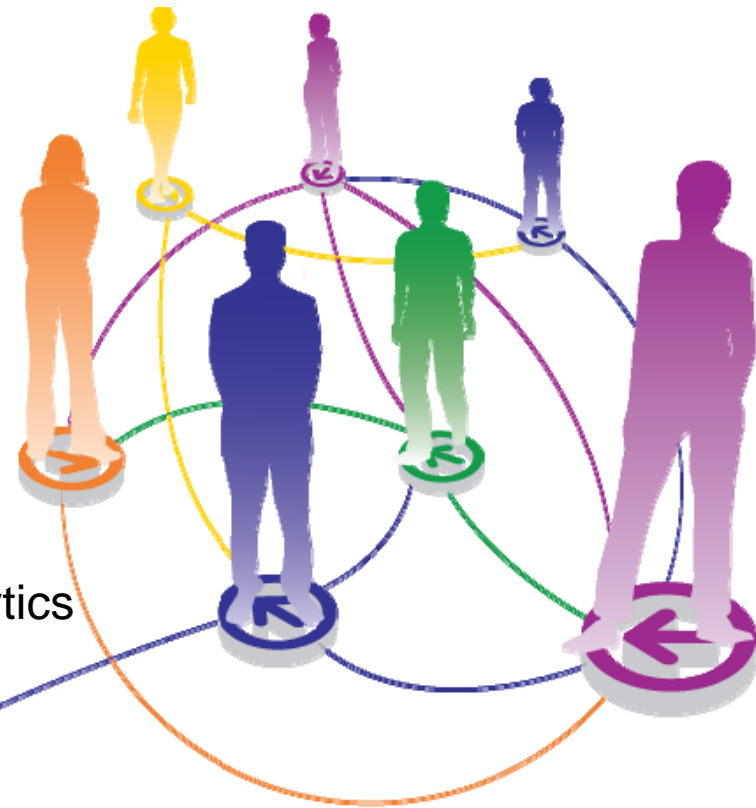# Building a Smarter Planet
Information-Led Transformation

Neil Isford
Vice President, Worldwide Sales
Information Management and Business Analytics
IBM Software Group
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IBM Information on Demand 2010

Today's Topics

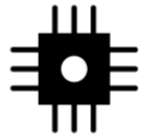**Our Smarter Planet and the Information Challenge**

Accelerating an Information-Led Transformation

Creating your Information Agenda

The Next Level: Business Analytics

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Building a Smarter Planet…

Our world is becoming
INSTRUMENTED

30 billion RFID tags…
This year!

Our world is becoming
INTERCONNECTED

~2 billion people on the Web… 2011
…a trillion connected objects

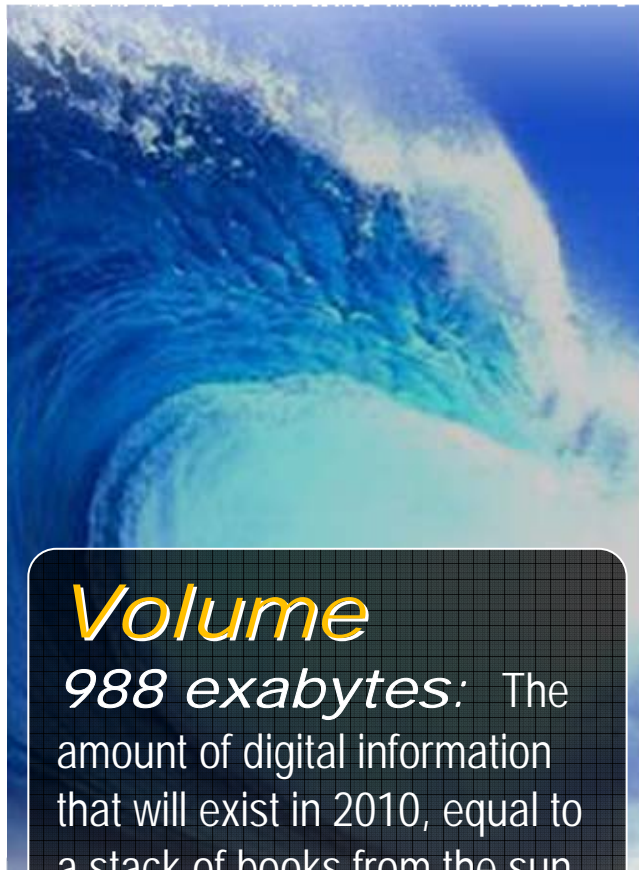Virtually all things, processes
and ways of working are becoming
INTELLIGENT

15 petabytes of new
Information generated daily…

Source: Various IBM and Public Studies

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…is Producing an Explosion of Information

Volume
988 exabytes: The amount of digital information that will exist in 2010, equal to a stack of books from the sun to Pluto and back…

Variety
80% of new data growth is generated largely by email, with increasing contribution by documents, images, and video and audio.

Velocity
77% of executives say they do not have real-time information to make key business decisions.

Source: Various IBM and Public Studies

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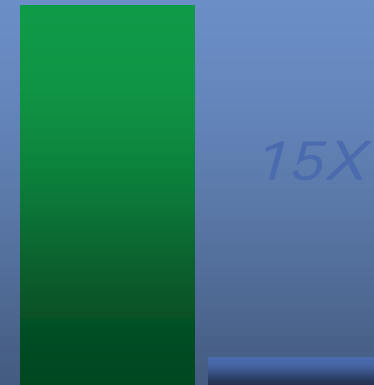# Yet Organizations are Operating with Blind Spots.

1 in 3

Business leaders **frequently make decisions** based on information they don't trust, or don't have

1 in 2

Business leaders say **they don't have access to the information they need** to do their jobs

Top Performers Demonstrate Expertise

15X

Predict and prepare for the future by evaluating trade-offs proactively

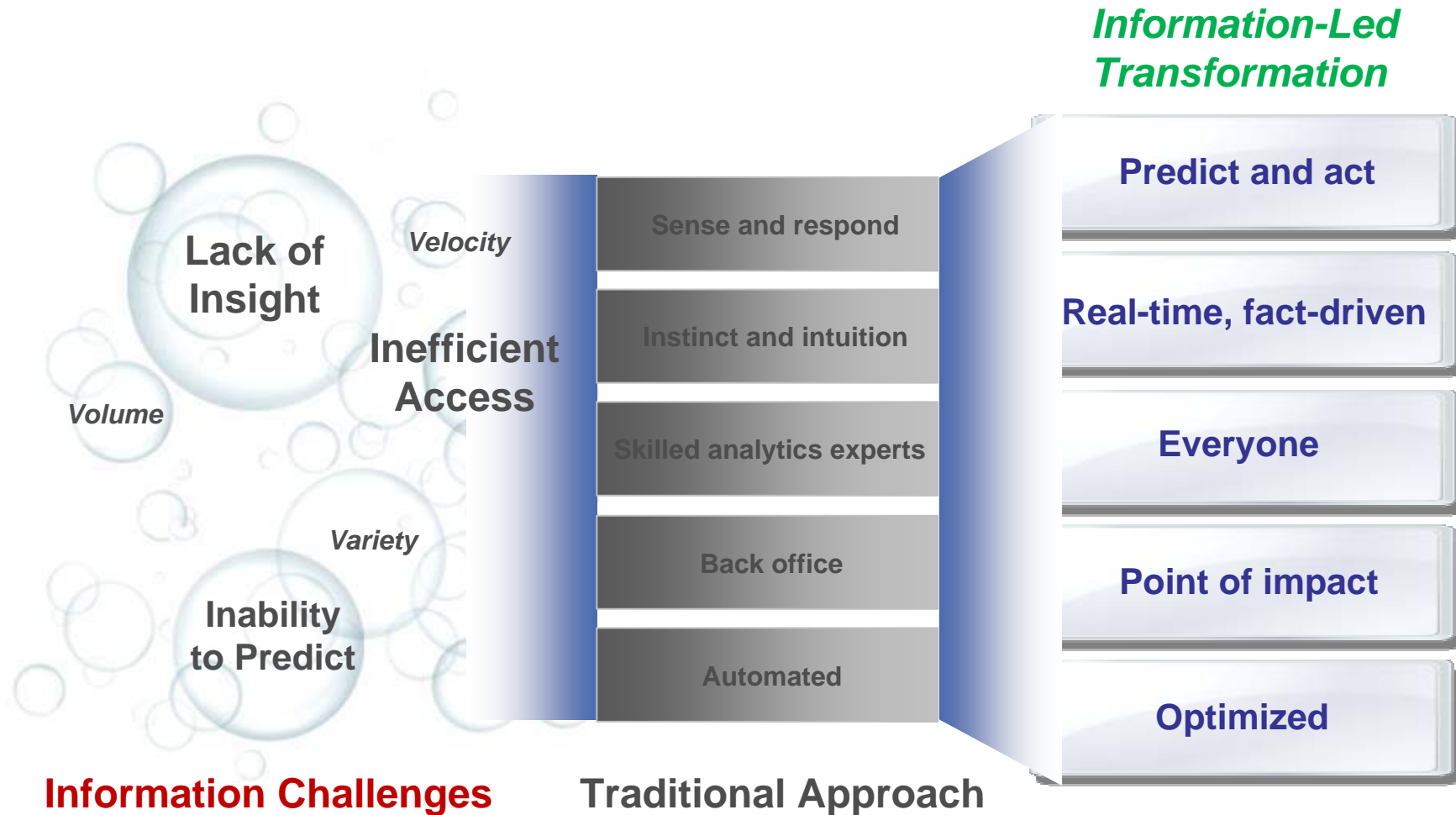- ■ Industry Top performers
- ■ Industry Under performers

Source: IBM: Break Away with Business Analytics and Optimization Study

The Key is Leveraging Information and Analytics
Informed, Real-time Decisions at the Point of Impact…
An Information-Led Transformation

Information-Led Transformation

Lack of Insight

Velocity

Inefficient Access

Volume

Variety

Inability to Predict

Traditional Approach	Information-Led Transformation
Sense and respond	Predict and act
Instinct and intuition	Real-time, fact-driven
Skilled analytics experts	Everyone
Back office	Point of impact
Automated	Optimized

Information Challenges

Traditional Approach

...Giving Organizations the Insight to Act with Confidence.

Irish Life & Permanent:
Single, complete, accurate record of customers leads to improved customer satisfaction and cross-sell, reduced costs

Major US Government Agency:
Predictive modeling at the point of disability application submission reduces claim processing time by 100 days, with ROI estimated at >$1B USD by 2011

Geisinger Health System:
Integrates real-time clinical data to provide a comprehensive patient view including complete medical history

Univ. of Ontario Institute of Technology:
Analytics detect potentially life-threatening conditions in premature infants up to 24 hrs earlier
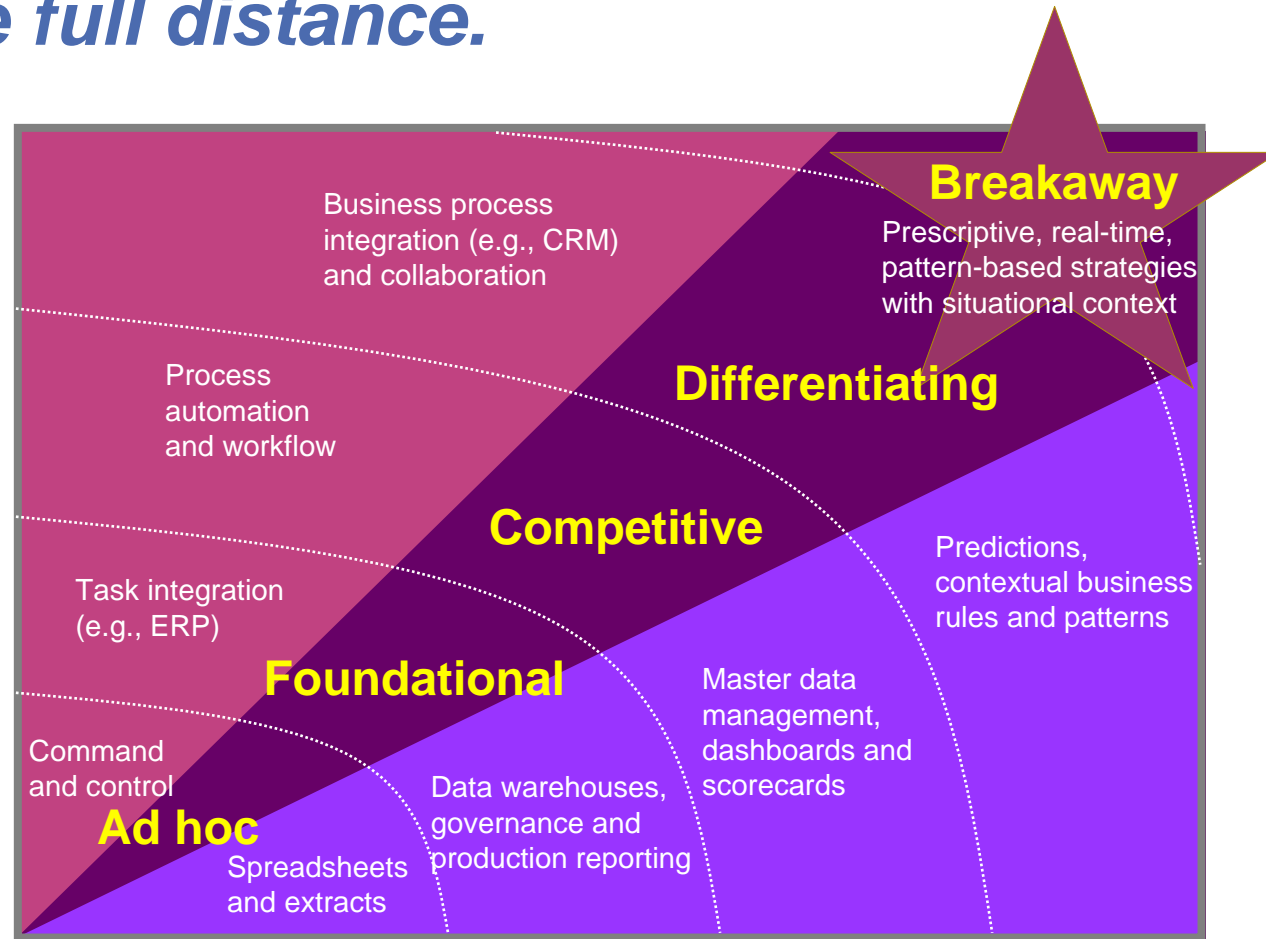
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Businesses today have an entirely new way to compete: BAO. But most have yet to take analytics the full distance.

Business operations maturity

How the business applies information to achieve its goals
- Policies
- Business Processes
- Organization

Business process integration (e.g., CRM) and collaboration

Process automation and workflow

Task integration (e.g., ERP)

Command and control

Breakaway
Prescriptive, real-time, pattern-based strategies with situational context

Differentiating

Competitive

Predictions, contextual business rules and patterns

Foundational

Master data management, dashboards and scorecards

Ad hoc

Spreadsheets and extracts

Data warehouses, governance and production reporting

Information and analytics maturity

How the business manages information and learns from it

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Top performers have the right management systems, tools, and culture – enabling them to seek, evaluate and act on opportunities

Key Advantages

Winning Characteristics

21.9X

32.5%

1.5%

Challenging

Disrupt the status quo to improve the business and create new opportunities

15X

22.7%

1.5%

Anticipating

Predict and prepare for the future by evaluating trade-offs proactively

5.6X

25%

4.4%

Empowered

Enable and empower employees to analyse, decide and act
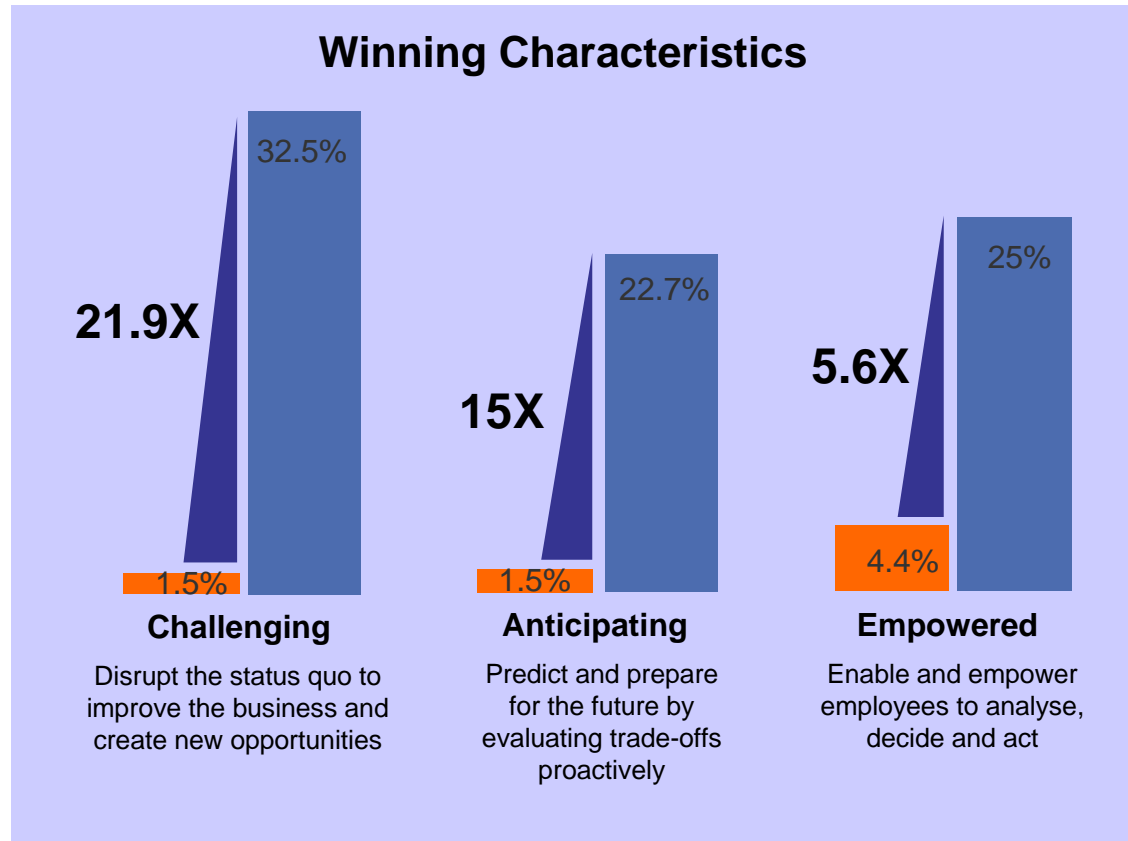
High quality information

Strong decision support

Keen focus on driving business change

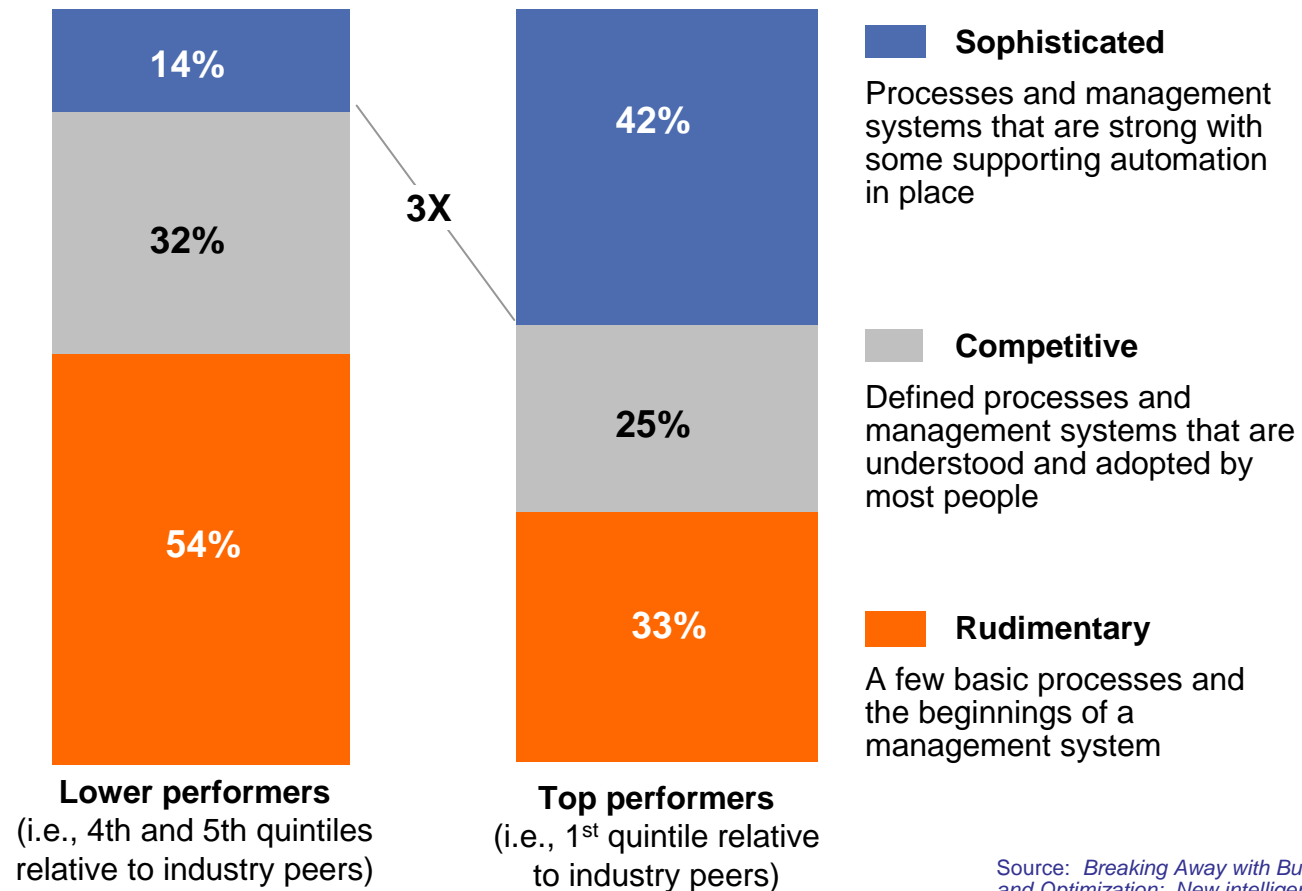Chart shows differences at the highest achievement levels

Key: ■ Top performers (i.e., 1st quintile relative to industry peers)

■ Lower performers (i.e., 4th and 5th quintile relative to industry peers)

■ Relative difference of top performers to lower performers

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Strong data governance discipline helps top performers move faster and collaborate more easily

Data Governance Levels

Lower performers
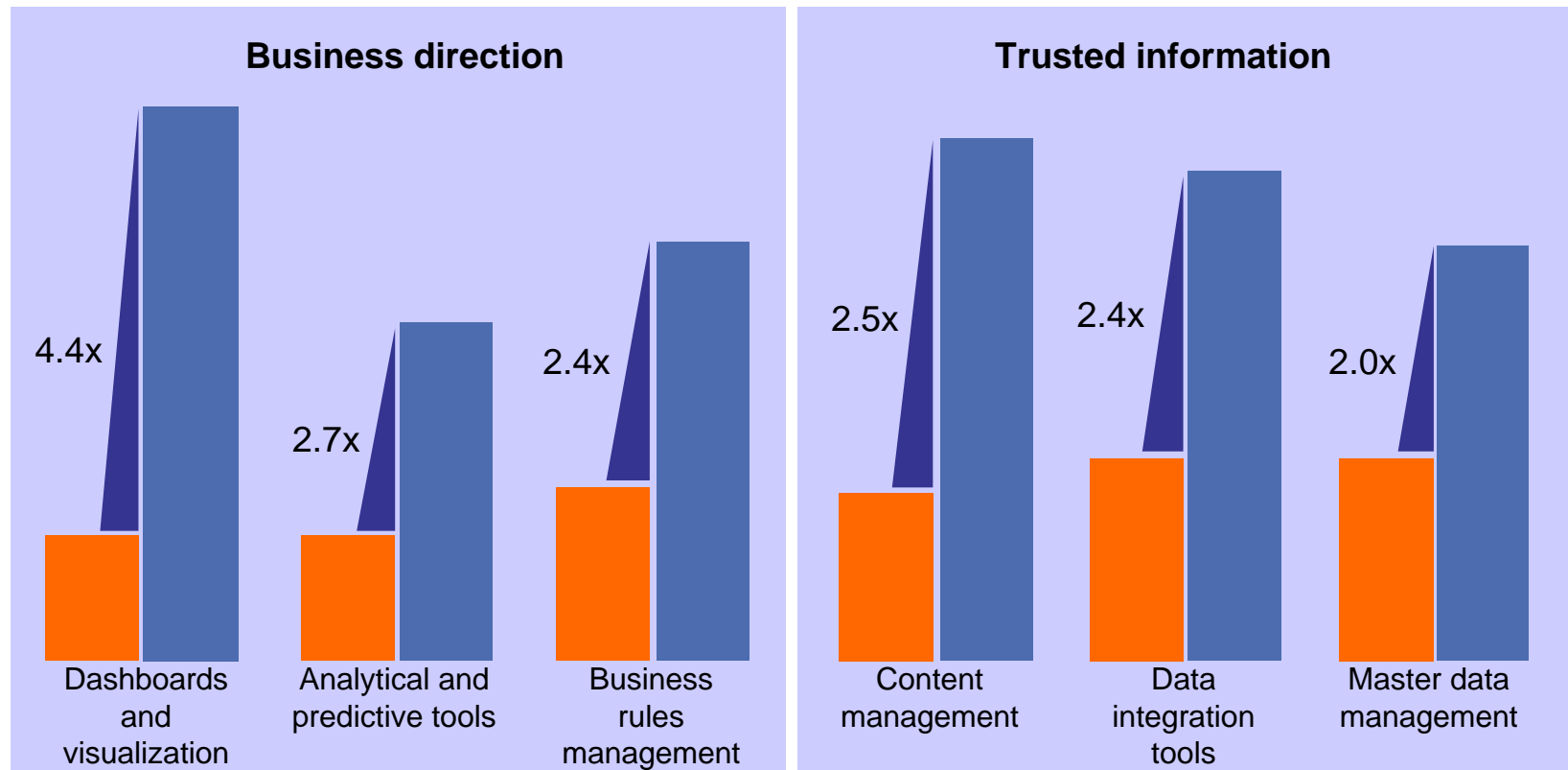(i.e., 4th and 5th quintiles
relative to industry peers)

- 14%
- 32%
- 54%

3X

Top performers
(i.e., 1st quintile relative
to industry peers)

- 42%
- 25%
- 33%

Sophisticated

Processes and management
systems that are strong with
some supporting automation
in place

Competitive

Defined processes and
management systems that are
understood and adopted by
most people

Rudimentary

A few basic processes and
the beginnings of a
management system

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ON Demand 2010

Top performers are armed with state-of-the-art tools to support decisions

Above average BAO platforms and toolsets

Business direction

4.4x — Dashboards and visualization

2.7x — Analytical and predictive tools

2.4x — Business rules management

Trusted information

2.5x — Content management

2.4x — Data integration tools

2.0x — Master data management

Source: *Breaking Away with Business Analytics and Optimization: New intelligence meets enterprise operations* at www.ibm.com/gbs/intelligent-enterprise.

Key:
■ Top performers (i.e., 1st quintile relative to industry peers)

■ Lower performers (i.e., 4th and 5th quintile relative to industry peers)

■ Relative difference of top performers to lower performers

Focus on making the operational changes necessary to create value from new insights pays off for top performers in business results

2.5X
Top performers nearly triple their odds of success through their keen focus driving change

2X
Focusing on driving change is more than twice as important to success as having a well run project

Beating the odds for success

Best
Driving change
- Culture and people change
- Data governance
- Business process change
- Organizational alignment

Better
Well run project
- Program governance
- Project objectives
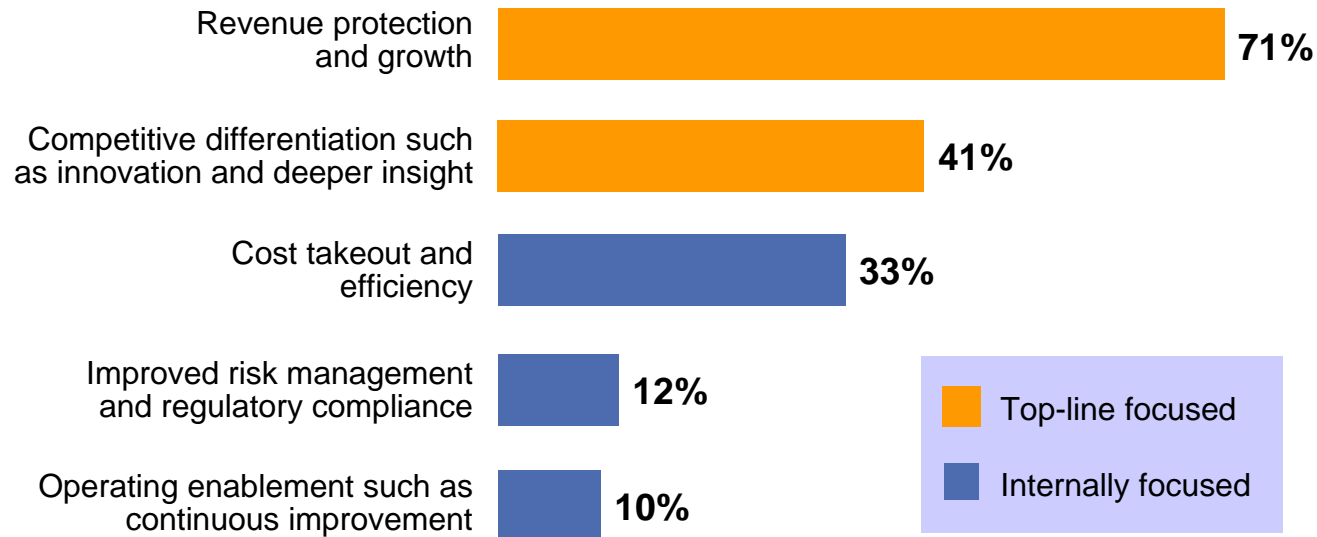- Multi-phased roadmap

Good
Sound justifications
- Sponsorship
- Capability assessments
- Funding process management

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IBM's 2009 survey of 398 executives worldwide found top-line focus is back and it's a global phenomenon

Business Objectives for 2010-2011

- Revenue protection and growth — **71%** (Top-line focused)
- Competitive differentiation such as innovation and deeper insight — **41%** (Top-line focused)
- Cost takeout and efficiency — **33%** (Internally focused)
- Improved risk management and regulatory compliance — **12%** (Internally focused)
- Operating enablement such as continuous improvement — **10%** (Internally focused)

Legend:
- ■ Top-line focused
- ■ Internally focused

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We predict a shift in projects to better reflect top line priorities

Impact　　　　　　**Project Scope**

Increase Focus
- Pricing and offer strategies
- Branding and reputation management
- Product/services market selection
- Lead generation and pipeline management
- Promotion and offer management
- Logistics and distribution management

Maintain Focus
- Customer segmentation and profitability
- Demand forecasting and management
- Enterprise goal setting and alignment
- Budgeting and resource allocation

Re-assess Focus
- Reporting and performance measurement
- Cost/expense management
- Career path and succession management
- Fraud and financial risk management
- Leadership development
- Channel performance

Next 24 Months Top Ten Priorities

Current Top Ten Priorities

Business Objectives: ■ Top-line　■ Top-line and internal improvement　■ Internal improvement

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As our Clients Shift to an Information Driven Enterprise, they are asking how can I Create Value and *Lower Costs*

Create Value…

> **Can I get just the right insight & information
> to the right people in the context of what they are doing?**
> Executives? Business Analysts? Customers? Call Centers? Web?

Lower Costs…
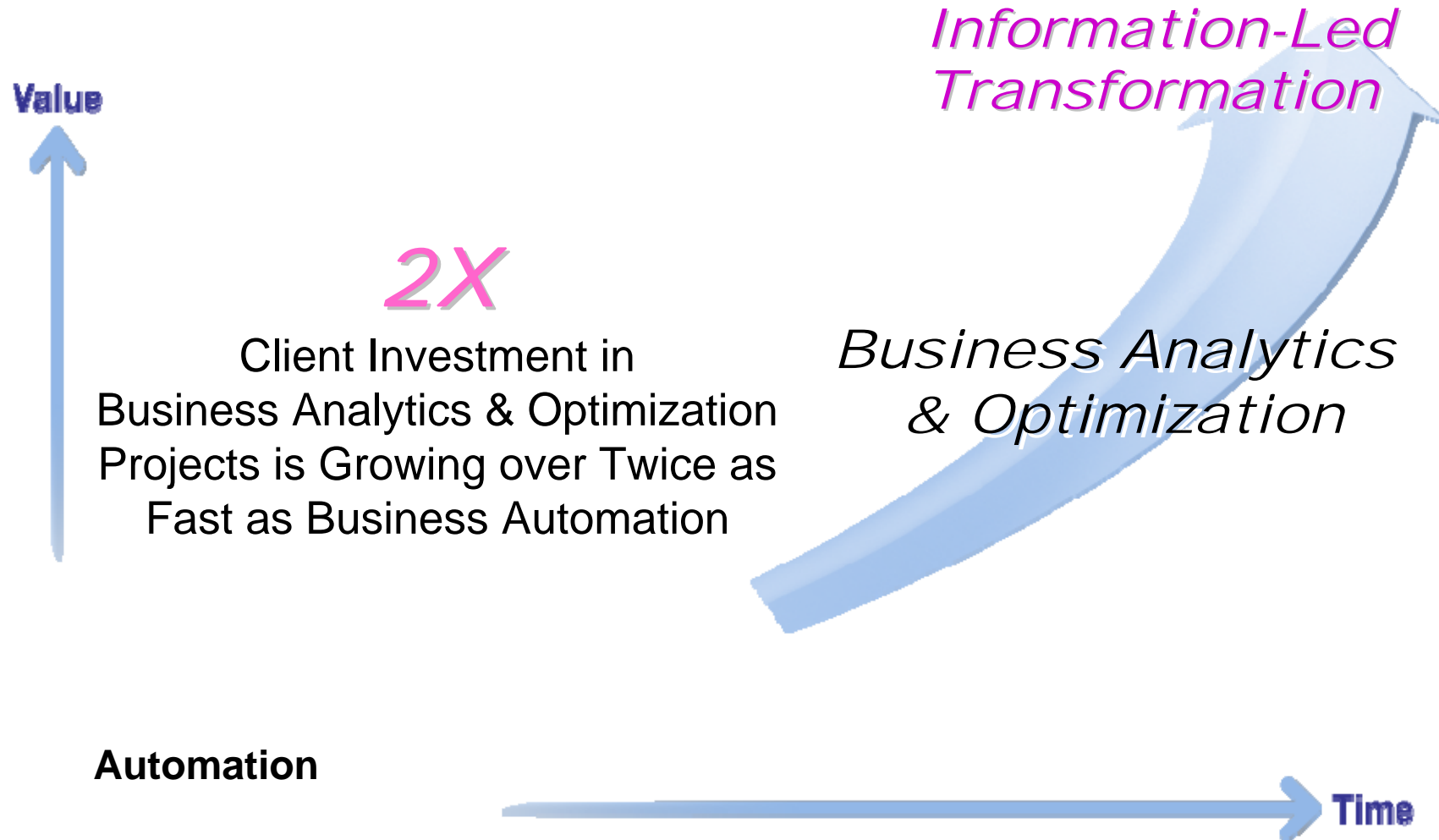
> **I have thousands of databases and content repositories.**
> I don't know where what is?
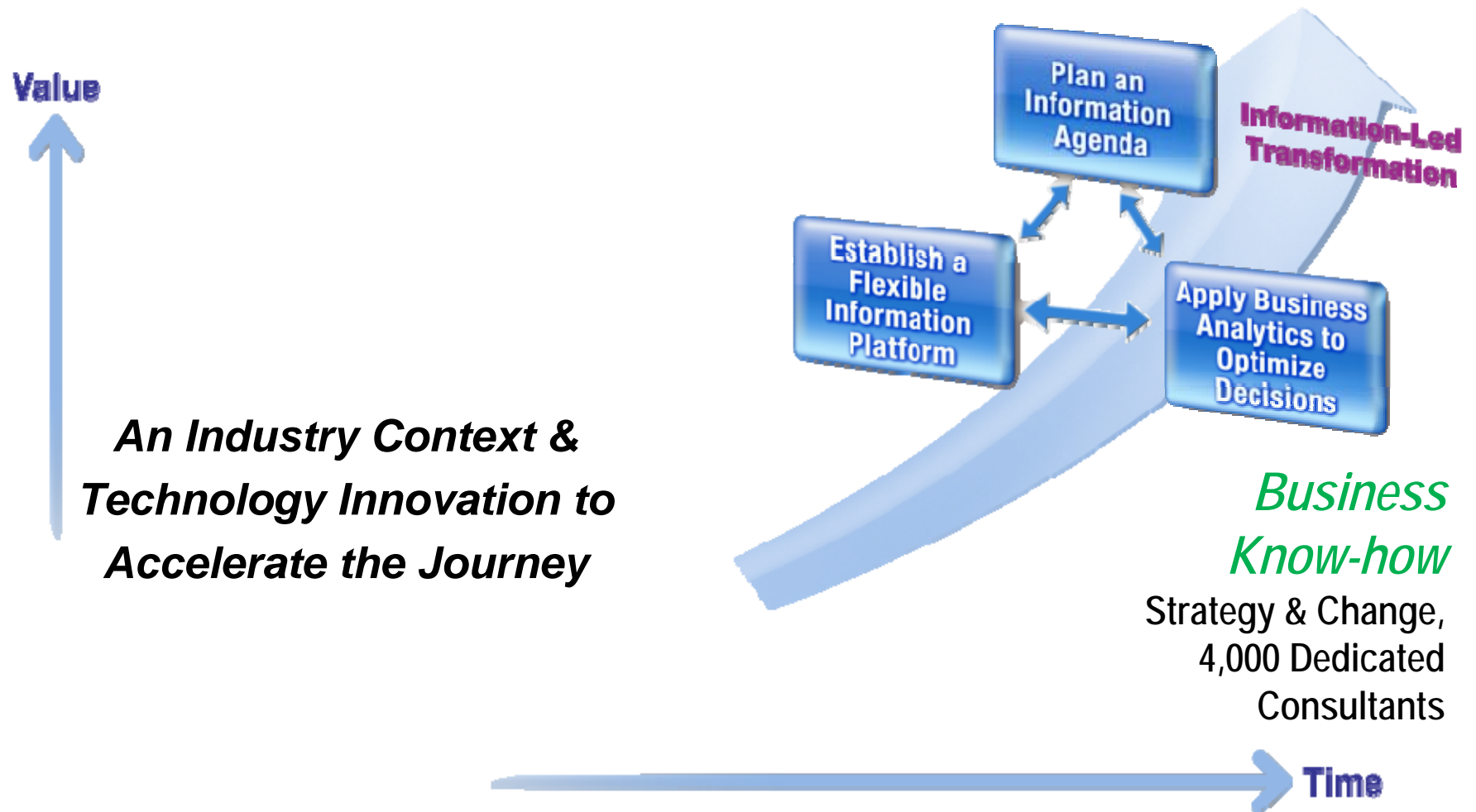> Can I get it all organized?
> Can I decommission data?

Information-Led Transformation

Information-Led Transformations will Change
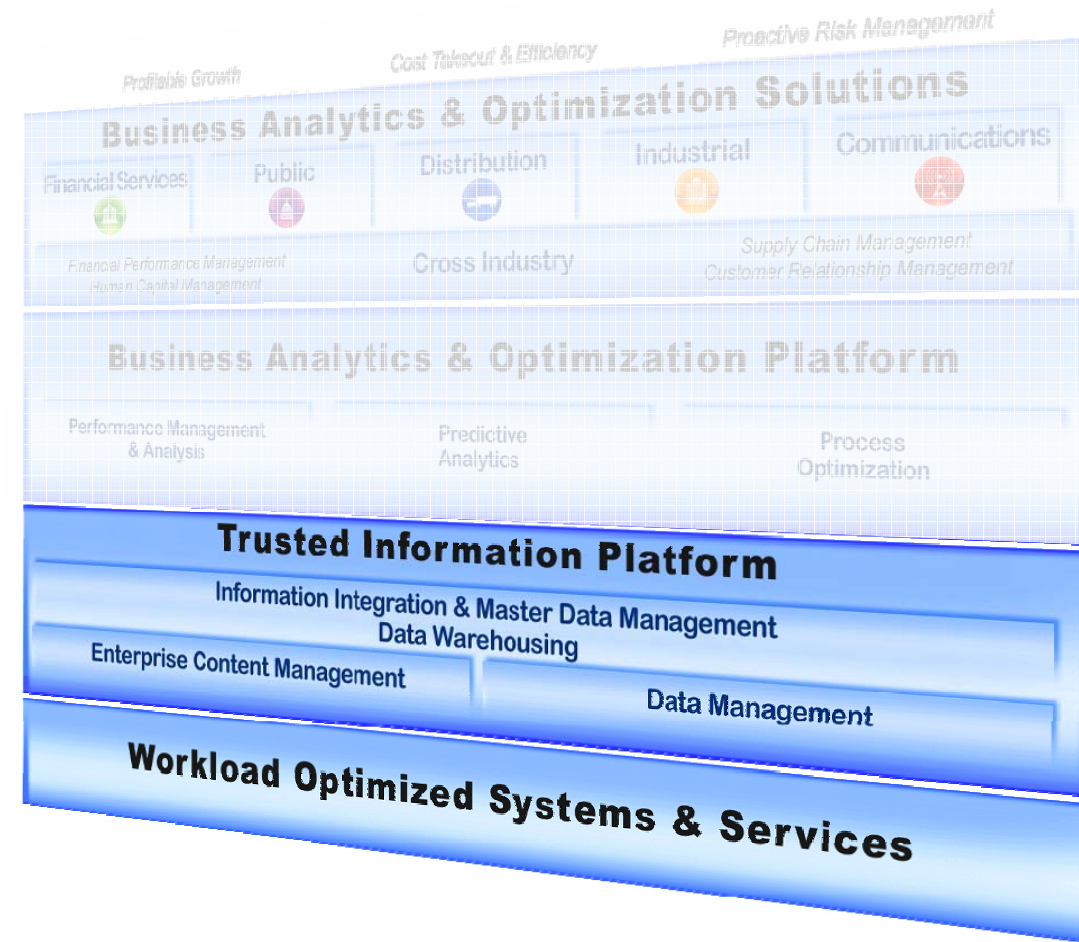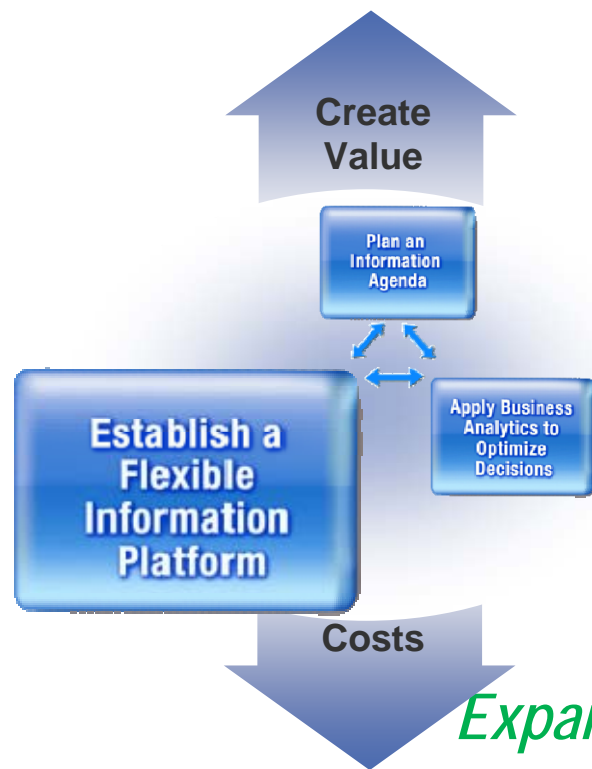Business the Same Way as ERP & CRM…

Value

**Information-Led
Transformation**

2X

Client Investment in
Business Analytics & Optimization
Projects is Growing over Twice as
Fast as Business Automation

**Business Analytics
& Optimization**

Automation

Time

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Accelerating an Information-Led Transformation…

An Industry Context & Technology Innovation to Accelerate the Journey

Value

Plan an Information Agenda

Information-Led Transformation

Establish a Flexible Information Platform

Apply Business Analytics to Optimize Decisions

Business Know-how

Strategy & Change, 4,000 Dedicated Consultants

Time

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A Flexible Information Platform

Create
Value

Plan an
Information
Agenda

Establish a
Flexible
Information
Platform

Apply Business
Analytics to
Optimize
Decisions

Costs

*Expanding
Technology*

$12B Software Investments
Over 15,000 New Clients
Over 2,300 New IOD Partners

Profitable Growth   Cost Takeout & Efficiency   Proactive Risk Management

Business Analytics & Optimization Solutions

Financial Services   Public   Distribution   Industrial   Communications

Financial Performance Management   Cross Industry   Supply Chain Management
Human Capital Management   Customer Relationship Management

Business Analytics & Optimization Platform

Performance Management
& Analysis   Predictive
Analytics   Process
Optimization

Trusted Information Platform

Information Integration & Master Data Management
Data Warehousing

Enterprise Content Management   Data Management

Workload Optimized Systems & Services

Accelerating an Information-Led Transformation…
IBM has invested $12B in R&D and Acquisitions
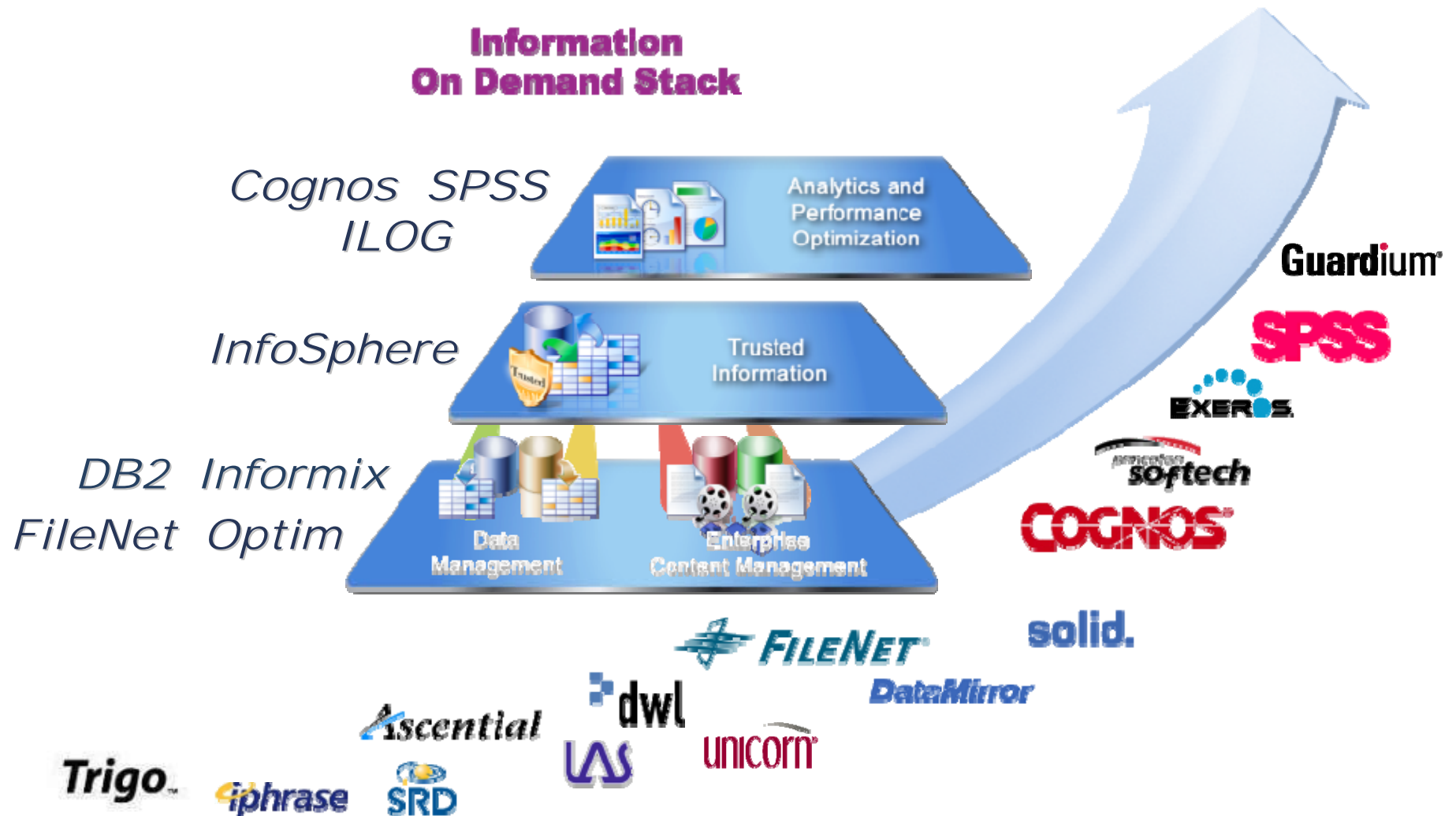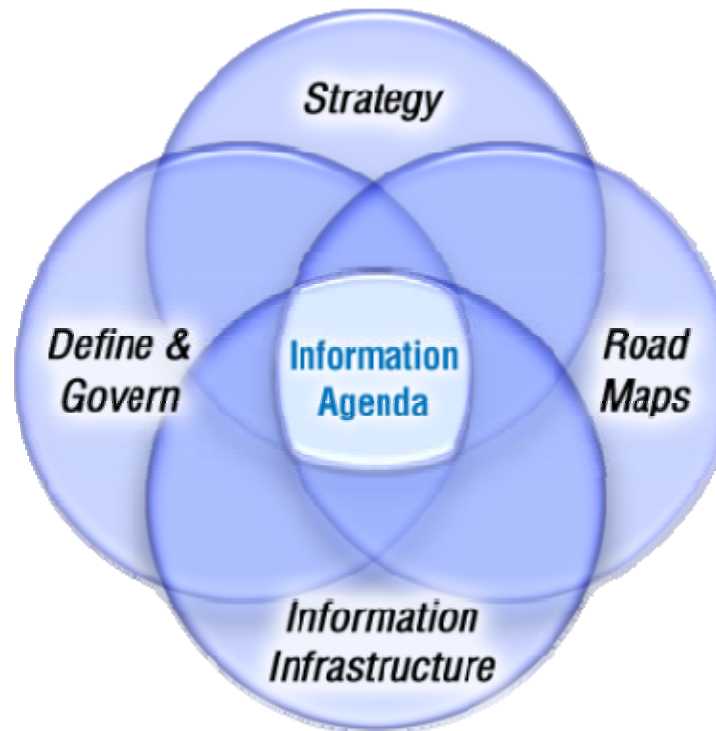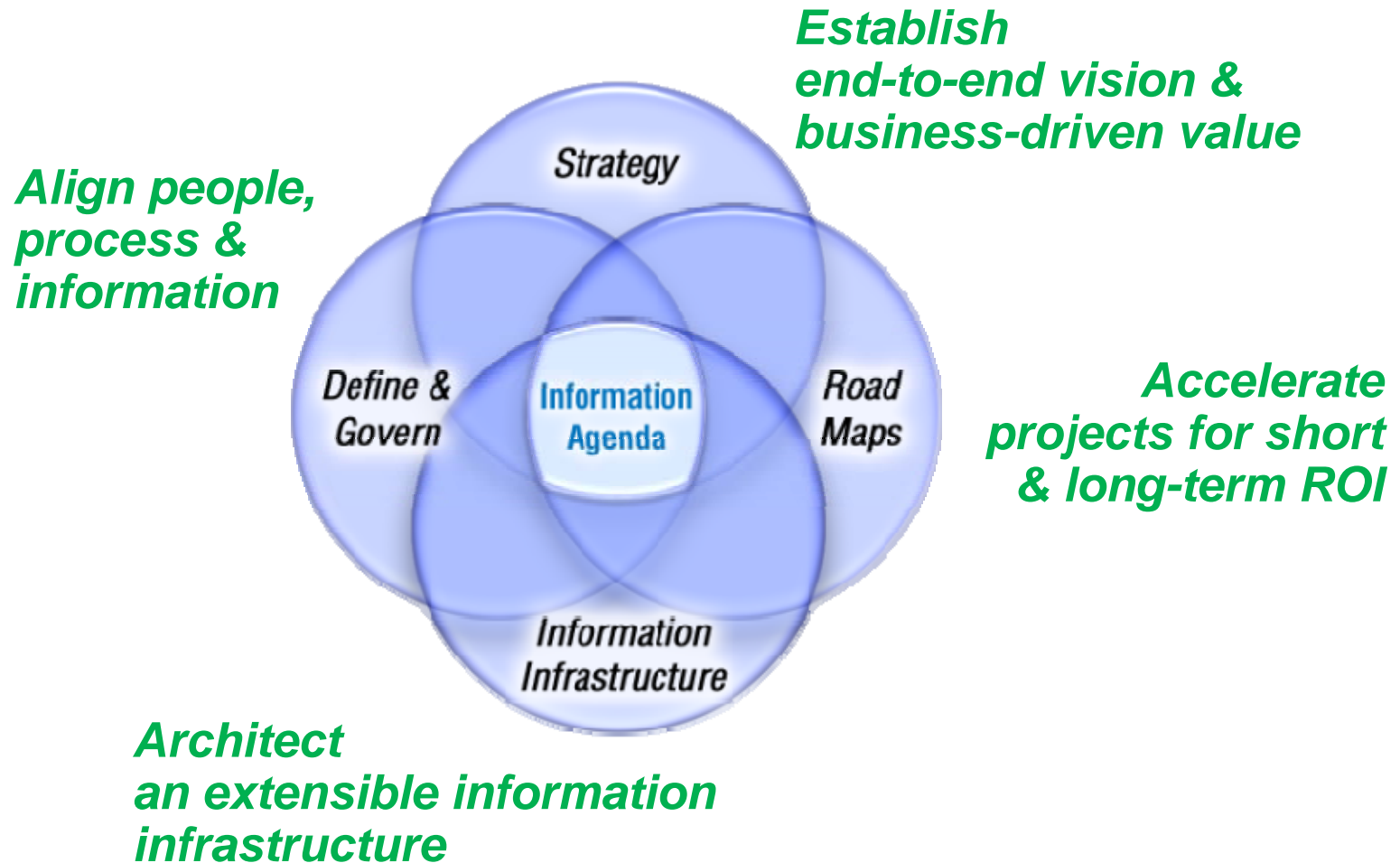
Information Agenda
A proven, industry-specific approach for aligning information with business objectives
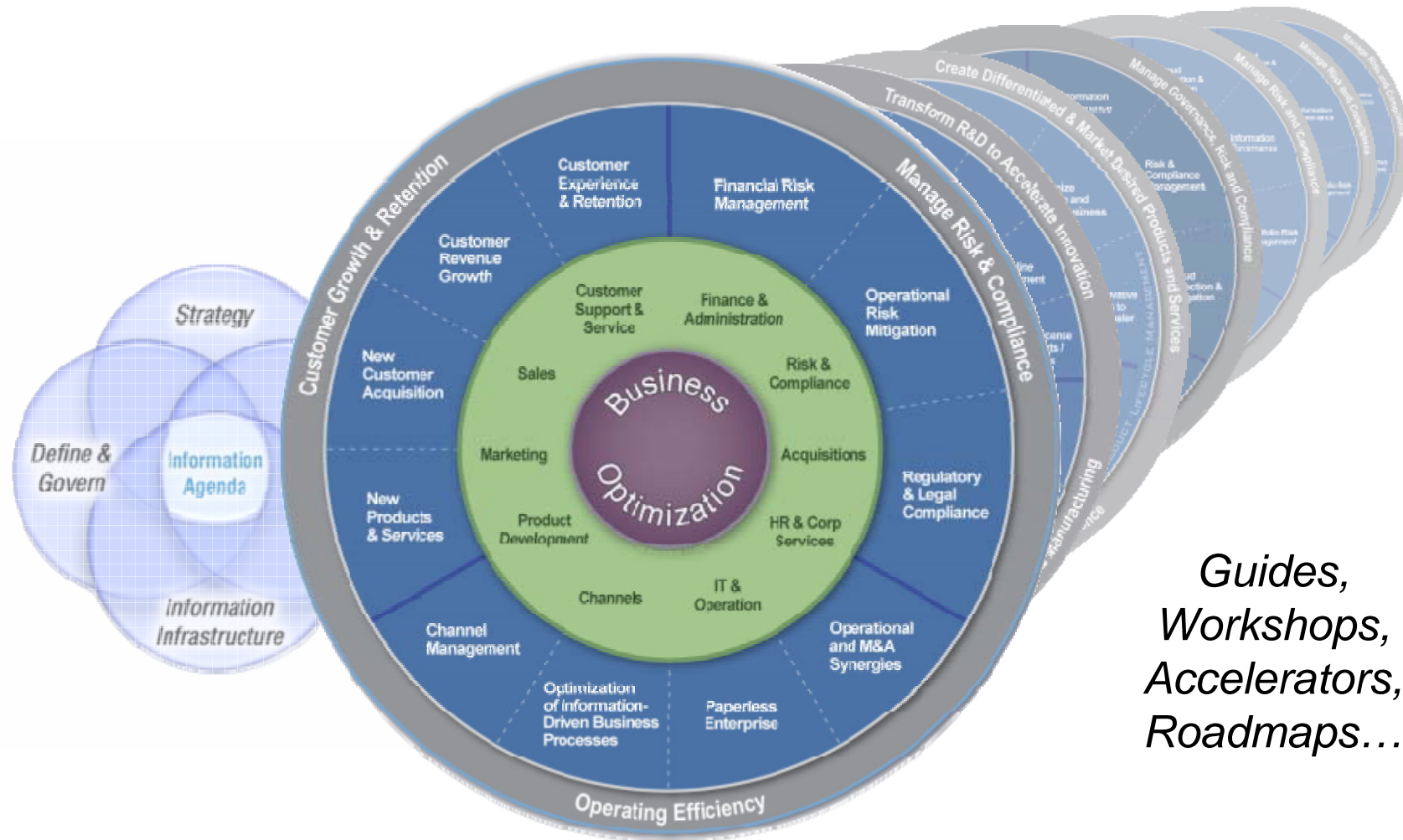
Information Agenda

A proven, industry-specific approach for aligning information with business objectives

Establish end-to-end vision & business-driven value

Align people, process & information

Strategy

Define & Govern

Information Agenda

Road Maps

Information Infrastructure

Accelerate projects for short & long-term ROI

Architect an extensible information infrastructure

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Information Agenda
Strategy, Roadmaps, Information Agenda Guides

*Guides,
Workshops,
Accelerators,
Roadmaps…*

Information Agenda
Guide for Banking & Finance

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Taking it to the Next Level with Business Analytics & Optimization
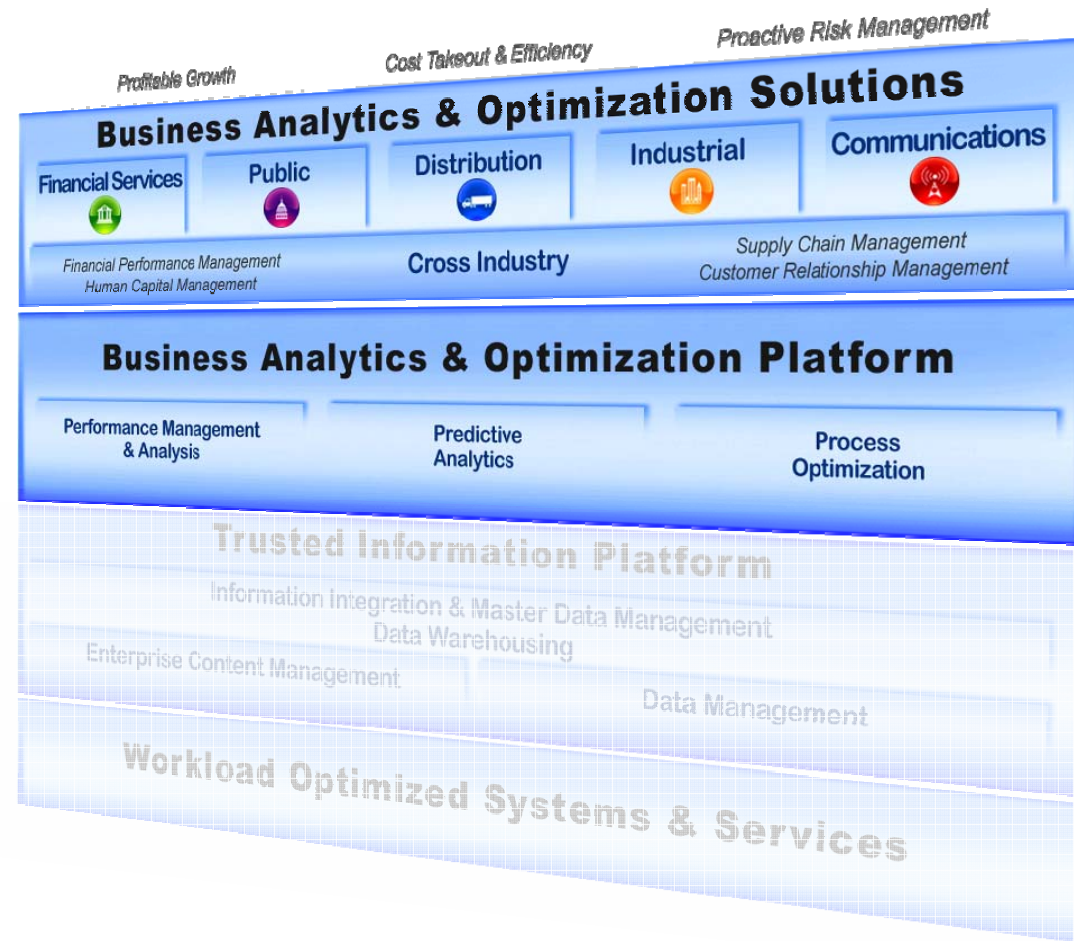
Taking it to the Next Level: Predictive Analytics

Richmond County Police pinpoints hotspots & leads to 20-30% decease in violent crimes

Center for Disease Control Characterizes disease & quickly assess medical needs in real-time

Cablecom GmbH Doubled ability to predict churn & reduced actual churn 10 fold

Infinity Property & Casualty Corporation Real-time claims scoring starts fraud investigations within 24hrs. vs. 2 weeks

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Taking it to the Next Level: Content Analytics
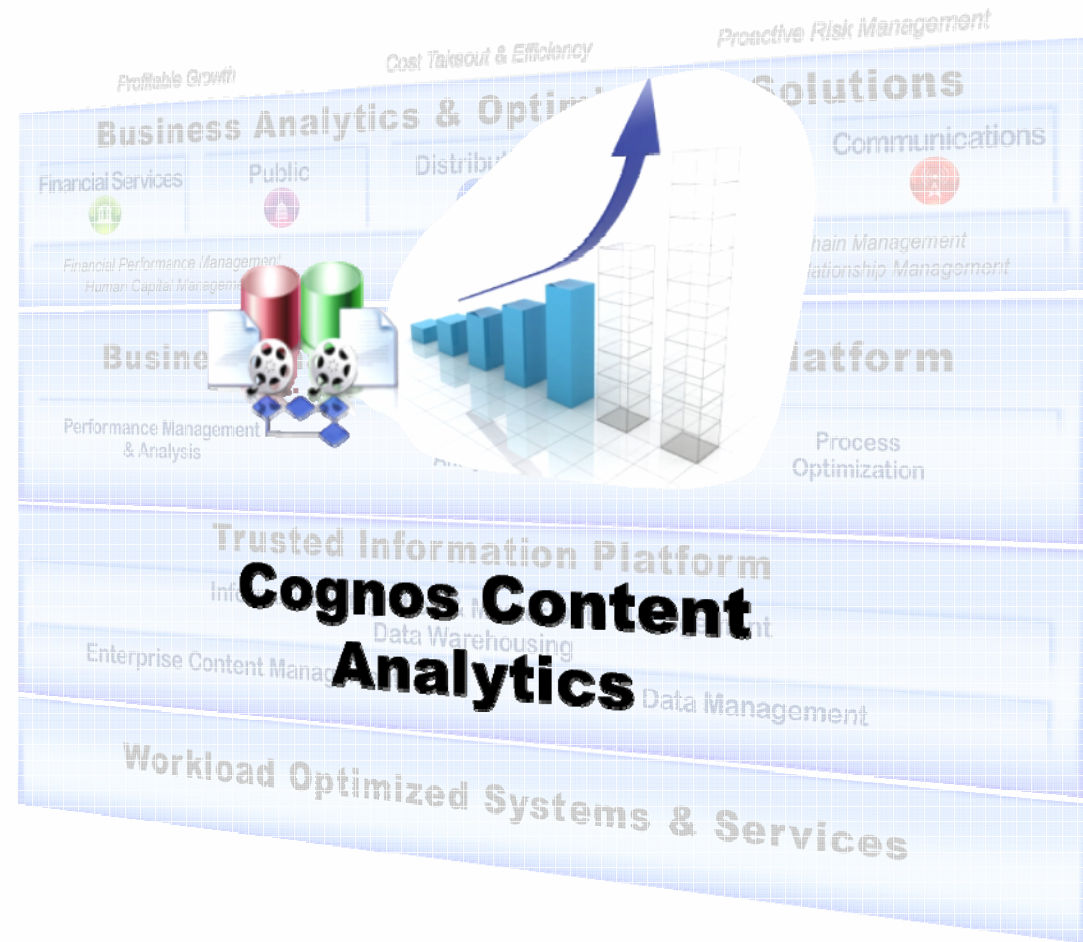
Taking it to the Next Level: Content Analytics

Large Claims 3rd Party Administrator Content Analytics over claims detects fraud faster, reducing costs by millions

University of Ontario Institute of Technology detects life-threatening conditions in infants up to 24 hrs earlier

NTT DoCoMo Content Analytics over "Voice of Customer" data creates insight driving customer-oriented decisions

Kraft Content Analytics over online customer postings helps target & deliver new campaigns, increasing sales & loyalty

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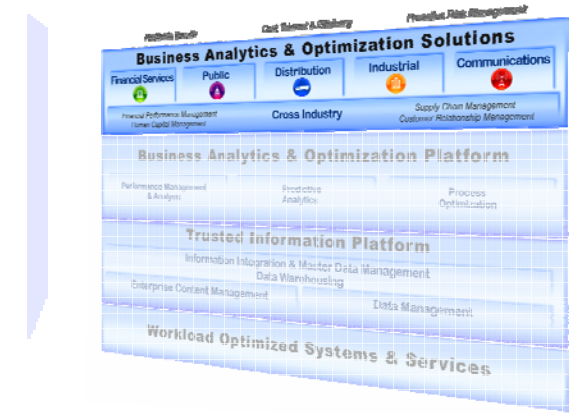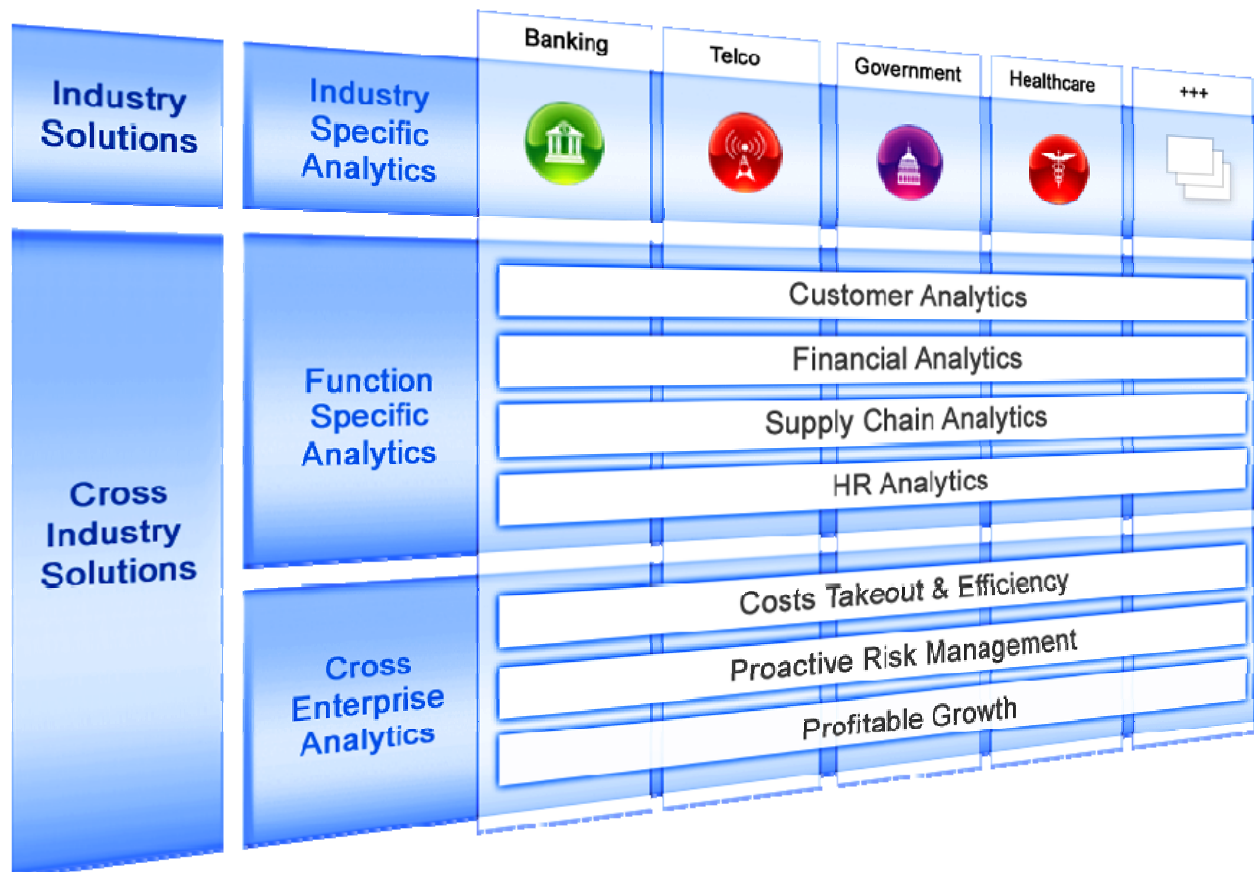# Accelerating Value Creation through Analytic Applications

Blueprints, Best Practices, Industry Assets…

Flexible Approach…
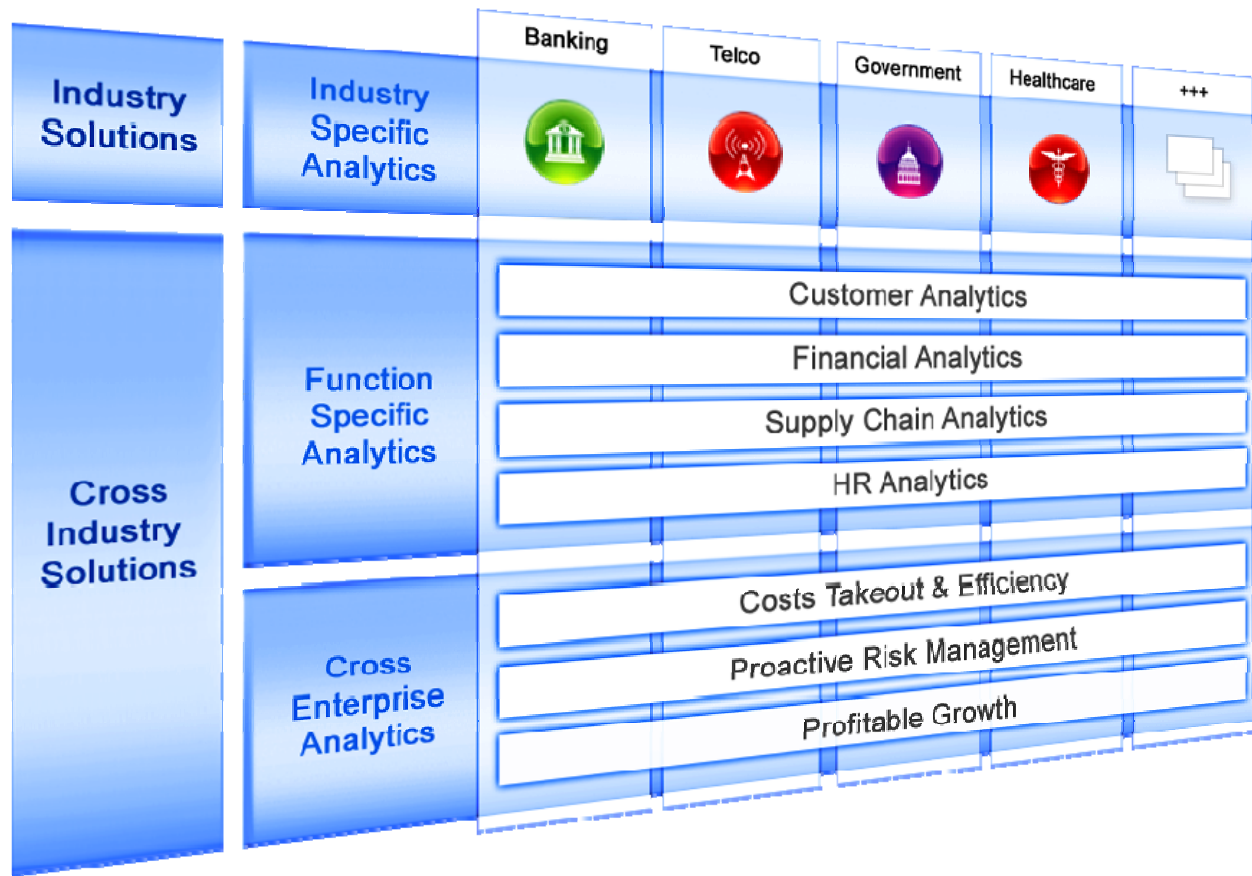*Based on Middleware for Open Platforms*

Taking it to the Next Level:
With Experts from IBM and Business Partners…

BAO Strategy

Analytics & Performance Management

Advanced Analytics & Optimization

Enterprise Information Management

Enterprise Content Management

Putting it All Together…
IBM Smart Analytics System

Pre-optimized
Business Intelligence Software
triples out of the box performance*

Analytics Software Options

☑ Business Intelligence Capabilities

☑ Cubing Services

☑ Text and Data Analytics

Powerful Data Warehouse

☑ Warehousing Platform

☑ Advanced Workload Management

☑ System Automation

Hardware & Services

☑ Server Platform

☑ Storage Capacity

☑ Build, Deploy, Health Check & Premium Support Services

* Based on IBM Laboratory Tests. Actual results may vary depending on specific environment and configuration.

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We've Only Just Begun to Uncover What is Possible on a Smarter Planet.

With the information organizations already have and new analytical tools, there are no limits to what is possible
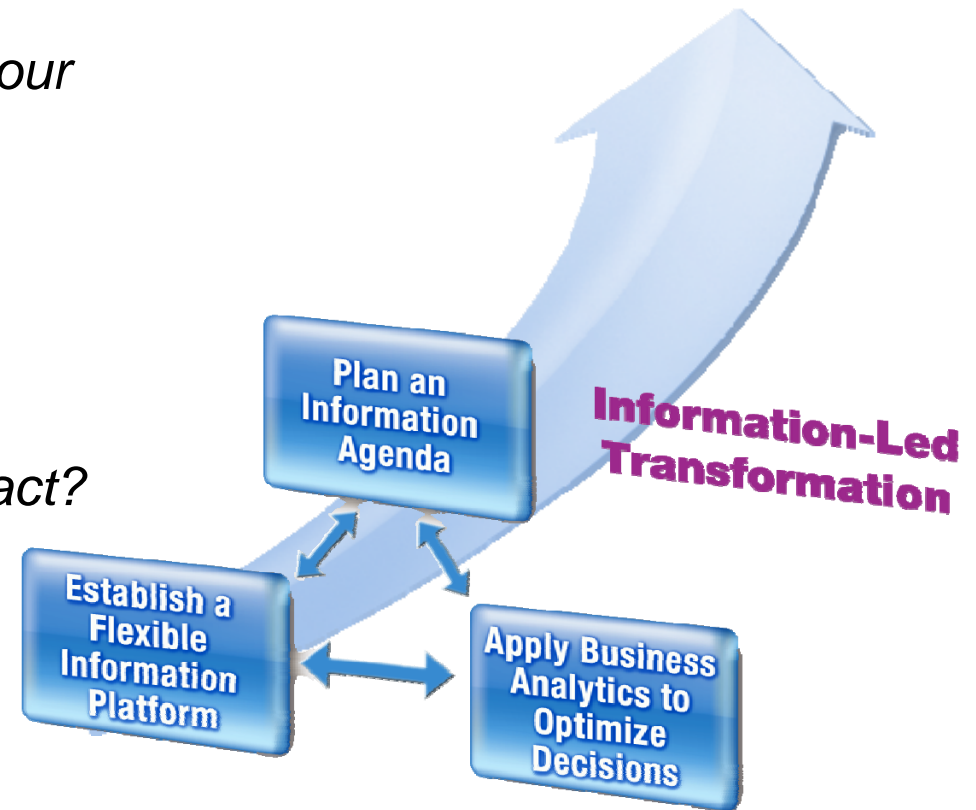
Real-time Trading Positions

Real-time Risk Analysis

Withholding Tax Optimization

M&A Agility…

How can you use information to transform your organization?

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Start the Transformation Today, Ask Yourself:

☑ *Is your information aligned with your business strategy?*

☑ *Is your information managed as a trusted, strategic asset?*

☑ *Do you have the insight needed to make informed decisions and act?*

IBM can help.

Plan an Information Agenda

Establish a Flexible Information Platform

Apply Business Analytics to Optimize Decisions

Information-Led Transformation

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A New Kind of Intelligence for a Smarter Planet

Neil Isford
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