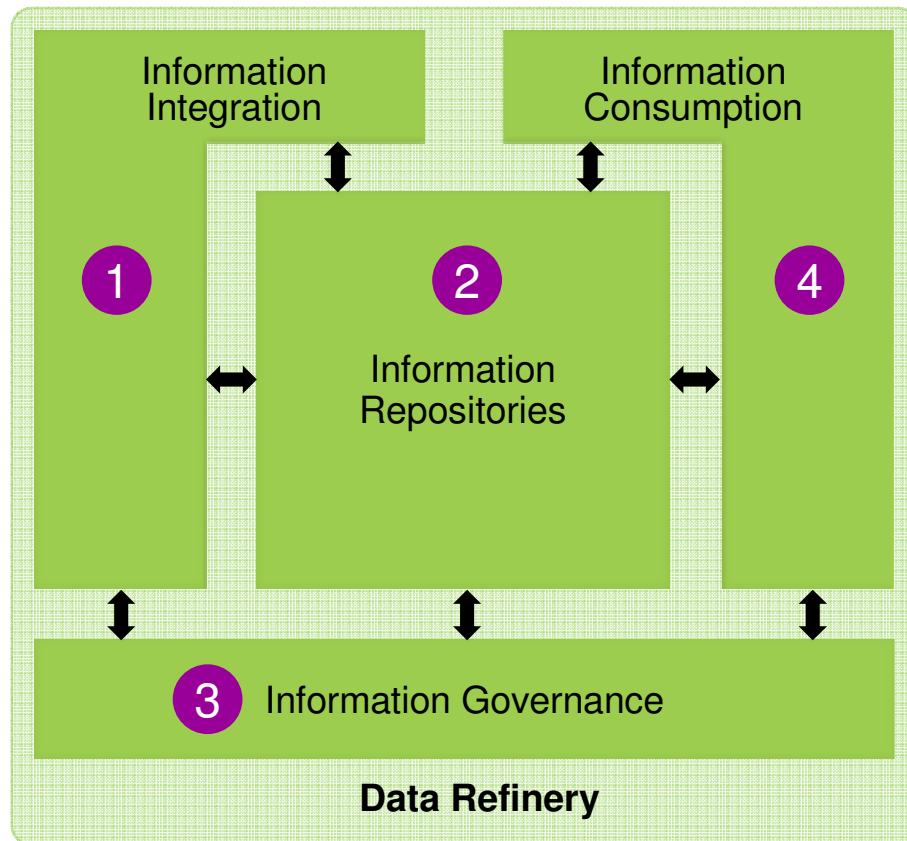
- Reduce data warehousing costs
- Provide business with quicker access to information
- Enable faster and deeper analysis – *“fail fast”*

Additional data you can leverage

- ALL data



Data Refinery Functionality for Big Data Adoption



- 1 Information Integration**
 - Core services for information provisioning and preparation
 - All information is catalogued
- 2 Information Repositories**
 - Hadoop providing the generic store for all types of data
 - Specialized repositories for specific workloads
- 3 Information Governance**
 - Cataloging, privacy and security, and policy based management
- 4 Information Consumption**
 - Virtualized and simplified access to information in the data refinery

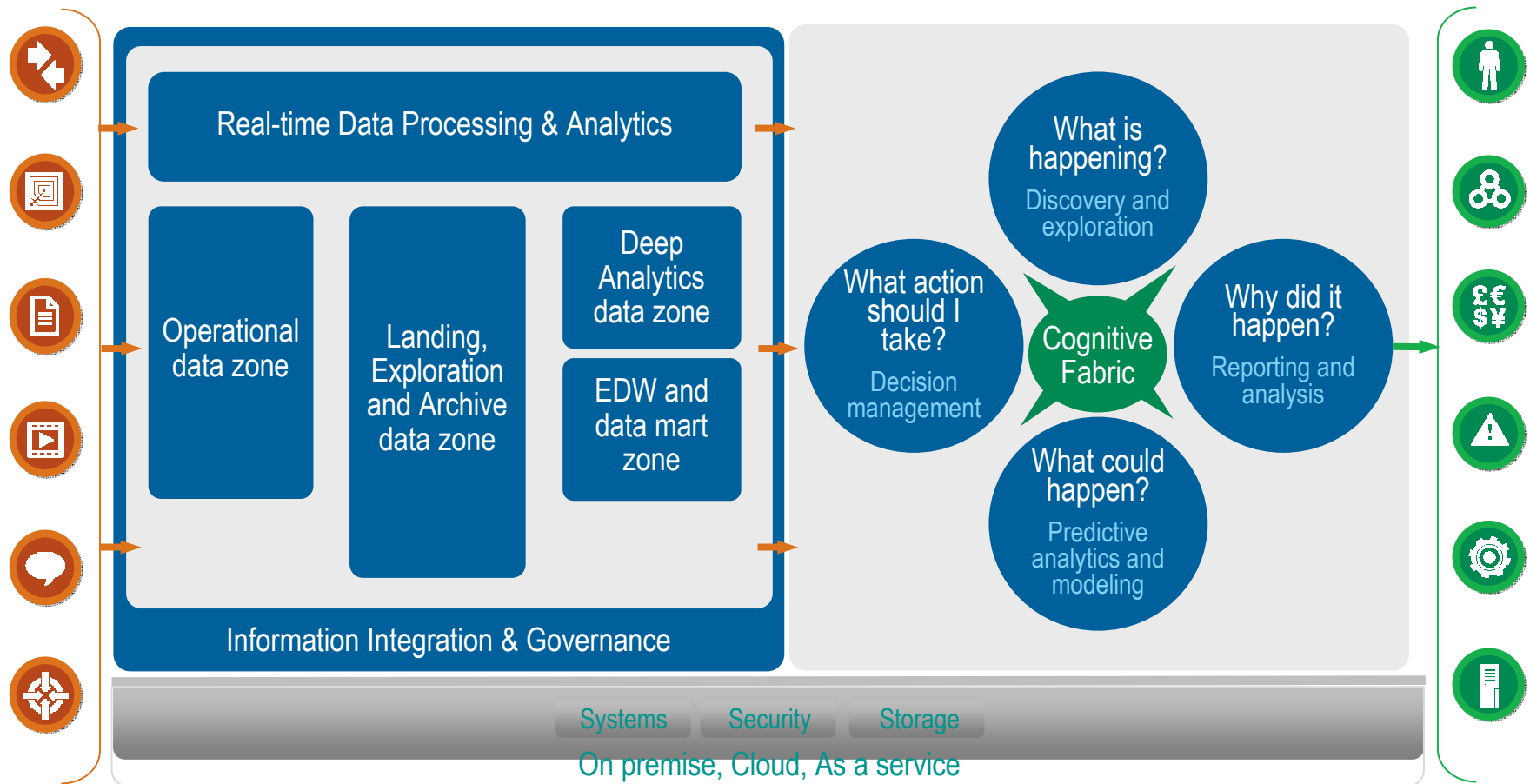


Next Generation Architecture for Big Data & Analytics

All Data

IBM Watson Foundations

New/Enhanced Applications



...And the Results are Game-Changing



4x

IBM InfoSphere BigInsights delivers performance gains¹

InfoSphere BigInsights for Hadoop



Open Source Hadoop

1. Audited STAC® Report Securities Technology Analysis Center

38x

Average acceleration of database queries for reporting²

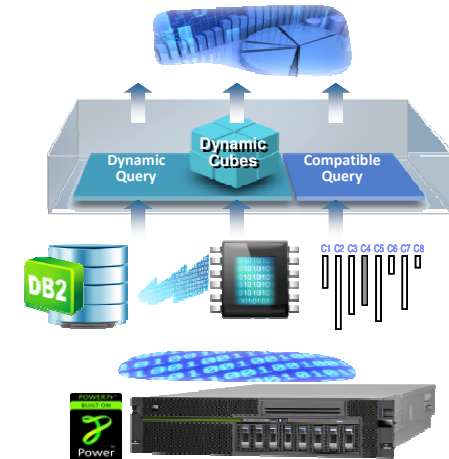
Cognos BI

+

DB2 BLU

+

Power



2. Based on internal tests



Big Data & Analytics is a journey.

Build a culture
that infuses
analytics
everywhere

Imagine It.

Invest in a
big data &
analytics
platform

Realize It.

Be proactive
about privacy,
security and
governance

Trust It.



Go Further and Faster with IBM



Accelerated Discovery Lab



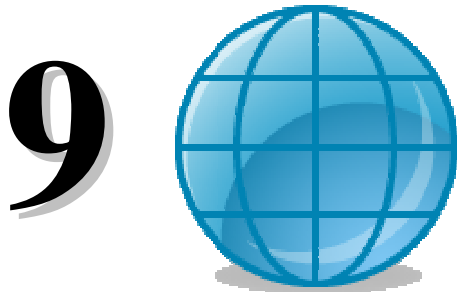
40K
Engagements
15K
Consultants

Expertise



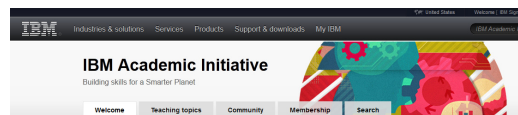
2,500+
Business Partners

Ecosystem

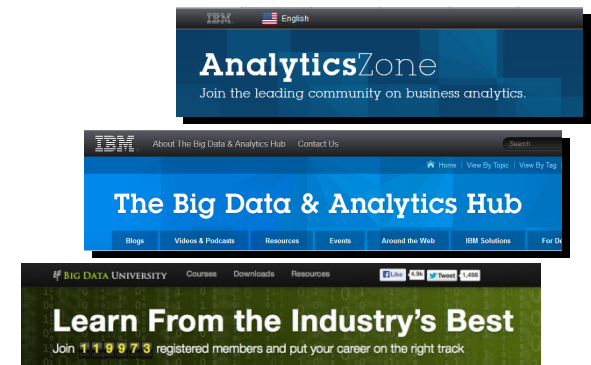


**Analytics Solution Centers
Worldwide**

1,000
Partnerships



Academic Initiative



Resources

