Driving better decisions across the Smarter Planet:
The opportunity for Market Research in an instrumented, interconnected, intelligent world

Colin Shearer
Worldwide Industry Solutions Leader

Business Analytics software

Imagine if you could…

… track disease outbreaks across country borders in real time?

Imagine if you could…

… track disease outbreaks across country borders in real time?

An International Health Agency

Insight

- Near-real-time access to local and international disease data leads to better forecasts of health risks

Implications

- Hospitals and countries have more time to prepare for potentially disastrous disease outbreaks
- Comply with national privacy and security requirements

Imagine if you could…

…catch money laundering before it happens?

Imagine if you could…

…catch money laundering before it happens?

Major Korean Bank

Insight

- Patterns or linkages across accounts, products or channels can predict illegal activity

Implications

- Detect money laundering before it happens by running over 100 scenario-based algorithms employing 300 variables

Imagine if you could…

… apply social relationships of customers to prevent churn?

Imagine if you could…

Major Telco

… apply social relationships of customers to prevent churn?

Insight

- Social networks and calling patterns can reveal the full value of a customer

Implications

- More effective customer retention programs
- More attractive and useful subscriber plans
- Identification of new target markets

Imagine if you could…

…identify at-risk students before they drop out of school?

Imagine if you could…

…identify at-risk students before they drop out of school?
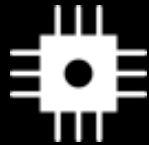
Mobile County Public School System

Insight

• There are early indicators when a student begins to have problems

Implications

• Proactive intervention when students cross at-risk thresholds
• Accountability information transformed into a strategic asset
• Better identify which programs are likely to work for each student

Our world is becoming smarter

Instrumented

Interconnected

Intelligent

enabling organizations to make faster, better-informed decisions

With this change comes an explosion in information …

Volume of Digital Data

Variety of Information

Velocity of Decision Making

… Yet organizations are operating with blind spots

Lack of Insight
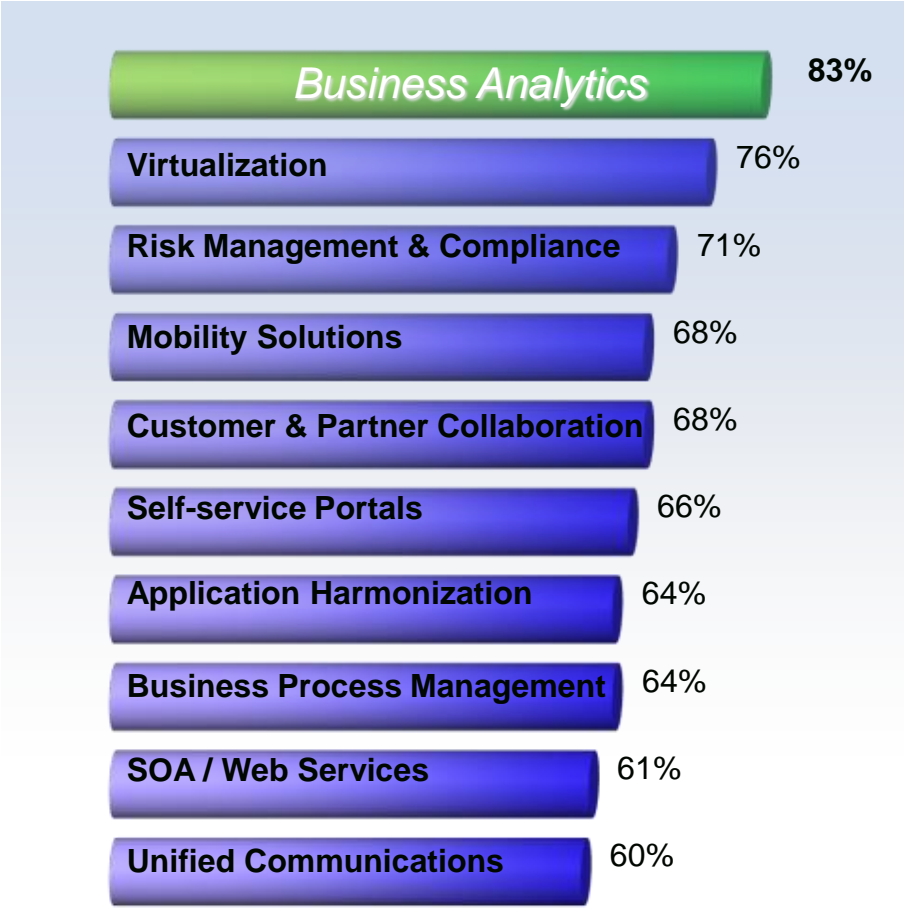1 in 3 managers frequently make critical decisions without the information they need

Inefficient Access
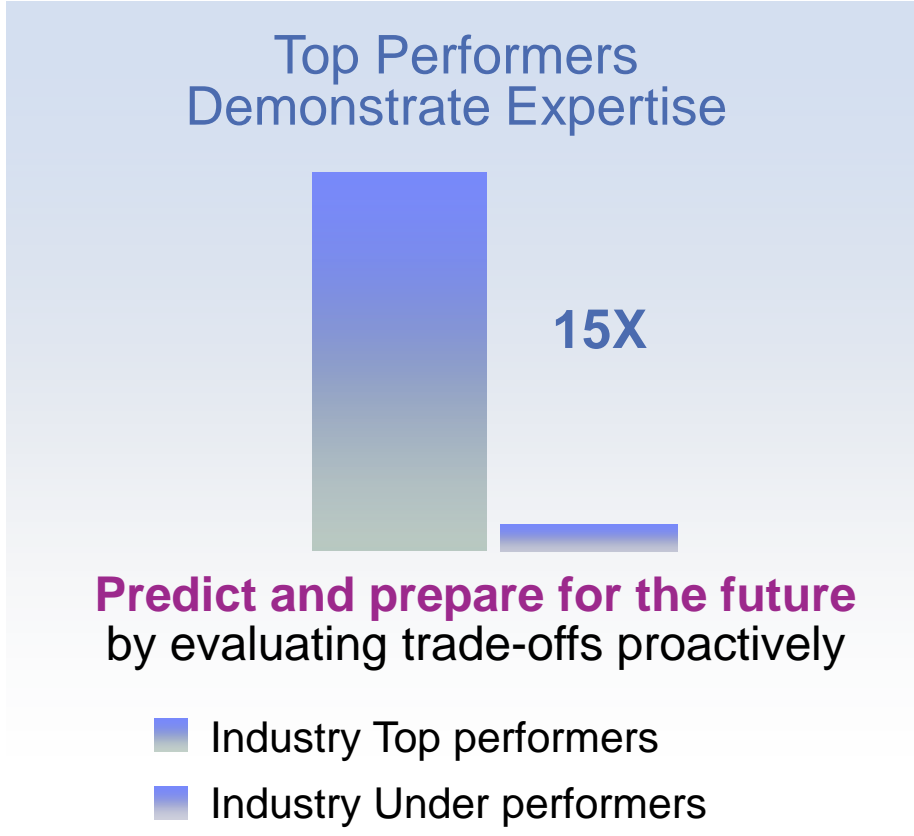1 in 2 don't have access to the information across their organization needed to do their jobs

Inability to Predict
3 in 4 business leaders say more predictive information would drive better decisions

Source: IBM Institute for Business Value

CIOs are focused on analytics and trusted information, tied to business needs

Business Analytics	**83%**
Virtualization	76%
Risk Management & Compliance	71%
Mobility Solutions	68%
Customer & Partner Collaboration	68%
Self-service Portals	66%
Application Harmonization	64%
Business Process Management	64%
SOA / Web Services	61%
Unified Communications	60%

Source: IBM Global CIO Study 2009, n = 2345

Top Performers Demonstrate Expertise

15X

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

■ Industry Top performers

■ Industry Under performers

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

The Predictive Advantage

Predict & Act

Deploying Predictive Models
- Leverage current and historical data
- Make robust predictions on current and future cases
- Embed in business processes to transform decision making and drive better outcomes

"NOW"

Predictive Analytics:
- Algorithms automatically discover significant patterns
- Deliver deep insights to improve strategic and operational decision making
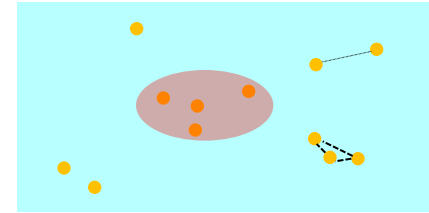- "Learn" from historical data – create *predictive models*

"NOW"

Traditional BI and Conventional Analysis:
- Insight, metrics, etc. up to this point in time
- User initiative to explore aggregate data

"NOW"
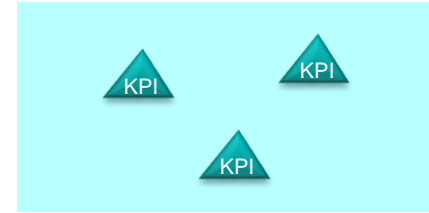
Sense & Respond
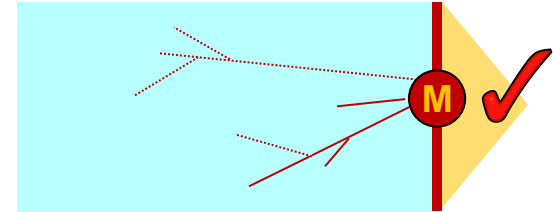
IDC - Independent Financial Impact Studies

"The median ROI for the projects that incorporated predictive technologies was 145%, compared with a median ROI of 89% for those projects that did not."

Source: IDC, "Predictive Analytics and ROI: Lessons from IDC's Financial Impact Study"

How Decision-Making is Changing

Quality and value of decisions

Decisions from "Intuition"
• "Instinct"
• "Hunches"
• Based on experience

"We are in a historic moment of horse-versus-locomotive competition, where intuitive and experiential expertise is losing out time and time again to number crunching."

Ian Ayres, author of "Super Crunchers"

How Decision-Making is Changing

Quality and value of decisions

Decisions from "Intuition"
• "Instinct"
• "Hunches"
• Based on experience

Automated Decision-Making
• Knowledge, policies and practices embodied in business rules
• Decisions made efficiently and consistently
• Objective

How Decision-Making is Changing

Quality and value of decisions

Decisions from "Intuition"
- "Instinct"
- "Hunches"
- Based on experience

Automated Decision-Making
- Knowledge, policies and practices embodied in business rules
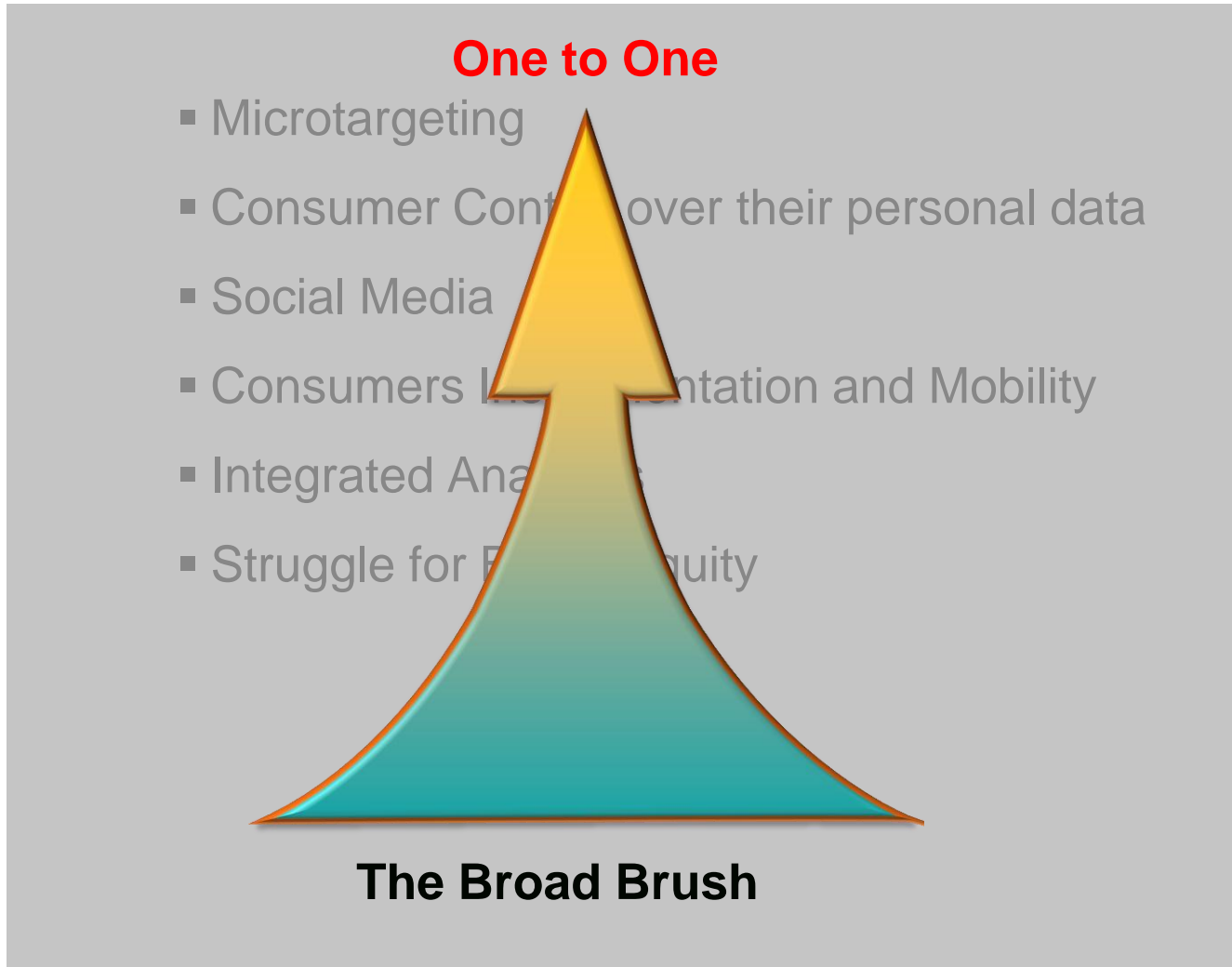- Decisions made efficiently and consistently
- Objective

Predictive Decision-Making
- Accurate predictions based on historic patterns
- Leverage all available data
- Flexible, evidence-based decisions
- Robust in volatile environments – models re-generated from latest data to reflects changing fashions, trends, etc.
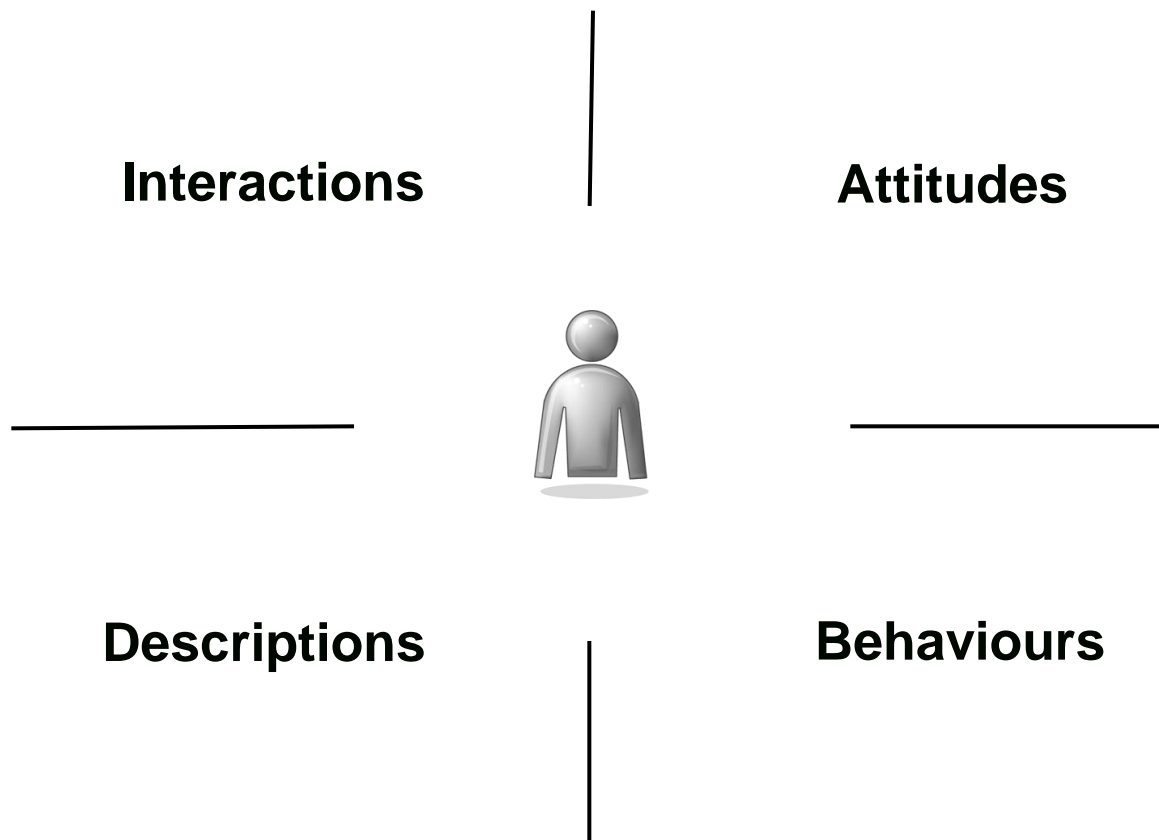
Context:
The *Customer (Employee, Citizen, …)*

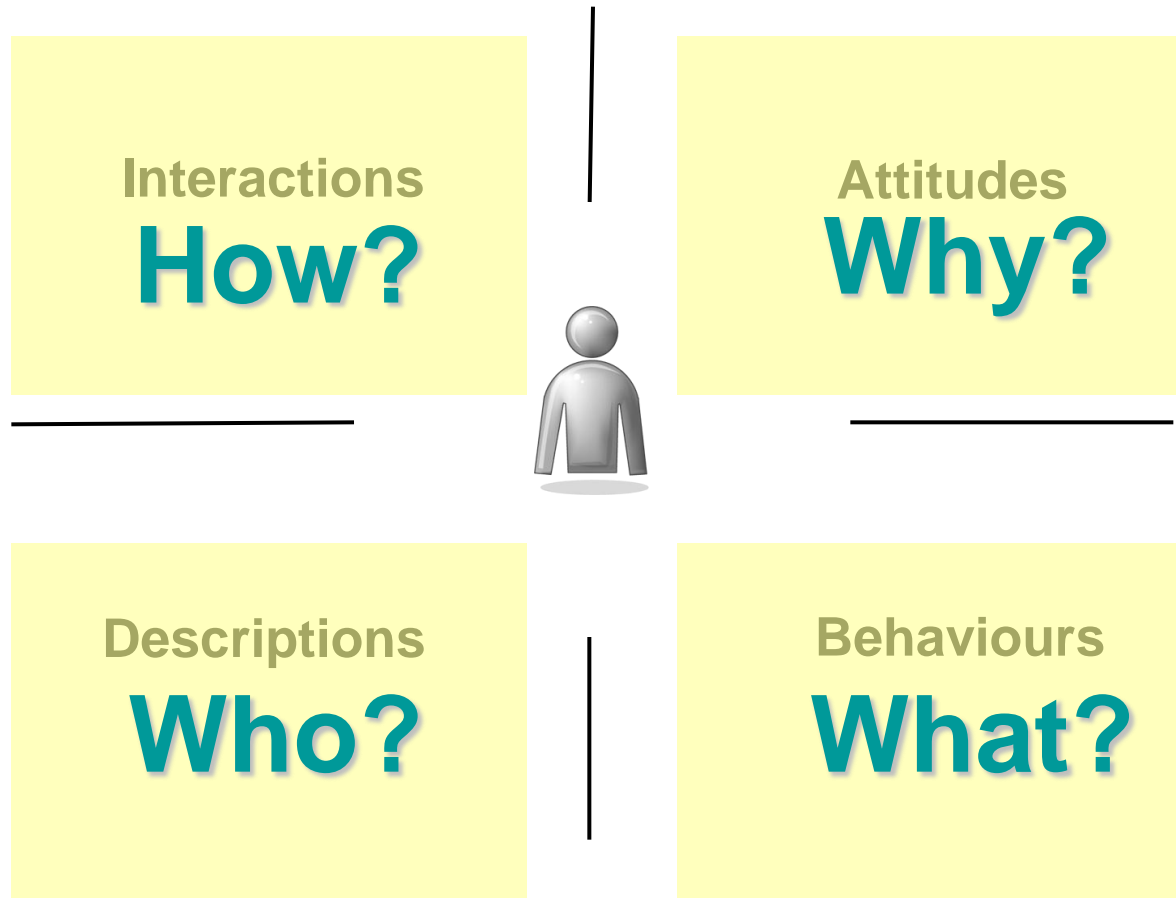# Trends in Customer Analytics - today's market – Multiple Disruptions

One to One

- Microtargeting

- Consumer Control over their personal data

- Social Media

- Consumers Implementation and Mobility

- Integrated Analytics

- Struggle for Brand Equity

The Broad Brush

Data at the Heart of Analytics

Interactions

Attitudes

Descriptions

Behaviours

Data at the Heart of Analytics

Interactions
How?

Attitudes
Why?

Descriptions
Who?

Behaviours
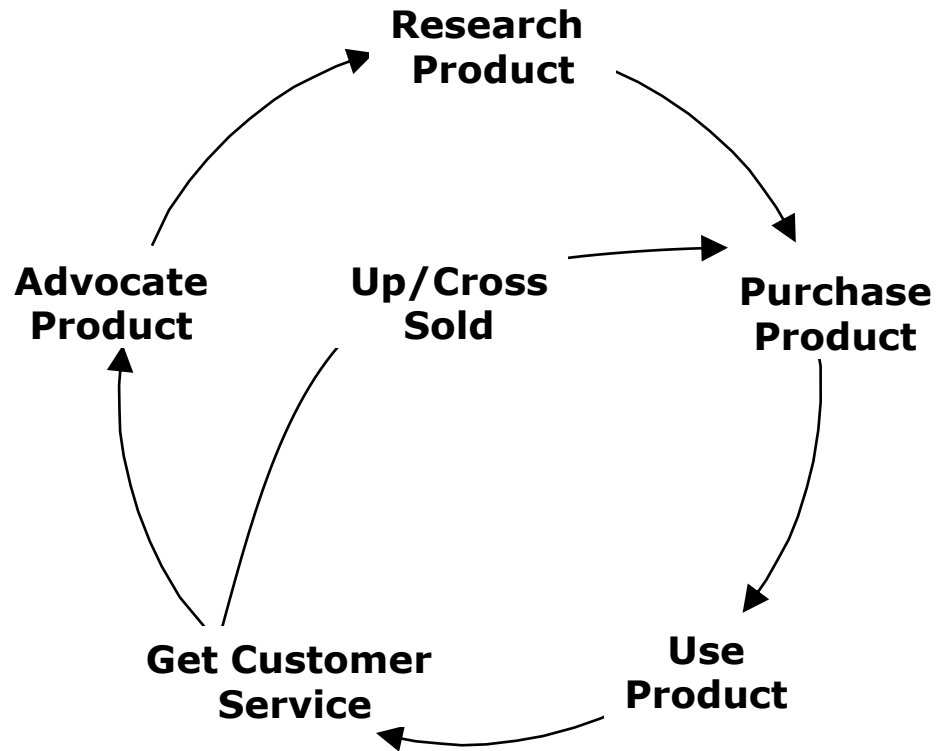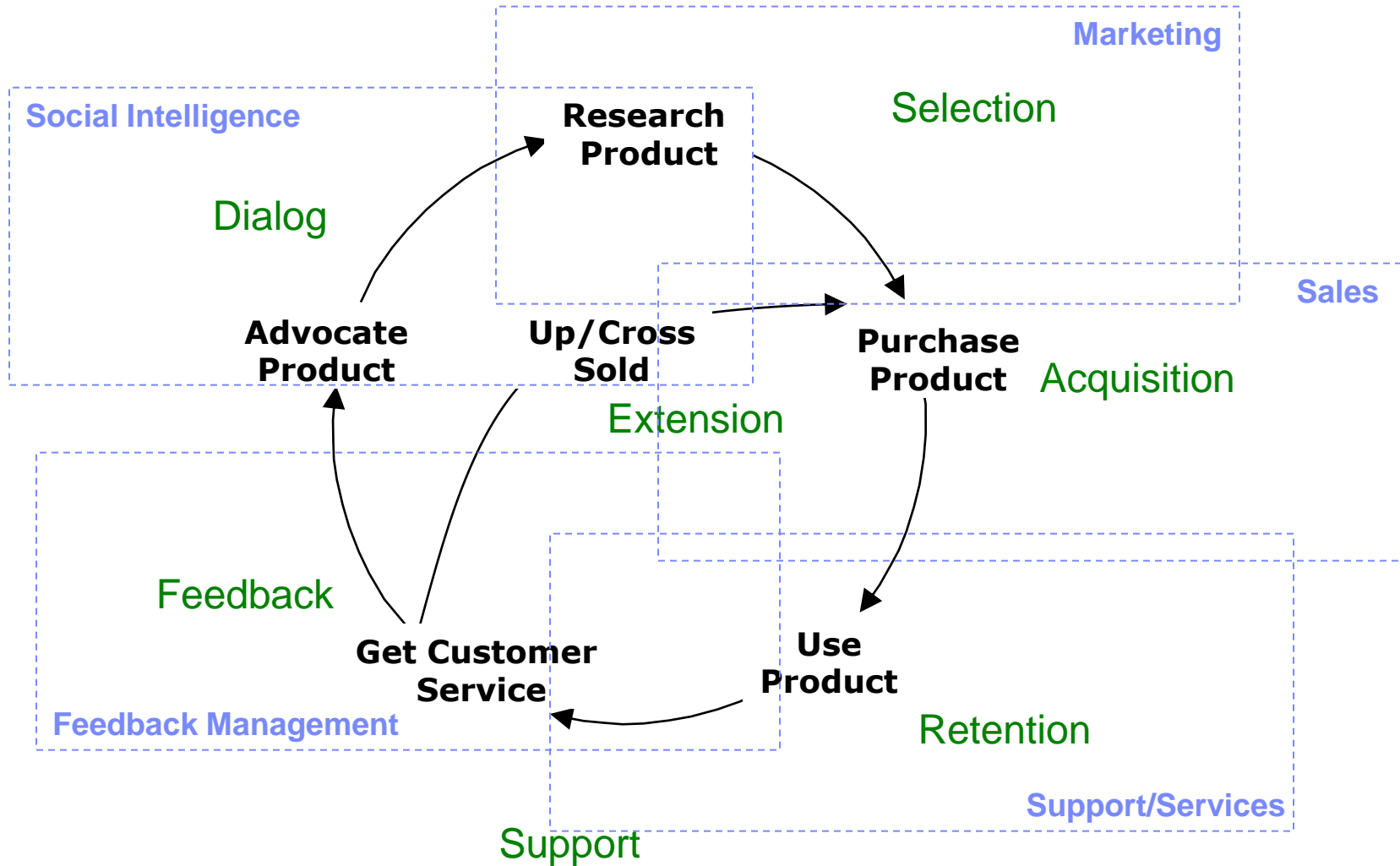## What?

The Customer Life Cycle

Each part of the organization plays a critical role of the Customer Life Cycle

Marketing

Selection

Social Intelligence

Research Product

Dialog

Advocate Product

Up/Cross Sold

Purchase Product

Sales

Acquisition

Extension

Feedback

Get Customer Service

Use Product

Feedback Management

Retention

Support/Services

Support

Customer Life Cycle – Case Studies
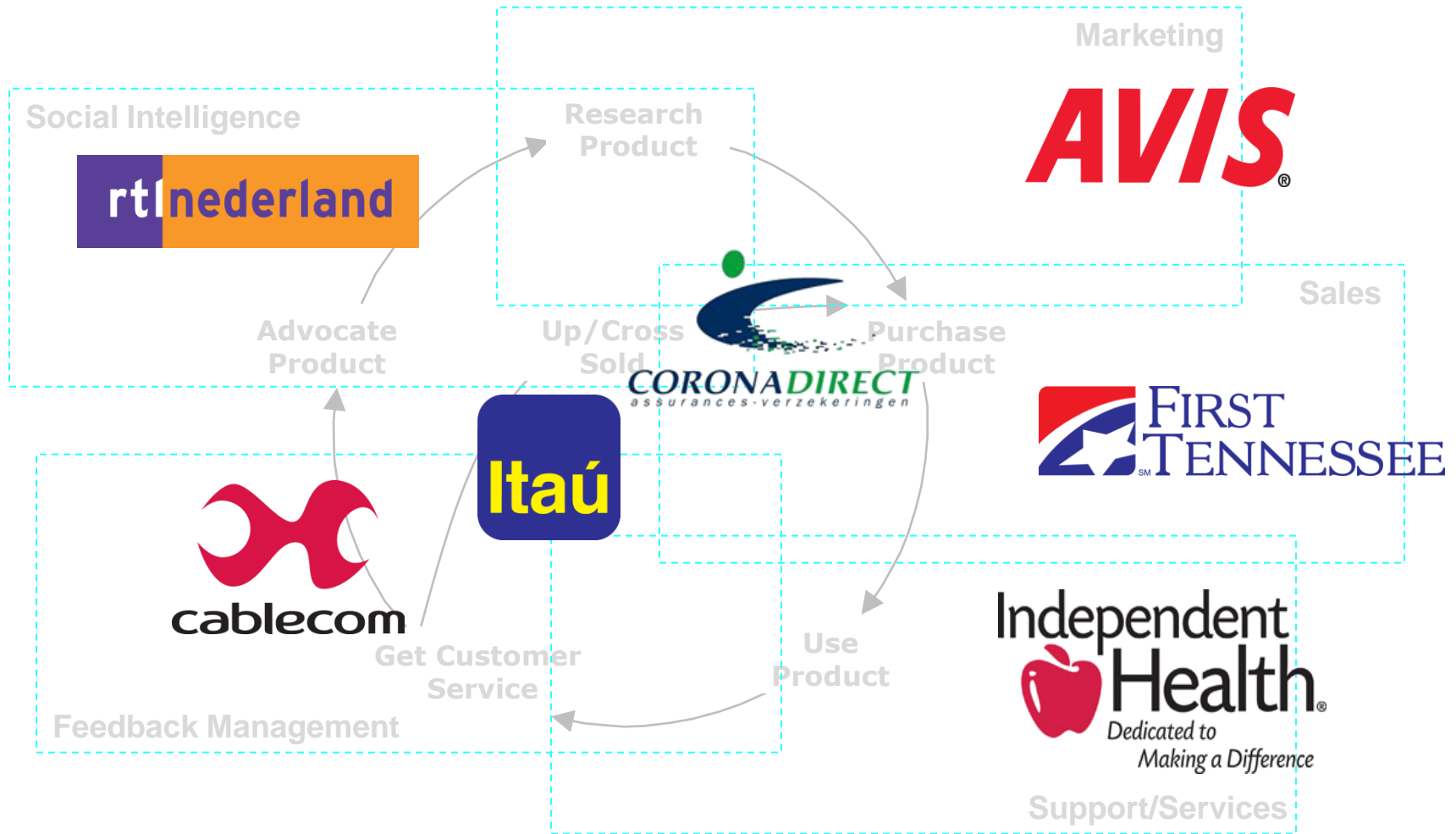
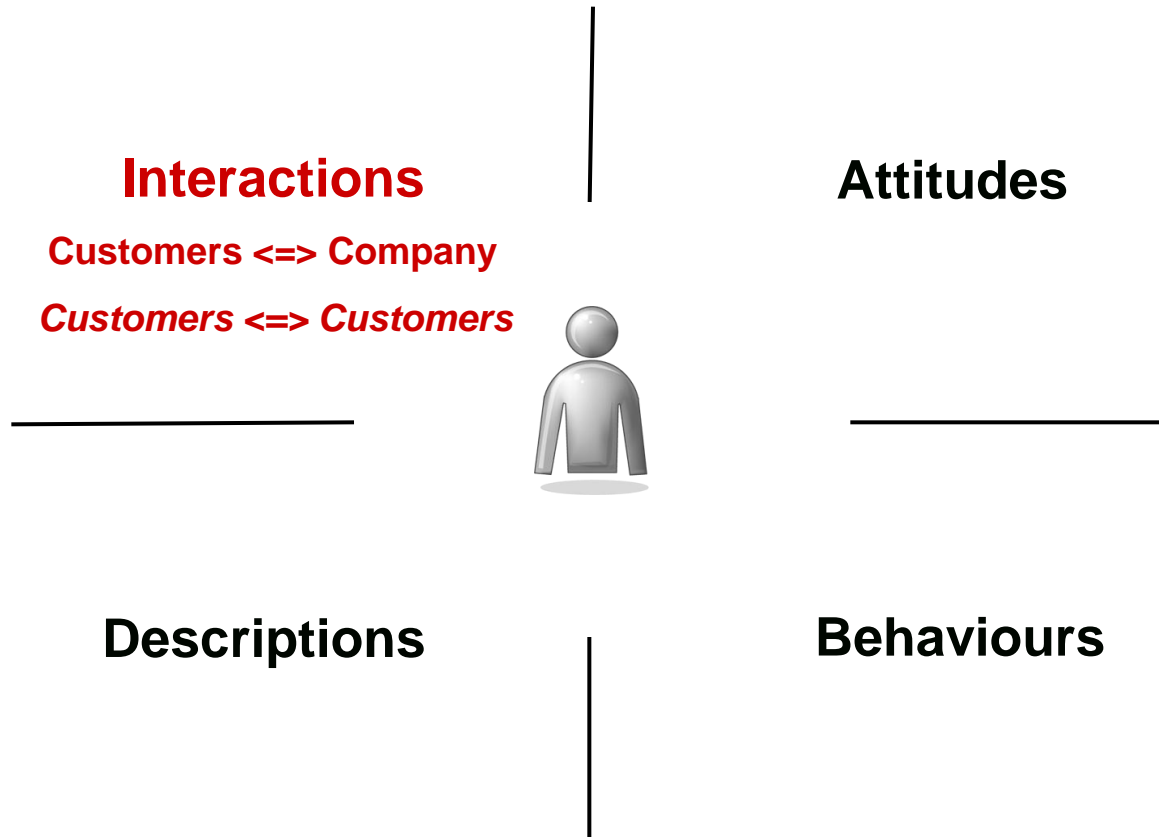# IBM has Proven Solution for each stage of the Customer Life Cycle

Attract

Brand monitoring

Customer segmentation

Social feedback analysis

Research Product

Optimal trigger marketing

Social Intelligence

Channel optimization

Influencers program management

Assortment planning

Customer insight analysis

Lead management

Competitive value assessment

Advocate Product

Up/Cross Sold

Purchase Product

Prospect assessment

Incentive optimization

Loyalty value assessment

Value pricing optimization

Value perception communication

Buying process optimization

Customer dialog management

Get Customer Service

Use Product

Proactive activation service

Grow

Warrantee analysis

Prescription/recommendation services

Support channels monitoring

Retain

Employee empowerment

Support/Services

Retention risk management

Customer Satisfaction

© 2010 IBM Corporation

Boiling it Down

Retain profitable customers

Attract New Customers

Grow Customer Value

Data at the Heart of Analytics

Interactions

Customers <=> Company

Customers <=> Customers

Attitudes

Descriptions

Behaviours

Digital Noise = Semantic Deafness

The Noise Volume is Increasing

Access Proliferation

Products Proliferation

TNS Media Intelligence has 4 million brands in its database growing at 700 a day, over 10% a year

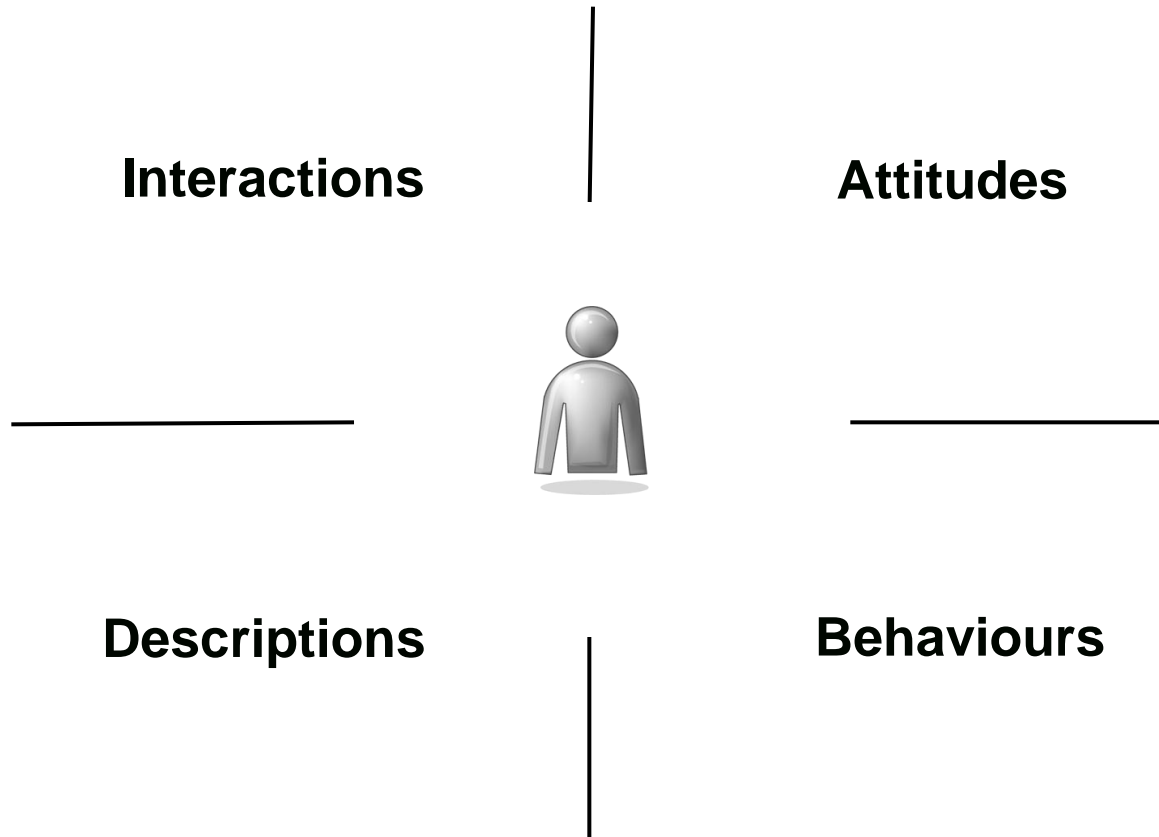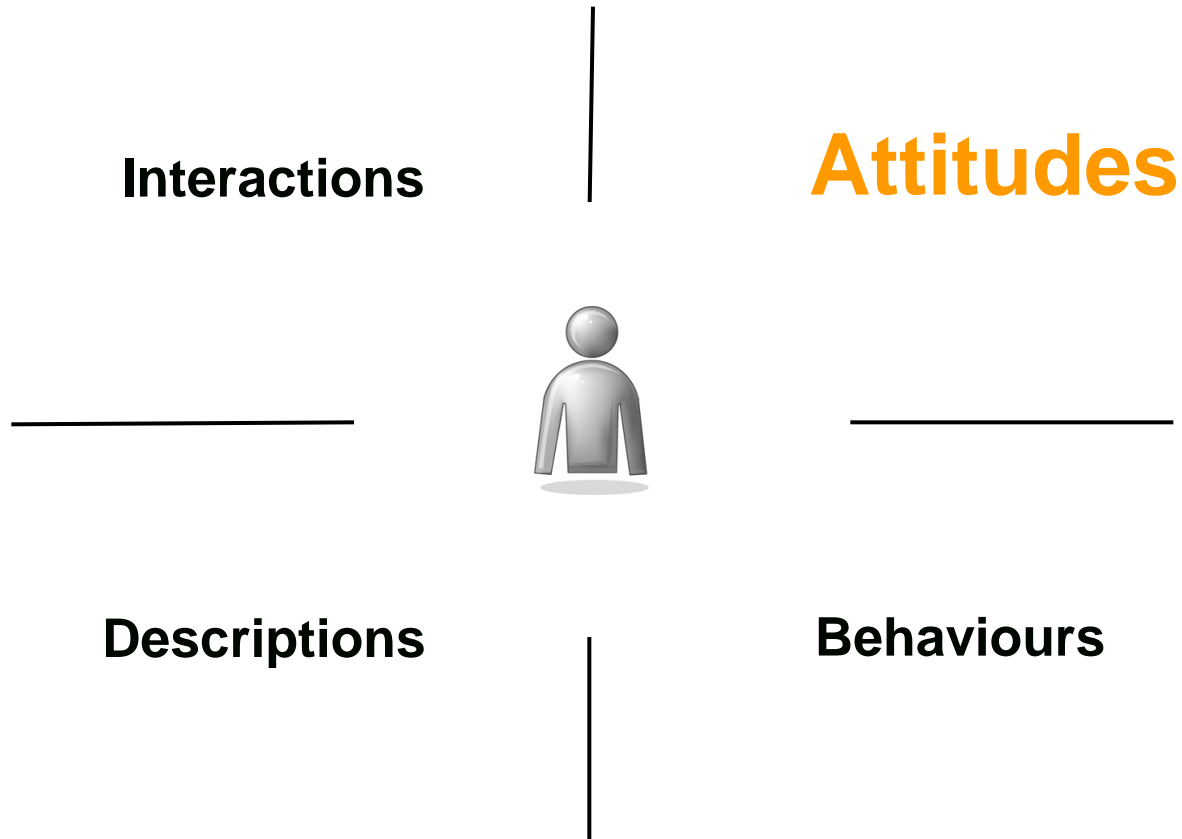**Networks Proliferation**

Them for Today:
The *Opportunities*

Data at the Heart of Analytics

Interactions   **Attitudes**

Descriptions   **Behaviours**

Data at the Heart of Analytics

Interactions

Attitudes

Descriptions

Behaviours

For the Agencies

Build on a position of strength….

…to deliver broader offerings…

Interactions ⟷ **Attitudes**

Descriptions **Behaviours**
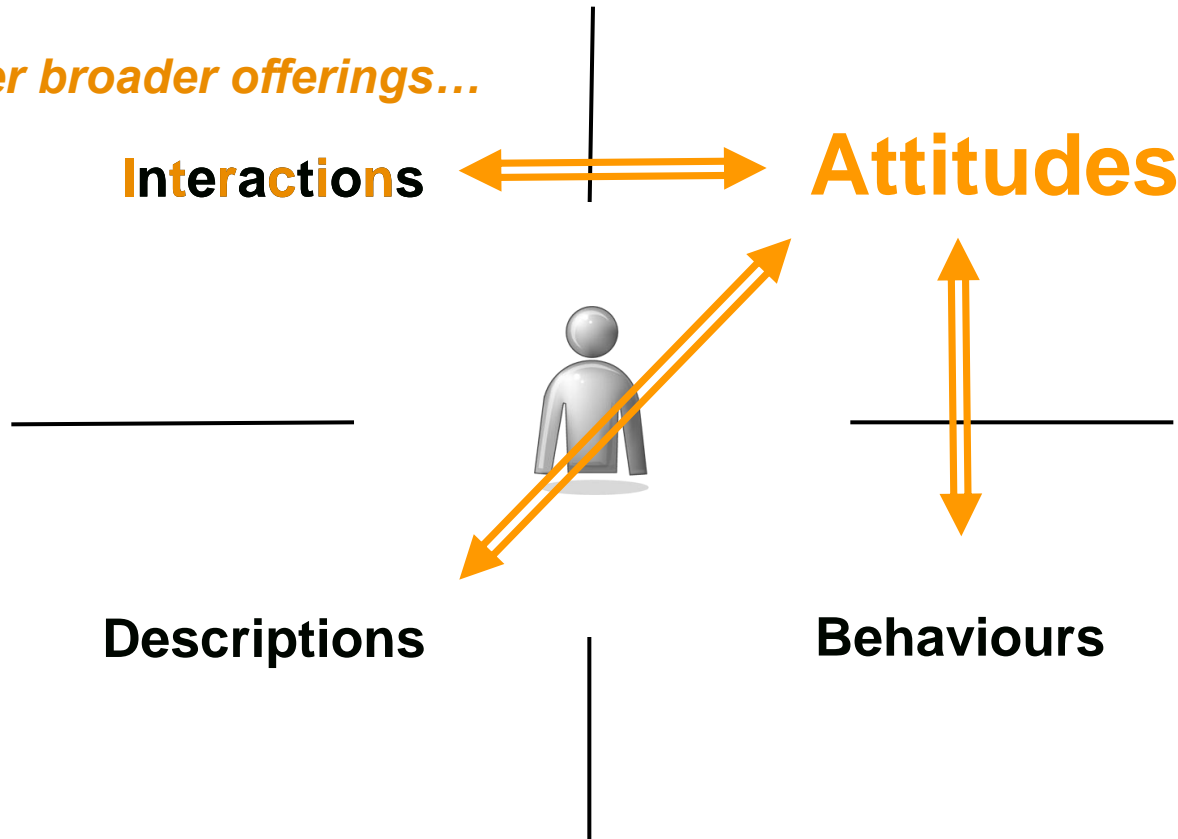
…and add value by helping clients tackle key business problems

Data at the Heart of Analytics

Interactions

Attitudes

Descriptions

Behaviours
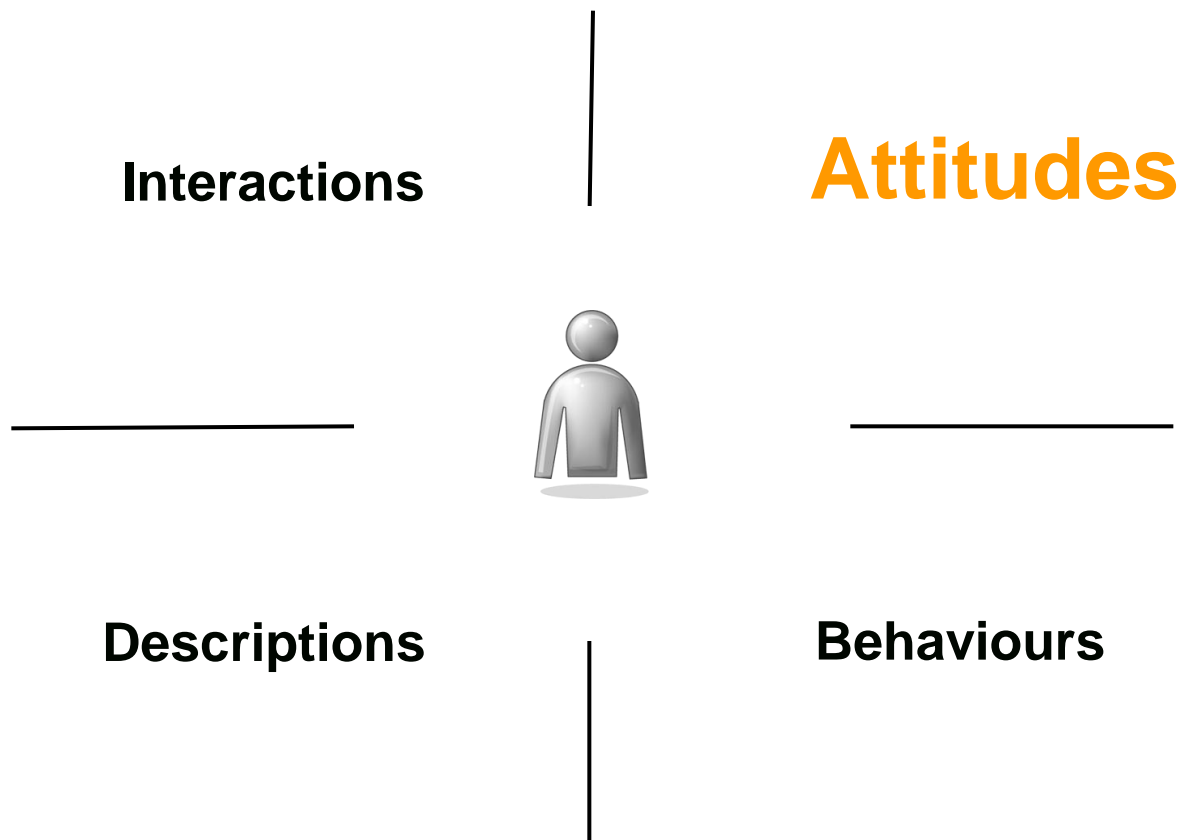
For the User Organisations

Interactions ⟷ **Attitudes**

Descriptions ⟷ Behaviours
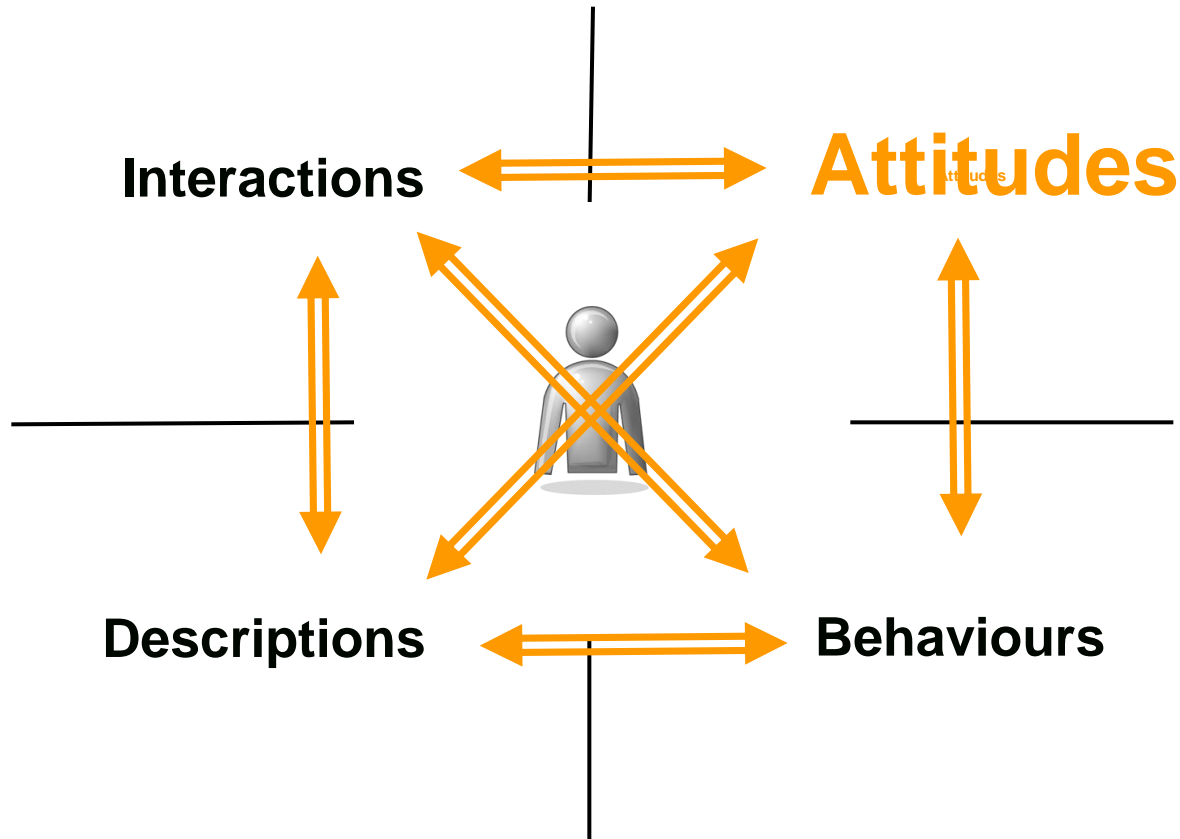
…deeper insight, greater accuracy
of prediction, higher returns

Case Study: Cablecom

- Based in Switzerland

- Core business: cable TV

- Diversified into:
  - Broadband internet access
  - Digital phone
  - Pre-paid mobile

- Business issue: retention of broadband customers
  - High cancellation rate at end of initial contract

Identified crucial point in lifecycle

- Created customer satisfaction survey, run at month 7 of initial contract

- Ten "0-10" questions, one free text

- Converted to single "satisfaction score", 0-100
  - 100 = perfectly satisfied
  - 0 = totally dissatisfied

Predictive approach

- Combined satisfaction scores with other data assets:
  - Demographics
  - Product ownership and usage behavior

- Built models to predict satisfaction score for <u>all</u> customers

- Used predictive satisfaction score to drive retention marketing

- **Result: churn reduced from 19% to 2% in treated group**

Cablecom example 2:
NPS plus text mining

- Net Promoter Score (NPS)

   "On a scale of 0-10 how likely is it that you would recommend Cablecom to a friend or colleague?"

0	1	2	3	4	5	6	7	8	9	10

Combine NPS (KPI) with
Customer Feedback (key to actions) and Text Mining

cablecom

**Supplementary open ended question:**

- **Promoters**

  "what is the single most important thing that makes you _likely_ to recommend us?"

- **Passives**

  " what is the single most important thing we could do to make you _more likely_ to recommend us?"

- **Detractors**

  " what is the single most important thing that currently makes you _unlikely_ to recommend us?"

| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |

Fix these things   Do more of these things
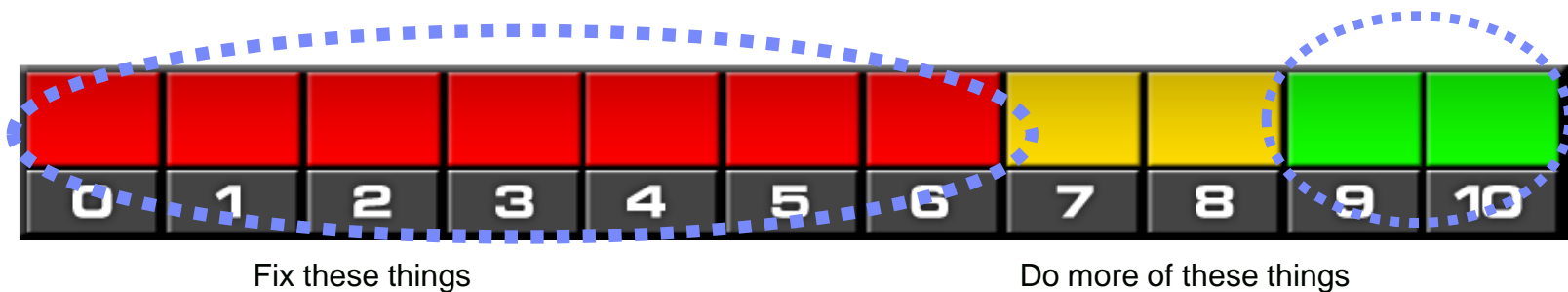
Results

Macro level:
- Information from supplementary question, categorised, reveals areas for improvement (product owners, market managers, operations managers)

Micro level:
- Customer issues drive 1:1 interactions and resolutions

In 3 months:
- **Satisfaction improved in > 50% of cases**
- **23% of detractors converted to promoters**

Agenda

09:00	Breakfast and registration
10:00	Colin Shearer (IBM): Driving better decisions across the Smarter Planet: the opportunity for Market Research in an instrumented, interconnected, intelligent world.
10:30	Phyllis Macfarlane (GfK NOP): "The Future of Market Research: Listening for the Unexpected or Passive measurement, Data Integration and Modelling?"
11.00	Coffee
11.20	Nick Read (IBM): "The Rise of Predictive Analytics"
11.50	Jonathan Thomson & Thomas Edwards (Synovate): "Data Collection from the South Pole!"
12.20	Jason Cregor (IBM): "Cloud Computing & Market Research - Opportunity or Threat?"
12.50	Lunch
13:45	James Turner (ICM Direct): "Are we Negotiating the Data Deluge?"
14:15	Dixit Shah (IBM): Social Media Analytics
14:45	Closing, Q&A
15:00	1-to-1 sessions, data mining for research demonstration, coffee and networking

SPSS **AND** IBM Technology

Bring analytics to strategic decisions

Lotus software

Highly scalable & big data computing
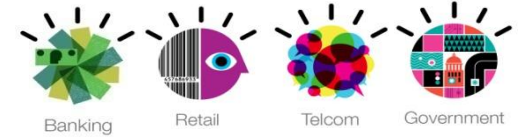
IBM Research

The Customer-centricity revolution

N NETEZZA

IBM Analytics Ecosystem

IBM
GBS

Cognos software

SPSS AN IBM COMPANY

U unica
An IBM Company

Banking   Retail   Telcom   Government

Deployment to decision makers

WebSphere software

Core *metrics*
An IBM Company

Industry Solutions

Multi-channel deployment & management