

BA 101 presentation

- Purpose:** The purpose of the BA deck is to:
- Drive a sense of urgency for why analytics, why now
 - Communicate IBM's POV on infusing analytics into the fabric of an organization
 - Communicate the breadth of IBM's BA offerings, within a framework that keeps it simple
 - Show why we are superior to the competition
 - Provide a consistent way for presenting the BA portfolio
- Audience:** As this deck will represent a standard "stump speech" it should be consumable by a broad set of roles:
- CEO, CFO, CRO, CMO, COO
 - Mid-level LOB leaders
 - IT
- Usage:** The usage of this deck would be client-facing meetings or events where an introduction to IBM's BA portfolio is required. In-depth decks (BA 201) would ladder down from this, going to the next level of detail.

REMOVE THIS SLIDE FOR EXTERNAL PRESENTATIONS

September 6, 2012

Outperform with IBM Business Analytics



Today's organizations are facing many **DISRUPTIVE FORCES** fueling the need for analytics

1 The emergence of big data

Creating new opportunities to capture meaningful information from new varieties of data and content coming at organizations in huge volumes and at accelerated velocity



2 The shift of power to the consumer

Creating the need for organizations to understand and anticipate customer behavior and needs based on customer insights across all channels



3 Accelerating pressure to do more with less

Creating the need for all parts of the organization to optimize all of their processes to create new opportunities, to mitigate risk, and to increase efficiency



The pressures on organizations are at a point where analytics has evolved from a business initiatives to a **BUSINESS IMPERATIVE**

More organization are using analytics to create a competitive advantage

Respondents who believe analytics creates a competitive advantage



Source: The New Intelligent Enterprise, a joint MIT Sloan Management Review and IBM Institute of Business Value analytics research partnership. Copyright © Massachusetts Institute of Technology 2011

And leaders are outperforming their competitors in key financial measures

1.6x Revenue Growth

2.0x EBITDA Growth

2.5x Stock Price Appreciation

Source: *Outperforming in a data-rich, hyper-connected world*, IBM Center for Applied Insights study conducted in cooperation with the Economist Intelligence Unit and the IBM Institute of Business Value. 2012

ANALYTIC-DRIVEN ORGANIZATIONS are distinguished by their ability to leverage ...

All information

- All information
- Transaction data
- Application data
- Machine data
- Social data
- Enterprise content

All perspectives

- Past (historical, aggregated)
- Present (real-time)
- Future (predictive)



All people

- All departments
- Experts and non-experts
- Executives and employees
- Partners and customers

All decisions

- Major and minor
- Strategic and tactical
- Routine and exceptions
- Manual and automated

...and focusing on high-value initiatives in core **BUSINESS AREAS****1****Customers**

Examples:

- Advanced client segmentation
- Leveraging customer sentiment analysis
- Reducing customer churn

2**Finance**

- Enabling rolling plan, forecasting and budgeting
- Automating the financial close process
- Delivering real-time dashboards

3**Risk**

- Making risk-aware decisions
- Managing financial and operational risks
- Reducing the cost of compliance

4**Operations**

- Optimizing the supply chain
- Deploying predictive maintenance capabilities
- Transform thread & fraud identification processes



CUSTOMER ISSUES & CHALLENGES

Decreasing Loyalty

Consumerization of IT

Intensifying Competition

Social Networking

Soaring Customer Expectations

Increasing Transparency

Globalization

Channel Proliferation and Complexity

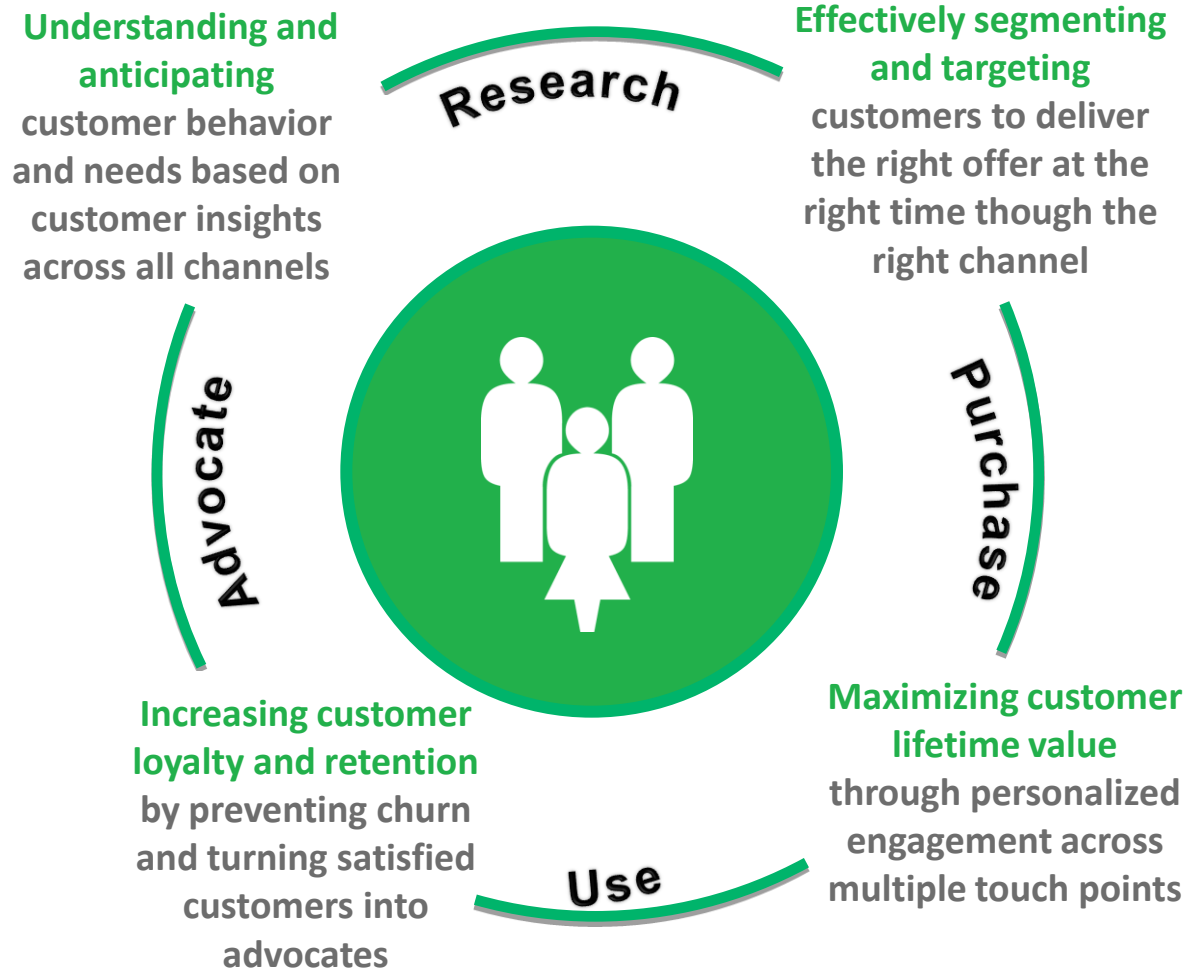
Mobile Commerce

Shrinking Wallet Share





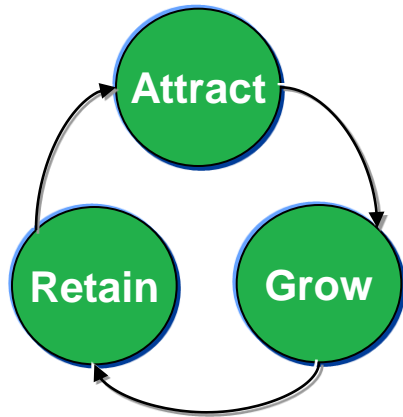
In this **ERA of the EMPOWERED CONSUMER**, organizations are focused on optimizing the customer experience





IBM solutions enable organizations to **ATTRACT, GROW** and **RETAIN CUSTOMERS**

Customer Analytics Solutions



Attract

- Reduce wasted acquisition costs due to improved segmentation
- Deliver the right message at the right time and through the right channel

Grow

- Analyze and predict trends in behavior and sentiment to cross-sell/up-sell
- Collect all data regardless of format & location to create 360° customer view

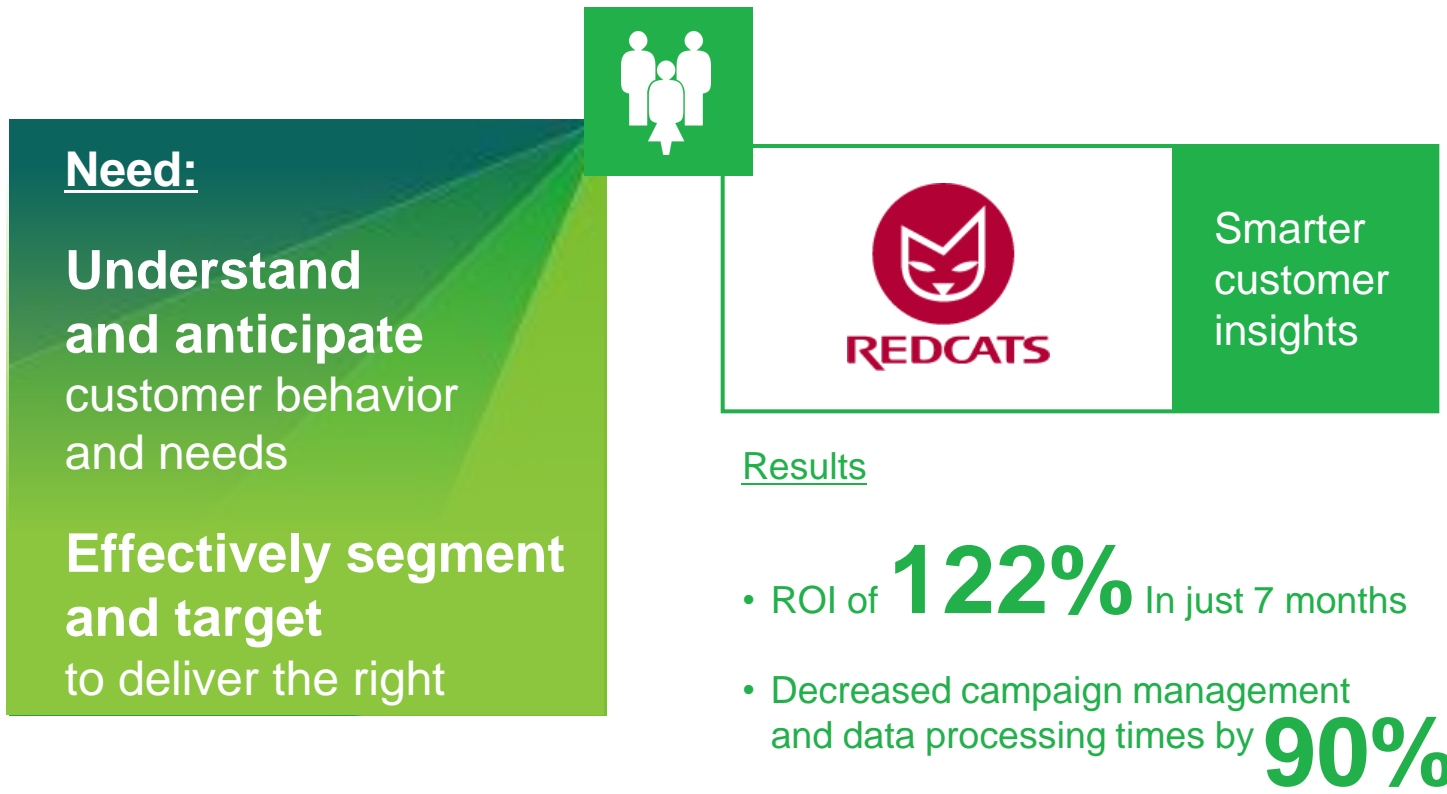
Retain

- Detect customers at risk of churning, deliver right offer to make them stay
- Identify full & near advocates, develop nurture communications strategy





Outperforming organizations attract, grow and retain **customers**





COMPARISON: Customer Analytics



SAS

Oracle



Capture

Coherent, 360° View of the Customer

- Collect voice of the customer through survey research
- Data mining and preparation across all customer data silos
- Social media monitoring and analysis



Analyze

Comprehensive Analysis for Actionable Insight

- Powerful, yet easy to use predictive modeling workbench
- Rapid, accurate insights and predictions – regardless of where the data resides
- Complete analysis of all data formats



Act

Deliver Next Best Action at Point of Impact

- Combine predictive models, business rules, and optimization for best of breed solution
- Personalize every customer interaction in real-time by embedding into operational systems
- Measure and share performance across the organization





FINANCE ISSUES & CHALLENGES

Volatility

Expense

Risk **Growth**

Reporting

Forecasting

Cash Flow

Shareholders

Revenues

Regulation

Transparency

Uncertainty

Working Capital

Capital

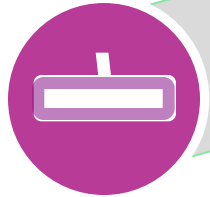
Profitability

Variability





As finance evolves, organizations need to understand **WHAT** happened, **HOW** they are doing, and **WHAT** the future may hold



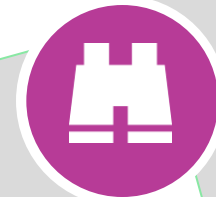
WHAT HAPPENED?

- Balance sheet, profit and loss, and cash flow statements
- Revenue and cost variance analysis



HOW ARE WE DOING?

- Customer and product profitability
- Spend optimization
- Working capital analysis
- Market, customer, & channel pricing
- Sales and supply chain effectiveness



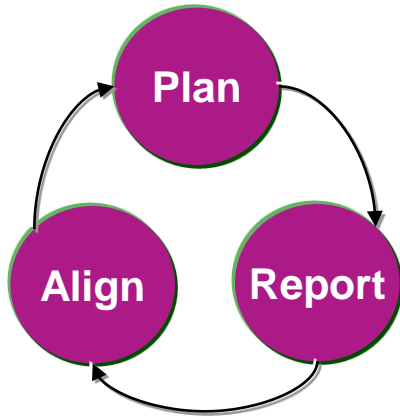
WHAT WILL HAPPEN NEXT?

- Cash forecasting
- Scenario-based planning and forecasting
- Strategic investment decision support
- Volatility and risk-based predictive and behavioral modeling



IBM solutions help organizations **TRANSFORM financial PROCESSES** and drive improved performance

Finance Solutions



Plan

- Improve visibility with driver-based and predictive forecasts
- Rapidly adjust and realign resources

Report

- Deliver fast, reliable performance reports and analysis
- Automate financial close process
- Meet new disclosure and filing mandates (XBRL)

Align

- Define, measure, and adjust strategy with metrics
- Deliver engaging, up-to-the-minute dashboards





Outperforming organizations transform processes in **finance**



Need:
Make better
capital investments

Lower
accounts receivable



Smarter
financial
planning

Results:

- Saved **4%** of cost of goods
- Saved over **40 million** miles in transportation costs



COMPARISON: Financial Analytics



Oracle

SAP



Time

Drive efficiencies and scale

- Eliminate intensely manual efforts
- Structure and automate dynamic processes
- Scale to large user communities and data sets



Control

Gain agility and preparedness

- Link operational and financial performance management
- Support advanced analytic techniques (e.g., scenario and predictive analytics, narrative performance reporting)
- Eliminate delays in coordinating around to emerging realities



Confidence

Improve effectiveness and outcomes

- Dramatically reduce risk of errors
- Cost-effectively address compliance
- Drive new confidence in analytics-driven decision making





RISK ISSUES & CHALLENGES

Increased regulatory oversight

Liquidity

Risk information silos

Basel III

Solvency II

Risk exposure

Risk Convergence

Rogue trading

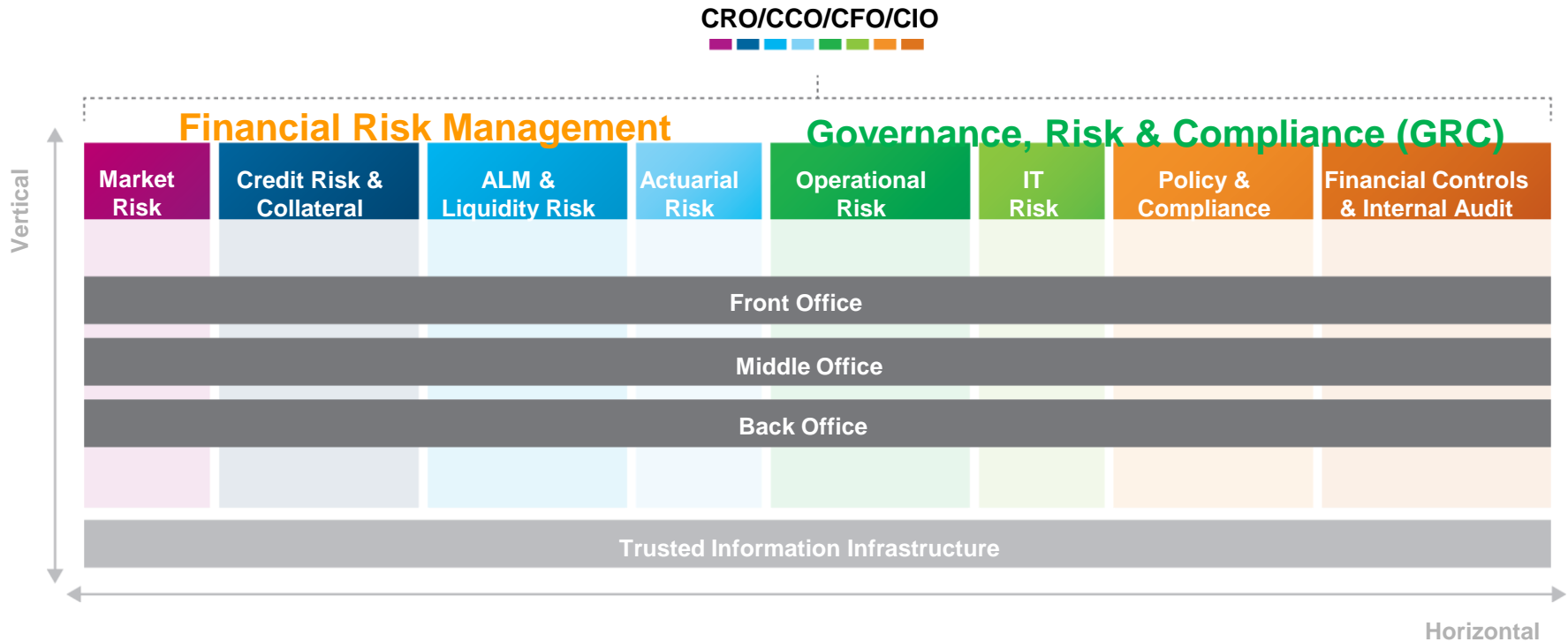
Dodd-Frank

Capital charges





Firms are looking to optimize business outcomes through horizontal and vertical **RISK INTEGRATION**



Horizontal integration to integrate “silos” and enable a comprehensive view of risks across firms

Vertical integration linking risk management to business processes



IBM Risk Analytics solutions help address today's risk management challenges

Financial Risk

Understand the impacts and act on financial uncertainty and exposure across your business including: Market Risk; Credit Risk and Collateral; ALM & Liquidity Risk; Capital Management and Actuarial Risk.

IT Governance and Risk

Sustain compliance across multiple IT best practice frameworks and understand the impact of IT risk, threats and vulnerabilities to the business processes they support.



Operational Risk

Manage operational risk to improve visibility into risk exposure across the enterprise, reduce unexpected losses and improve business performance.

Regulatory Compliance

Manage regulatory change and provide senior management with confidence that regulatory compliance is achieved, risks are mitigated and corporate policies are enforced.



IBM Risk Analytics Solutions enable **RISK-AWARE business DECISIONS** and **improved compliance management**

Risk Solutions

Financial Risk: Sell Side (Banks and Financial Markets)

- Strategic Business Planning
- Balance sheet risk management
 - ALM & liquidity risk
 - Regulatory & economic capital
- Credit lifecycle management
- Integrated market and credit risk
 - Counterparty credit risk & CVA
 - Collateral management
- Integrated Financial Reporting & Analysis

Financial Risk: Buy Side (Asset Owners, Servicers and Managers)

- Portfolio construction and risk management for investment portfolios
- Economic Capital & Solvency II
- Actuarial and financial modeling

Governance, Risk & Compliance (GRC)

- Operational risk management
- Loss event case studies & database
- Governance and IT risk
- Policy and compliance management
- Enterprise disclosure management
- Financial controls management
- Internal Audit

FRM Sell Side	FRM Buy Side
GRC Operational Risk IT Governance & Risk Regulatory Compliance	





Outperforming organizations manage regulatory compliance and **risk**



Need:

**Identify
and manage**
risk sooner

Improved
trading decisions

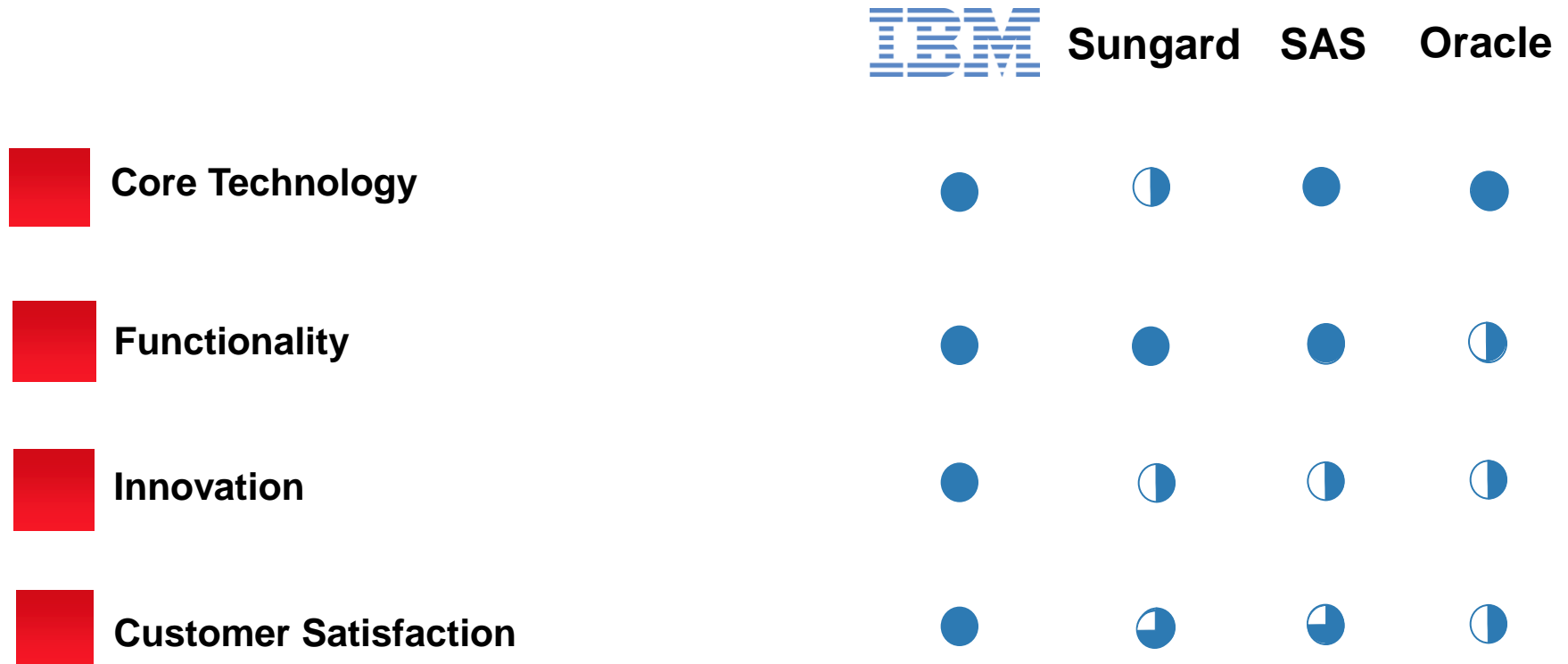
 **Scotiabank™** Smarter risk management

Result:

- **70%** of counterparty exposure measurements changed by **20%** or more



COMPARISON: Risk Analytics



See Chartis RiskTech 100 Vendor Rankings, 2011 for additional information

[Access the Chartis RiskTech100 report here \(PDF, 413KB\)](#)



OPERATIONAL ISSUES & CHALLENGES

Demand Shaping **Fraud** **Assets** **Processing**
Inventory **Real-time** **Improvement** **Waste**
Abuse **Sustainability** **Supply** **Price Volatility**
Efficiency **Costing** **Variability** **Optimization**
Compliance

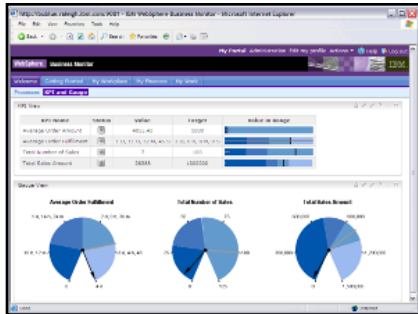




Operational visibility paired with performance optimization and analytics is driving new levels of **DYNAMIC DECISION MAKING**

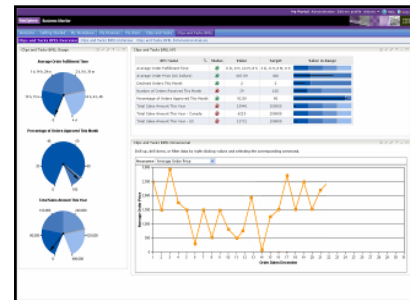
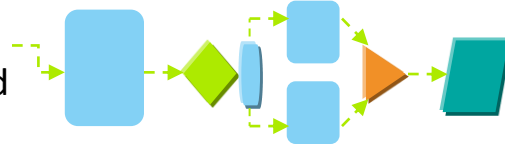
**OPERATIONAL
VISIBILITY**

**PERFORMANCE
OPTIMIZATION**



View specific, personalized business dashboards....

...based on business processes and external events...

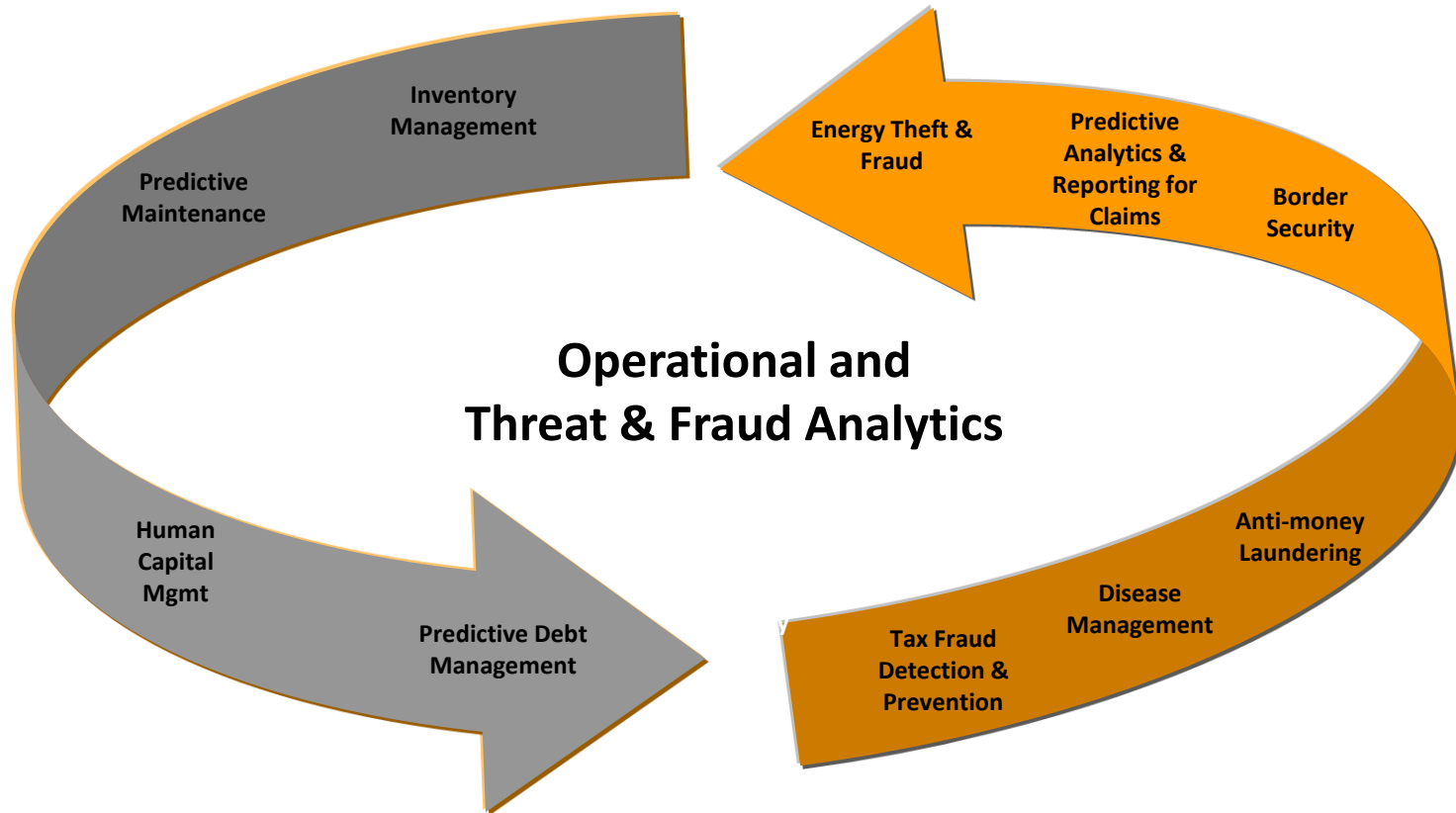


...configured based on business rules and business policies...

...augmented with advanced analytics to suggest next best action, creating an environment of competitive agility that is game-changing.



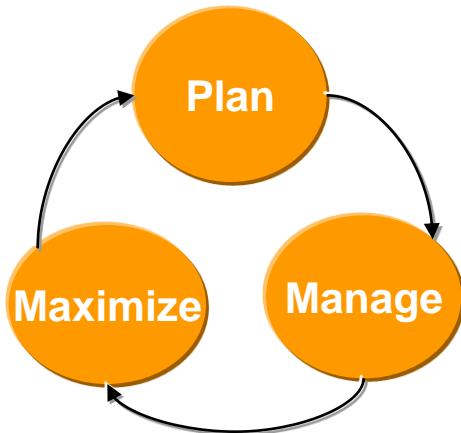
IBM has both **OPERATIONAL** and **THREAT & FRAUD** analytics solutions tailored by industry





IBM operations solutions help plan, manage, & maximize to **INCREASE EFFICIENCY AND PROFITABILITY**

Operations Solutions



Plan

- Allocate future expenditures in most efficient manner
- Ensure the right quantity of the right product is available at the right time and location

Manage

- Enhance existing operational processes
- Improve employee productivity and effectiveness

Maximize

- Extend longevity of infrastructure and equipment
- Improve asset and employee performance





Outperforming organizations increase efficiency in **operations**



Need:

Visibility

and analysis of
all inventory

Optimize

processes for
maximum efficiency



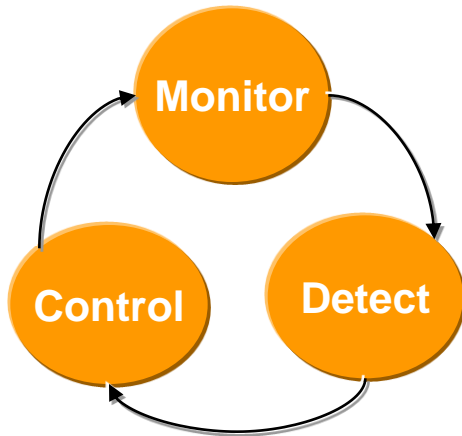
Smarter
inventory
management

Results:

- Increased inventory turnover by **17%**
- Accelerated report creation by up to **97%**, providing near real-time analysis

 IBM threat & fraud solutions help organizations **TRANSFORM PROCESSES** and drive improved performance

Threat & Fraud Solutions



Monitor

- Gain insight into your environment
- Incorporate a wide variety of data from multiple sources

Detect

- Automate the identification of suspicious behavior
- Applicable to a wide range of threats, information breeches, crime & fraud

Control

- Deliver the best response to reduce exposure or loss
- Maximize the impact of the action taken





Outperforming organizations transform **threat & fraud** identification processes

Need:

Identify

fraud early with a predictive analytics solution

Improve

productivity and reduce cost



Smarter fraud detection

Results:

- Identified major fraud ring less than 30 days after implementation
- Saved more than USD **2.5 million** in payouts to fraudulent customers
- Reduced claims processing time on low-risk claims by nearly **90%**



COMPARISON: Operational, Threat & Fraud Analytics



SAS

Oracle



Visibility

Gain Insight into Business Processes

- Collect additional data from all stakeholders with advanced survey capabilities
- Easily create dashboards, scorecards, and reports for mobile, desktop, and enterprise views
- Leverage forecasting and planning capabilities to ensure future success



Analysis

Comprehensive Analysis for Actionable Insight

- Utilize user-friendly, predictive analytics workbench for structured, text, and social media information
- Ensure all data is analyzed, regardless of where the data resides, due to open architecture
- Leverage manual-driven and machine-learning techniques to gain insights



Integration

Deliver Next Best Action at Point of Impact

- Combine predictive models, business rules, and optimization for best of breed solution
- Enhance real-time decision-making by embedding insights into existing processes
- Measure and share performance across the organization



IBM delivers the broadest Business Analytics portfolio to drive better business outcomes

IBM Business Analytics

Industry Solutions

<p>Financial Services</p>	<p>Public Sector</p>	<p>Distribution</p>	<p>Industrial</p>	<p>Communications</p>
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Functional Solutions

Customer		Finance		Operations		Risk	
Customer Acquisition	Social Media Analytics	Budgeting & Forecasting	Financial Consolidation	Resource Optimization	Asset Management	Risk Identification	Risk & Control Assessment
Customer Lifetime Value	Customer Loyalty & Retention	Disclosure Management	Profitability Modeling & Optimization	Production Planning	Decision Management	Risk Mitigation Planning	Risk Aware Decisioning





Core Capabilities

REPORT	ANALYZE	MODEL	PLAN	COLLABORATE	PREDICT
Visualize	Discover	Simulate	Govern	Contribute	
Forecast	Mine	Score	Survey	Decide	

Software Categories

<p>Business Intelligence</p>	<p>Predictive Analytics</p>	<p>Performance Management</p>	<p>Risk Analytics</p>
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And has the industry experience to help clients address key imperatives

	 Banking/Insurance	 Government	 Retail	 Industrial	 Telecommunications
 Customer	Create a Customer-centric Enterprise	Improve Citizen Services	Optimize the Shopping Experience	Plan & Forecast Demand	Reduce Customer Churn
 Finance	Ensure Financial Transparency	Manage Resources Effectively	Demand Planning	Sales and Operations Planning	Optimise Capex and Opex
 Operations	Streamline Operations	Measure Program Performance	Improve Store Operations	Enable Predictive Maintenance	Build Smarter Networks
 Risk	Optimize Risk and Manage Compliance	Reduce Fraud and Waste	Manage Operational Risk	Manage Operational Risk	Manage Operational Risk



IBM Business Intelligence

Transform data into meaningful information to help organizations make the best business decisions

- Provide users with reporting, analysis, modeling, planning and collaboration capabilities to explore information, analyze key facts and make decisions
- Support every type of user with capabilities for the office and desktop, on mobile devices, online and offline
- Compare historical, current and predictive results side by side
- Integrate “what-if” analysis to compare alternative scenarios to determine the best action
- Adapt to the changing needs of the business and IT with flexible deployment options

Analytics in the hands of everyone



IBM Performance Management

Guide management strategy in the most profitable directions with timely, reliable insights, scenario modeling and transparent reporting

- Link financial and operational plans through driver-based models.
- Guarantee the quality and accuracy of financial numbers for timely, sustainable compliance.
- Track performance against strategic objectives.
- Perform “what-if” scenario modeling and create flexible rolling forecasts.
- Replace rigid budgets with continuous planning—daily, weekly, or monthly

Performance reporting and scorecarding



IBM Predictive Analytics

Discover patterns and associations and deploy predictive models that optimize decision-making

- Enable data and predictive modeling to guide front-line interaction
- Uncover unexpected patterns and associations from all data within your organization
- Perform advanced analytics, data mining, text mining, social media analytics and statistical analysis
- Use customized functionality for different skill levels
- Deliver optimized decisions to your operational systems and decision makers.

Optimized decisions made possible

Customer Analytics

Acquire
Grow
Retain



Operational Analytics

Plan
Manage
Maximize



Threat & Fraud Analytics

Monitor
Detect
Control

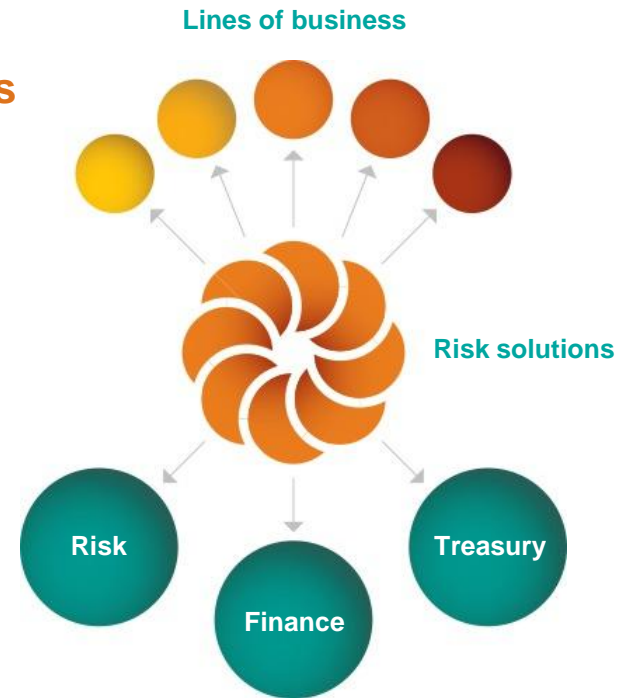




IBM Risk Analytics

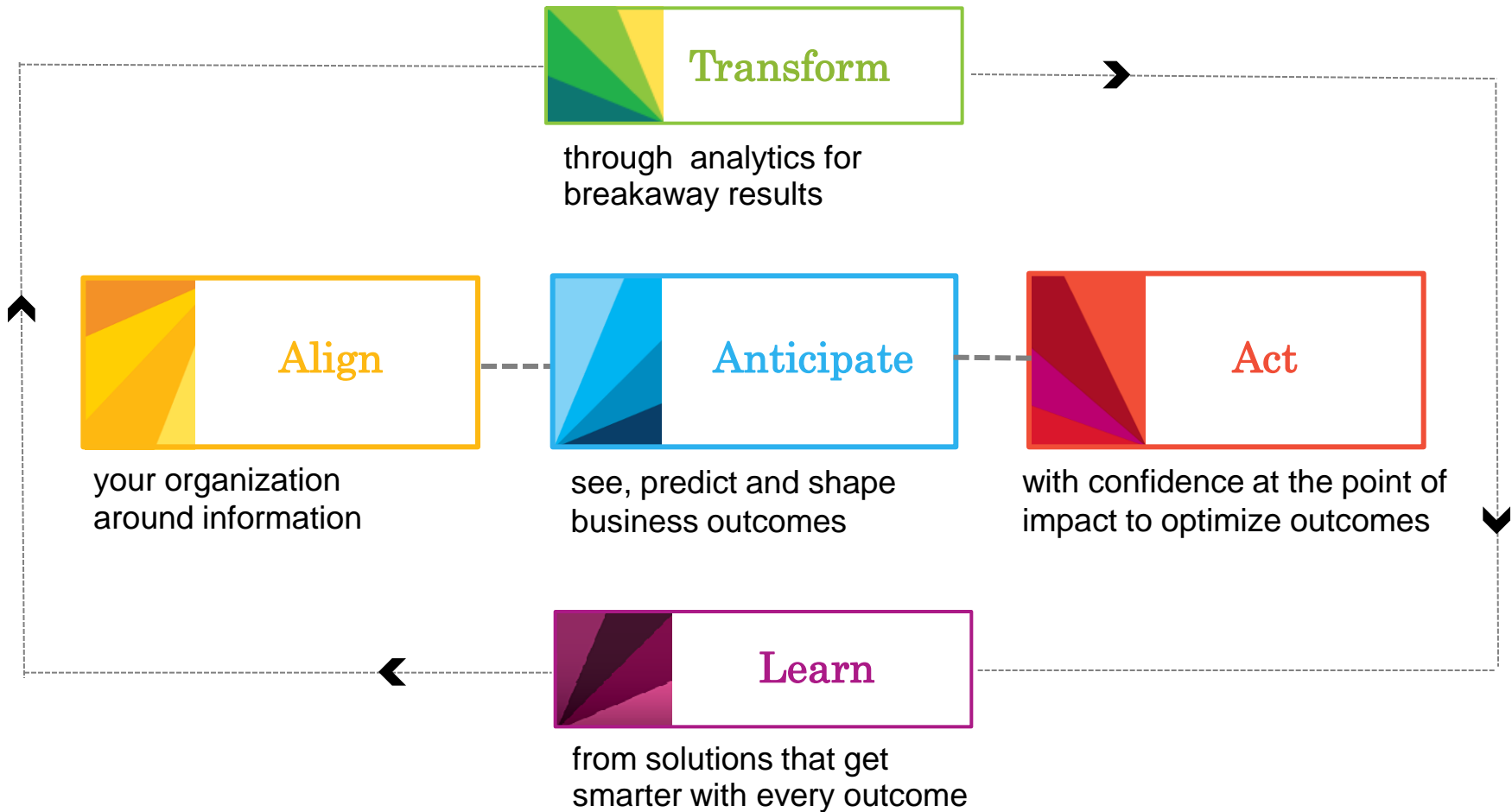
Make risk-aware decisions and meet regulatory requirements with smarter risk management programs and methodologies

- Improve decision making by providing risk insight and transparency to business decisions
- Increase your return on capital by making better informed decisions
- Reduce the cost of compliance
- Accelerate and streamline risk processes reduce cost and operational risk and transform our clients' customer business
- Dynamically evolve as risk practices and regulations change



Reduce complexity while improving governance

Business Analytics is core to **IBM SMARTER ANALYTICS** – helping clients anticipate and act with confidence to optimize outcomes



Why choose IBM Business Analytics?



Unrivaled

- Analytic capabilities that are dually specialized to the task and interconnected to allow shared insights across the organization
- Analytics capabilities that scale from small and midsize businesses to enterprises



Comprehensive

- Analytic capabilities for all decisions all people, all data, when and where you need them
- Multiple delivery options, including appliances, hardware, cloud and mobile



Innovative

- Nearly 600 analytics patents a year and first in overall patent ranking for the past 19 years
- Next-generation analytics systems that are able to reason and learn



Proven

- Recognized technology leader with superior R&D wins and a significant number of analytics innovation use cases
- More than 20,000 analytics engagements and 9,000 dedicated analytics consultants around the globe