



**IBM ASEAN  
Leadership Exchange**



# Foundations of an Intelligent Enterprise

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Vice President, Information Management Product Strategy



**Knowledge is Power**

**Time is Money (\$)**

$$\text{Power} = \frac{\text{Work}}{\text{Time}}$$

$$\text{Knowledge} = \frac{\text{Work}}{\text{Money}}$$

**Lesson: The more you Know, the more Work you Do, and the less Money you make**





“...70% of our people’s time is spent looking for information and only 30% in making intelligent decisions.

We want to flip the ratio providing 70% of time for intelligent, analytical decision making and only 30% administrative work...”





## Organizations are operating with blind spots

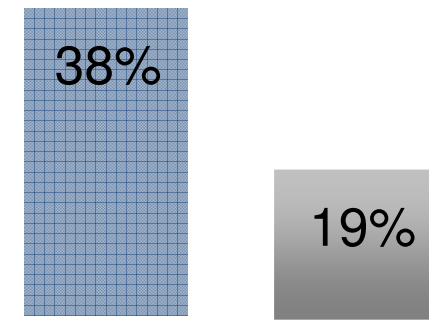
# 1 in 3

**business leaders frequently make critical decisions without the information they need**

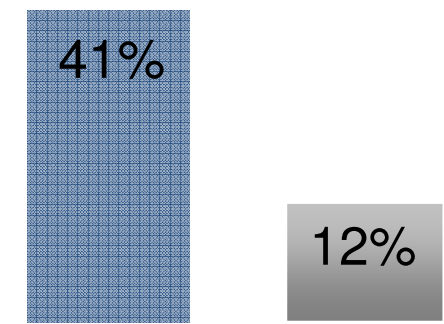
# 53%

**don't have access to the information across their organization needed to do their jobs**

### Ability to predict



### Ability to understand risk



Source: IBV Business Analytics and Optimization Study, March 2009

# Volume, Variety and Velocity



*Compounding the Problem*

*...or Creating New Possibilities?*

## Volume of Digital Data

- 57% CAGR digital data growth
  - Sensors, RFID, GPS..

## Variety of Information

- 80% of new data growth is unstructured content
  - Emails, images, audio, video..

## Velocity of Decision Making

- Rapidly changing business climate
- Need to get ahead of the curve : predict issues and fix them



# What if you could?



**Smarter Food**  
*Track food to the table*



**Smarter Healthcare**  
*Improve patient diagnosis*



**Smarter Public Safety**  
*Identify criminal activity early*



**Smarter Financial Services**  
*Manage risk and cost*

# Real Examples of Organizations Leveraging Insight to Drive Smarter Outcomes



## **Matiq**

*RFID tracking of poultry and meats from farm to stores*



## **Geisinger Health System**

*Integrate real-time clinical data to assist physicians*



## **New York Police Department**

*Apply crime patterns as its happening real-time*

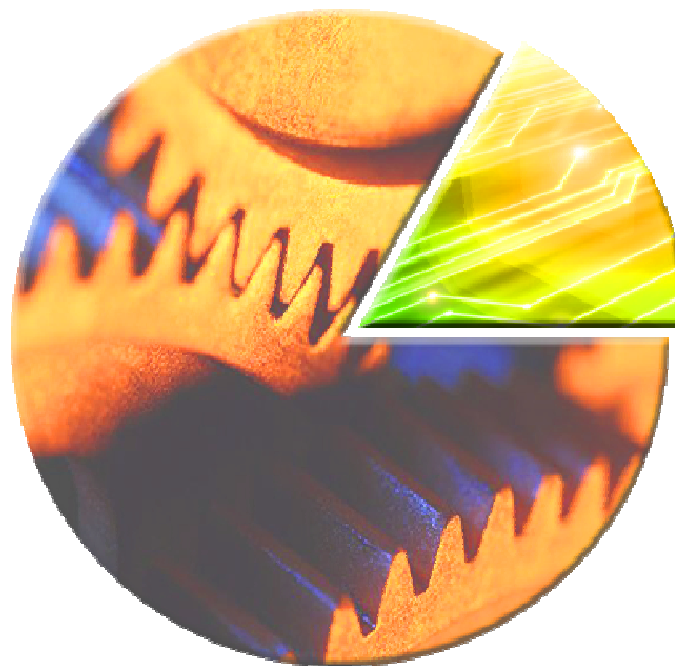


## **TD Bank Financial Group**

*Use stream computing to act on real-time market data 21x faster*



# A Shift is Underway: *Business Optimization is Driving New Investments*



**Business  
Analytics &  
Optimization**

**\$105B  
7.8% CGR**

**Business  
Automation**

**\$566B  
3.3% CGR**

**2X**  
**Client Investment in  
Business Optimization  
Projects is Growing over  
Twice as Fast as Business  
Automation**

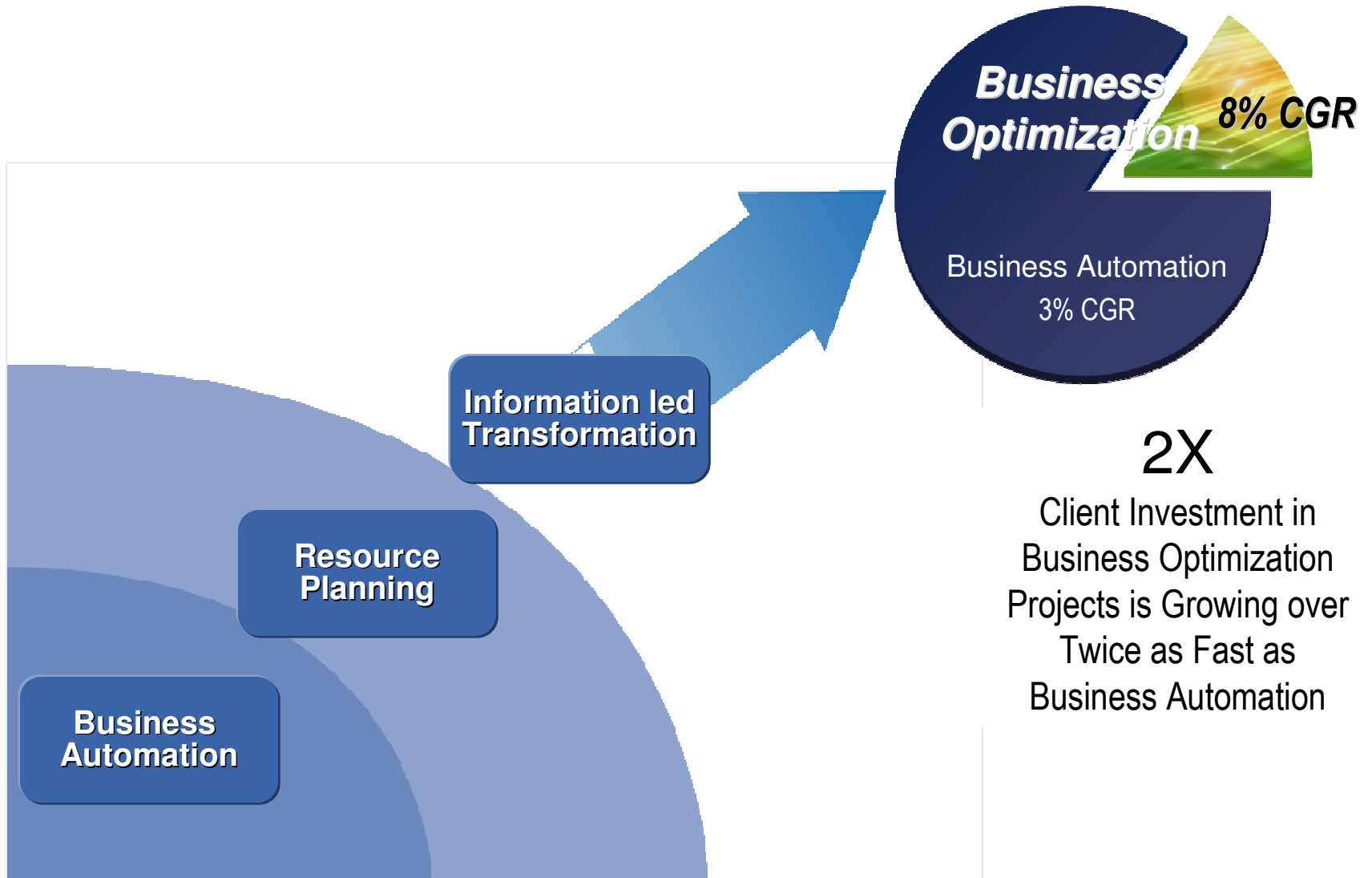
**IT Spending Estimates, 2009\***

\* Includes Hardware, Software and Services. Does not include Networking, Printer, or Standalone Printer or PC Markets. CGRs 2009- 2012.  
Opportunity estimates based on analysis done by the IBM Market Intelligence Department. IBM Market Intelligence data is provided for illustrative purposes and is not intended to be a guarantee of market opportunity.

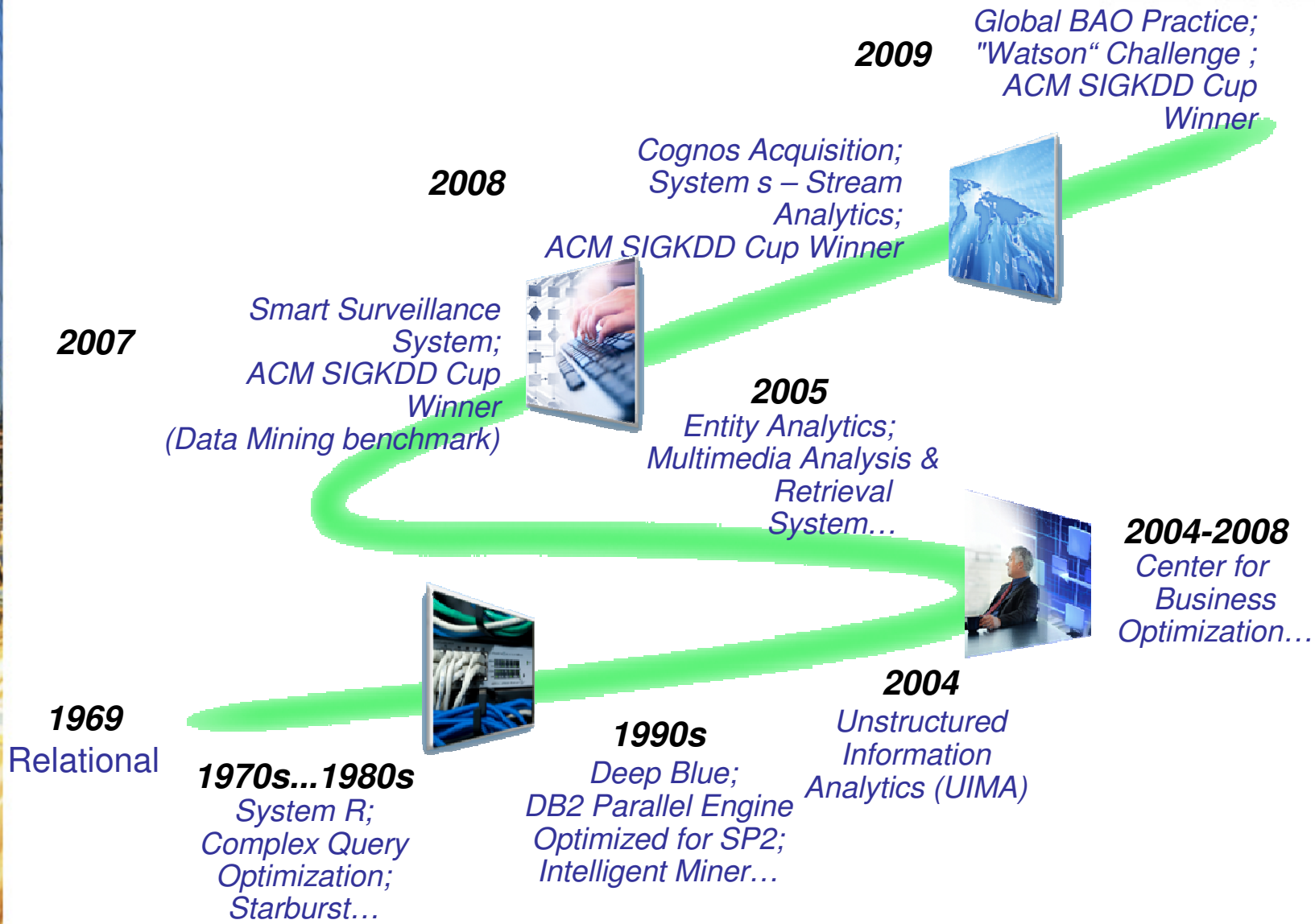
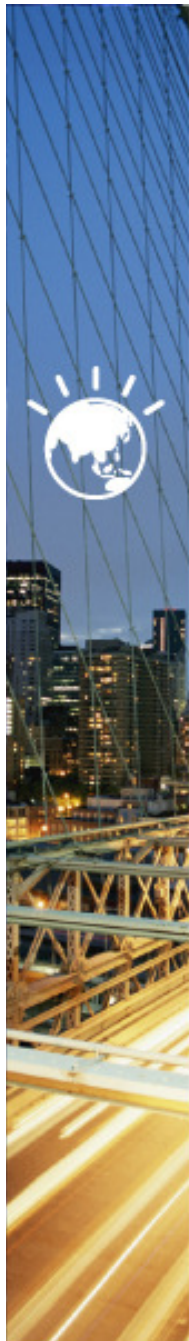


# Analytics & Optimization

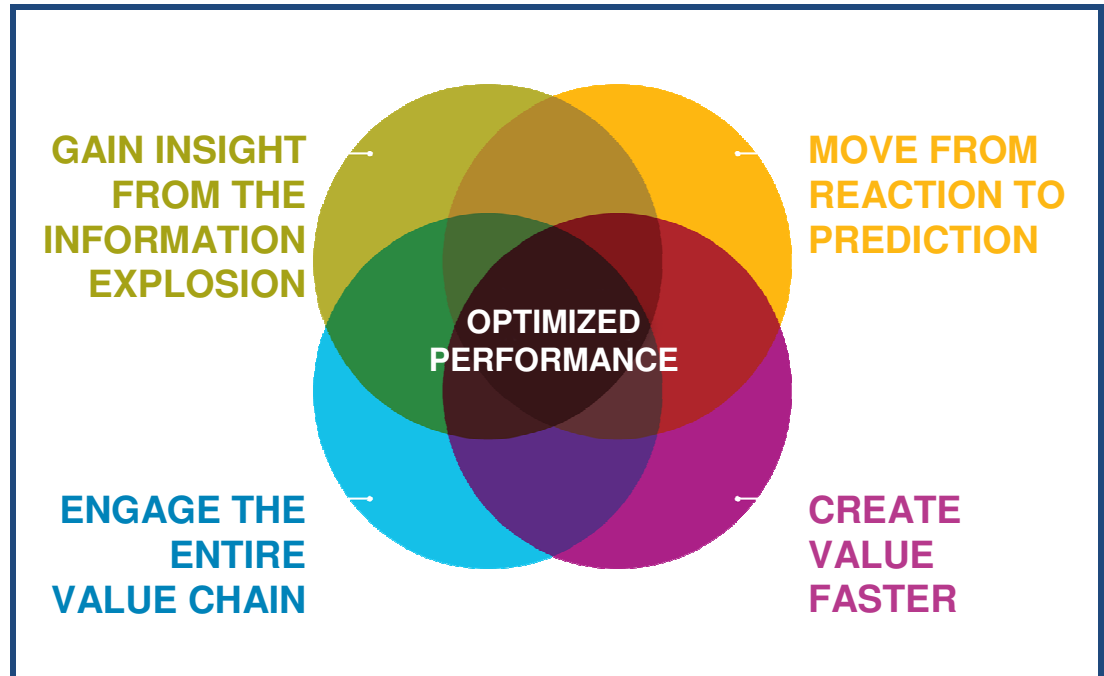
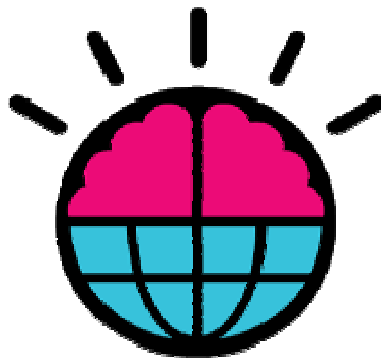
*Change business the same way as ERP & CRM...*



# IBM Innovations for Business Analytics



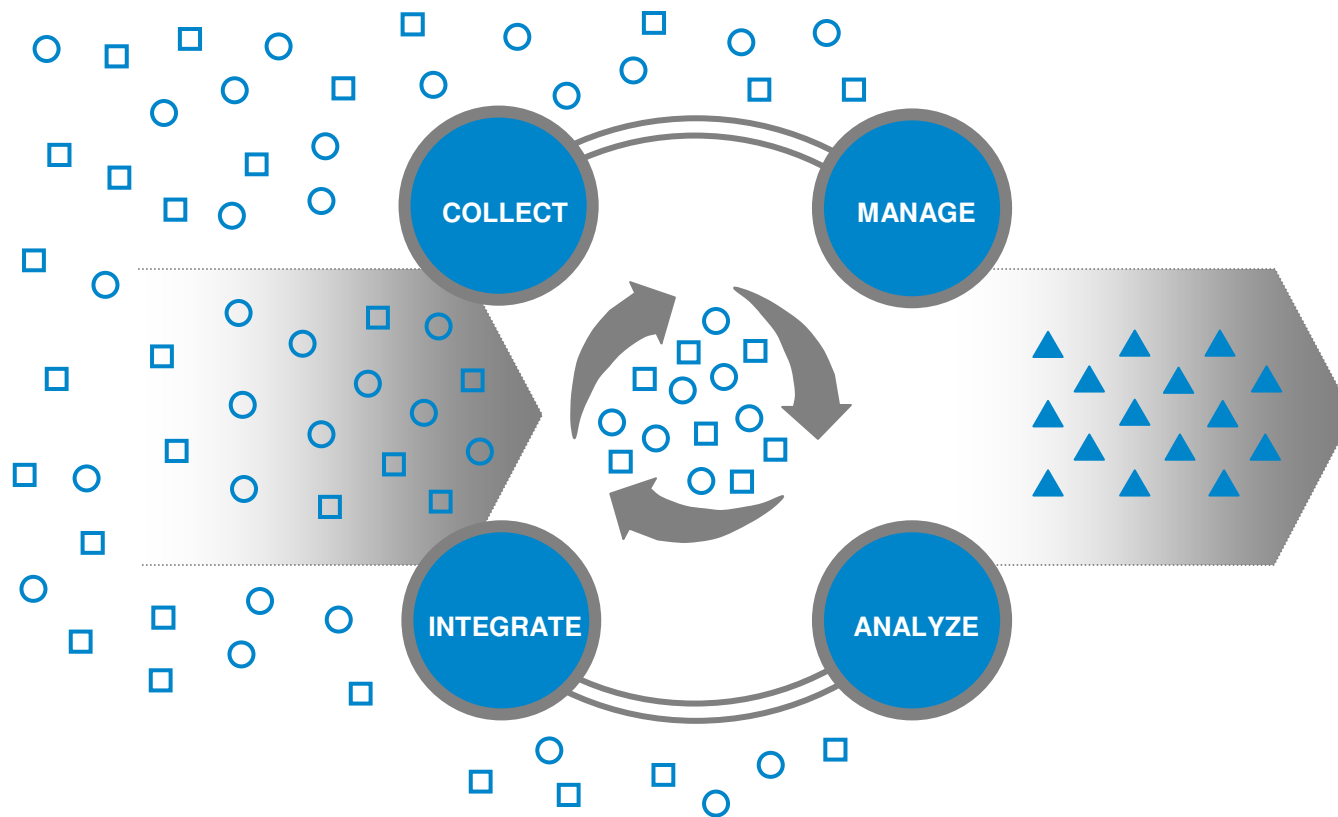
The shift towards optimization creates an opportunity to become a more intelligent enterprise



*Giving businesses new capabilities to optimize their business*

# Gain Insight from the Information Explosion:

Managing unprecedented volumes of structured and unstructured data



**ENGAGE THE  
ENTIRE  
VALUE CHAIN**

**MOVE FROM  
REACTION  
TO  
PREDICTION**

**CREATE  
VALUE  
FASTER**



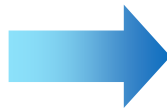
# Trusted Information for Smarter Business Outcomes

*Real-time, Predictive Analytics*



*Real-time Trading Positions,  
Real-time Risk Analysis,  
Withholding Tax Optimization,  
M&A Agility...*

*Trusted Customer Information*



*Enterprise-wide Expansion*



*Advanced Analytics*

*Trusted Information*

*Information as an Asset*

*Real-time*

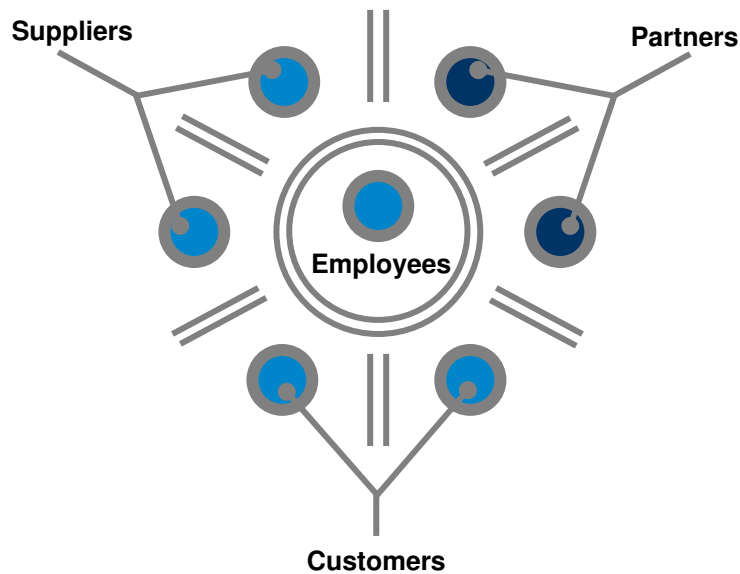
**Over 200 Core Systems; Mergers & Acquisitions**

*IBM Global Services is delivering the overall Information Agenda leveraging IBM Information Management Software*

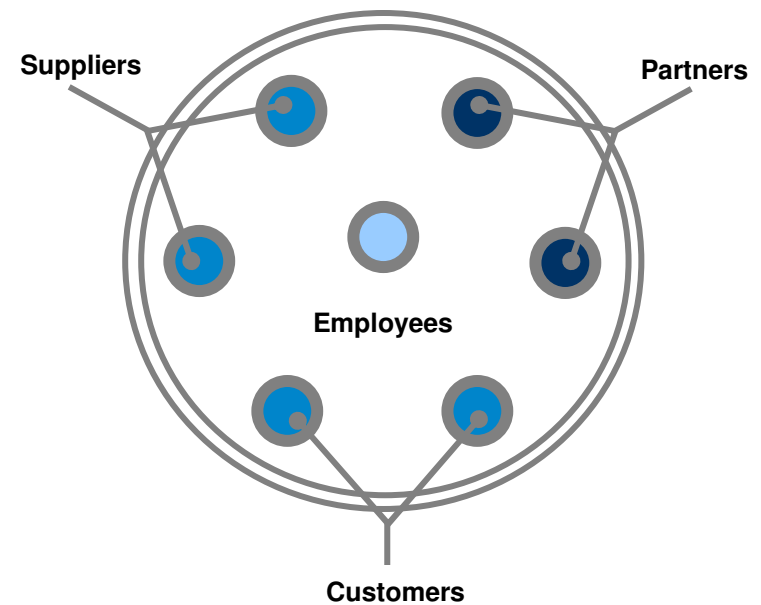
# Engage the Entire Value Chain: Capturing and sharing collective wisdom to make decisions with greater confidence



## LOW VISIBILITY



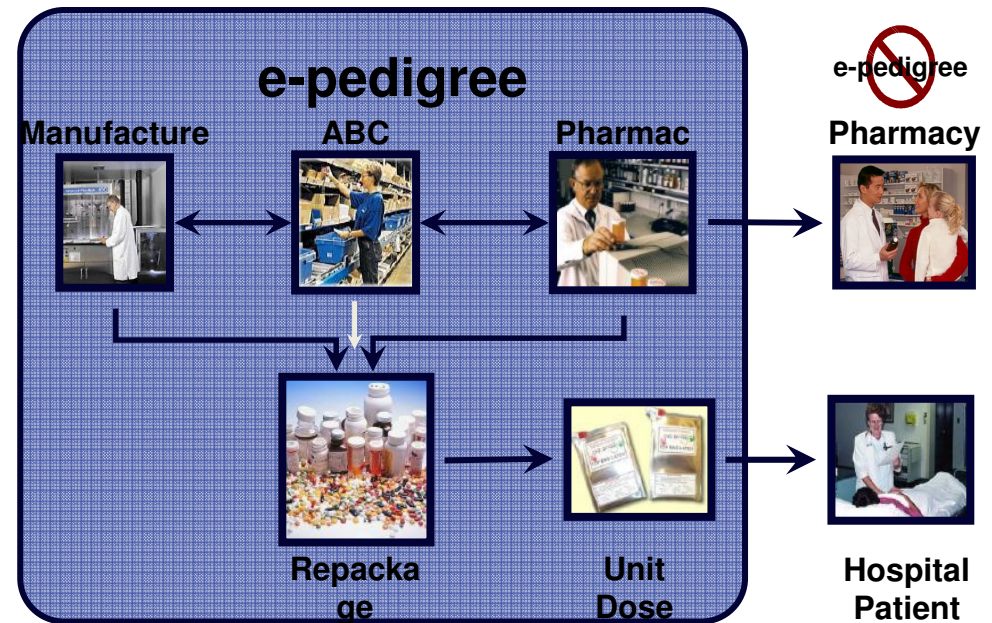
## HIGH VISIBILITY



# Managing the Pharmaceutical Supply Chain with ePedigree Track and Trace



- 70% of States in the US have pedigree legislation
- A certified record of the complete chain of custody
- Product Serialization
  - Source Information
  - Transaction Information
  - Ownership Information
  - Certification of Transaction Authenticity

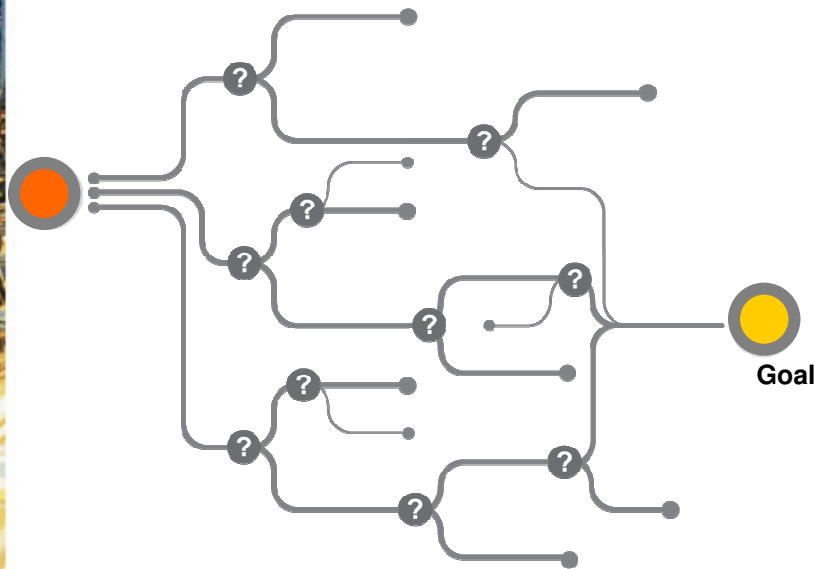


# Move from Reaction to Prediction:

Applying advanced analytics to information to anticipate risks and opportunities

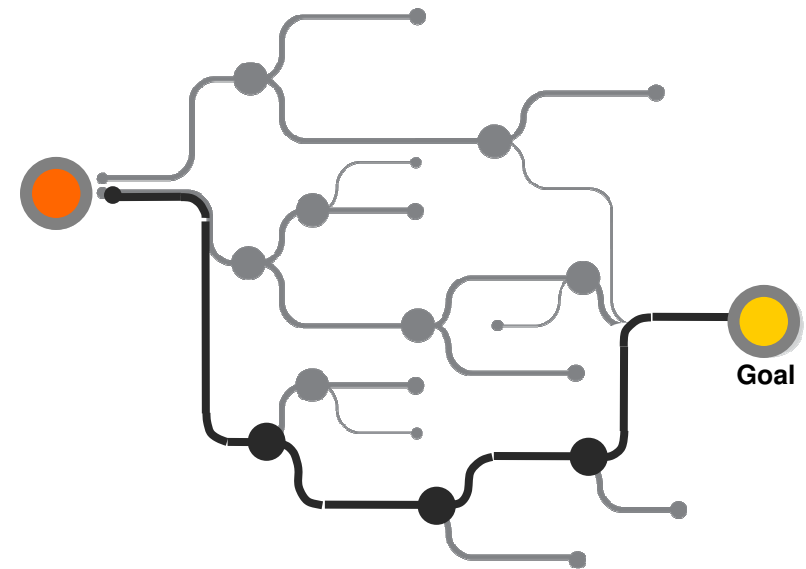


## REACTION



- ? Unforeseen Decision Point
- Predicted Decision Point

## PREDICTION



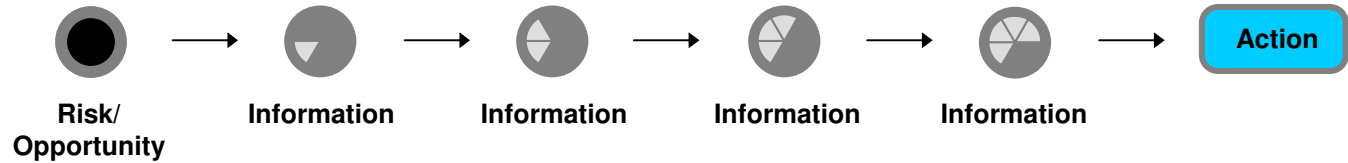


# Create Value Faster:

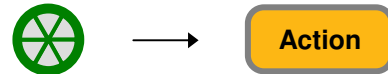
Delivering trusted insight that gives decision-makers the confidence to take action faster



**INFORMATION GATHERED OVER TIME**



**INSTANT INSIGHT**



- High confidence
- Low confidence
- Insight

## Building a next generation trading platform with Stream Computing – TD Bank



- Identify and execute trades
- Process over 5M events per second
- Handle content feeds, news text, audio, video, etc



**CIO TD Bank** "TD Bank Financial Group worked with IBM Research to develop a first-of-a-kind architecture capable of consuming, analyzing and acting on real-time market data while maintaining sub-millisecond response times even under extreme data loads"

# Business Analytics and Optimization: What's required and What IBM's Delivering



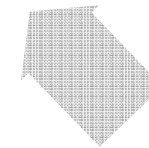
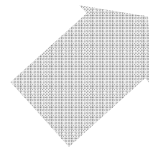
- **Insight on our clients and industry**
  - **4,000+** professionals in GBS BAO Practice
- **Foundational information software platform**
  - **\$10B** investment in information management
- **Mathematical and analytic skills of IBM Research**
  - **10 years** of Research investment in services
  - **300** Research mathematicians

- **High performance systems and hosting**
  - **9 consecutive years** of leading the supercomputer list
- **Market-validating client experiences:**
  - Research and consulting first-of-a-kind projects – thousands of engagements
  - Center for Business Optimization – creating scaleable assets with Research

**Analytics Solution Centers**  
New York, Washington D.C., London,  
Tokyo, Beijing, Berlin



# How do you get Started?



**Insight, Expertise  
and Proven Approach**

**1**

**Enabling  
Technologies**

**2**

**Industry Solutions  
& Accelerators**

**3**





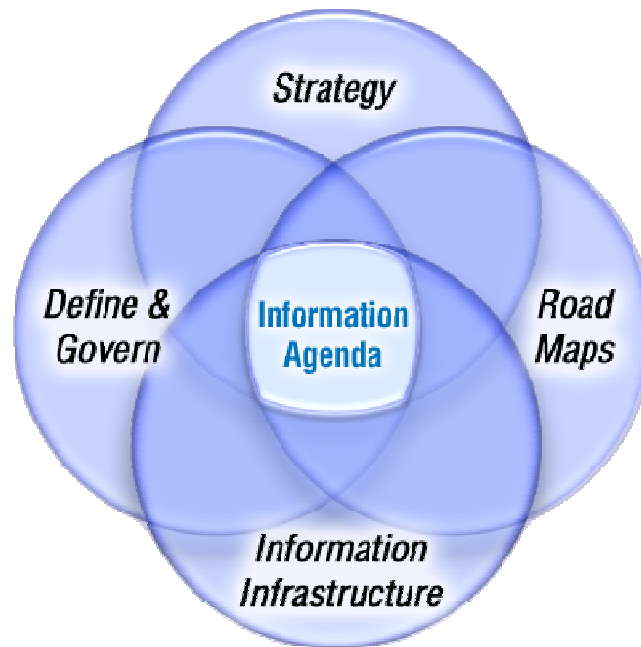
Proven Approach:

Know-how to ensure success and reduce risk  
IBM can help you create an Information Agenda



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

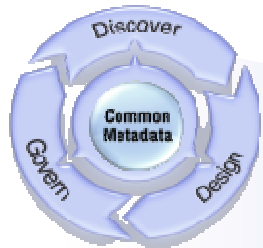
*Align people,  
process, &  
information*



*Accelerate  
projects for short  
& long-term ROI*

*Architect an extensible information infrastructure*

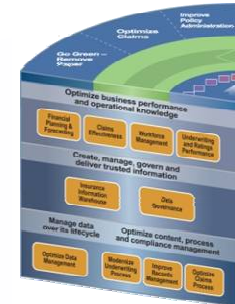
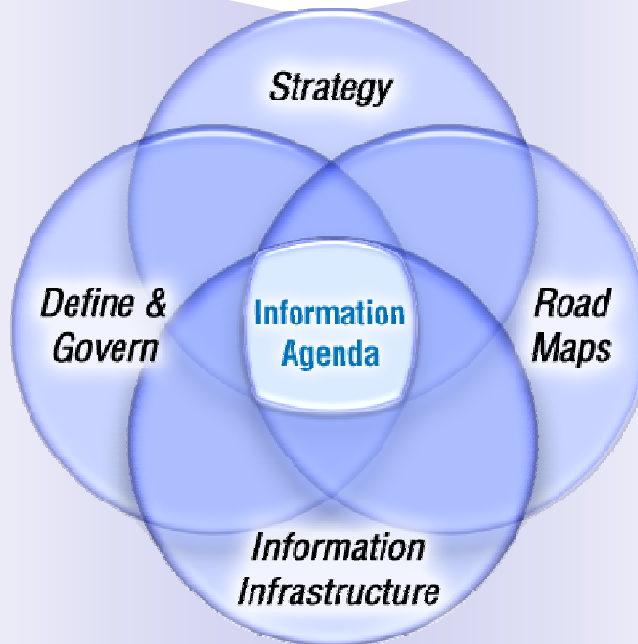
# The Information Agenda is the foundation for an Information-led Transformation



**Foundational Tools & Competency Centers**



**End-to-end Capabilities**

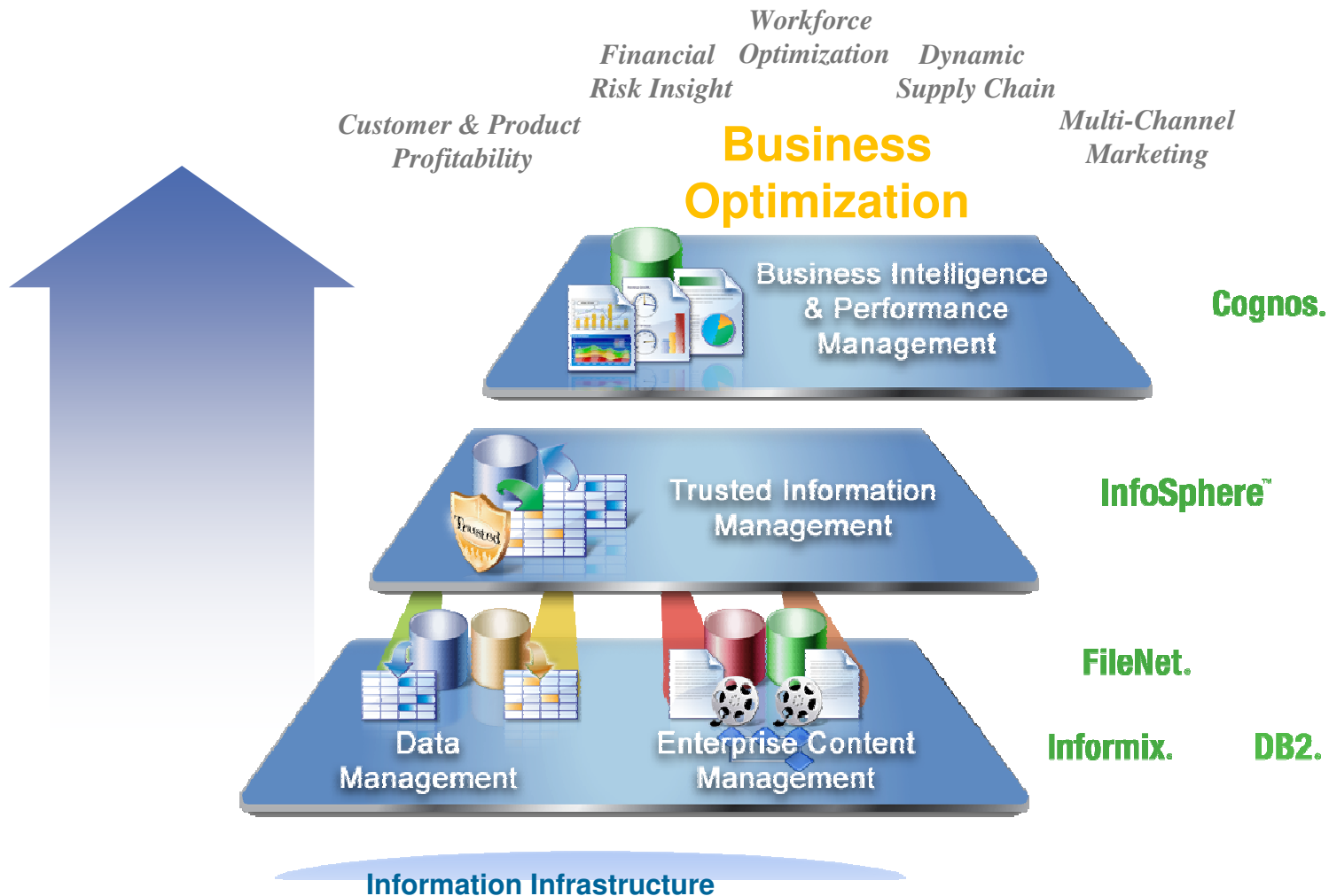


**Industry Guides & Workshops**



**Information Accelerators**

# Enabling Technologies: Establishing a platform to support intelligent decision making

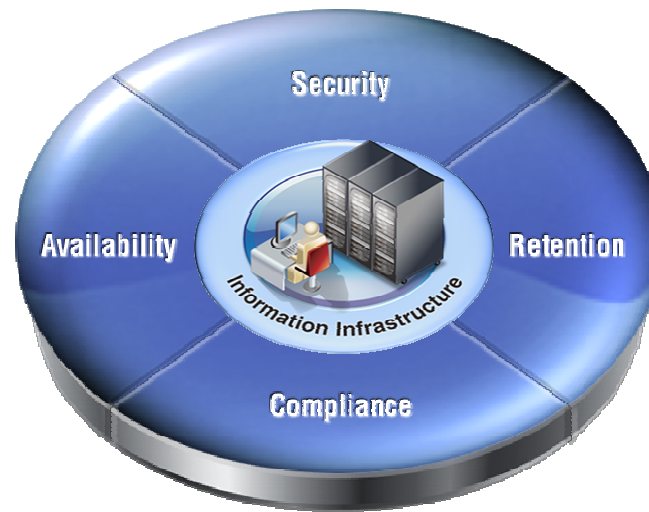


# Investing in Information Infrastructure Solutions to securely manage and mitigate business risks



Keep information secure & protected

Keep information available & accessible



Retain & manage information more efficiently

Reduce reputation risks and audit deficiencies



# Industry Solutions and Accelerators: Accelerate Time to Value using



## Financial Services

- Risk Adjusted Profitability
- Branch Performance
- Retail Banking Customer Segment Performance
- Corporate Banking Customer Segment Performance...



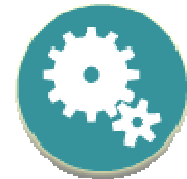
## Insurance

- Product Profitability
- Claims Submission Optimization
- Insurance Self Service
- Insurance Scorecard...



## Retail

- Store Development
- Strategic Promotions
- Financial Merchandising
- Financial Workbench & Scorecard...



## Industrial

- Sales & Operation Planning
- Allocations Optimization
- Risk Analysis
- Trade Promotion Management
- Asset Management...



## Telco

- Customer Service
- Customer Billing
- Compliance
- Simple Order...



## Energy & Utilities

- Intelligent Utility Network
- Asset Plant Lifecycle Mgmt.
- Central Engineering
- Rate Case
- Aging Workforce
- Violations...



## Government

- Crime Information Warehouse
- Case Management
- Municipal Performance Management
- Court Management
- Fraud Investigation ...



## Healthcare

- Enterprise Health Analytics
- Health Plan Industry Models
- Customer Care & Insight for Health Plans
- Risk, Fraud, & Compliance for Health Plans...

# IBM Business Analytics & Optimization Consulting Services: Extensive industry experience accelerates client success



*Dedicated to advanced business analytics & business optimization...*



**\* New!**

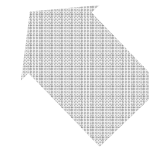
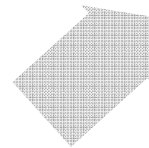
**Over 4,000  
Dedicated  
Consultants  
Worldwide**

*Pervasive  
Skill Across  
All Practices*

*Leveraging  
IBM Software  
and  
Research...*

BAO Strategy	BI& Performance Management	Advanced Analytics & Optimization	Enterprise Information Management	Enterprise Content Management
<ul style="list-style-type: none"> <li>• BAO Strategy and Roadmap</li> <li>• BAO Process Improvement</li> <li>• BAO Governance</li> </ul>	<ul style="list-style-type: none"> <li>• Dashboards &amp; Scorecards</li> <li>• Planning, Budgeting, &amp; Forecasting</li> <li>• Business Analytics &amp; Reporting</li> </ul>	<ul style="list-style-type: none"> <li>• Advanced Analytics</li> <li>• Analytic Applications</li> <li>• Predictive Modeling</li> <li>• Business Optimization</li> <li>• Visualization</li> </ul>	<ul style="list-style-type: none"> <li>• Data Integration</li> <li>• Data Quality</li> <li>• Data Architecture</li> <li>• Master Data Management</li> </ul>	<ul style="list-style-type: none"> <li>• Document &amp; Records Management</li> <li>• Web 2.0 / Web Content Management</li> <li>• Digital Asset &amp; Rights Management</li> <li>• Archiving &amp; Record Management</li> </ul>

# Start your Information-led Transformation Today



## Insight, Expertise and Proven Approach

**1**

- ✓ Ensure Success
- ✓ Reduce Cost

## Enabling Technologies

**2**

- ✓ Platform for  
Intelligent  
Decision Making

## Industry Solutions & Accelerators

**3**

- ✓ Accelerate Time  
to Value

## We Believe We are on the Right Track

Why IBM? ...IBM Leads Overall And In All Categories



**Gartner**

*"...the only vendor in the leadership quadrant: Business Intelligence Services, Data Quality, Data Integration, Customer Data Integration, Info Access..."*



*"...Since 2006, IBM has deliberately & doggedly constructed an unparalleled portfolio of software ...it's difficult to see how any competitors will be able to compete anytime soon..."*

**intelligent**  
enterprise

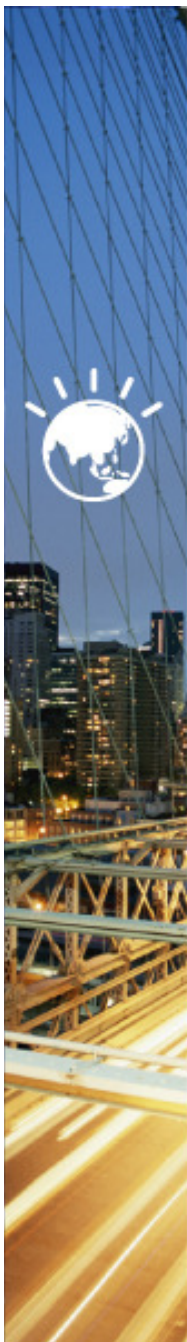
*IBM has stayed maniacally focused on helping companies to build a "trusted information" layer. It adds technologies when they emerge as important differentiators.*



## Want to Hear More?



- Attend our Panel Discussion on New Intelligence tomorrow afternoon
- Request a meeting this week
- Learn more about New Intelligence and Business Analytics and Optimization at [www.ibm.com/think](http://www.ibm.com/think) and [www.ibm.com/gbs/bao](http://www.ibm.com/gbs/bao)





***Thank you***

