



Business Intelligence and Analytics Trends

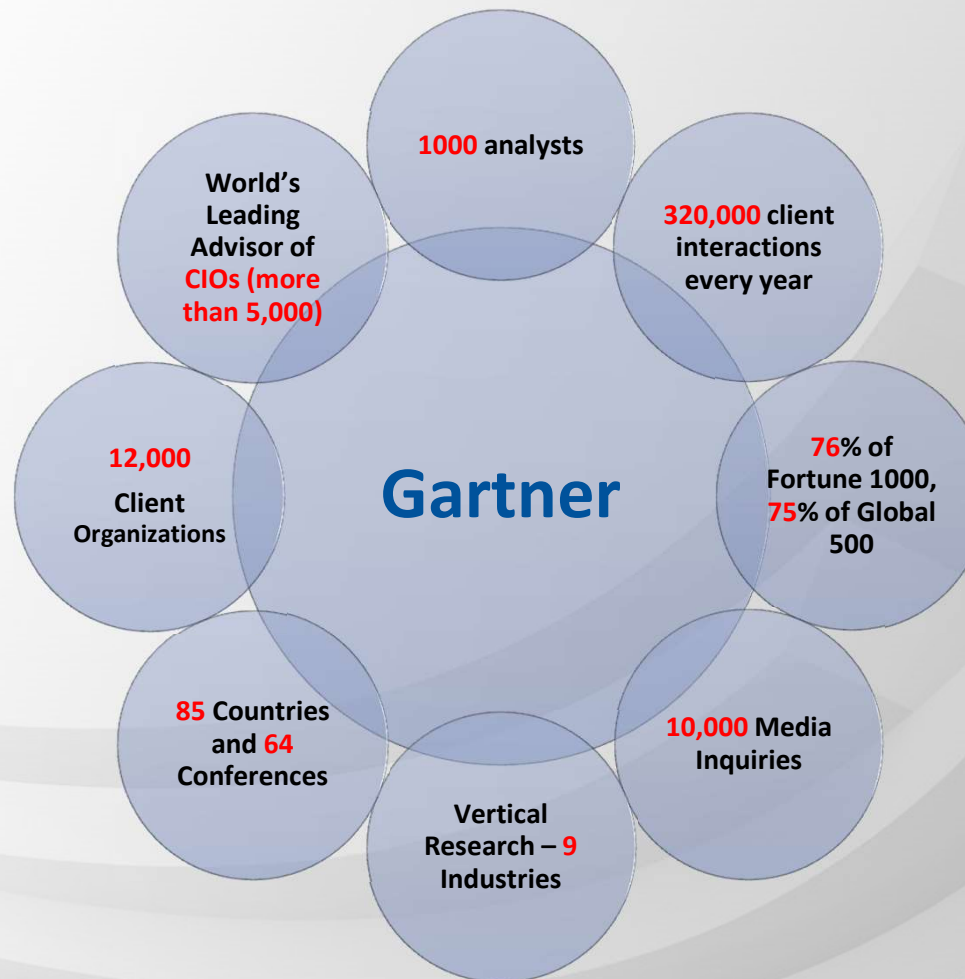
GUBI - Sucesu

Alexandre Blauth

#GartnerSYM

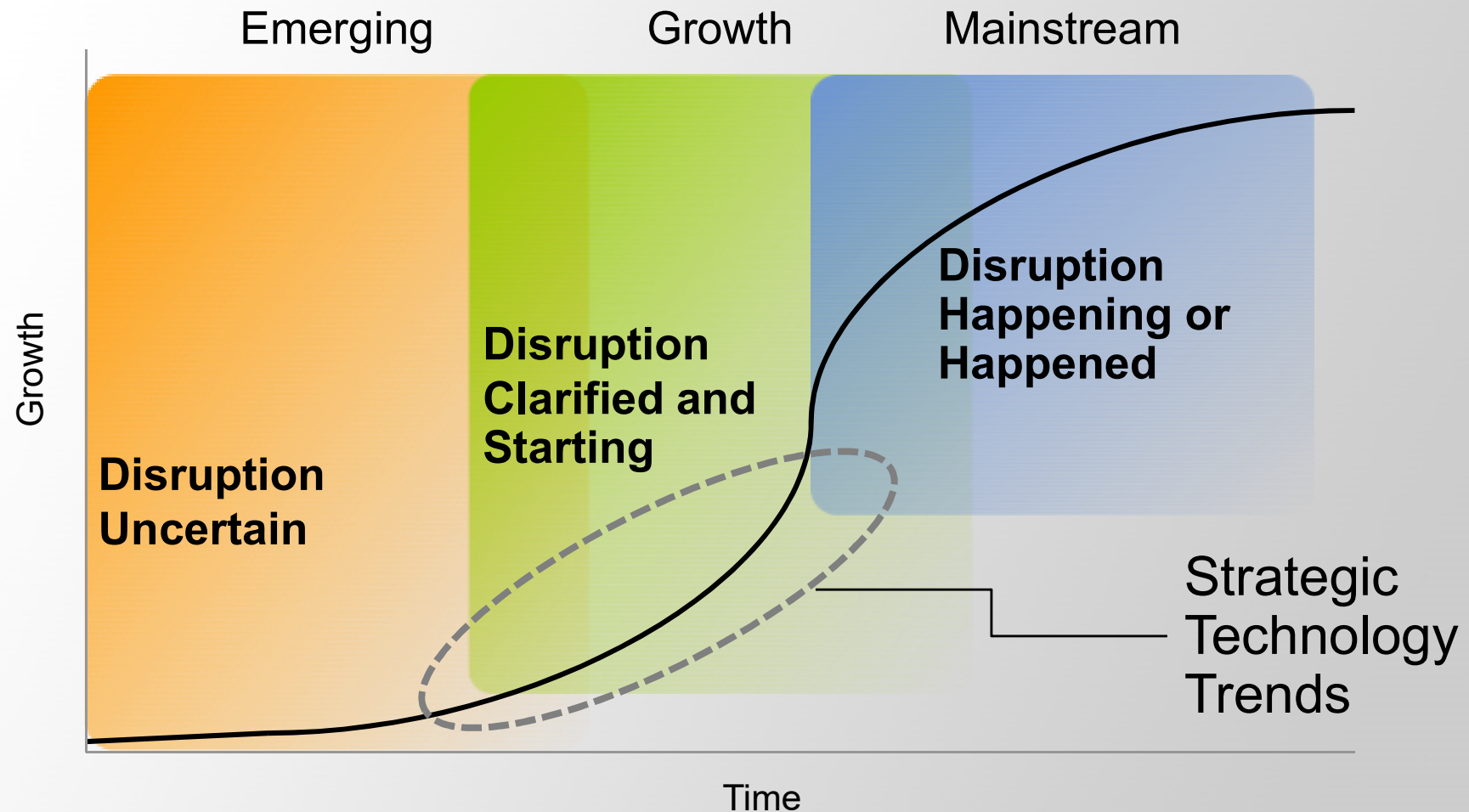
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Gartner in a minute...



O Gartner compõe a maior comunidade privada e global de informações de TI, Telecom e Negócios

Technology Adoption and Market Disruption



Top 10 Strategic Technology Trends for 2015

Merging the Real World and the Virtual World

1

Computing Everywhere

2

The Internet of Things

3

3D Printing

Intelligence Everywhere

4

Advanced, Pervasive and Invisible Analytics

5

Context-Rich Systems

6

Smart Machines

The New IT Reality Emerges

7

Cloud/Client Computing

8

Software-Defined Applications and Infrastructure

9

Web-Scale IT

10

Risk-Based Security and Self-protection

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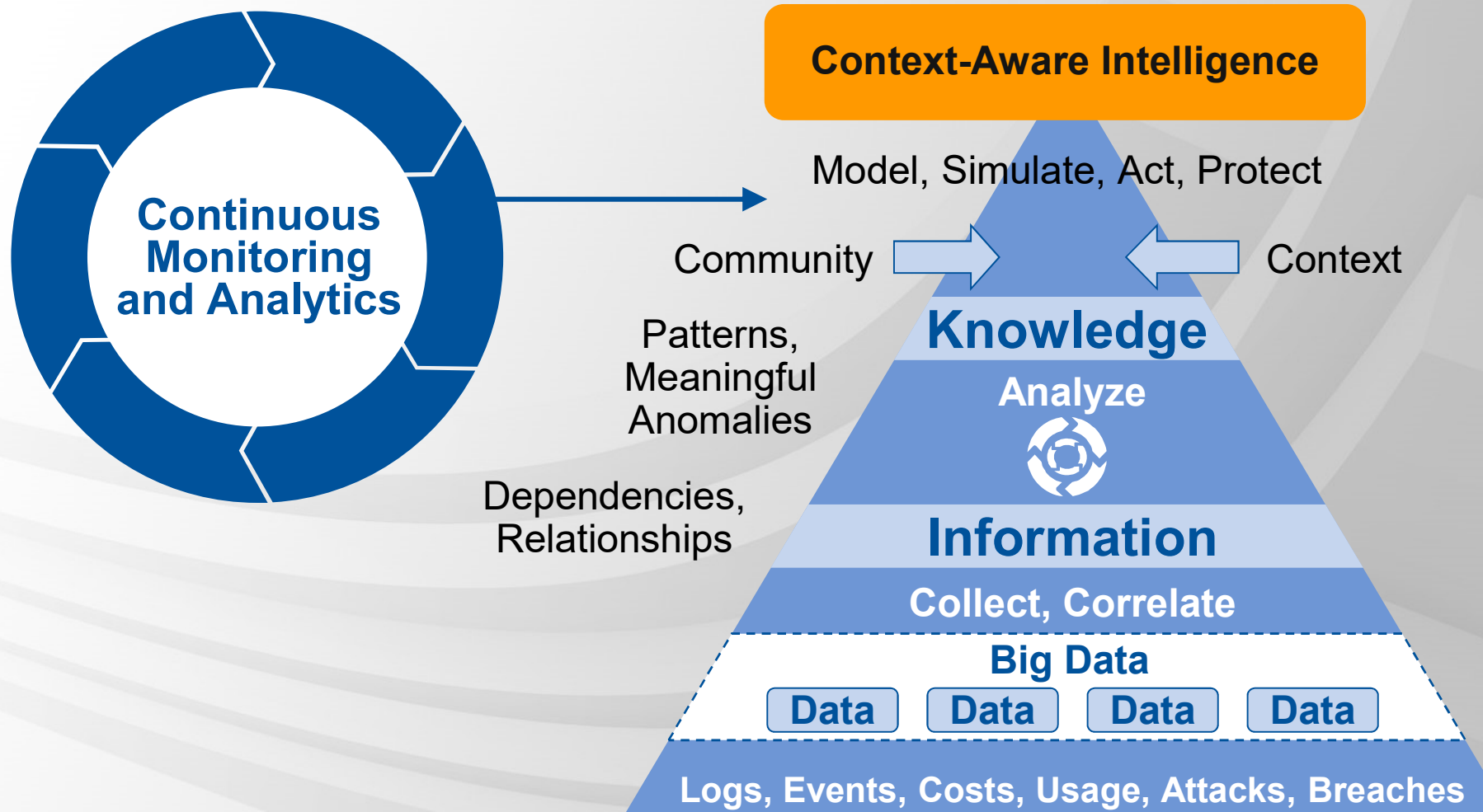
9

Web-Scale IT

10

Risk-Based Security and Self-protection

Big Data Security Analytics at the Heart of Next-Generation Security Platforms



BA = Business Analytics = Balancing Act



Increasing
user
demands

Changing
technology
landscape

New and
different
skill sets

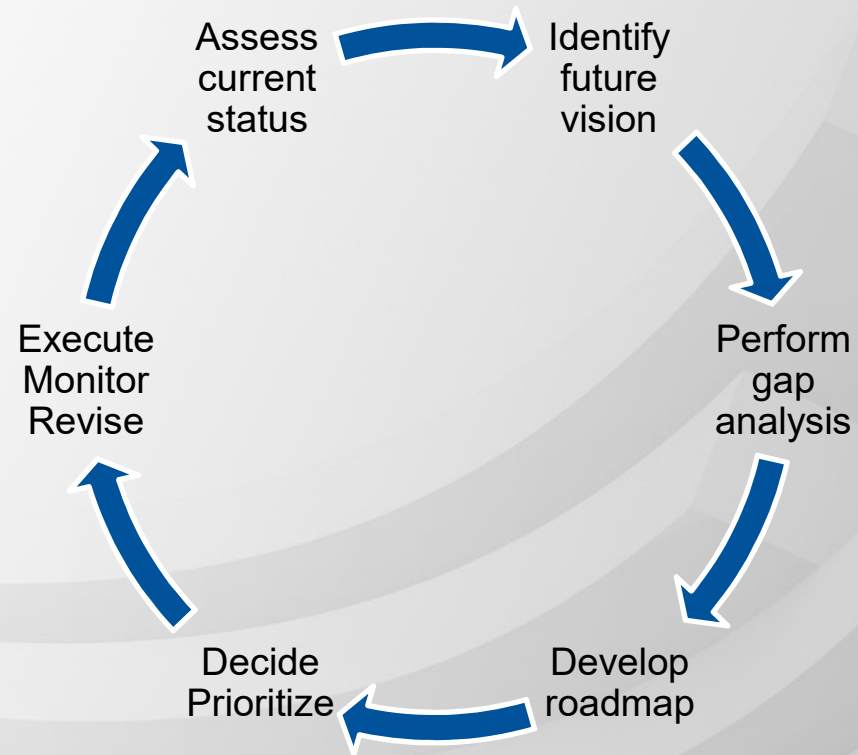
Renewed
focus
on BA

Changing
data
landscape

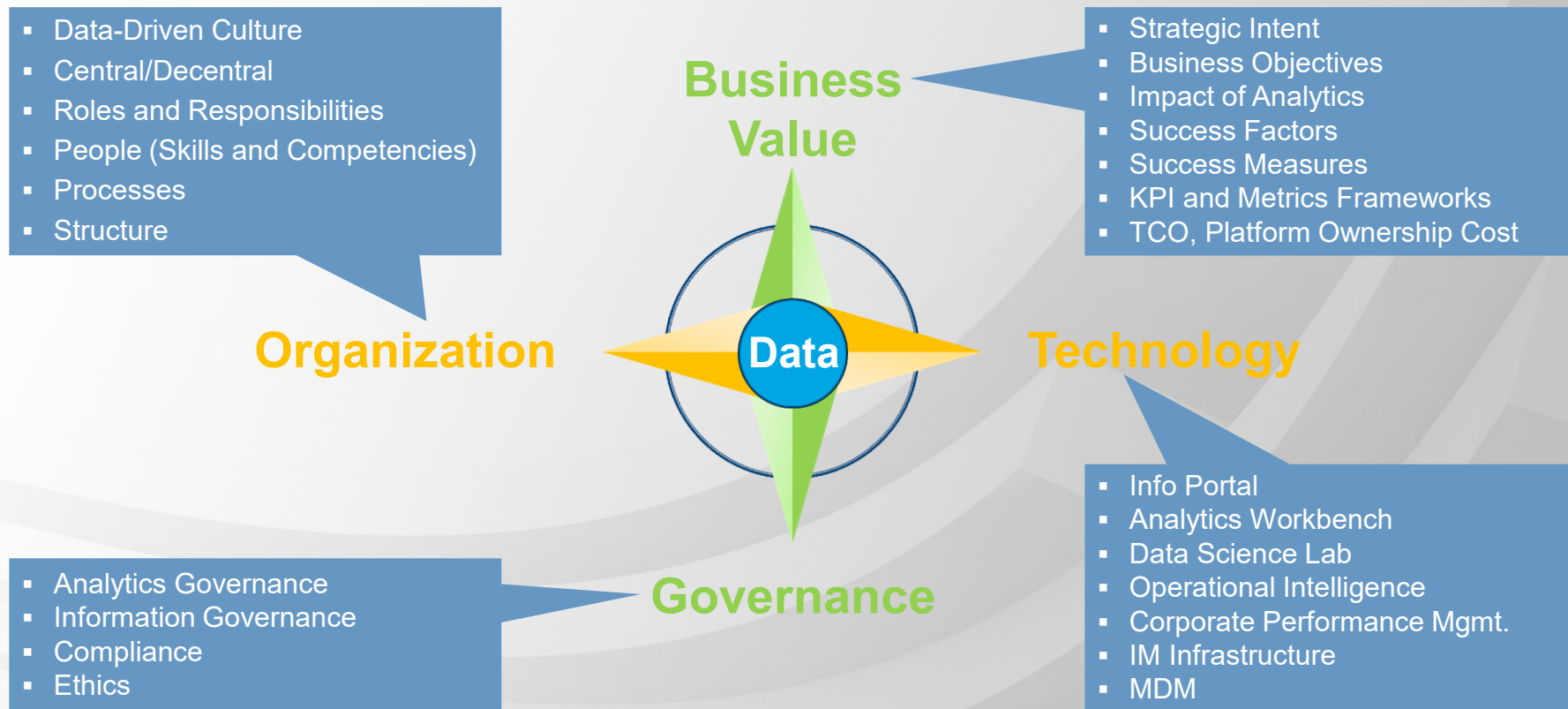
Cloud is a Journey

Where are we now?
Where are we going?
What do we need to get there?

Six BA Strategy Steps



Business Analytics Strategy Compass



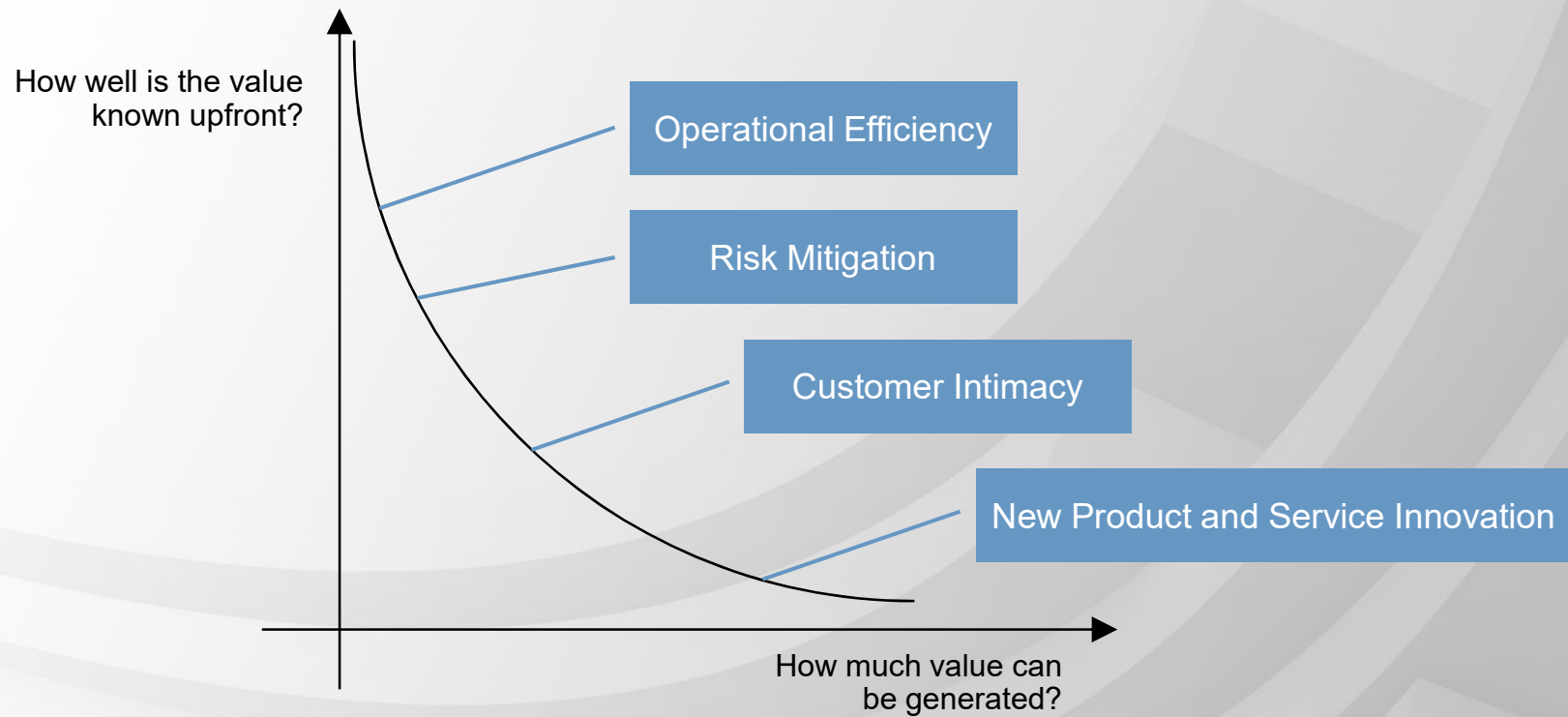
**Business
Value**



Make Business Analytics a Business

Business Aspect	Aggregates	Primes			
Demand Management	Market Responsiveness	Up 8% yoy			
	Sales Effectiveness	Market Coverage Index	Channel Profitability Index	Market Share Index	Configurability Index
		Sales Opportunity Index	Sales Cycle Index	Sales Close Index	Sales Price Index
		Cost-of-Sales Index	Forecast Accuracy	Customer Retention Index	
	Product Development Effectiveness	New Product Index	Feature Function Index	Time-to-Market Index	R&D Success Index
Supply Management	Customer Responsiveness	On-Time Delivery	Order Fill Rate	Material Quality	Service Accuracy
	From 87% to 94%	Service Performance	Customer Satisfaction	Agreement Effectiveness	Transformation Ratio
		Supplier On-Time Delivery	10 days reduction	Supplier Material Quality	Supplier Service Accuracy
		Supplier Service Performance		Supplier Agreement Effectiveness	Supplier Transformation Ratio
	Operational Efficiency	Cash-to-Cash Cycle Time	Conversion Cost	Asset Utilization	Sigma Value
Support Services	Human Resources Responsiveness	Recruitment Effectiveness Index	Benefits Administration Index	Skill Inventory Index	Employee Training Index
		HR Advisory Index	HR Total Cost Index		
	Information Technology Responsiveness	System Performance	IT Support Performance	Partnership Ratio	Service-Level Effectiveness
		New Project Index	IT Total Cost Index		
	Finance and Regulatory Responsiveness	Compliance Index	Accuracy Index	Advisory Index	Cost-of-Service Index

Balance Investments in Business Analytics



Organization



Understand Obstacles to Success

Unaligned, diverse
data structures

Poor data quality

Reliance on
spreadsheets and
gut feel

Poor Sponsorship

Multiple point solutions

Proliferation of analytic
tools

Poorly integrated
processes

Cultural and Political
resistance

Time spent on
validation rather
than analysis

Confusion about roles
and responsibilities

Inability to create plans

Lack of resources
and funding

Trouble prioritizing or
justifying investments

Lack of business
engagement

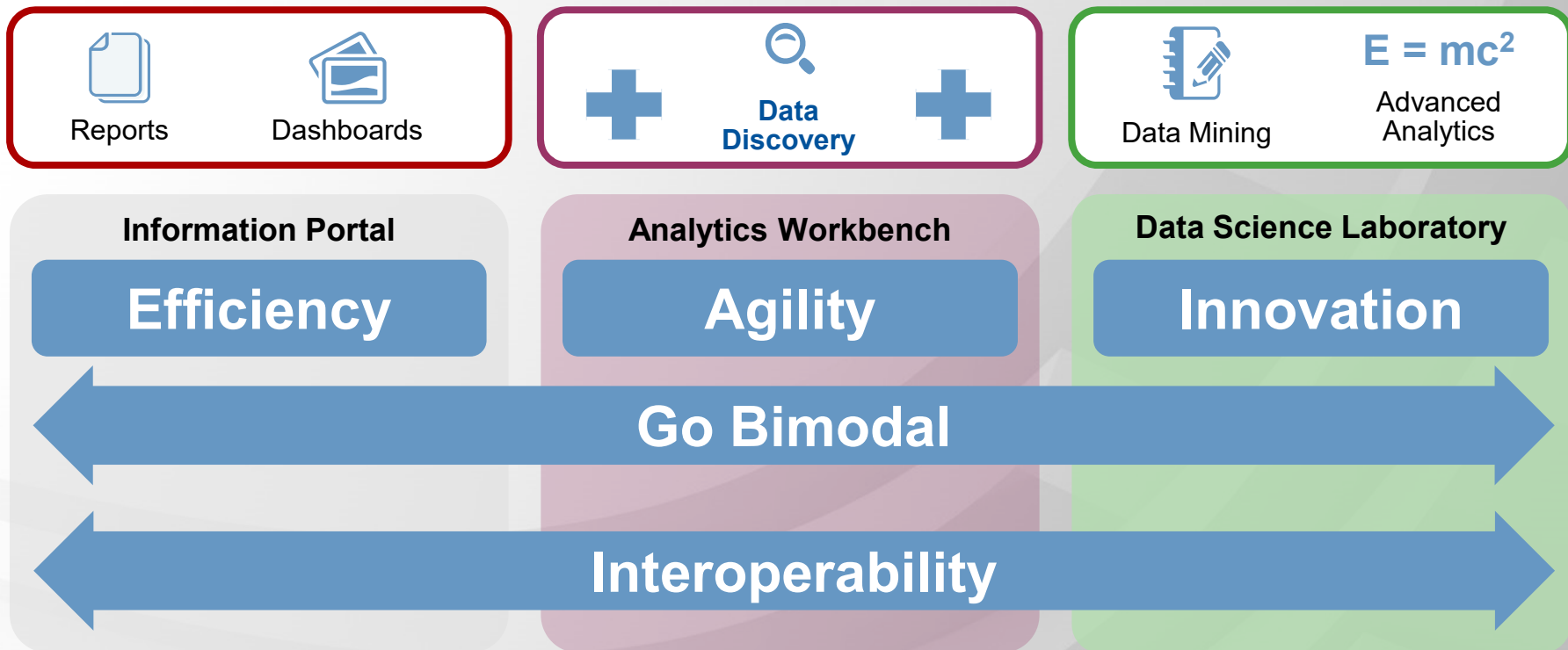
Too busy firefighting

Tactical wants
displacing strategic
needs



Technology

One Size Doesn't Fit All



Thoughts

"Culture eats strategy for breakfast."

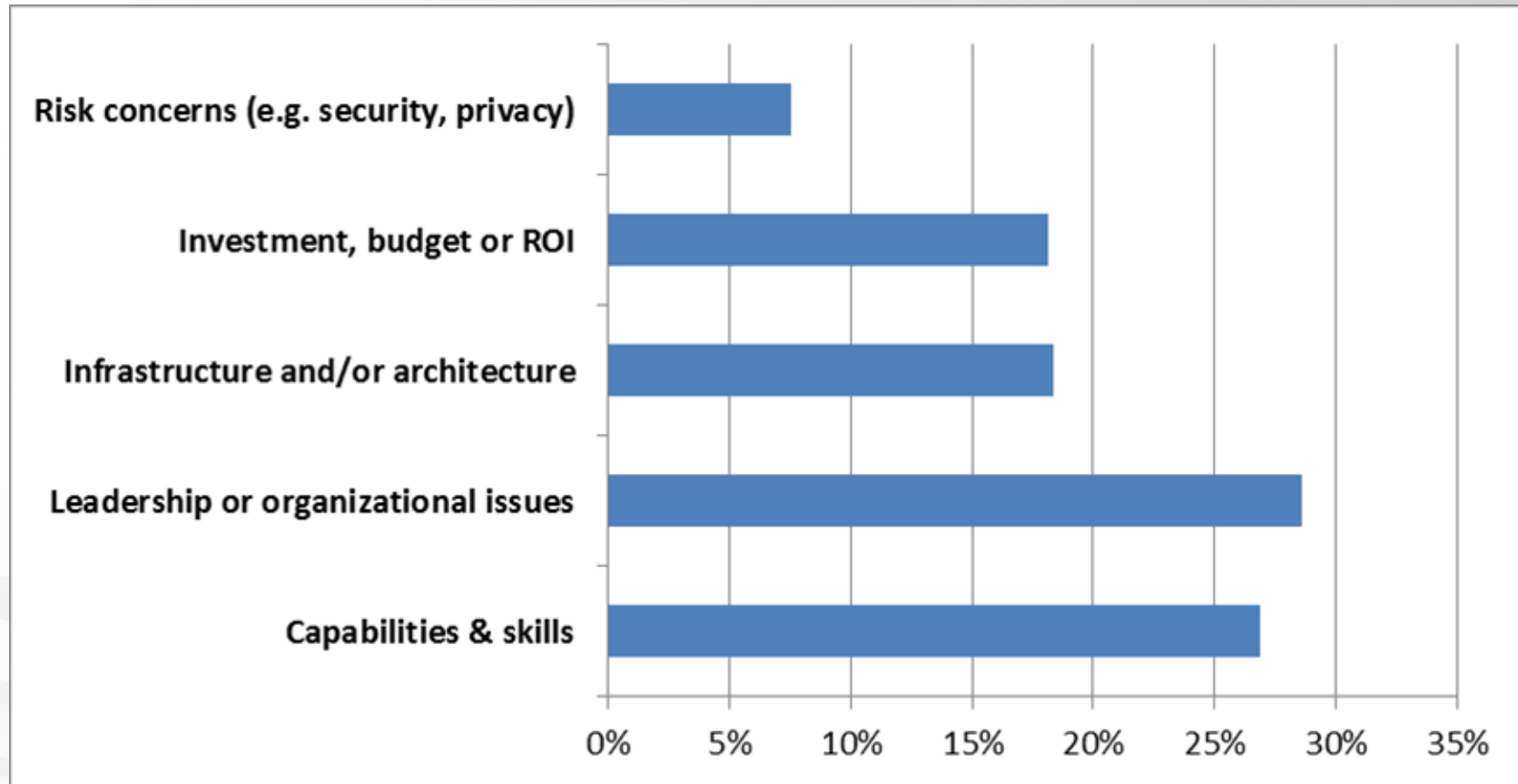
— Peter Drucker



Changing Culture Takes Time



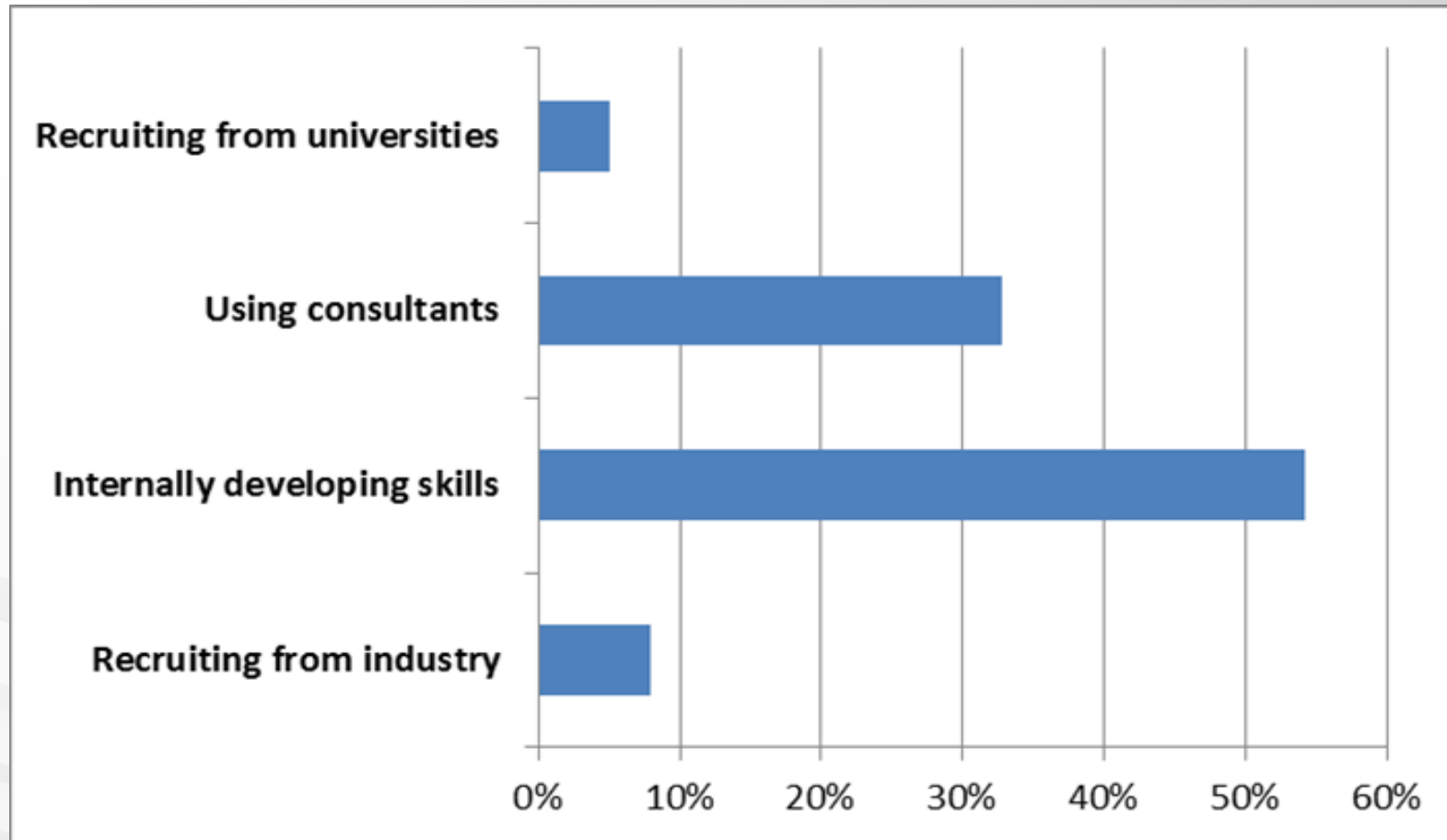
What is your organization's biggest inhibitor to benefiting from Big Data?



Source: Gartner [Big Data & Strategy Essentials Webinar](#), March 2013

N=330

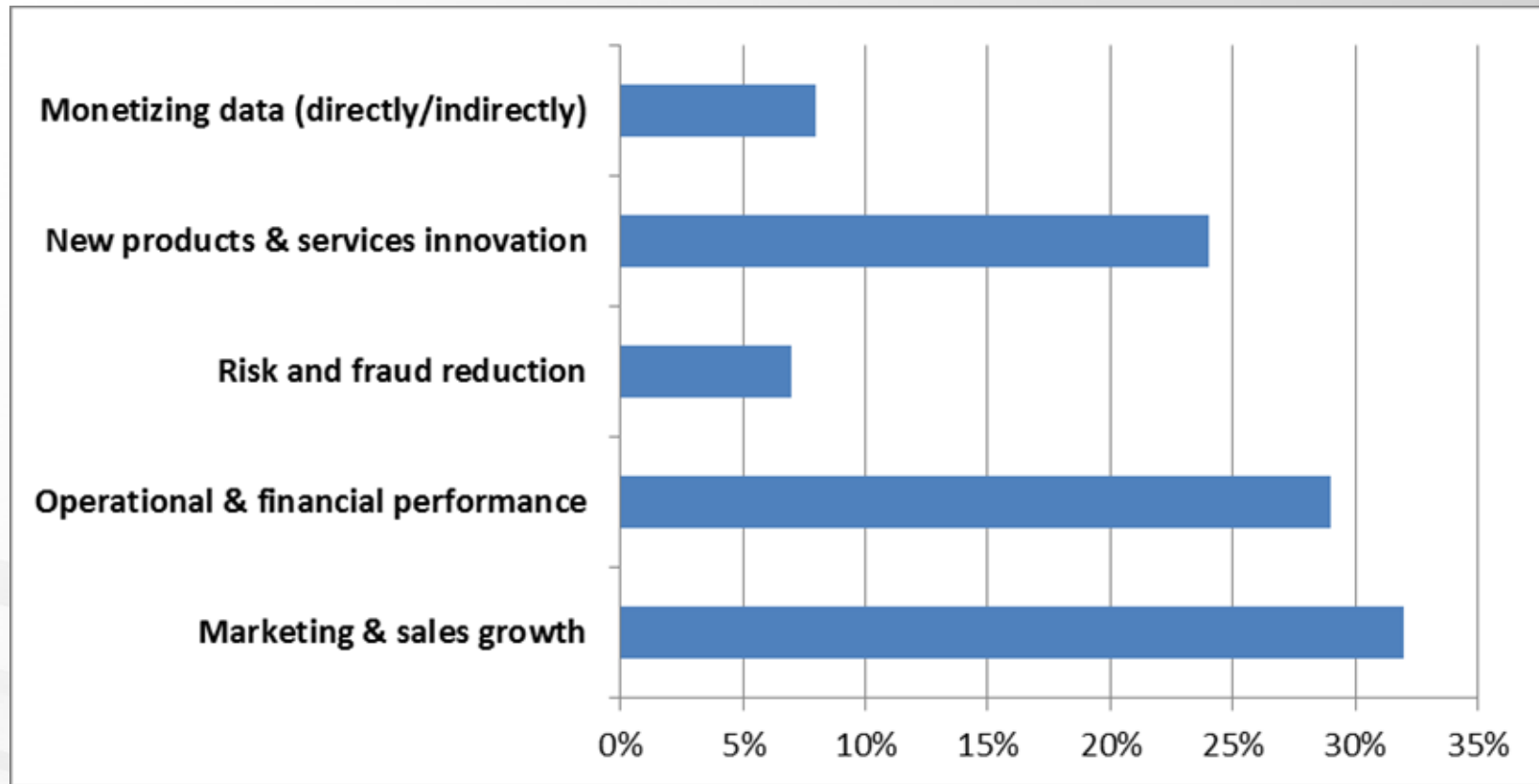
What is your current primary approach for acquiring Big Data & advanced analytics talent?



Source: Gartner [Big Data & Strategy Essentials Webinar](#), March 2013

N=290

Which is the biggest opportunity for Big Data?



Source: Gartner [Big Data & Strategy Essentials Webinar](#), March 2013

N=151

Here's the BI Report You Wanted ...



Q: Why are you here?

**A: Because new
approaches to BI and
analytics are critical.**

A Framework for Change

Changes/Improvements are needed in several areas.



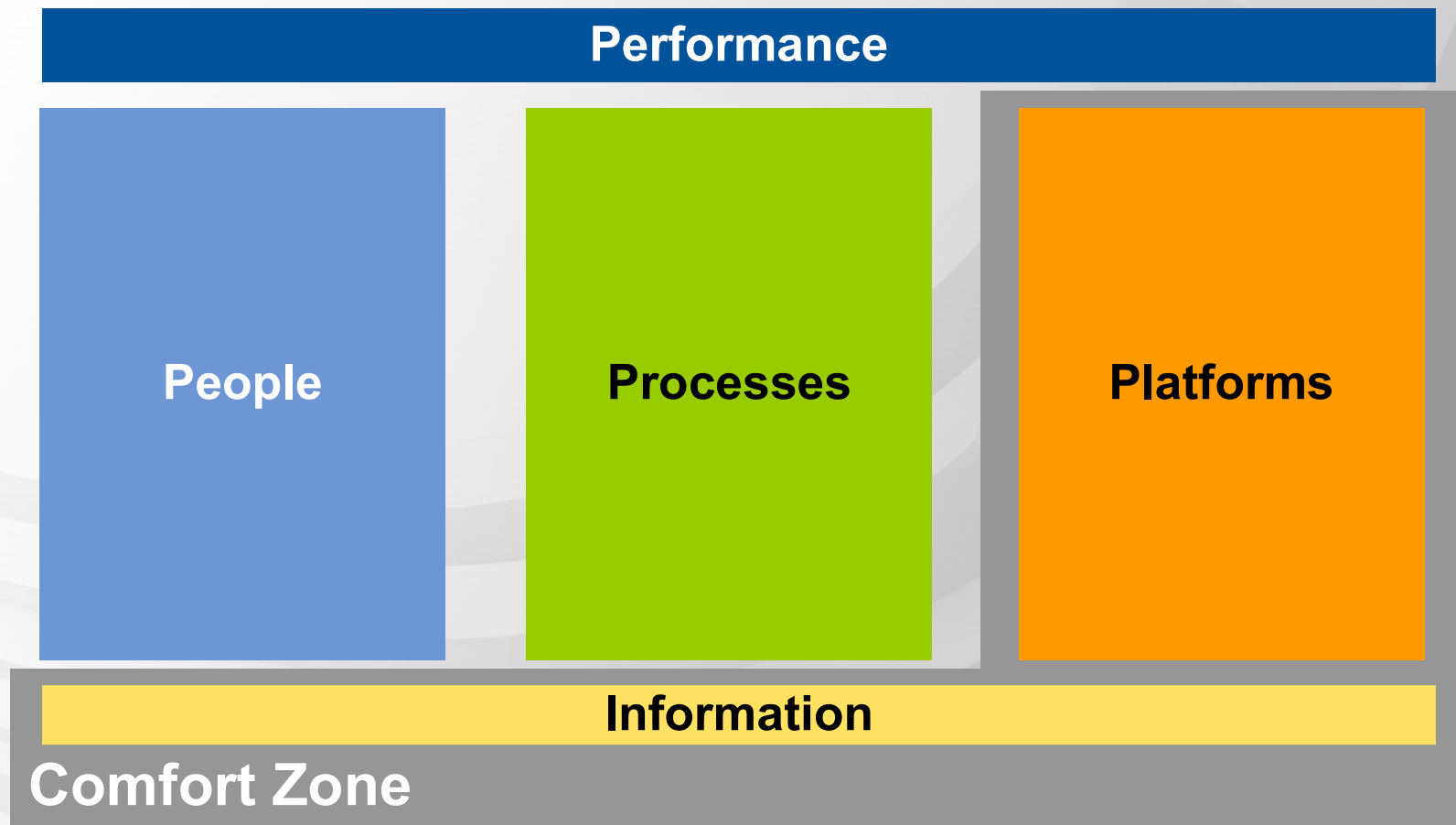
The diagram consists of a large blue arrow pointing upwards, positioned between two horizontal bars. The top bar is dark blue and labeled 'Performance'. The bottom bar is yellow and labeled 'Information'. The background features a series of light gray, curved, overlapping bands that sweep from the bottom left towards the top right, creating a sense of motion or flow.

Performance

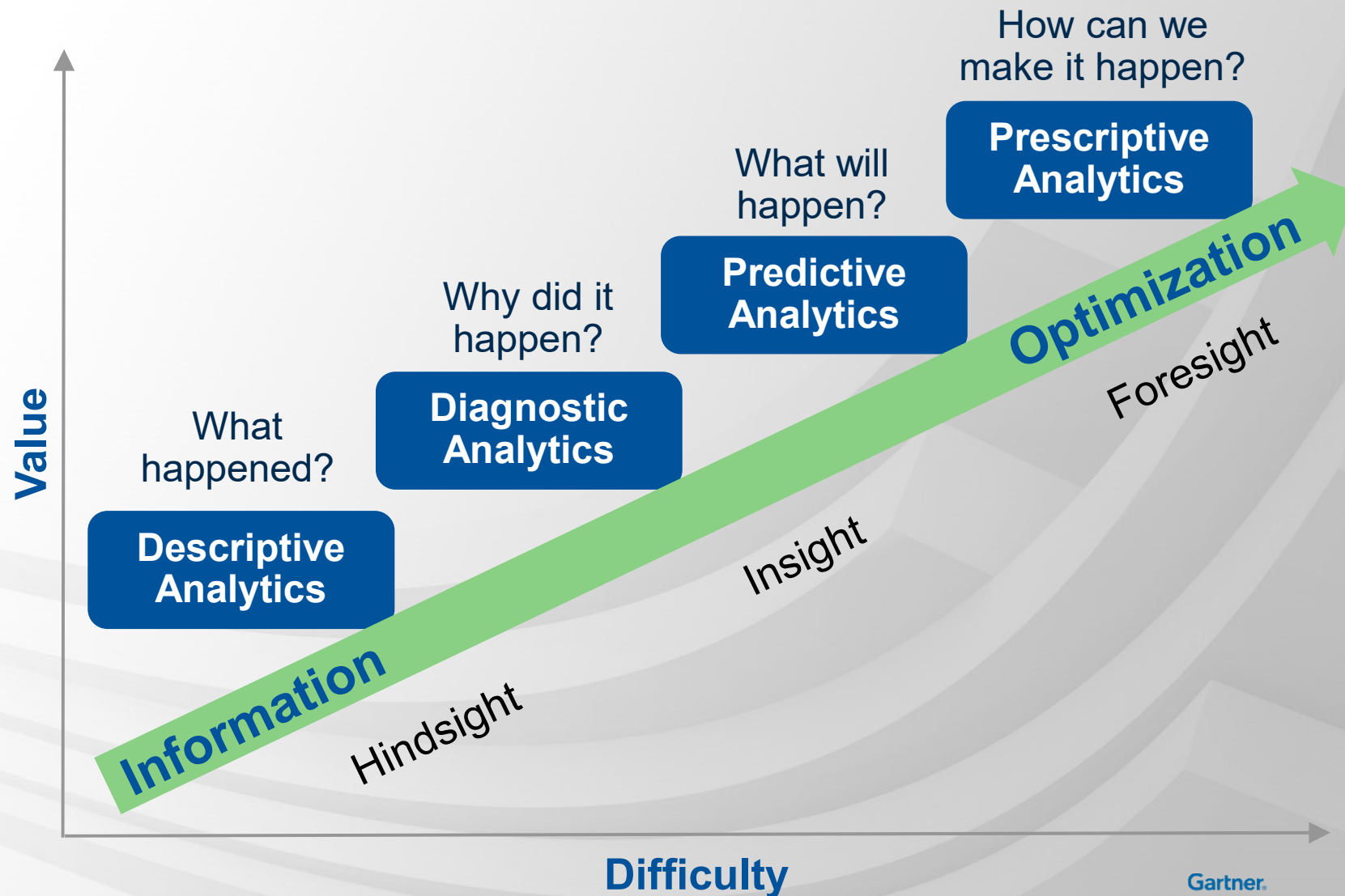
Information

A Framework for Change

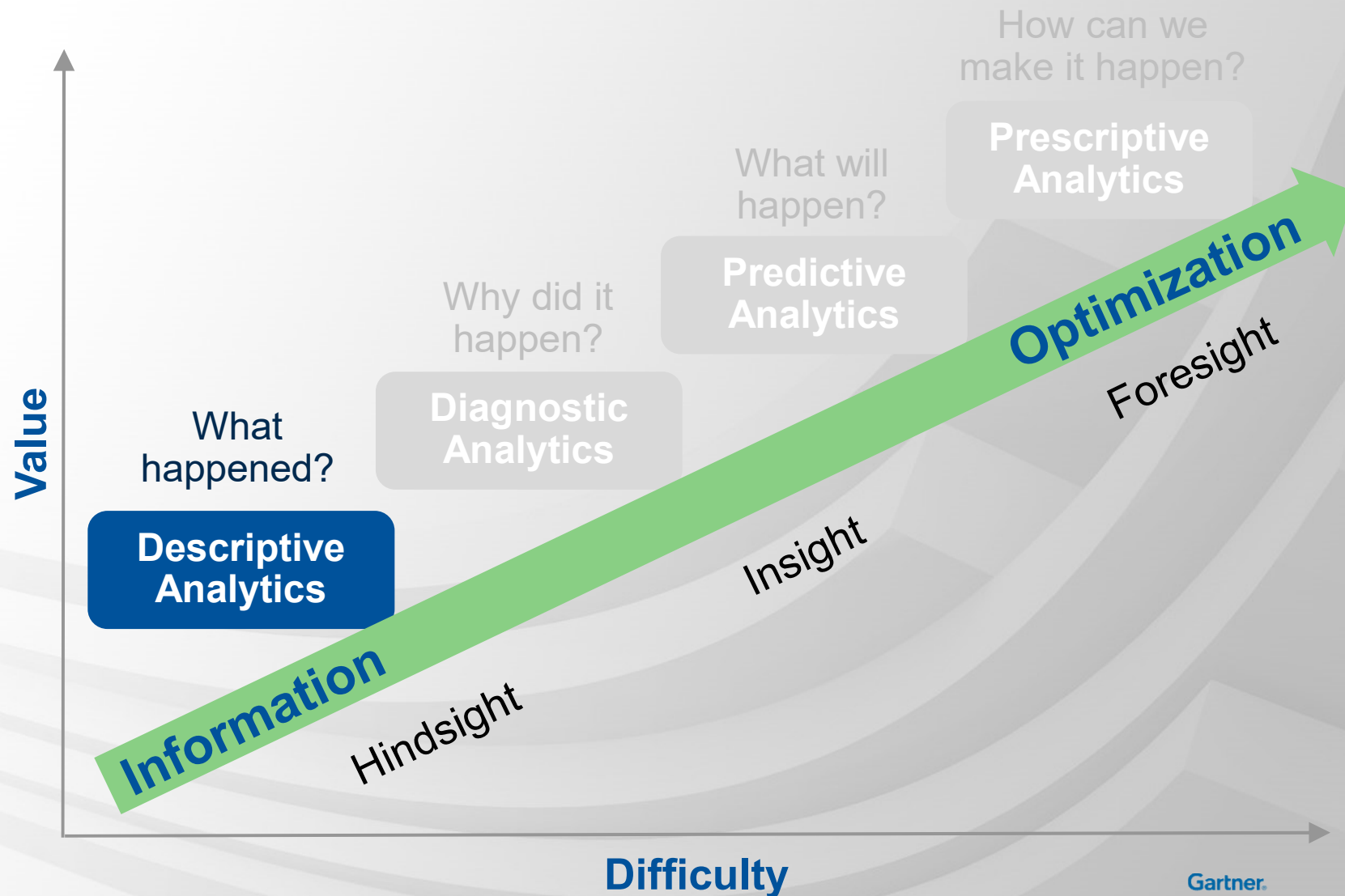
Changes/Improvements are needed in several areas.



Improving Business Performance



Improving Business Performance



Reporting

Revenue Growth for France

Revenue			France				Central Europe	Sales Territory
			2004	2005	2006	% Growth	% Growth	% Growth
Camping Equipment	Cooking Gear	●	\$125,516.26	\$116,733.50	\$147,198.48	26.10%	20.30%	25.15%
	Sleeping Bags	◆	\$290,767.50	\$275,282.52	\$310,203.60	12.69%	14.05%	21.79%
	Packs	●	\$431,071.22	\$427,499.48	\$497,624.98	16.40%	16.03%	23.13%
	Tents	●	\$683,882.82	\$661,319.26	\$809,391.72	22.39%	14.06%	19.86%
	Lanterns	●	\$271,296.92	\$250,133.14	\$288,022.38	15.15%	11.68%	17.75%
	Camping Equipment	●	\$1,802,534.72	\$1,730,967.90	\$2,052,441.16	18.57%	14.53%	20.71%
Golf Equipment	Irons	■	\$166,643.98	\$232,007.04	\$212,859.18	-8.25%	-5.99%	11.74%
	Putters	■	\$50,940.44	\$70,509.90	\$66,185.02	-6.13%	-11.65%	7.50%
	Woods	■	\$274,651.14	\$379,567.72	\$363,065.56	-4.35%	-0.50%	13.54%
	Golf Accessories	■	\$15,766.26	\$23,807.34	\$21,825.10	-8.33%	-7.12%	0.92%
	Golf Equipment	■	\$508,001.82	\$705,892.00	\$663,934.86	-5.94%	-3.54%	11.96%
Mountaineering Equipment	Climbing Accessories	●	\$0.00	\$97,473.96	\$133,150.90	36.60%	15.53%	15.58%
	Tools	●	\$0.00	\$123,172.52	\$178,540.72	44.95%	14.59%	17.73%
	Rope	●	\$0.00	\$281,037.78	\$390,477.30	38.94%	15.02%	16.42%
	Safety	●	\$0.00	\$41,201.58	\$58,402.34	41.75%	15.18%	17.27%
	Mountaineering Equipment	●	\$0.00	\$542,885.84	\$760,571.26	40.10%	15.02%	16.66%



Would you drive looking backwards?

Descriptive Analytics' Core Capabilities

Already mainstream in 2006, had a modest evolution in the last 7 years.

Scorecards

Dashboards

Reporting

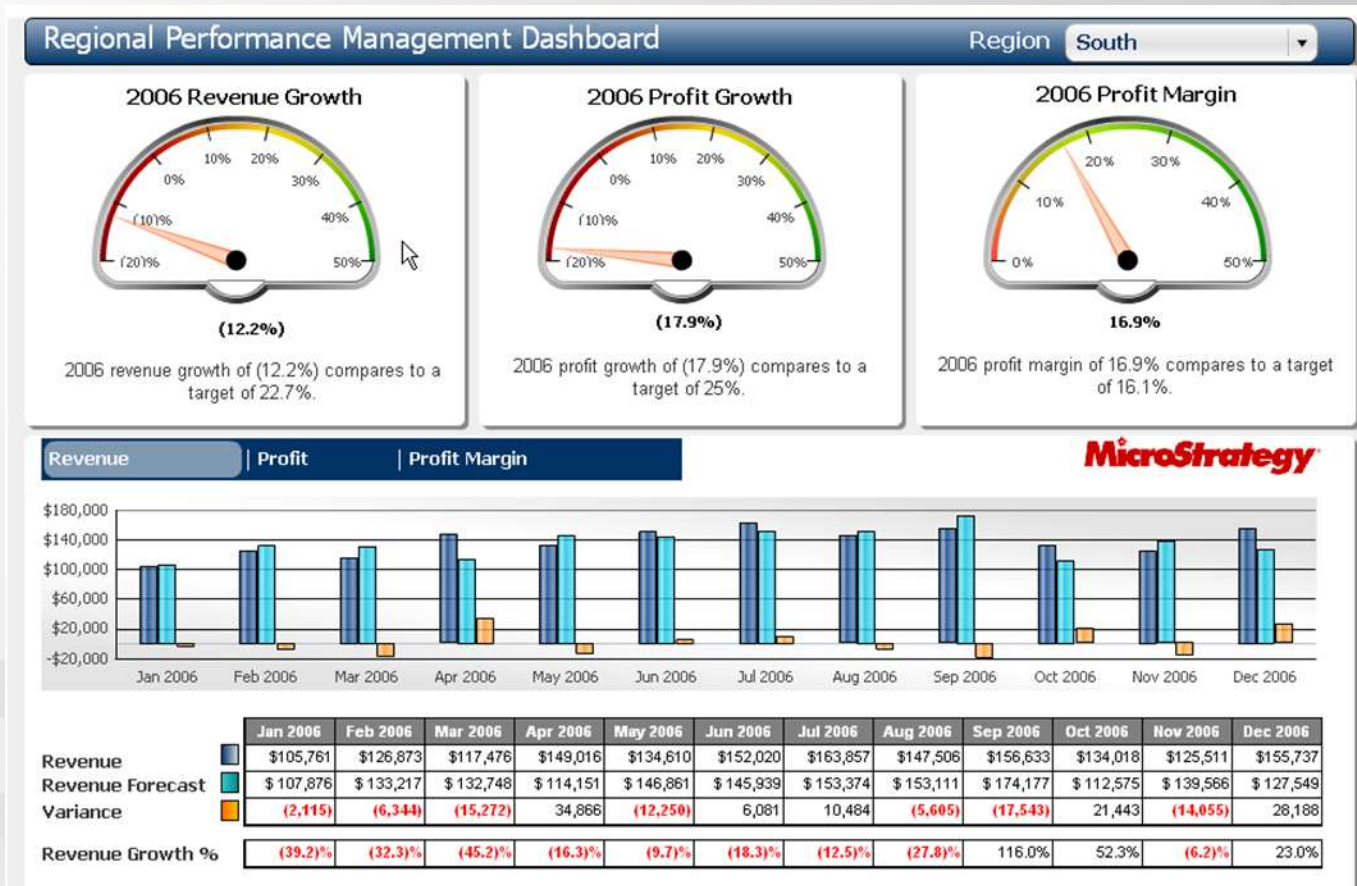
MS Office
Integration

Metadata
Management

Development
Tools

BI
Infrastructure

Descriptive
Analytics



A great dashboard in 2006... still good in 2013.

Source: MicroStrategy

Gartner
SYMPOSIUM ITXPO® 2014

Descriptive Analytics' Opportunities

Non-exhaustive

Mobile

Cloud

In-memory

Location
Intelligence

Embedded BI

Real Time

Big Data,
Unstructured,
External, ...

Core Capabilities

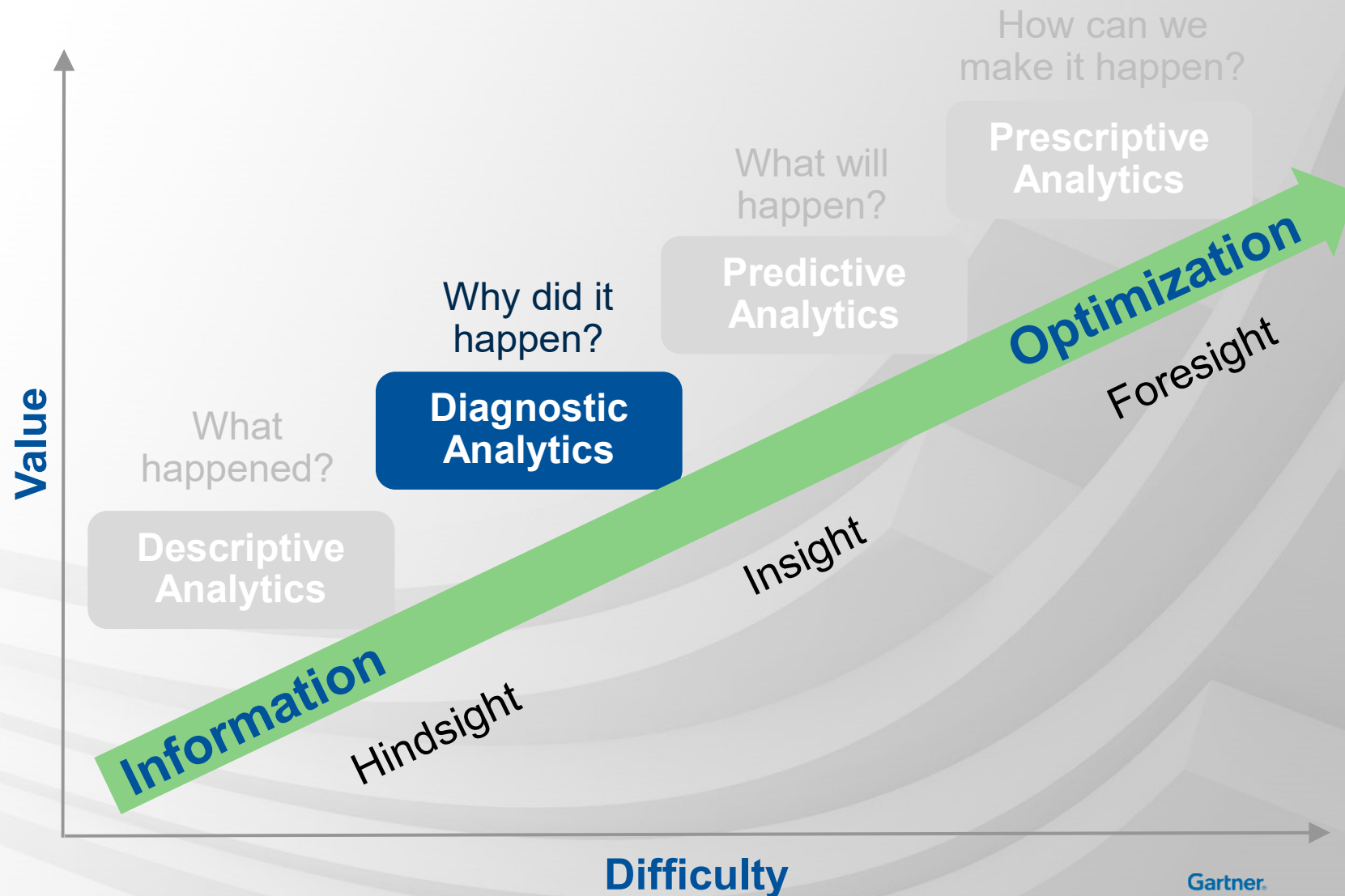
**Descriptive
Analytics**

List of capabilities to enhance descriptive analytics:

- Used whenever needed, in new places, within new processes, by new users with new devices.
- Deployed and scaled to terabytes in hours.
- Information accessed now!
- Location of "everything" becomes relevant.
- Embedded in business applications and processes.
- Yesterday's news are old news: Move to "now."
- Every data asset is a data source to report on.
- New sources and types of information welcome.
- **New information management capabilities are needed!**

New Appetite:
**Everyone is hungry for
more insight.**

Improving Business Performance



Diagnostic Analytics' Opportunities

Non-exhaustive

Collaboration

Data Mashups

Search-based
Data Discovery

Interactive
Visualization

Statistics

OLAP

Ad hoc Query

Diagnostic
Analytics

Why did it happen?

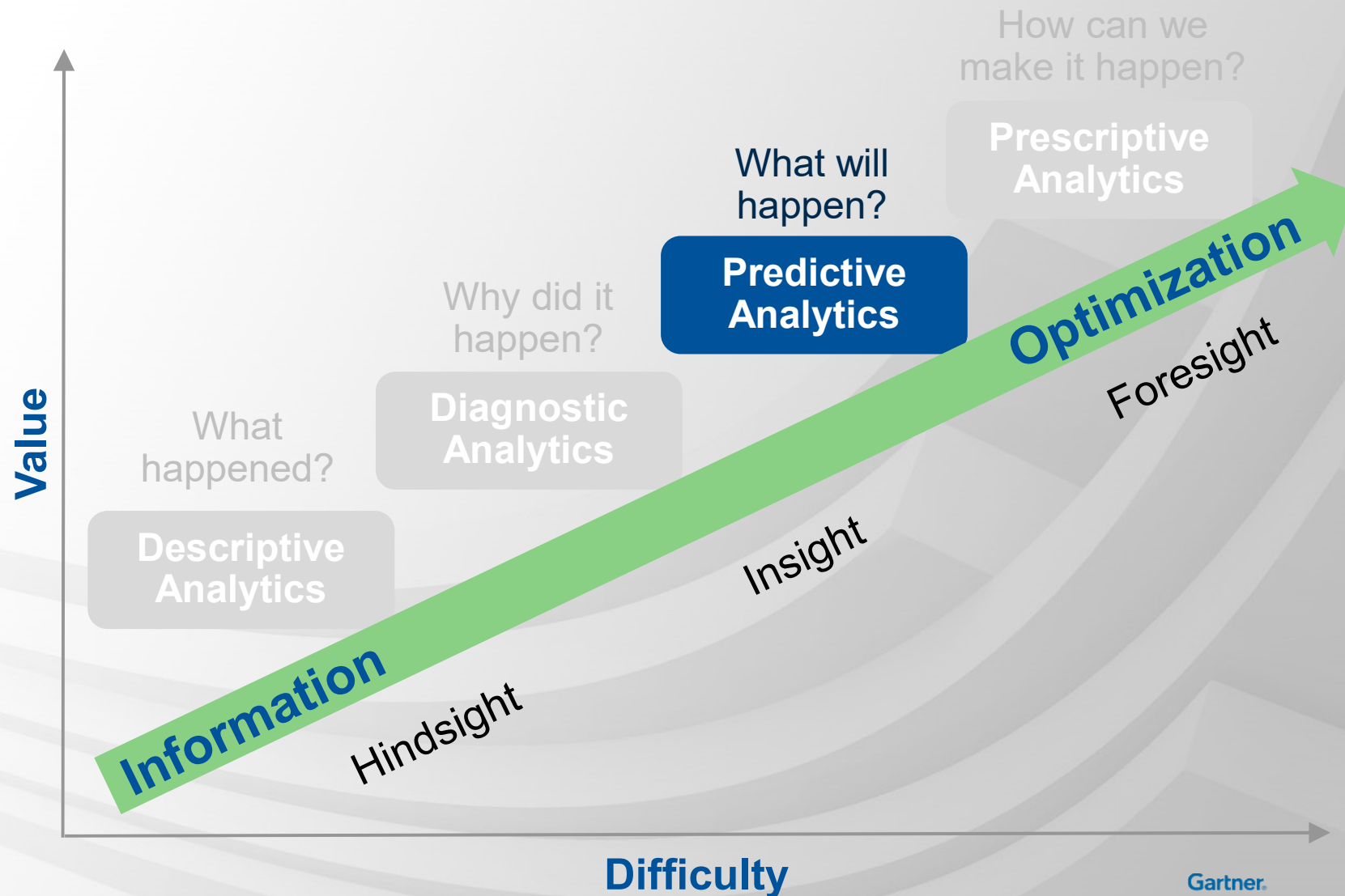
- Ability to share, comment, approve, track, discuss, analyze in a collaborative effort.
- Enhanced visibility, flexibility, and autonomy for business users.
- Improved pattern detection and analysis.



Source: Panorama, QlikTech

Gartner.
SYMPOSIUM ITXPO® 2014

Improving Business Performance



Predictive Analytics' Opportunities

- Project performance and anticipate events.
- Create models for propensity and risk.
- Identify correlations and leading indicators.

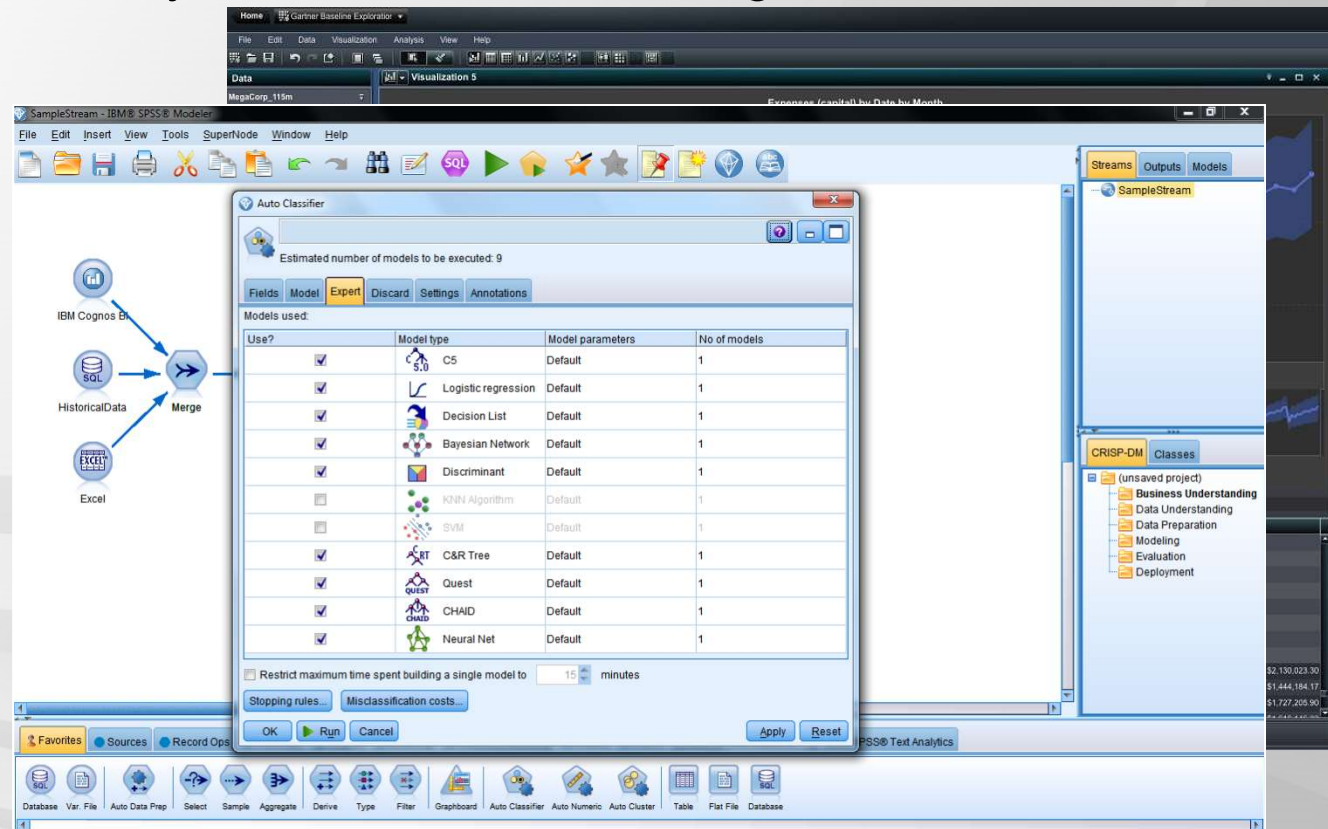
Forecasting

Predictive
Modeling

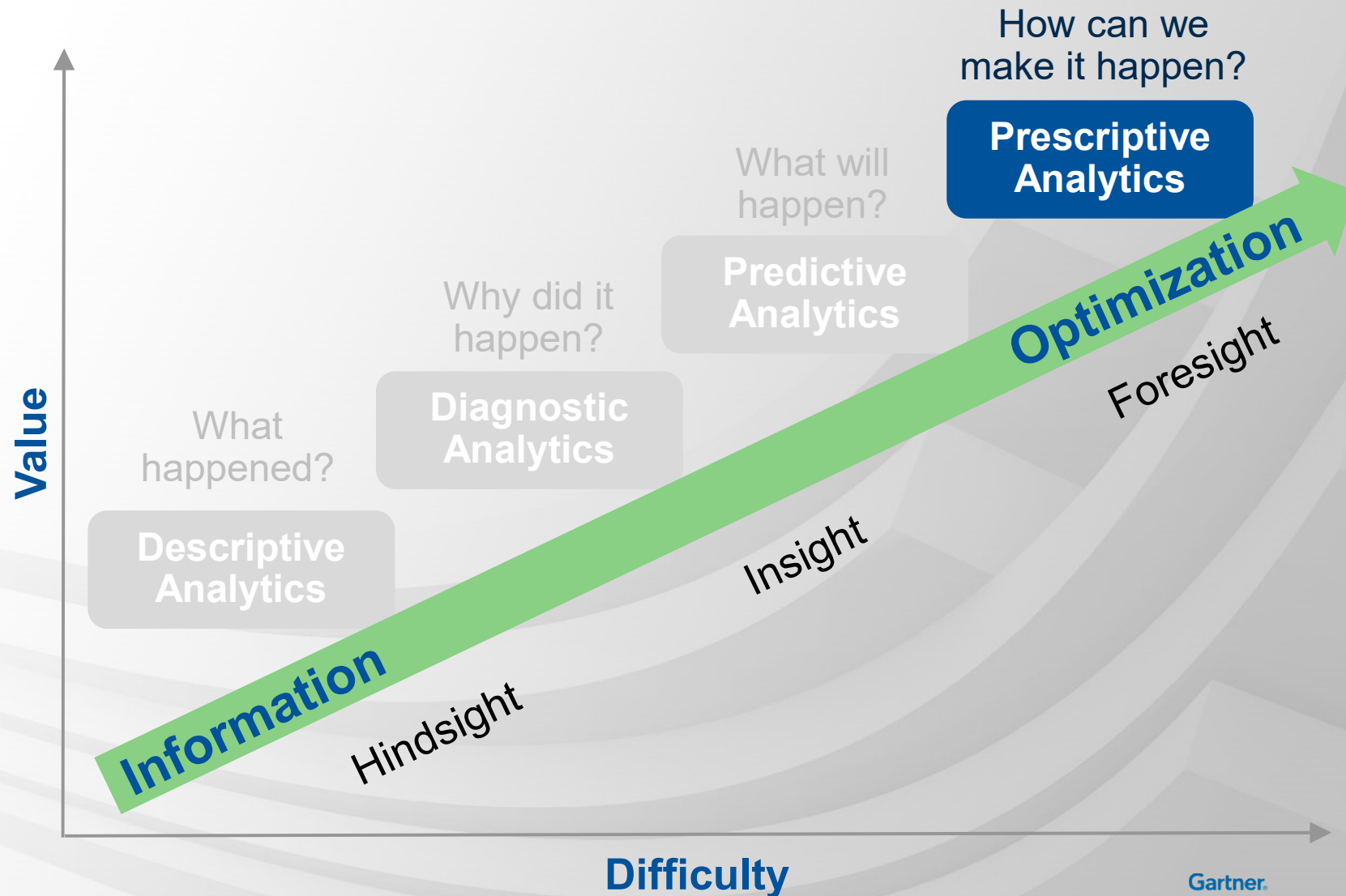
Data Mining

Predictive
Analytics

What will happen?



Improving Business Performance



Prescriptive Analytics' Opportunities

- Deliver "invisible analytics" within business applications.
- Rationalize, optimize, and automate decisions.
- Test hypothesis and optimize processes and business outcomes.
- Identify and take the

Applications

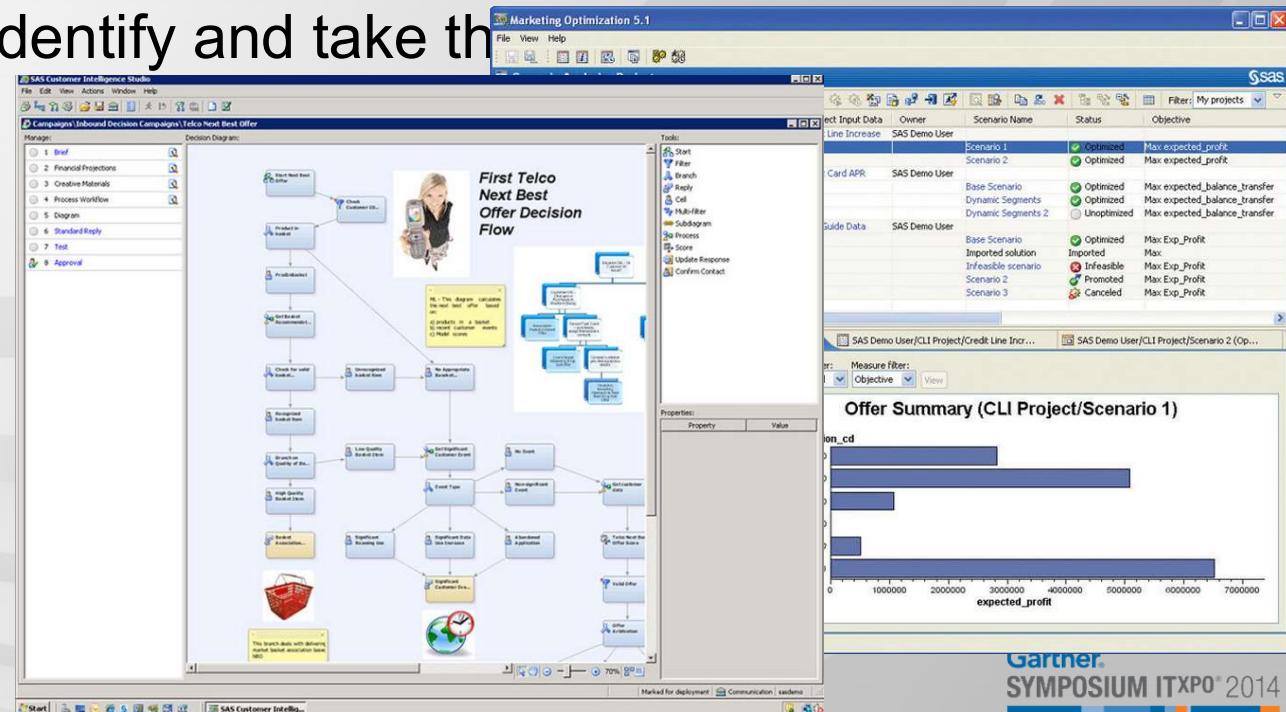
Decision
Automation

Simulation and
Optimization

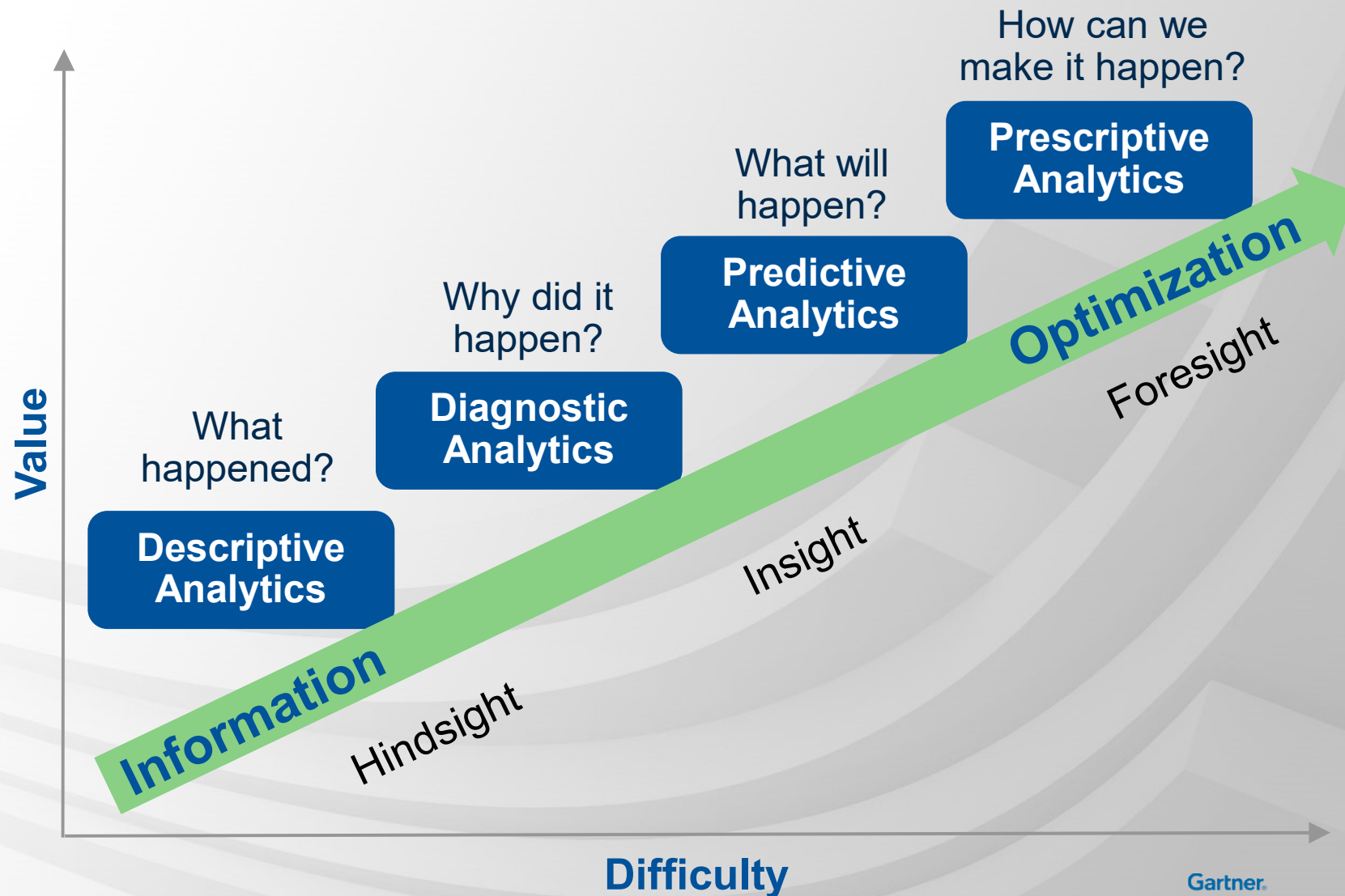
Prescriptive
Modeling

**Prescriptive
Analytics**

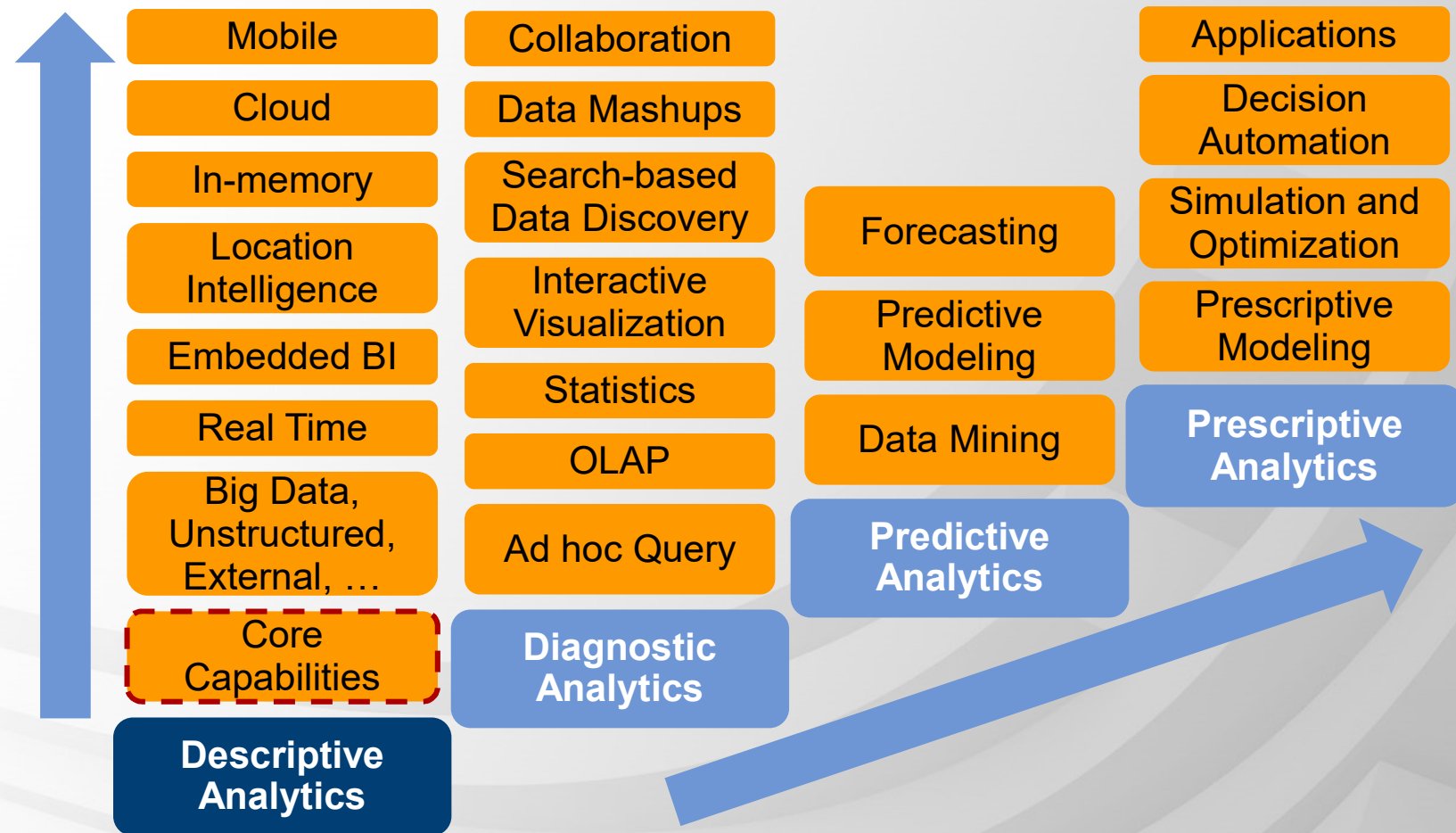
How can we
make it happen?



Improving Business Performance



Key Platform Capabilities and Information to Support the Analytics Continuum



Information



Social



Documents



Transactions



IT/OT



Image



Audio



Text



Video



Mobile



Search
Engine

Non exhaustive list of capabilities

Information Tunnel Vision Starves Decisions of Context



Broaden the View!



New Appetite:

**Decision makers need
richer information.**

New Appetites:

**Data must power
efficiency, cost
reduction, service
quality, innovation, ...**

New Approach:
Liberate your
information.

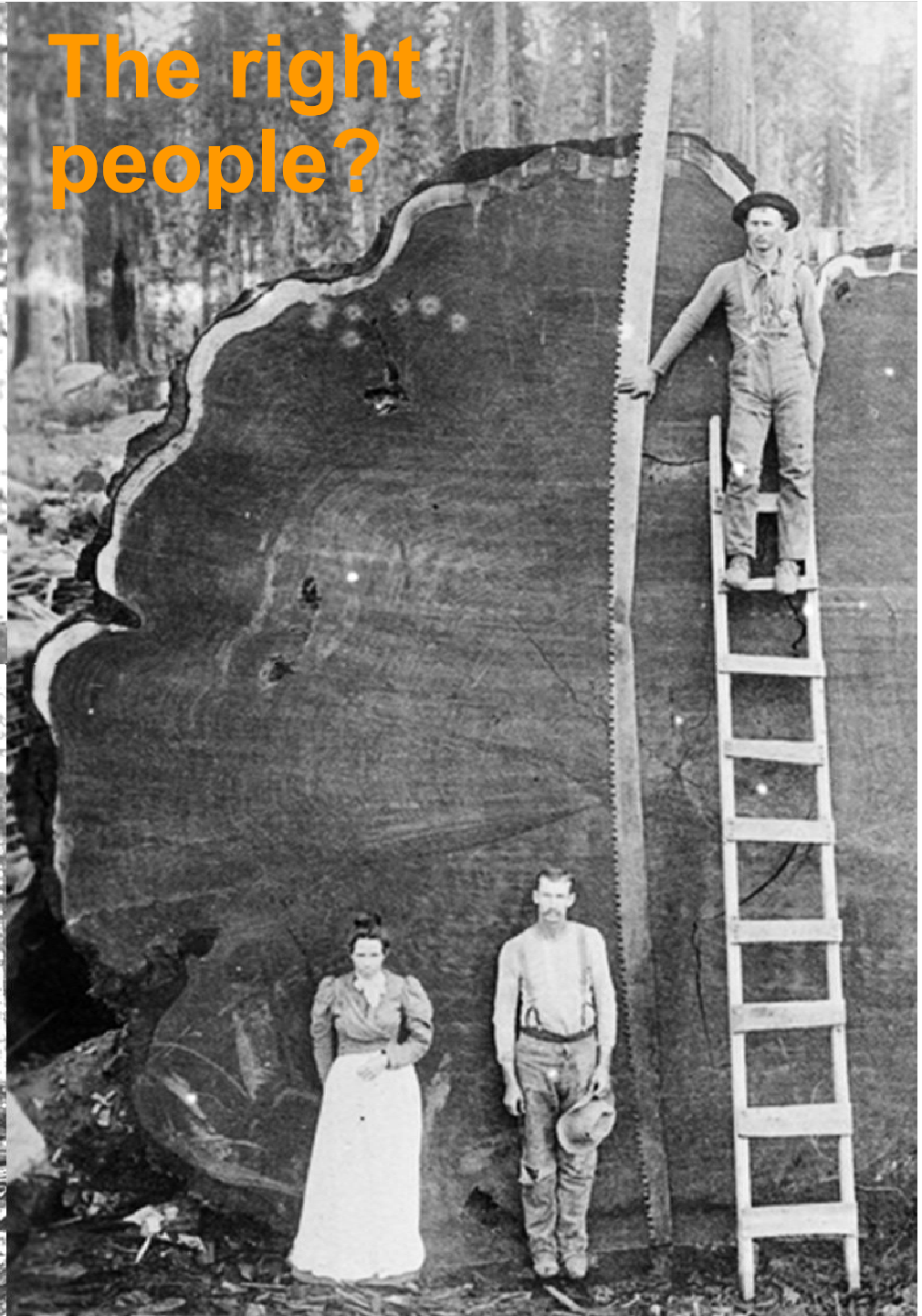
Is This Your Information Infrastructure?



**The right
tools?**



**The right
people?**



**The right
processes?**



The Need for an Holistic Approach: Platforms, Processes and People

The chaotic attempt.

Users have the skills.
Tools were bought by the business.

No governance in place.

We try hard but it doesn't work...

Users have the skills.
The BI team is prepared to empower users.

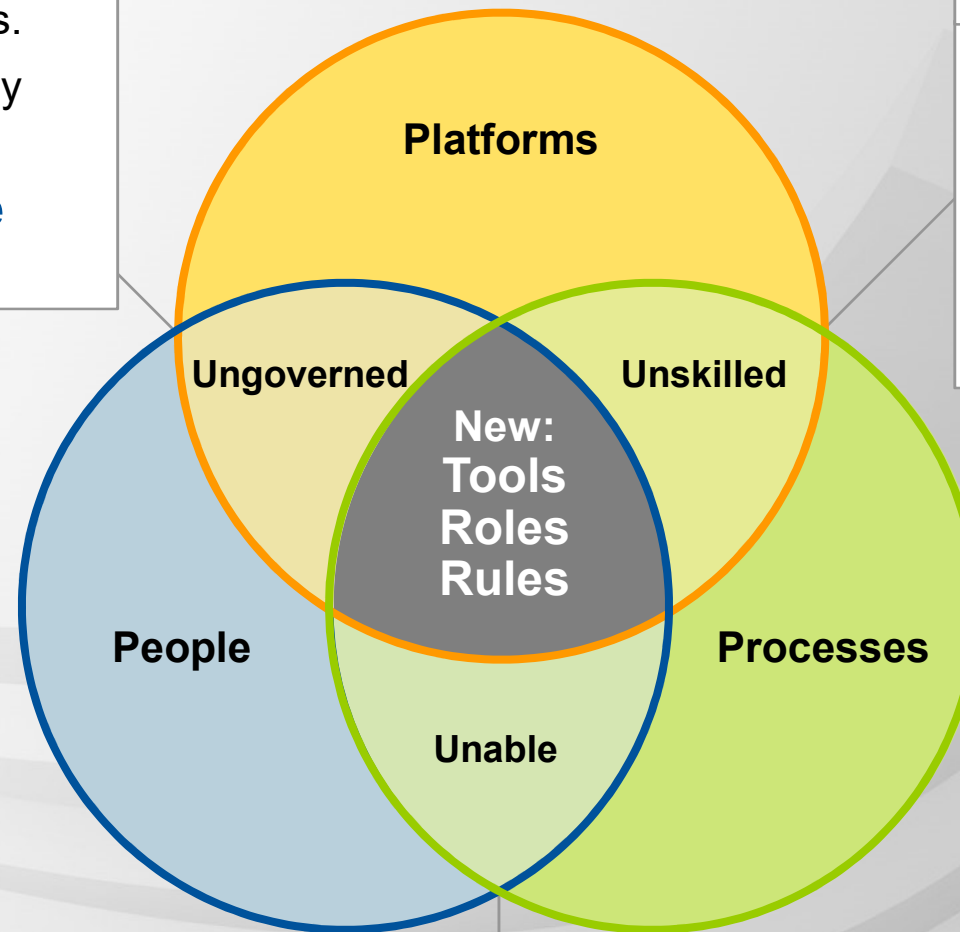
The wrong tools are being used.

Where's that Data Scientist?

The tools exist in the organization.

The BI team has the proper governance.

Users don't have the skills.



MQ Scoring Criteria

Completeness of Vision

- **Market Understanding***
- Offering (Product) Strategy
- Innovation
- Marketing Strategy
- Vertical/Industry Strategy
- Sales Strategy
- Geographic Strategy

Ability to Execute

- **Customer Experience***
- **Product or Service***
- Overall Viability
- **Sales Execution/Pricing***
- Market Responsiveness and Track Record

*Heavily influenced by MQ Customer Reference Survey Results

BI and Analytics Platform Capabilities Evaluated for MQ

Business Intelligence Platform

Integration

- BI infrastructure and administration
- Metadata management
- Business user data mashup and modeling
- Development tools
- Embeddable analytics
- Collaboration
- Support for big data sources

Information Delivery

- Reporting
- Ad hoc report/query
- Microsoft Office integration
- Dashboards
- Mobile BI

Analysis

- Interactive visualization
- Search-based data discovery
- OLAP (Online Analytical Processing)
- Embedded advanced analytics
- Geospatial and location intelligence

Magic Quadrant for Business Intelligence and Analytics Platforms 2016

Figure 1. Magic Quadrant for Business Intelligence and Analytics Platforms



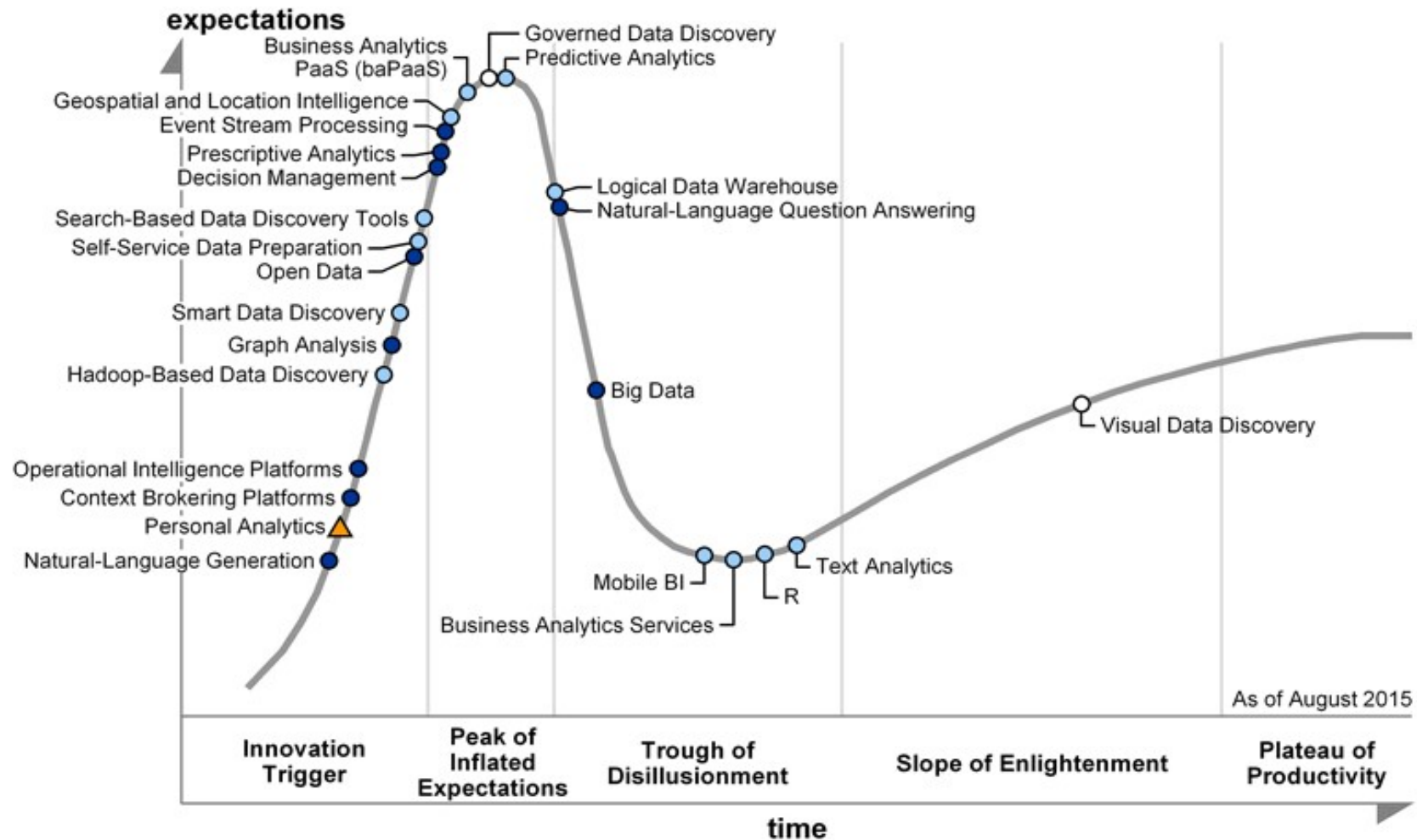
Magic Quadrant for Advanced Analytics Platform 2016

Figure 1. Magic Quadrant for Advanced Analytics Platforms



Hype Cycle for Business Intelligence and Analytics

SOURCE: GARTNER (AUGUST 2015)



Plateau will be reached in:

○ less than 2 years

● 2 to 5 years

● 5 to 10 years

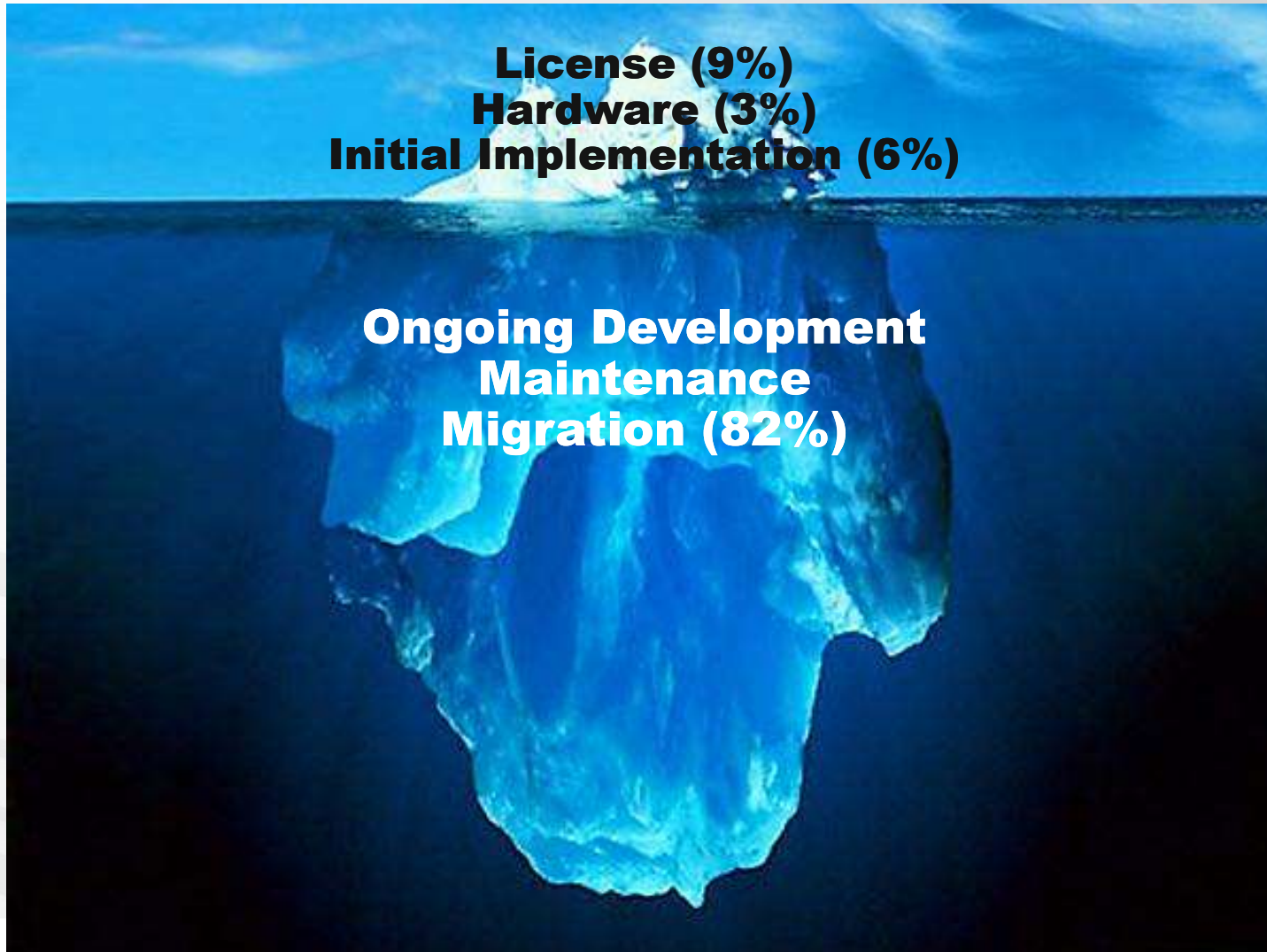
▲ more than 10 years

obsolete

⊗ before plateau

License Costs Are Most Visible But Least Significant Over Time

Percentage of Three Year BIPOC



Expose Three Types Of Investment

FEAR

Keeping the
Business in
Business

Risk **Cost**
Quality



FACT

Extending Within
the Known
**Strengthen
Categories**

ROI



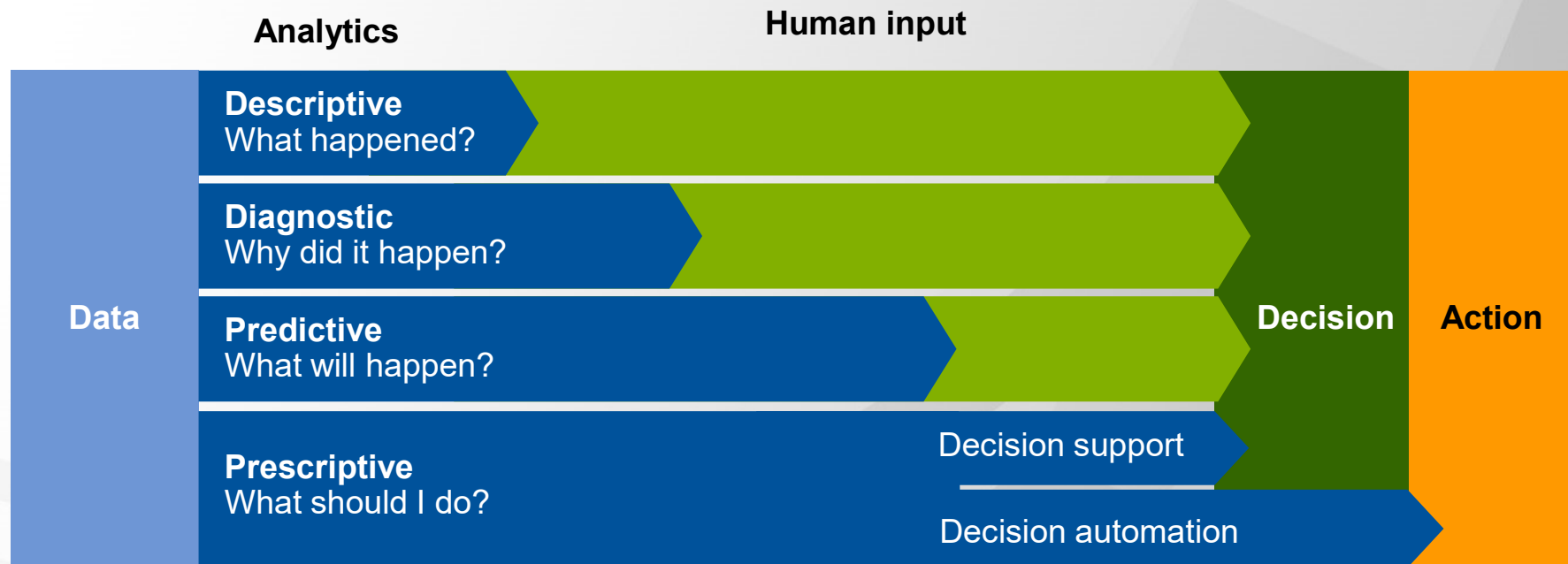
FAITH

Transforming
Beyond the Known

Experiments
Platforms



Analytics Equals Better Measurement and Classification



"Suits" Versus "T-Shirts"



Traditional DW and BI

VS.



Big Data and Analytics

Performance management
Requirements-based
Top-down design
Integration and reuse
Better decisions
Enterprise

Data discovery
Opportunity-oriented
Bottom-up experimentation
Immediate use
Business innovation
Functional

Enterprise BI Standard vs The World: It shouldn't be a "Us vs Them" because...

- "Own" and control systems
- Often own the budget
- Define information governance rules
- Manage security and access to information
- Have the technical knowledge



CIO / BI Team

vs

- Are responsible for the company's results
- Will find a way to get budget
- Have the mandate to overcome "limitations" hindering performance
- Have wide access to top management
- Can find solutions that bypass the need for technical expertise

Business Users

The “(Try to) Stop the Trend” Scenario

How users will react:

- Won't go back to the corporate BI system.
- Stop using information and analytics to drive the business.
- Revert to flexible “authorized” tools: Excel / Access.
- Continue using the “unofficial” tools.
- Hire analytics consultants with their own toolsets.



CIO / BI Team

The “Do nothing” Scenario

How users will react:

- Continue building their siloed BI solutions.
- Use the existing BI platform as a glorified information export tool.
- Disengage from the BI ecosystem and team over time.
- Drive into an unmanageable situation if tools add up.
- Hire their own “unofficial” BI teams.



CIO / BI Team

The Result...

- Missed opportunities in BI and analytics.
- Fragmented / discredited BI ecosystem.
- Frustrated users and IT/BI teams.
- High TCO.
- Blame on the IT/BI team.

- Lost business opportunities resulting from delayed decisions.
- No holistic view of the business.
- No economies of scale from technology and skills investments



The “Embrace and Govern” Scenario

The challenge is to strike the right balance between control and autonomy.



Leverage/deliver new tools and capabilities.
Empower, train and support the users.
Define processes to govern BI, fostering users' autonomy.

New Approach:
**Hybrid and connected
analytic processes.**

Key Personas in the Analytics Continuum

**Descriptive
Analytics**

**Diagnostic
Analytics**

**Predictive
Analytics**

**Prescriptive
Analytics**

Information



Social



Documents



Transactions



IT/OT



Image



Audio



Text



Video

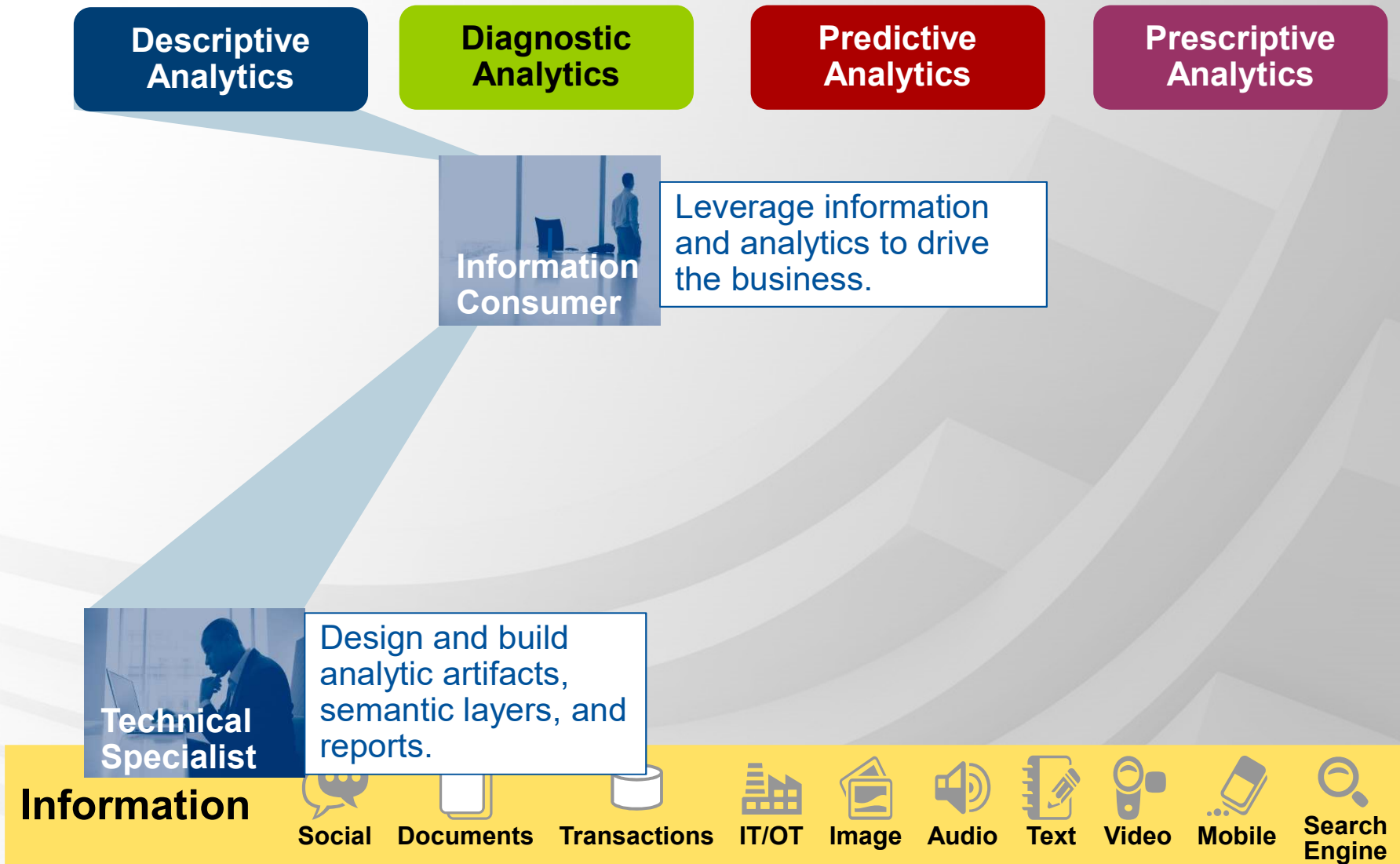


Mobile

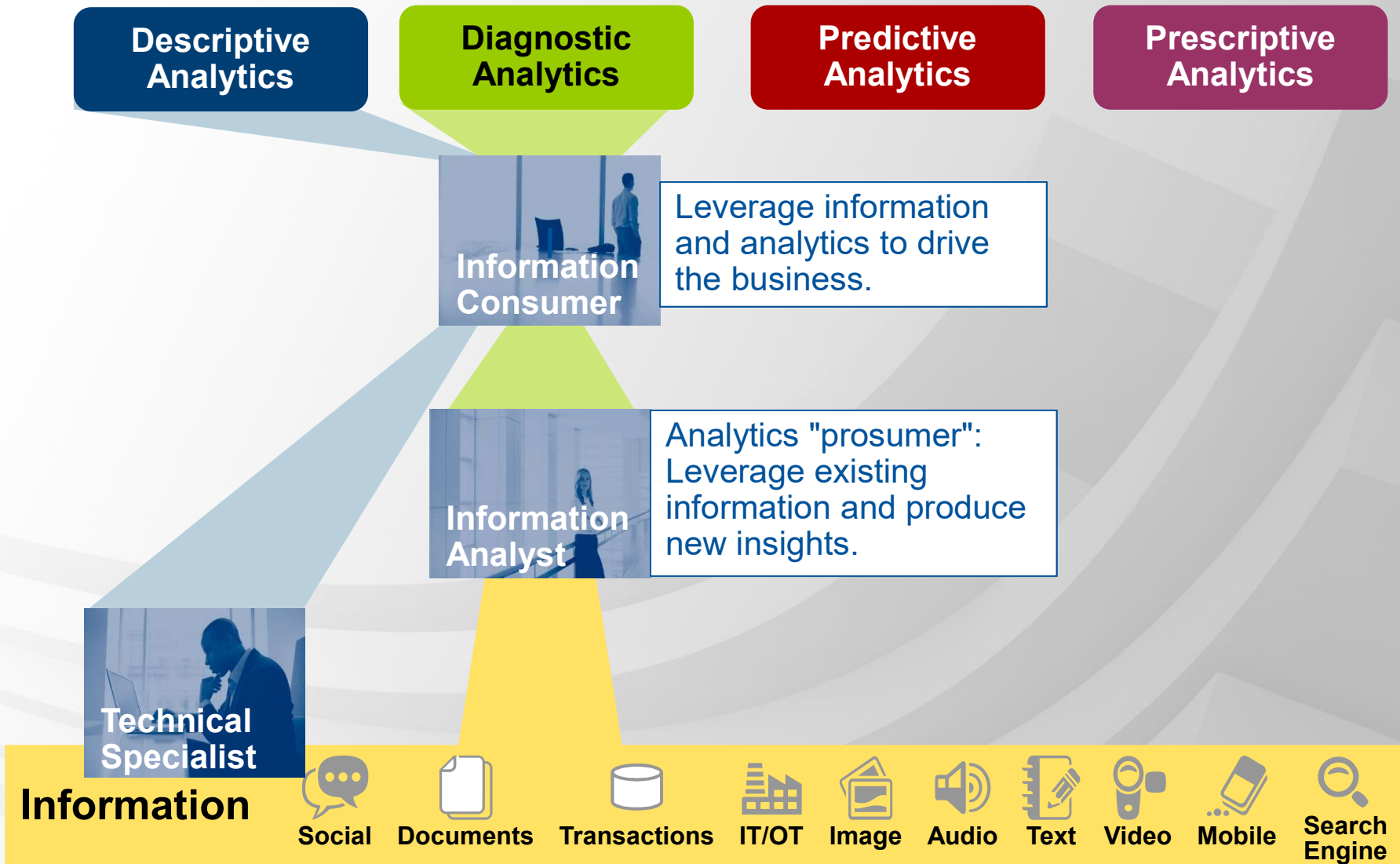


**Search
Engine**

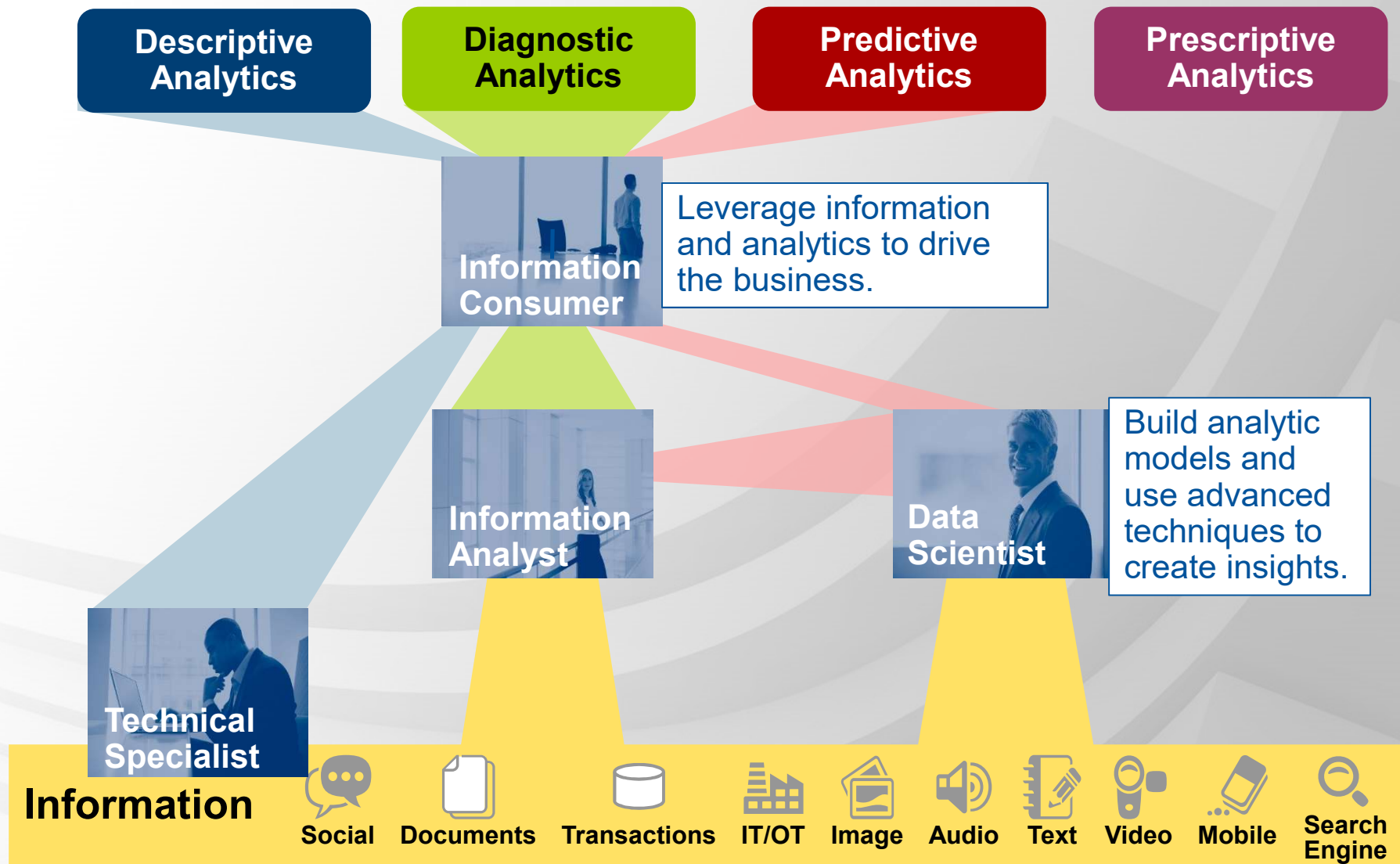
Key Personas in the Analytics Continuum



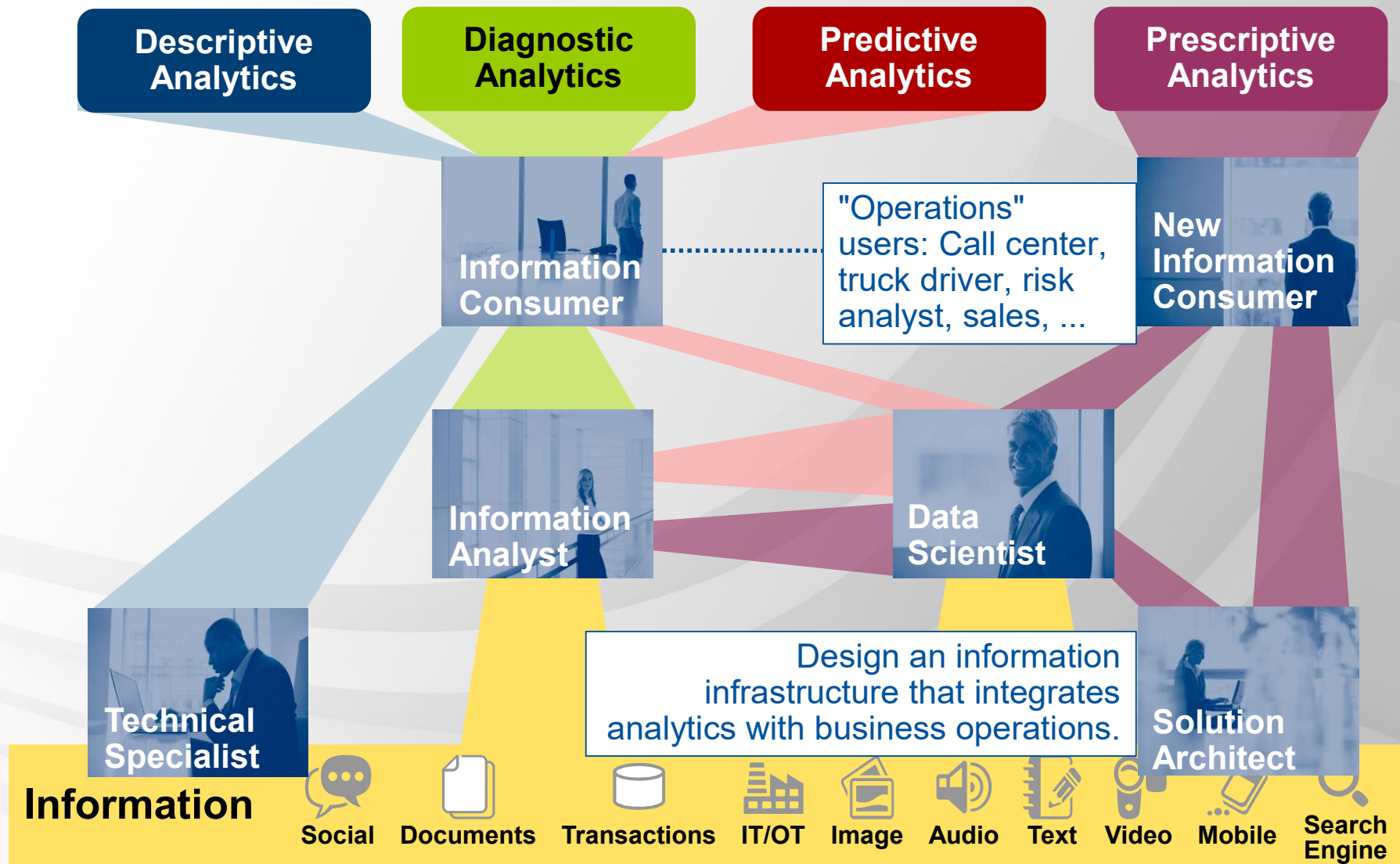
Key Personas in the Analytics Continuum



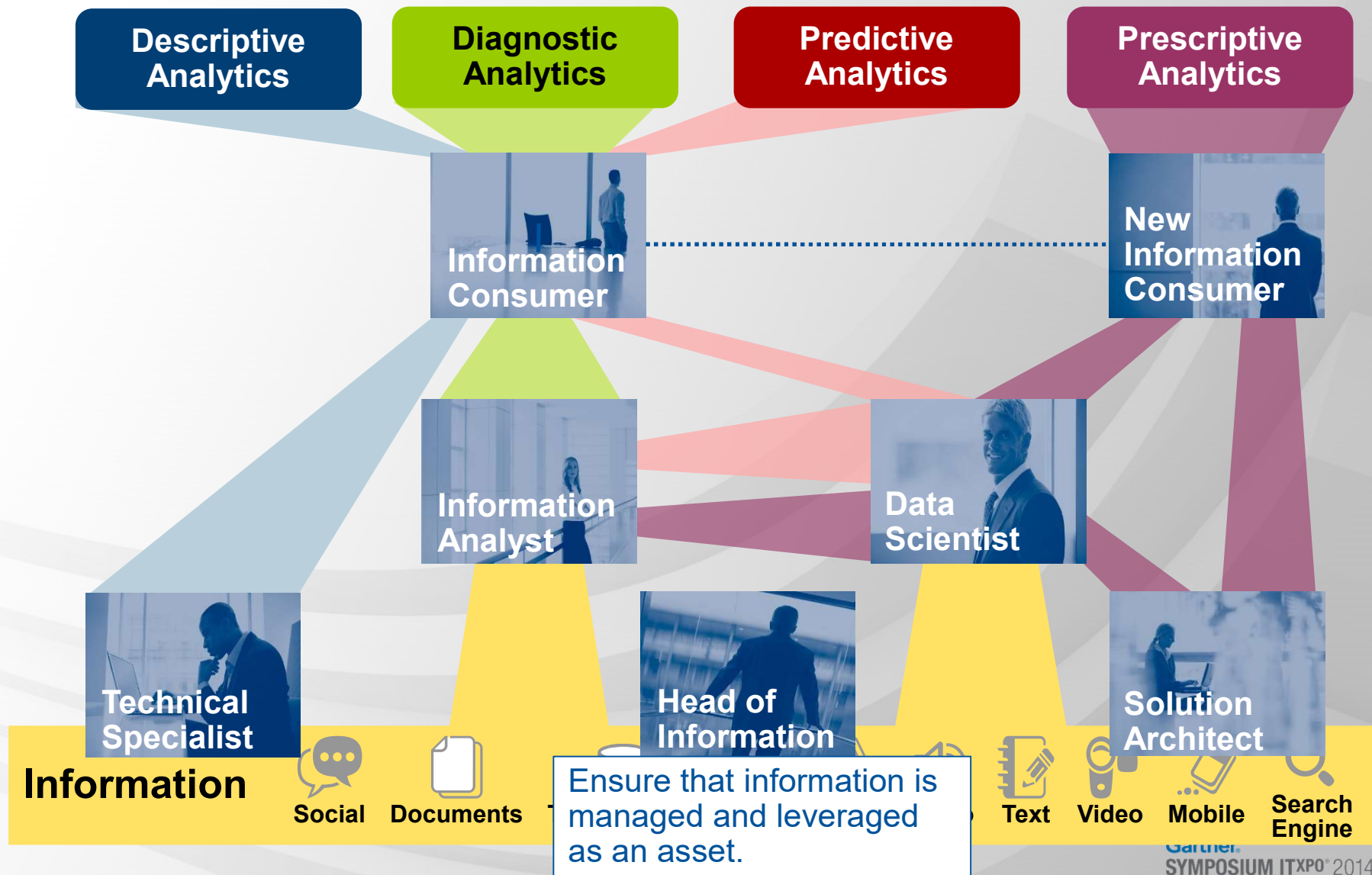
Key Personas in the Analytics Continuum



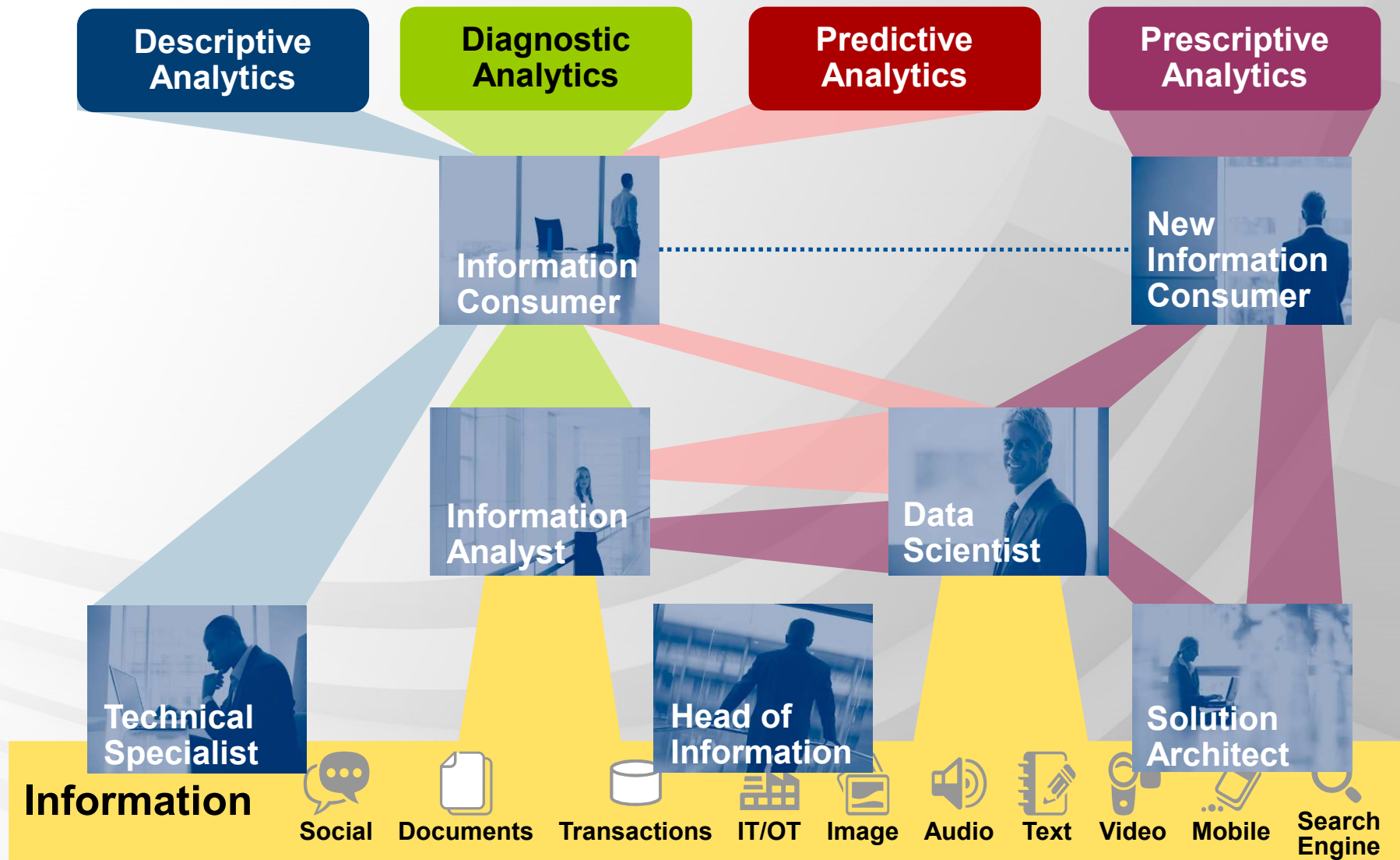
Key Personas in the Analytics Continuum



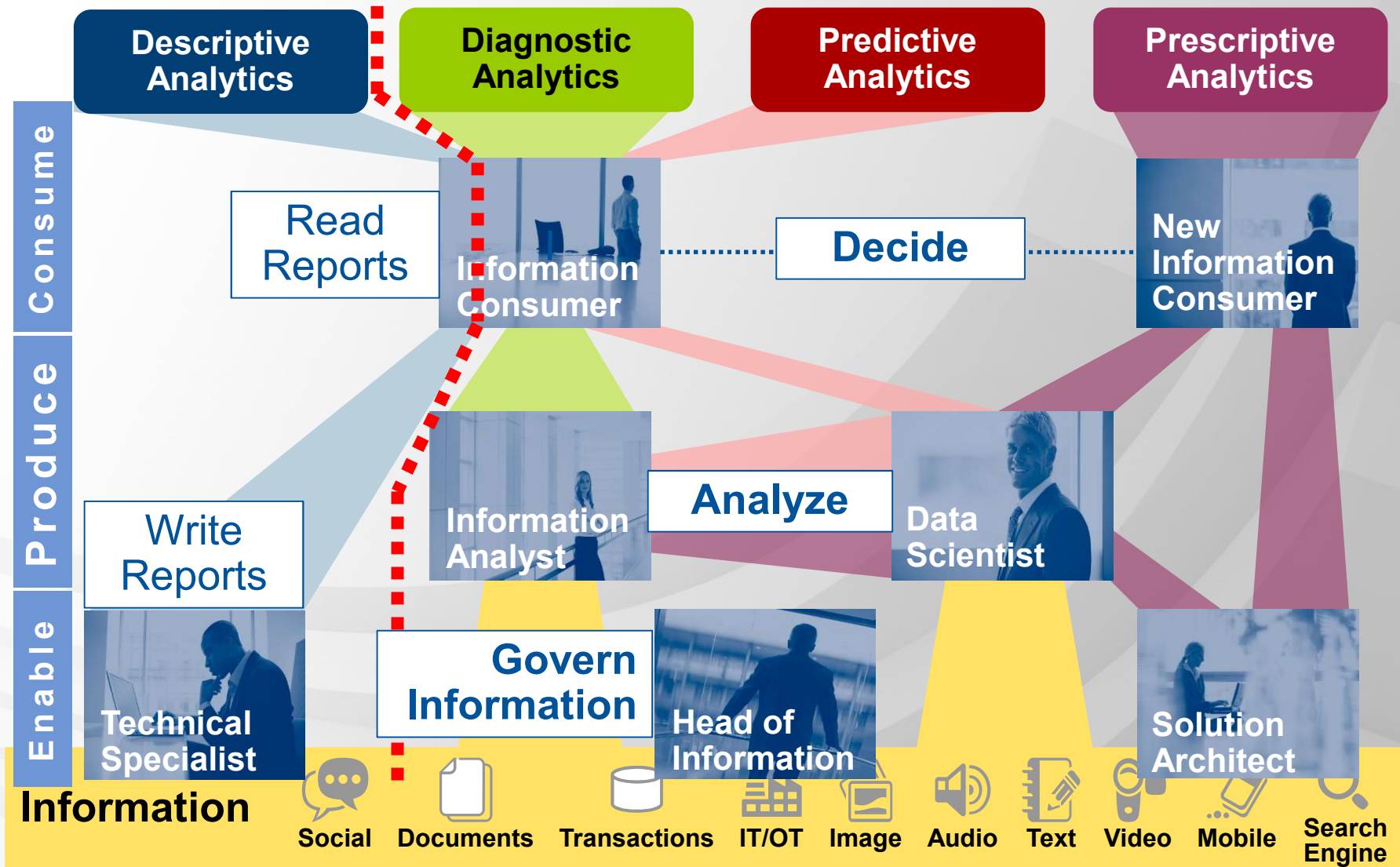
Key Personas in the Analytics Continuum



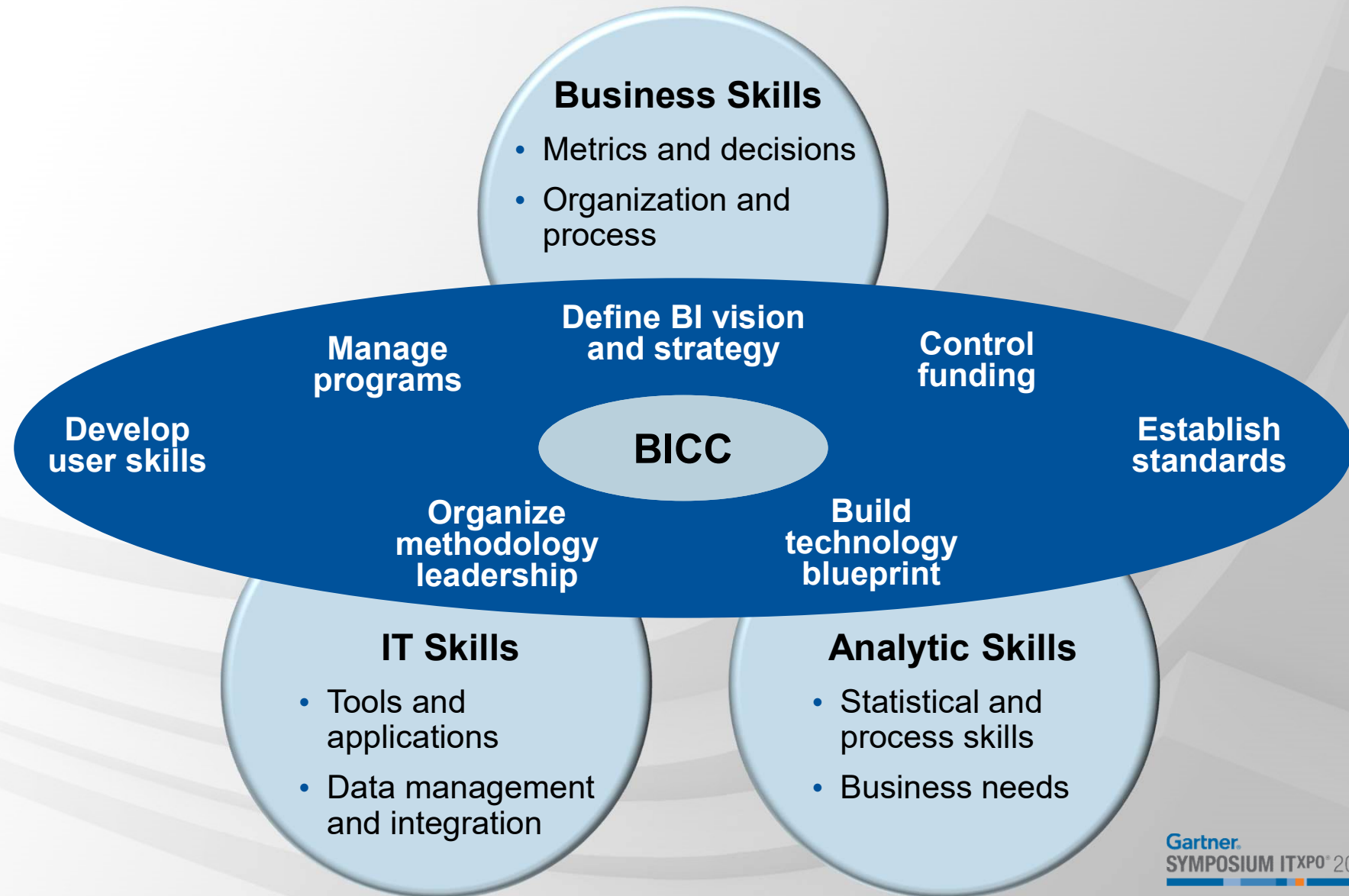
Key Personas in the Analytics Continuum



Key Processes in the Analytics Continuum



Integrate Essential BI Competencies and Skills With a BI Competency Center



Cross-functional BI Teams!



To deal with new realities, to
satisfy new appetites and
decide which new
approaches to take.





But you must choose ...

New Approach:
Be Entrepreneurial.
Market Analytics.

Fast Forward

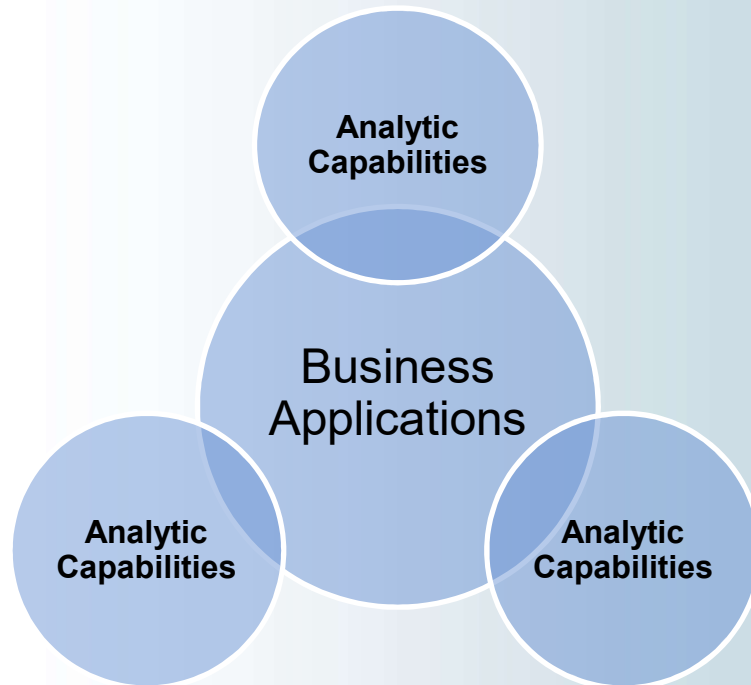
- ▶ Rethink your information
- ▶ Be experimental and change-ready
- ▶ Broaden analytical architectures
- ▶ Market analytics

The BA Strategy Building Blocks

Data	People	Process	Technology
			
Establish the Enterprise Information Management (EIM) Foundation	Shift Focus From IT Centric to Business Centric	Understand Where You Are	Assess New Technologies Proactively
Implement Master Data Management (MDM)	Plan for Changing Roles and Skill Sets	Measure and Communicate the Value of Business Analytics	Assess User Needs and Expectations
Assess and Address Changing Data Needs	Balance Business and IT Skills and Resources	Establish Process for the MDM Program	Design and Build a Flexible Data Strategy and Architecture
	Sustain an Ongoing Partnership Between the Business and IT	Consistently Support an Analytical Culture at All Levels	Architect and Build a Flexible Business Analytics Tool Environment

Analytics at the Core of Business and IT

Applications-
centered today



Business analytics-
centered tomorrow



The Connection of Information: Algorithm-Centricity

The End of BI

The Beginning of AI

Key Issues

1. How are big data and analytics used for sales and marketing?
2. How are big data and analytics used for operational and financial performance?
3. How are big data and analytics used for other innovative purposes?

Promoting Embedded Real-time Analytics

- Opportunity:
 - Improve performance of promotion offerings
- Data and Analytics:
 - New service delivery platform developed by IBM and Nokia integrating customer and retailer data with real-time promotional analytics and incentive payments
- Results:
 - 600% increase in promotional sales
 - 95% reduction in time and cost of developing new promotions (10 months to less than a week)
 - Ability to drive revenue from hundreds of simultaneous targeted promotions
 - Increased market share via improved customer experience and effective campaigns



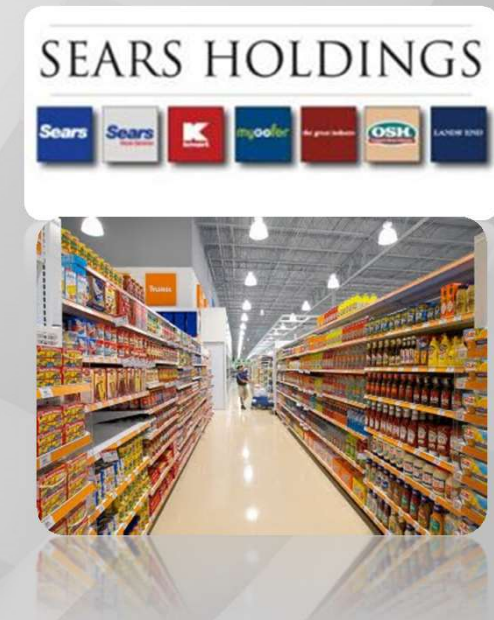
Banking on Knowing and Engaging Your Customers Better

- Opportunity:
 - Actively engaging a greater number of customer to ensure their satisfaction and retention
- Data and Analytics:
 - Capturing and centralizing customer activity of 12M customers, including bank website browsing history, ATMs usage, call center, and so on.
 - Matching behavior versus dozens of offerings and potential acceptance using SAS
- Results:
 - Launched "KnowMe" program to engage customers
 - Grew customer engagement (offers presented) from less than 1% to 25% of customers
 - Recommends nearby Westpac ATMs to save money when customer regularly uses another ATM



Stretching Analytic Performance to Measure Price Elasticity

- Opportunity:
 - Business lacking the ability to react to market conditions and new product launches
- Data and Analytics:
 - 8.9B sales line items, 1.4B SKUs, 1.8B rows of inventory, 3,200 stores
 - Entire solution moved from mainframe to Hadoop
 - Calculating store-item price elasticity over 12.6B parameters
- Results:
 - Price elasticity now measured weekly against all data instead of quarterly against a subset
 - \$600K annual savings; 6,000 lines of batch code reduced to 400 lines of PIG



Reaping What You Sow From Analytics

- Opportunity:
 - Maximize revenue from direct mailings
- Data and Analytics:
 - Thousands of agricultural products, 1,200 retail locations, and 300,000 farms across 23 states
 - Sophisticated optimization and spatial analytics without writing any code or exporting/importing data using Alteryx
- Results:
 - Improved understanding of customer needs
 - Reduced number of catalogs by 63% while improving response rate by 34%
 - Improved gross margin by 24%



The Search Is Over for Online Shoppers

- Opportunity:
 - Help online users to find what they're looking for more quickly
- Data and Analytics:
 - Product and category popularity scores are generated from social media feeds using text mining
 - Machine learning-based semantic search capability from the clickstream of 45M online shoppers per month
- Results:
 - Project "Polaris" search engine
 - 10% to 15% increase in online shoppers completing a purchase (reduction in cart abandonment)

@WalmartLabs



Banking on Big Data

- Opportunity:
 - Better determine borrower credit worthiness
 - Offer loans to underserved and higher risk segments
- Data and Analytics:
 - IBM Watson "hired" as Citi financial advisor.
Uses comprehensive analysis of market conditions, the client's past decisions, recent life events, and available offerings
 - Other new lenders analyze 1,000s of indicators including email response rates, LinkedIn interaction, Twitter activity, customer interaction on Facebook, and so on.
- Results:
 - Better prediction of loan defaults and fraud than standard credit scores
 - Improved margins
 - New loan products and customers



A Spoonful of Analytic Culture

- Opportunity:
 - hypercompetitive Greek yogurt market
- Data and Analytics:
 - Moved from cumbersome, inaccurate, and time-consuming spreadsheet-driven forecasting process to analytic software from M-Factor (now IBM)
 - Integrates historical, regional, and market data with pricing conditions, target customers, promotional information to generate expected base sales versus incremental promotional sales
- Results:
 - More time for executing sales plans and engaging customers
 - Improved forecast accuracy from 70% to 98%
 - Tripled Greek yogurt market share via regional and category price sensitivity analytics



Screening Those Not Just Watching Screens

- Opportunity:

- 800% growth in TV commentary online
- 40% of people who own tablets or smartphones use them while watching TV

- Data and Analytics:

- Enhanced Nielsen ratings data with Twitter data
- SocialGuide captures and classifies tweets for 234 English and Spanish channels and 36,000 programs

- Results:

- Improve ability to capture viewers attention for more than a 30-second spot or 30-minute show
- Get viewers to take action regarding a brand
- A new information product that measures the viewer engagement of broadcasters' programming



Dark Data Shedding Light on Retail Space Optimization

- Opportunity:

- Improve in-store customer experience
- Data and Analytics:
 - Historical video feeds from existing security cameras
 - Video analytics and visualizations from Prism Skylabs to understand shopper profiles (e.g., sex and estimated age) and shopping traffic patterns

- Results:

- Heat maps identified customer wait times, enabling the businesses to improve store flow
- Optimized relative product placement
- Improved employee assignments and scheduling improve customer service levels



Key Issues

1. How are big data and analytics used for sales and marketing?
2. How are big data and analytics used for operational and financial performance?
3. How are big data and analytics used for other innovative purposes?

Blowing Away Previous Wind Turbine Modeling Capabilities

- Opportunity:
 - Precise placement of wind turbines affects performance and useful life and energy costs
- Data and Analytics:
 - 10x increase in breadth (178 parameters) and history (18 to 24 *petabytes*) of weather data, including temperature, barometric pressure, humidity, precipitation, wind direction, and velocity from 0 to 300 feet altitude
 - Supercomputing-based analytics from IBM enables 10 sq. meter grids versus 27 sq. km grids previously modeled
- Results:
 - Reduced wind forecast modeling by 97% (3 weeks to 15 minutes) to pinpoint optimal placement of each turbine
 - 1 month faster turbine site development (1 turbine installed every 3 hours)
 - Reduced energy costs to utilities and consumers



Predictive Policing

- Opportunity:
 - Increase Los Angeles police presence where it's most likely needed
- Data and Analytics:
 - PredPol applies models for predicting earthquake aftershocks to historical crime data and other factors
- Results:
 - Predicted twice as many crimes as experienced crime analysts in controlled trials
 - 33% reduction in burglaries and 21% reduction in violent crimes in test region of Los Angeles, compared to a slight increase in the rest of the city



Big Data and Analytics Are Cool

- Opportunity:
 - Optimizing food refrigeration costs
- Data and Analytics:
 - Collaborated with refrigeration manufacturers to feed refrigeration data from in-store controllers to a dedicated data warehouse
 - 70M refrigeration-related data points per store each year; readings every 3 seconds
 - Analyzes performance of refrigerators using IBM's SPSS and overlays this on a Google Map
- Results:
 - Up to 20% energy cost savings (€20M annually)
 - Reducing maintenance by proactively addressing imminent refrigeration problems



Driving Performance by Packaging Instrumentation With Analytics

- Opportunity:
 - Improving driver safety and efficiency
- Data and Analytics:
 - Telematics sensors in 46,000+ vehicles capturing speed, direction, braking, drive train, RPM, oil pressure, shifting, idling time, seatbelt use, and 200 other data points including geographic and map data
 - Algorithms to determine the truck's performance and condition, recommend driving adjustments
- Results:
 - ORION (On-Road Integrated Optimization and Navigation) system saves 8.4M gallons of gasoline per year, and reduced maintenance and accidents by cutting 85M miles off daily routes and a 25% reduction in reversing trucks
 - Improved customer service



Cutting the Number of Cut Credit Cards

- Opportunity:

- Prevent corporate credit card customers from canceling

- Data and Analytics:

- Replace static business rules such as "declining use" with more sophisticated predictive models using IBM's SPSS
 - 40 predictive models analyzing 18 months of historical transactions and 115 variables including: The customer's industry, annual revenue, number of merchants paid, number of corporate credit cards and charge points
 - Vendor-supplied and internal data including hundreds of millions of records in its SAS data warehouse

- Results:

- Identifies 24% of Australian corporate accounts that will close within 4 months
 - Increases the amount of time to intervene and save the account



Police Predict Predator's Position

- Opportunity:

- Increase the speed of Swedish police investigations

- Data and Analytics:

- Communication behavior from phone calls in combination with crime statistics, weather, day of week, and city events

- Analyzed data from over 500,000 interrogations, evidence, and background info. using QlikView

- Results:

- Reduced 9 months of manual analysis to *3 minutes* of automated analytics
 - Helped locate a serial killer in the city of Malmö by calculating the time and location of the next shooting
 - 6.7M krone reallocated from administration to law enforcement



Rikspolisstyrelsen



Harvesting Optimum Product Configurations

- **Opportunity:**
 - High inventories, planning cycles, lead times, and production costs for manufacturing agricultural equipment
- **Data and Analytics:**
 - Manufacturing, sales, and inventory data
 - Thousands of configuration options of varying popularity and margin
 - Pattern analysis from Emcien to identify base configurations and real-time customer demand
- **Results:**
 - Reduced product variety by 61% and days of inventory by 81%; maintained service levels
 - 25% increase in plant capacity



Sniffing and Snuffing Insurance Fraud

- Opportunity:
 - Save and make money by reducing fraudulent auto insurance claims
- Data and Analytics:
 - Predictive analytics against years of historical claims and coverage data
 - Text mining adjuster reports for hidden clues, e.g., missing facts, inconsistencies, changed stories
- Results:
 - Improved success rate in pursuing fraudulent claims from 50% to 88% and claim investigation time by 95%
 - Additional \$12M in subrogation recoveries
 - Marketing to individuals with low propensity for claim fraud



Does This Data Make My Buns Look Good?

- Opportunity:
 - Move from manual to automated inspection of burger bun production to ensure and improve quality
- Data and Analytics:
 - Photo-analyze over 1,000 buns per minute for color, shape, and seed distribution
 - Continually adjust ovens and process automatically
- Result:
 - Eliminate 1,000s of pounds of wasted product per year
 - Speed production; save energy
 - Reduce manual labor costs



Key Issues

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Keeping Cousins From Kissin' (or Worse)

- Opportunity:

- Reduce the number of "hook-ups" between close cousins in Iceland

- Data and Analytics:

- *The Íslendingabók* database traces family lineage of 720,000 current and deceased Icelandic natives
- Mobile *ÍslendingaApp* app that allows trawling Icelanders to bump phones together to see how closely they're related

- Results:

- 4.6/5.0 rating app store rating
- Actual tagline: "*Bump the app before you bump in bed.*"
- Potential to reduce birth defects ... and uncomfortable family gatherings

ÍSLENDINGABÓK

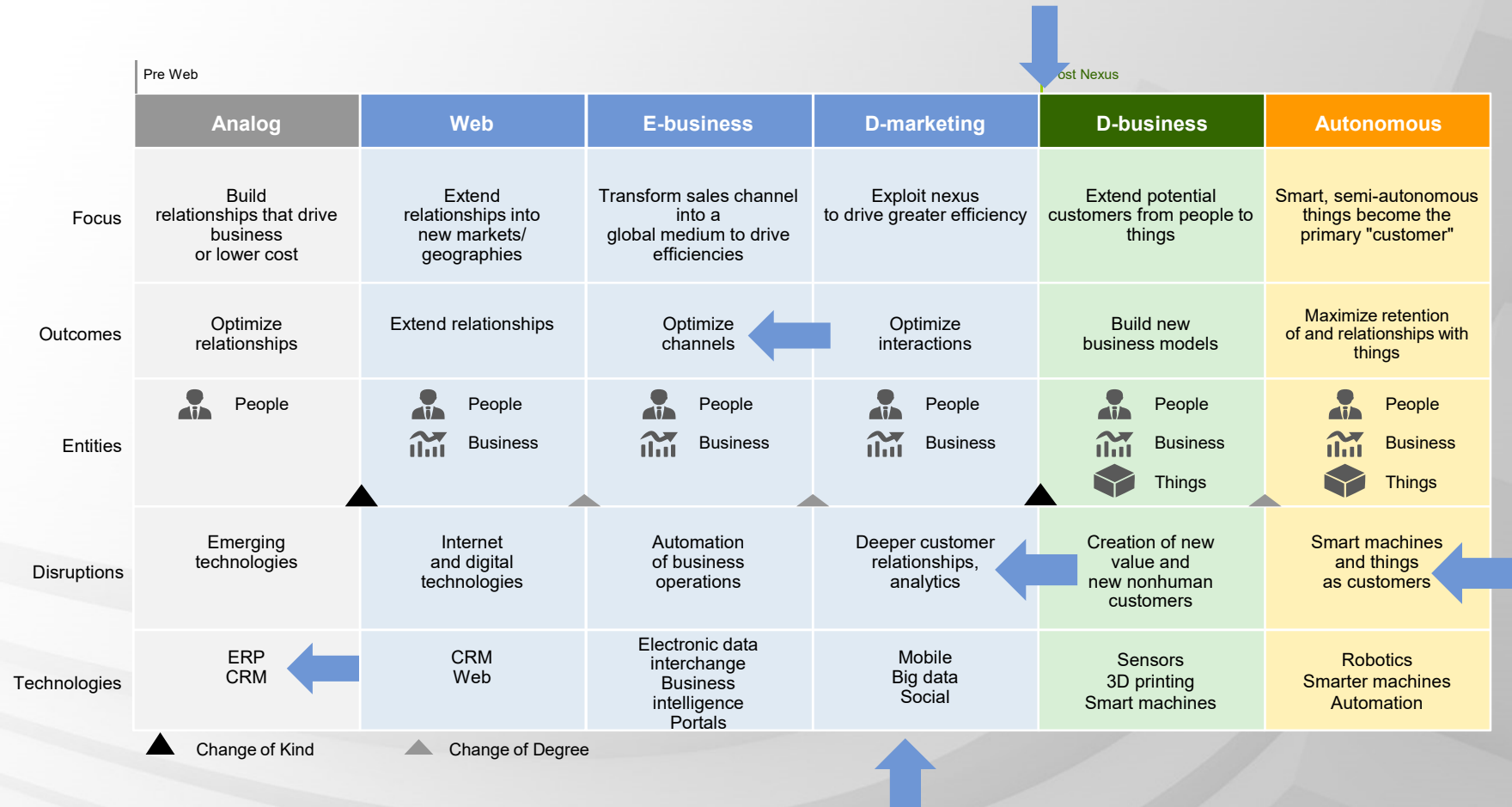


And the Award for Best Writer, Director, and Producer Goes to ... Us All

- Opportunity:
 - Produce entertainment content that optimizes interest, buzz, appeal, membership, and viewership
- Data and Analytics:
 - 25M users; 30M plays/day (incl. rewinds, fast forward, and pauses); 1B hours of streaming video watched per month; 4M ratings/day; 3M searches/day
 - Geo-location, time, and device information
 - Integrated Nielsen ratings and social media data from Facebook and Twitter
- Results:
 - Developed plot adaptation, scenes, colors, and selected actors for its "House of Cards" series
 - Committed \$100M for two full seasons of the show



The Journey Onward to Digital Business



Top Technology Priorities, Latin America vs. Global 2015

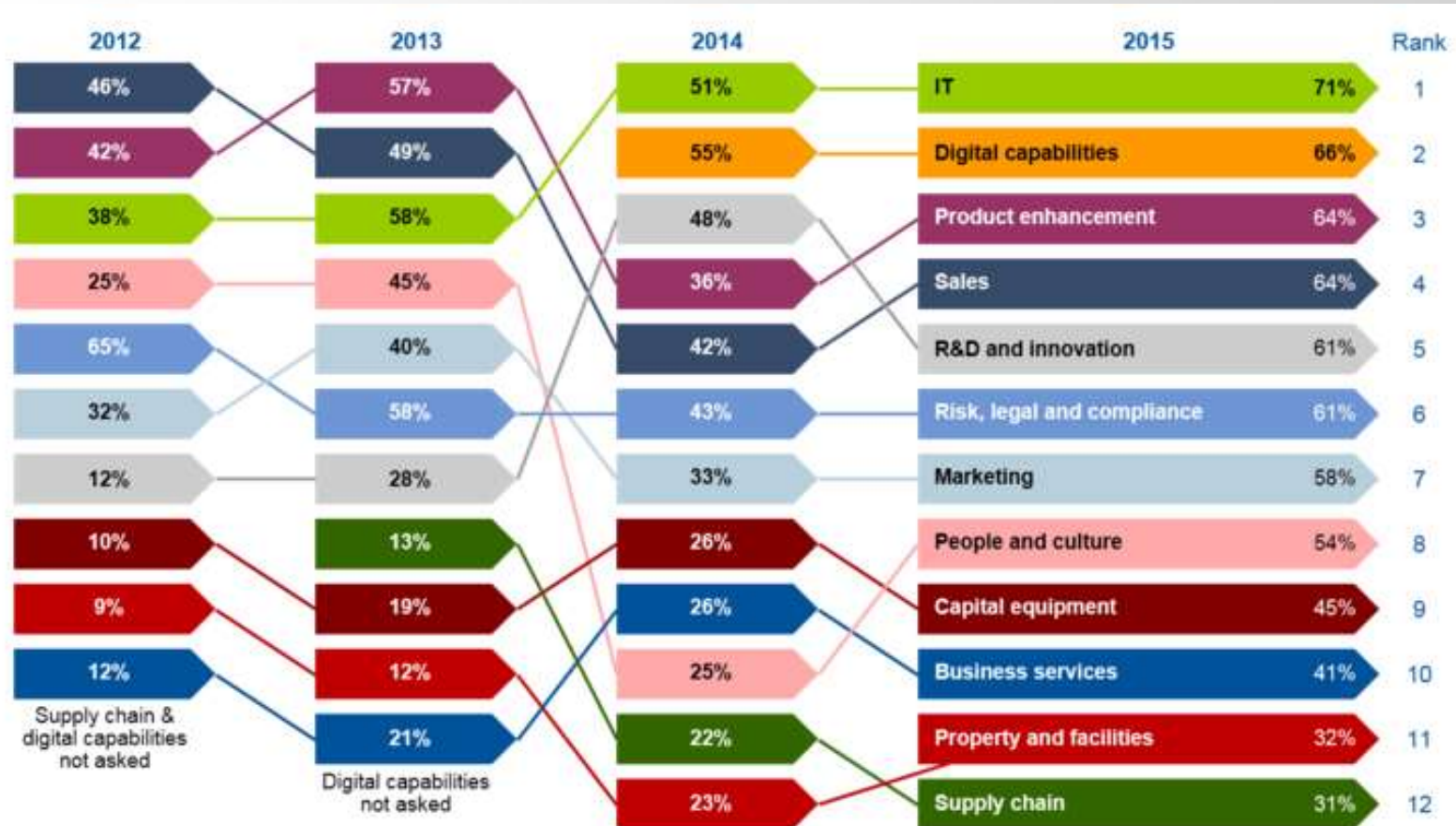
Latin America

1. Infrastructure and Data Center
2. BI/Analytics
3. ERP
4. Cloud
5. Mobile
6. Networking, Voice and Data Communications
7. Digitalization/Digital Marketing
8. Security
9. Application Development
10. IT Services/Automation
11. Enterprise Applications
12. CRM

Global

1. BI/Analytics
2. Infrastructure and Data Center
3. Cloud
4. ERP
5. Mobile
6. Digitalization/Digital Marketing
7. Security
8. Networking, Voice and Data Communications
9. CRM
10. Industry-Specific Applications
11. Legacy Modernization
12. Enterprise Applications

CEO Investment Areas



How will your organization's investment change in the next fiscal year?

n (2015) = 107



**Two roads diverged in a wood, and I,
I took the one less travelled by,
And that has made all the difference.**

— Robert Frost

Recommended Gartner Research

- [Toolkit: Big Data Business Opportunities From Over 100 Use Cases](#)
Frank Buytendijk, Lisa Kart, and others (G00252112)
- [Toolkit: Board-Ready Slides on Big Data Trends and Opportunities](#)
Hung LeHong, Douglas Laney (G00238695)
- [Big Data Strategy Components: IT Essentials](#)
Douglas Laney (G00238944)
- [Big Data Strategy Components: Business Essentials](#)
Douglas Laney (G00234882)

For more information, stop by Gartner Research Zone.

Recommended Gartner Research

- [Predicts 2013: Information Innovation](#)
Douglas Laney, Andreas Bitterer, and others
(G00246040)
- [Emerging Role of the Data Scientist and the Art of Data Science](#)
Douglas Laney, Lisa Kart (G00227058)
- [Maverick* Research: The Birth of Infonomics, the New Economics of Information](#)
Douglas Laney (G00239784)
- [A Framework for Evaluating Big Data Initiatives](#)
Svetlana Sicular (G00246250)

For more information, stop by Gartner Research Zone.

Recommended Gartner Research

- [Predicts 2015: Power Shift in Business Intelligence and Analytics Will Fuel Disruption](#)
Josh Parenteau and Others (G00270932)
- [Magic Quadrant for Business Intelligence and Analytics Platforms](#)
Rita L. Sallam, Bill Hostmann and Others (G00270380)
- [Market Share Analysis: Business Intelligence and Analytics Software, 2013](#)
Dan Sommer and Bhavish Sood (G00263514)
- [Create a Centralized and Decentralized Organizational Model for Business Intelligence](#)
Kurt Schlegel and Others (G00261728)
- [Business Intelligence Teams Need to Change With the Times](#)
Alan D. Duncan (G00270899)

For more information, stop by Gartner Research Zone.

Recommended Gartner Research

- ▶ [Create a Centralized and Decentralized Organizational Model for Business Intelligence](#)
Kurt Schlegel, Frank Buytendijk and Dan Sommer (G00261728)
- ▶ [Extend Your Portfolio of Analytics Capabilities](#)
Lisa Kart, Alexander Linden and W. Roy Schulte (G00254653)
- ▶ [Redefine, Reorganize, Revamp and Rebrand Your BICC to Shift Focus to Analytics](#)
Josh Parenteau and Ehtisham Zaidi (G00270091)
- ▶ [The Gartner Business Value Model: A Framework for Measuring Business Performance](#)
Michael Smith and Paul E. Proctor (G00249947)

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Related Gartner Research

- ➔ **Magic Quadrant for Business Intelligence Platforms**
Rita Sallam, James Richardson, John Hagerty
(G00225500)
- ➔ **Gartner's Business Analytics Framework**
Neil Chandler, Bill Hostmann, Nigel Rayner,
Gareth Herschel (G00219420)
- ➔ **Eight Steps to Foster the Creation of a Business Intelligence Competency Center**
Daniel Yuen (G00214920)
- ➔ **ITScore for Business Intelligence and Performance Management**
Bill Hostmann and John Hagerty (G00205073)