

# *IBM Business Analytics Industry Solutions*

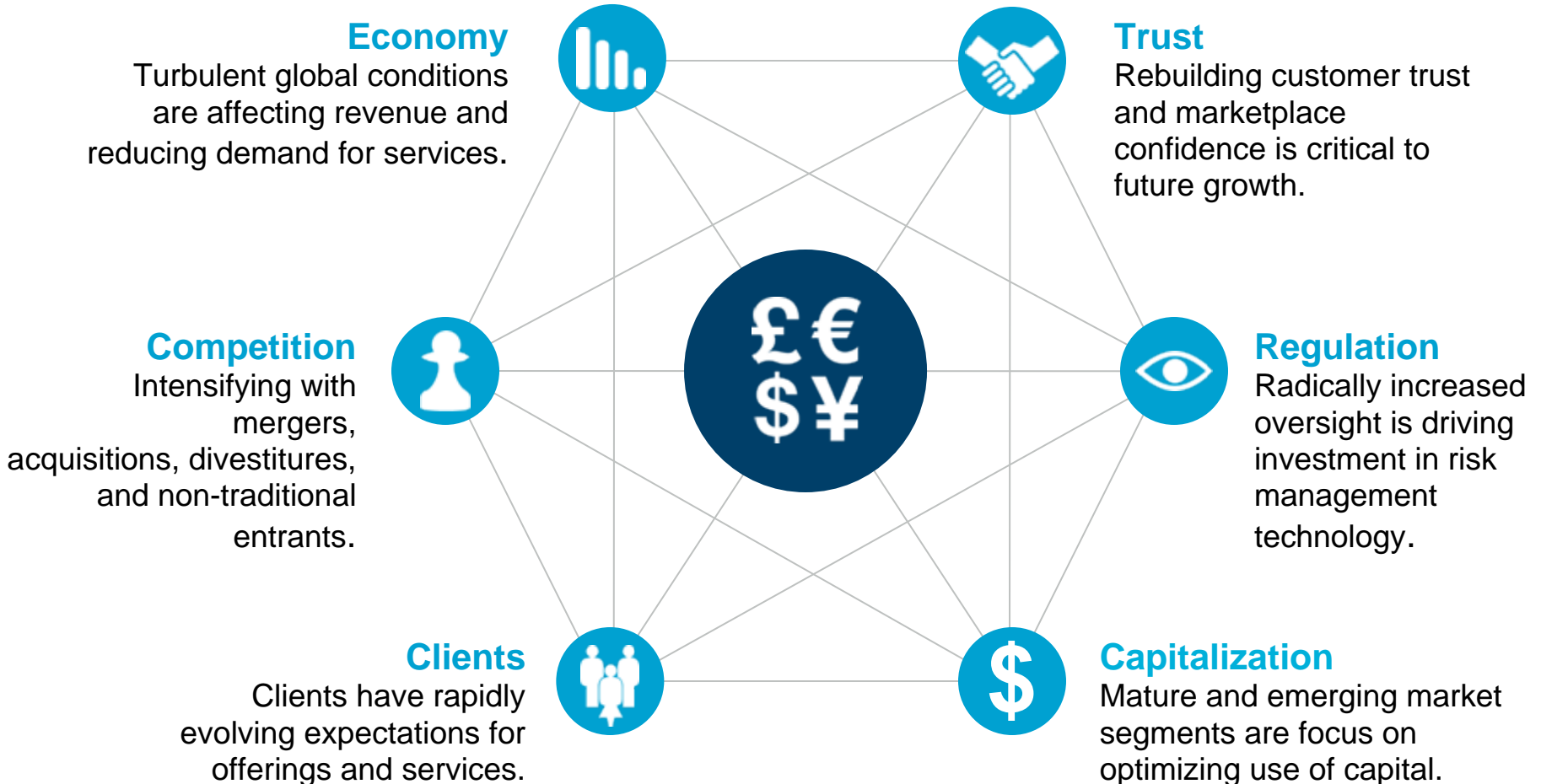


# *The Business Analytics 'dilemma'*

- Business analytics are “hot” but ...
  - Many customers have an established but under-productive set of assets and tools
  - Many customers wish to change and potentially set a new course but face a lengthy learning curve
  - IBM customers have asked for a “quick start” capability to address specific industry application areas



# Industry changes mean that “business as usual” is no longer an option

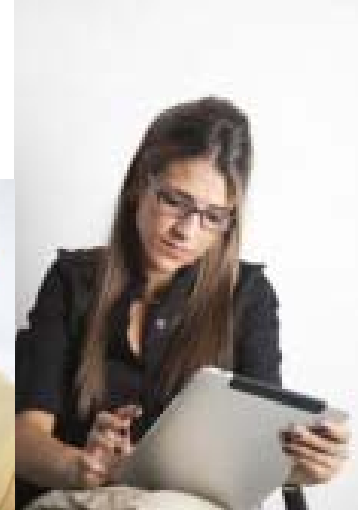


# *How does one get started rapidly?*



## *IBM Cognos has developed in-depth assets for the following industries ...*

- Banking & Finance
- Insurance
- Government
- Retail
- Manufacturing
- Telco
- Industrial Sector
- Education
- Consumer Goods
- Energy
- Healthcare
- Life Sciences



## We refer to these assets as “Blueprints”

- Solution templates (metadata) based upon industry solution/business area
- POV assets including demo data
- Industry expertise
- IBM services
- IBM hardware and software assets
  - Cognos
  - SPSS
  - Systems upgrades
  - ... and more



***I am going to use IBM's Banking Solution as a reference. The other industry blueprints offer common assets such as profitability as well as deeper, business area specific elements.***

***Many of our customers engage using the sample data and business definitions/reports, etc. to validate the potential impact upon their particular enterprise.***

***These are not cookie-cutter, out-of-the-box full solutions ... everyone wants to customize elements!***

# *The need for progress is clear*



**80%**

... of financial services firms say their governance, risk and compliance processes are not integrated across their enterprise.<sup>1</sup>



almost **90%**

... of bankers in our global survey believe that transforming from the status quo is critical to profitability.<sup>2</sup>



**54%**

... of banking and financial management CEOs are focusing on simplifying their products and processes to better manage complexity.<sup>3</sup>

<sup>1</sup> Economist Intelligence Unit, Oracle-sponsored briefing paper, *Governance, risk and compliance in financial services*, June 2008.

<sup>2</sup> IBM Institute for Business Value, *From complexity to customer centricity*, March 2011.

<sup>3</sup> IBM Institute for Business Value, *Capitalizing on Complexity: Insights from the Global CEO Study*, May 2010.



## *In spite of these challenges, analytics is helping banks turn threats into opportunities*

### Customer analytics

Using advanced analytics to profile and segment target customers, First Tennessee Bank improved marketing effectiveness by:

**600%**

### Operational efficiency

Using financial analytics to streamline statement creation, First Command accelerated month-end updates by over:

**500%**

### Risk management

Using business intelligence to create an online credit tool, Argos generated an annual business value for each customer of:

**\$855K**

# Smarter Analytics for Banking

## Industry Imperative

## Desired Outcome

## Where We've Done It



**Create a customer focused enterprise**

- Align organization, processes, and channels around the customer to deliver the right products and solutions to each customer
- Provide customers with a consistent cross-channel experience.

**BBVA**

**Positive customer sentiment increased by >1% and negative reduced by 1.5%**



**Optimize risk and compliance**

- Provide financial institutions with insight into all risk types across the enterprise
- Actively manage the risk associated with the bank's business operations
- Minimize fraud

**MoneyGram** 

**72% reduction in consumer fraud complaints in one year; halting over US\$37.7 million in fraud**



**Increase flexibility and streamline operations**

- Improve the efficiency of front office product and service delivery to serve customer better
- Reduce operating expense and improve back office efficiency

**ING** 

**ING BANK ŚLĄSKI**

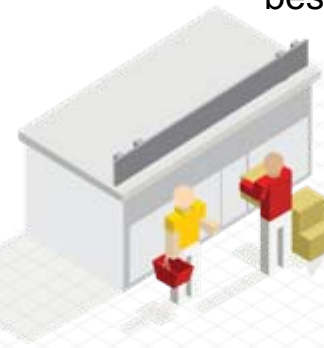
**180% increase in outbound sales through improved customer insights**

# Analytics delivers smarter outcomes for banks across their business

## What if...

### Branch management

...could understand which branches or products were performing the best?



### Payments

... predictive analytics could detect and prevent a wire transfer with a high probability of fraud?



### Executive leaders

...could make better business decisions using accurate data across all time horizons: past, present and future?



### Relationship management

...could consider the risk and profitability of the entire customer relationship when pricing new deals?



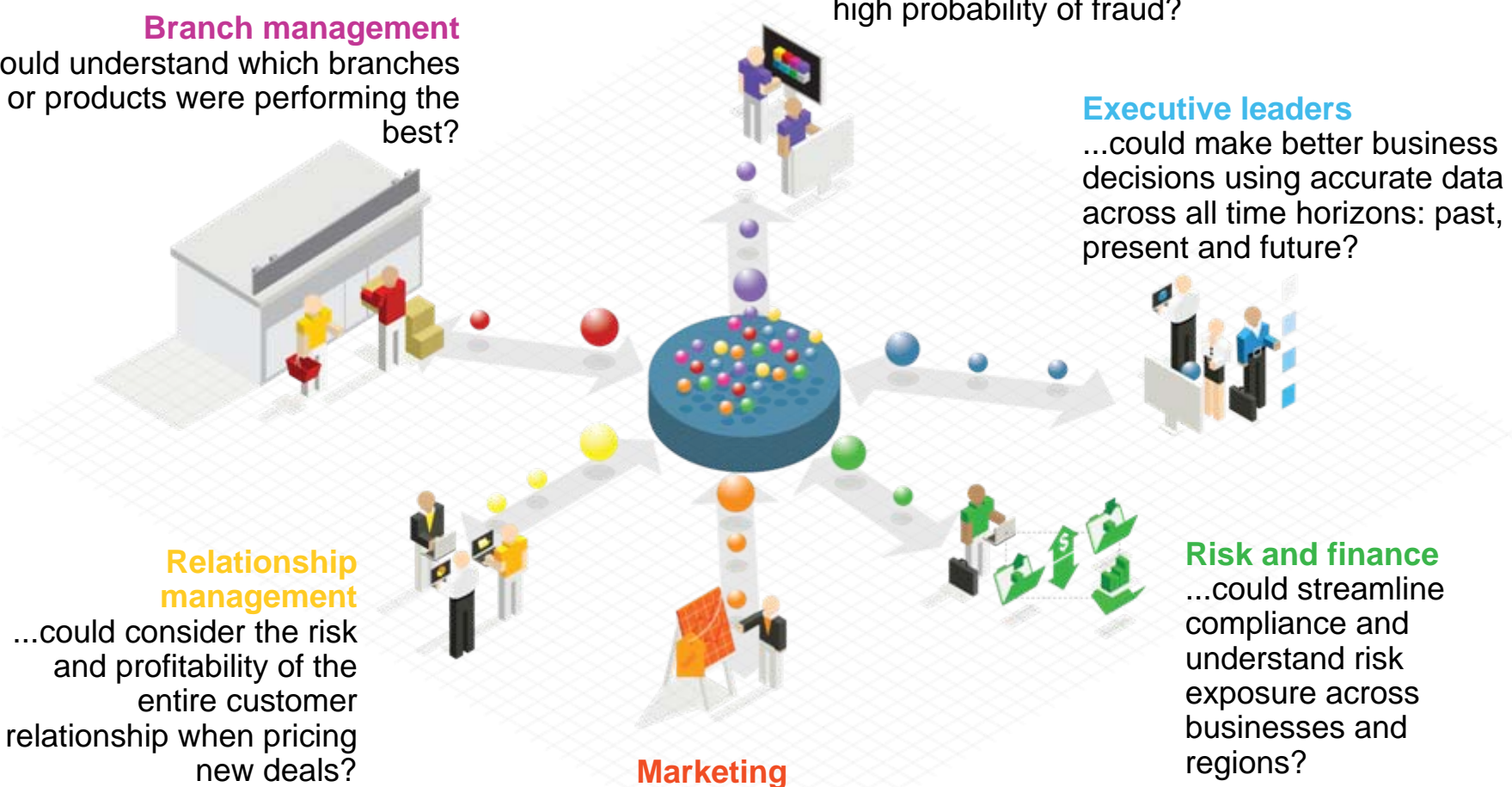
### Marketing

...could predict the right offer for the right customer at the right time?



### Risk and finance

...could streamline compliance and understand risk exposure across businesses and regions?



# *Analytics can help banks outperform competitors in three ways*

**Increase flexibility and streamline operations**



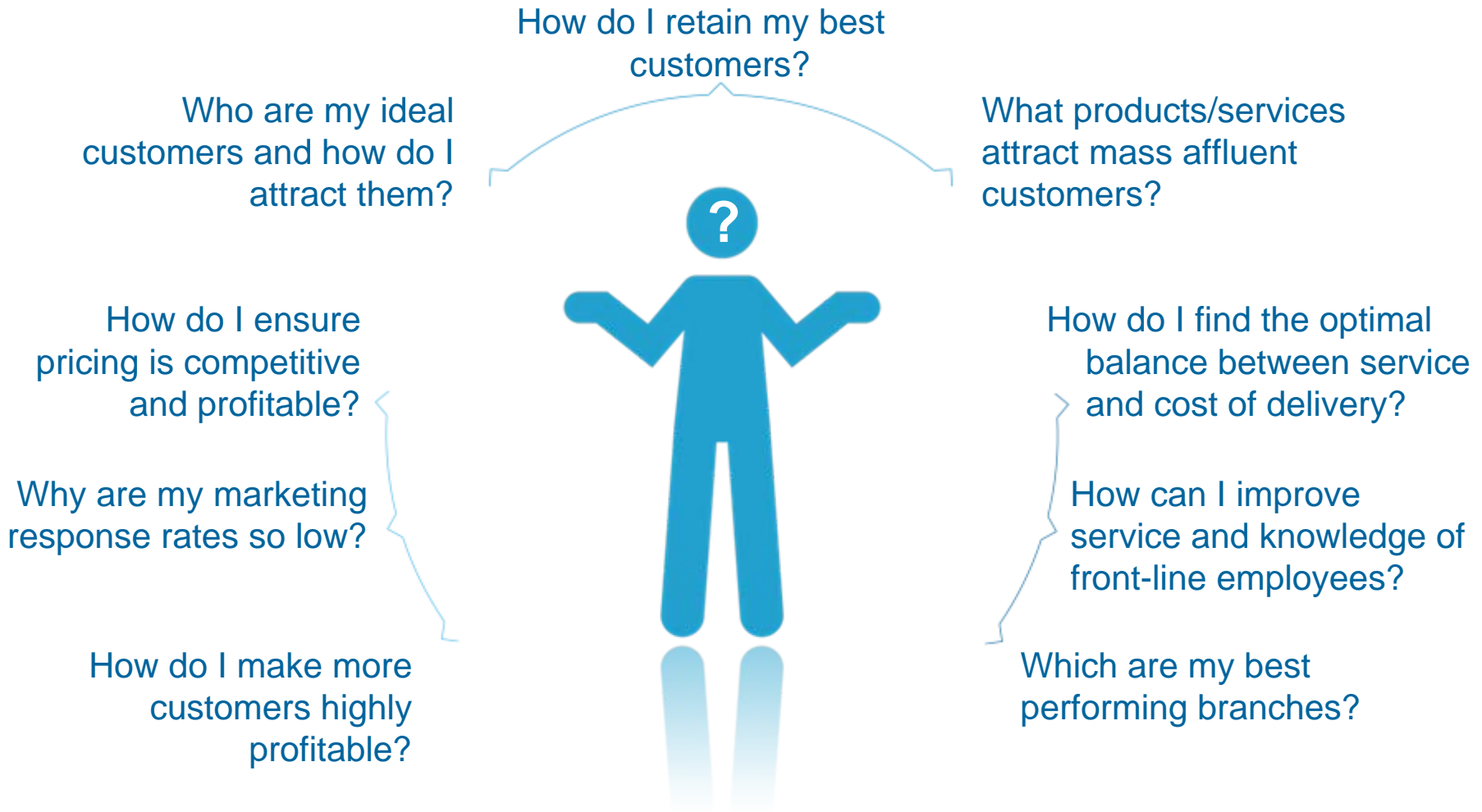
**Optimize enterprise risk management**



**Create a customer-focused enterprise**



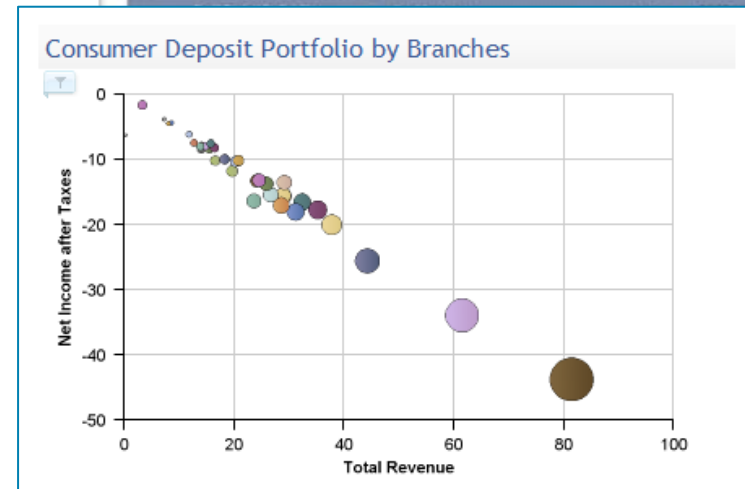
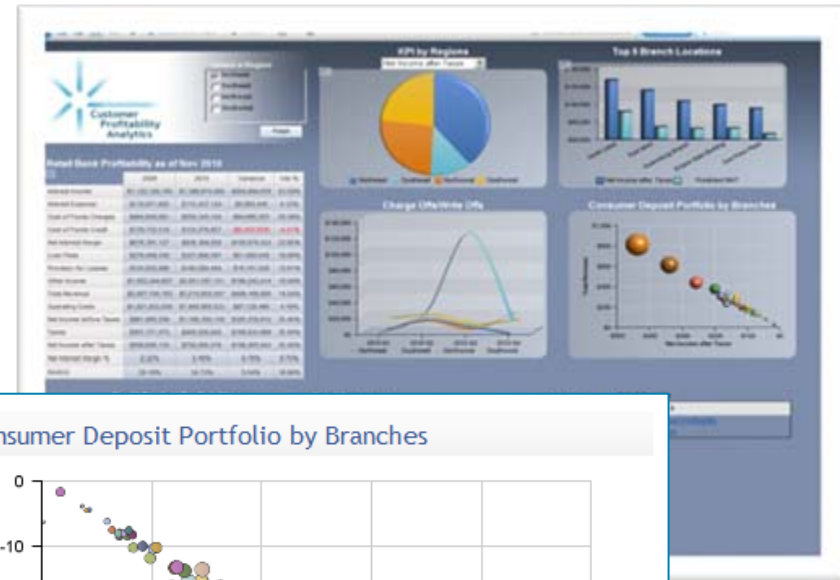
# *To become customer-centric, you first need to understand your customers*



# Analytics solutions that create a customer-focused enterprise

## Customer profitability analytics

- Create profitability analysis and forecasts
- Perform “what if?” scenario analytics
- Calculate profit and loss (P&L) at the account level
- Increase cross and up sell opportunities
- Analyze historical information to:
  - Predict customer propensity to buy
  - Develop lifetime value models
  - Create account retention strategies
- Develop strategies to improve retention and wallet-share of profitable customers
- Reduce servicing costs by matching service levels to customer value



## *Analytics solutions that create a customer-focused enterprise*

### Marketing optimization

- Mine historical customer information to determine patterns and segmentation
- Use predictive models to determine likelihood of response to offers or defection
- Generate reports and alerts on customer interactions and portfolios
- Incorporate unstructured text data into analysis
- Predict which customers are likely to leave and what will keep them
- Use marketing dashboards to track and monitor response and sales created
- Improve marketing cross-sell efforts and reduce execution costs with microsegmentation



## ***Analytics solutions that create a customer-focused enterprise***

### **Relationship pricing**

- Delivers an intuitive, centrally controlled pricing tool that considers complete relationship value and risk to improve pricing consistency for both credit and non-credit deals
- Provides bottom-up and top-down planning capability and automated approval workflow
- Enables quick changes and consistent roll out with centrally controlled pricing model
- Provides dashboards for relationship managers, lending officers and senior management
- Enables relationship managers to quickly and consistently evaluate risk and profitability of new business and increases management visibility into lending book





# Analytics solutions that create a customer-focused enterprise

## Client servicing

- Includes paperless, real-time self-service reporting and analysis of account holdings and recent activity
- Wealth Manager dashboard with service process monitoring, reporting, analysis and forecasting
- Provides online or mobile client statements with portfolio summary, performance analysis and asset allocation
- Improves relationship manager knowledge and customer service



# Banco Bilbao Vizcaya Argentaria (BBVA)

*Manage reputational risk through understanding social media sentiment*

## The need

As a leading bank in Europe & South America has been working to strengthen its brand globally. The bank wanted to deploy a single tool and methodology to measure and monitor online sentiment and to detect, assess, and respond to threats to its reputation before they became a significant problem.

## The solution

This global bank implemented a consumer insight solution to monitor and measure customer postings in social media, postings of industry experts about the bank and its competitors, or the mention of the bank in news sites – to detect possible risks to the bank’s reputation. The bank can now listen to the voice of its clients and what they think about the bank’s services, publicity campaigns, new products, customer service, and president’s statements, from a totally new viewpoint.

## Real business results

- Provides precise analysis of global sentiment - positive sentiment increased by >1% and negative reduced by 1.5%
- Enables global monitoring and analysis on results
- Improves consistency and reliability when comparing results among branches/ countries with single system.

*“Knowing what our customers think about us is essential to implementing effective customer service strategies, new products and strategic goals.”*



# Large American wholesale bank

*Delivered tailored service based on ranking of customer value*

## The need

A global financial services network wanted to obtain a single view of its clients across multiple siloed lines of business to enable smarter decision making.

## The solution

Starting with a consolidated view of each client, the bank can accurately analyze the profitability of every customer and make smarter decisions about lending, cross-selling and fees. The bank can also prioritize its customers—based on relationship and profitability—and create value-added services for highest revenue generating clients.

## Real business results

- Guides product sales and sets lending rates with real-time profitability assessments and scenario modeling
- Ranks the entire client relationship across multiple business segments
- Analyzes total value of relationship to drive informed lending decisions and analyze client return on equity for new product offerings
- Accelerates time to market for custom offerings to high-value clients

*“With a single view of every customer, we can deliver better service while allocating our resources appropriately to the most valuable clients, thereby maximizing profits and new business opportunities. It is a win-win situation.”*

**—Large American  
wholesale bank**

# Banco Itaú Argentina

*Increased revenue from existing clients by 40%*

## The need

In a highly competitive environment, Banco Itau Argentina wanted to find a more effective way to increase customer satisfaction and lifetime value while maximizing the bank's profitability.

## The solution

The bank chose IBM Business Analytics software and used it to create predictive models that identified clients with a high probability of accepting marketing offers. It also used sales optimization technologies to maximize the effectiveness of its marketing campaigns.

## Real business results

- Improve understanding of the customer to provide an unprecedented level of targeting and coordination of campaigns which decreased cost and increased revenue
- Implemented 20-30 rolling sales campaigns
- Increase revenue from existing clients by 40 percent
- Increase the total retail customer contribution margin by close to 60 percent

“We wanted to increase customer satisfaction and life-time value while maximizing bank profitability through the analysis and execution of optimal cross-selling and acquisition strategies. That’s why we chose solutions from IBM.”

- **Mauricio González Botto,**  
**COO, Banco Itaú Argentina**



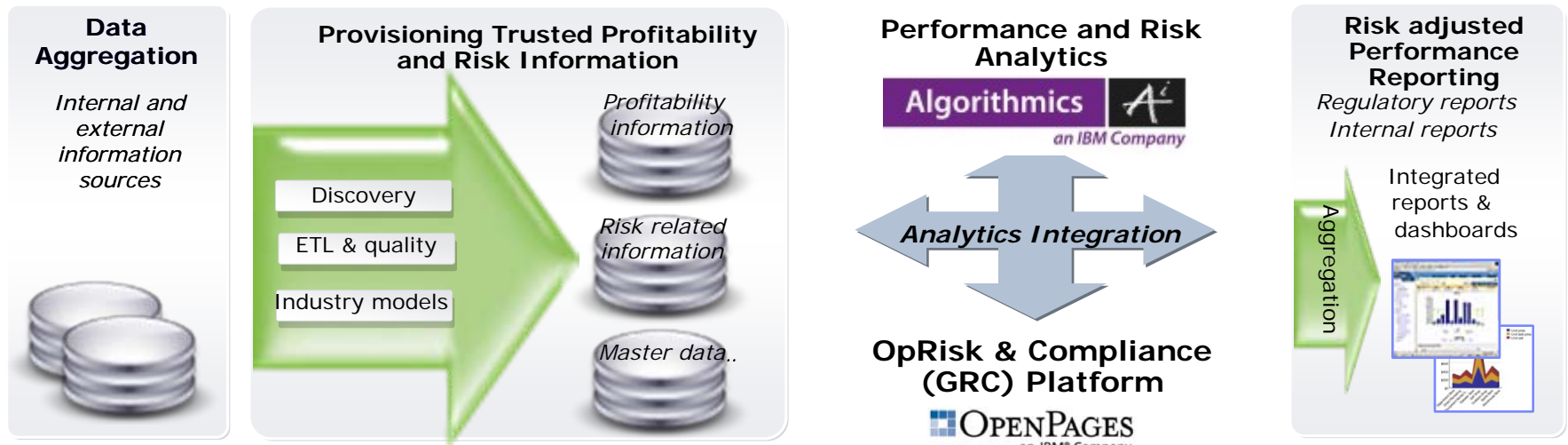
# Analytics for optimizing risk & capital management

## IBM differentiators in profitability, risk and compliance

- Breadth and Quality of Profitability and Risk Analytics
- Systems Implementation and Integration Capability
- Consulting Services enabling effective Operating Models

**Smarter Capital Management for Turbulent Times** integrates risk and profitability, providing enterprise risk, capital and performance management and reporting

### Integrated Risk Management and Risk Based Profitability – Smarter Capital Management



### Financial Consulting and Systems Integration

## *Analytics solutions for optimizing risk management*

### Financial risk management

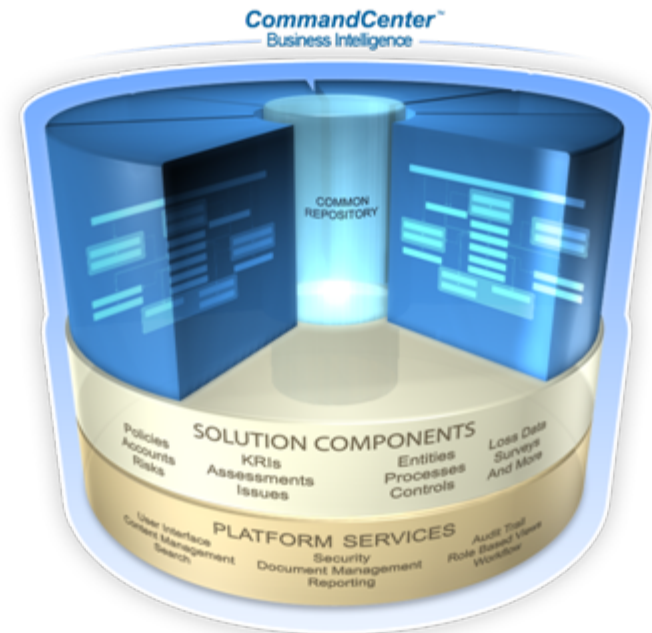
Algorithmics, an IBM company, has a suite of solutions that combine proven software, services, advisory and content for scalable enterprise-wide risk management including:

- Actuarial and Financial Modeling
- Balance Sheet Risk Management
- Collateral Operations & Reconciliation
- Credit Data Consortium Services
- Credit Lifecycle Management
- Credit Regulatory Capital Management for Banks
- Economic Capital and Solvency II
- Integrated Market and Credit Risk
- Investment Design for Wealth Managers
- Portfolio Construction and Risk Management for Fund Managers
- Portfolio Construction and Risk Management for Hedge Funds

## *Analytics solutions for optimizing risk management*

### **Governance, Risk and Compliance**

- Provides an integrated enterprise risk solution to help reduce risk exposure and simplify regulatory response with a single system of record
- Enables the identification, management, monitoring and reporting of operational risks and regulatory compliance initiatives
- Improves processes with fully integrated risk and compliance data
  - Risk control self-assessments
  - Scenario analysis
  - Key risk indicators
  - Loss event database
  - Policies and regulatory mandates
  - Harmonized control framework
- Provides root cause analysis and issue identification/remediation
- Includes decision support in the form of dashboards and heat maps



## *Analytics solutions for optimizing risk management*

### Integrated risk insight & optimization

- Includes business intelligence to provide finance-integrated, actionable risk dashboards, scorecards, and reporting
- Enables risk adjusted financial planning, business modeling, strategy selection and initiative planning
- Scenario analysis for all risk classes (credit, market, liquidity, operational, counterparty)
- Risk optimization through risk and finance integration, risk appetite management and communications, strategic planning, and risk-adjusted relationship pricing





## Grupo Bancolombia



*Increased identification of fraudulent and suspicious transactions by 40%*

### The need

To adhere to stricter governmental requirements, Grupo Bancolombia needed to analyze millions of transactions to identify fraud. They therefore needed to move from a decentralized system based on strict rules and parameters to a more automated, smarter process that would better detect unusual patterns or behavior.

### The solution

The bank deployed IBM predictive analytics software that helped it more easily and quickly detect transactions that were part of potential money-laundering operations. By detecting and analyzing expected and typical patterns of over 1.3 million transactions per day, the solution prevents, detects and reports potentially fraudulent banking activities that may stem from criminals and terrorists.

### Real business results

- Reveals 40% more suspicious transactions with automatic identification of fraudulent activities.
- 200% increase reporting capabilities and 80% in analyst productivity
- Discovered the latest money-laundering techniques
- Aggregates multiple transaction activities to detect financial relationships.

*“With the data mining system, we generated productivity savings of nearly 80 percent.”*

— Francisco Ruiz, Head of Compliance, Bancolombia



# *Analytics to increase flexibility and streamline operations*



## Branch performance management

- Enables driver-based, rolling branch financial planning at the product and customer segment level
- Provides staff planning so headcount expenses can be easily understood and controlled
- Integrates costs from Acorn Systems' Activity-Based Costing and Management (ABC/M) system, so less time can be spent calculating costs and more time spent analyzing them
- Monitors and analyzes key revenue, cost and profitability measures by branch, product type, product, customer segment and even household

## IT cost transparency blueprint

- Delivers reports, dashboards and metrics that show technology costing and chargeback, driver-based planning and forecasting, and the service catalog
- Gives a new view of technology services, cost of delivery and service levels through advanced analytics



# *IBM Business analytics banking solutions*

## Banking and financial market solutions



### Create a customer focused enterprise

- Customer profitability
- Campaign insight and optimization
- Relationship pricing
- Client servicing



### Optimize enterprise risk management

- Financial risk management
- Operational risk management
- Financial statement reporting



### Increase flexibility and streamline operations

- IT cost transparency
- Branch performance management
- Payments

## ***Solution elements***

### ***Software aspects of a potential solution ...***

Cognos 10 BI

Metadata models to build from

POV with sample data

SPSS Modeler or Decision Management

TM1

Cognos financial applications and more

... and others

## ***What about System z?***

- ***Under investigation for each solution element***
- ***Some Cognos components are not supported on System z yet (e.g. TM1 Server ... coming)***
- ***Best possible solution may be a hybrid of System z and the zBX***
- ***System z exclusives weighing some of the possible combinations (e.g. IDAA and DB2 for z/OS temporal data support)***

# *For more information*

<http://www-142.ibm.com/software/products/us/en/category/SWQ00>

