

# Keeping your loyal customers satisfied and your satisfied customers loyal



London Marriot April 23<sup>rd</sup> 2013

## Agenda

**09:00 Welcome**

Tony Boobier, Insurance Executive EMEA, IBM Business Analytics

**09:15 CMO Point of View**

Caroline Taylor, VP Marketing, Communication & Citizenship IBM UK & Ireland

**10:00 Break**

**10:15 Customer Analytics to win customers and grow your Business**

Rachel Pillsbury, CRM Manager - Data Mining, Boots

**11:05 Big Data and why it is critical to successful growth**

Noel Garry, Big Data Analytics Insurance Leadership, IBM

**11:50 Wrap up and Close**

**12:00 Lunch**

- ‘You can't just ask customers what they want and then try to give that to them. By the time you get it built, they'll want something new.’
- ‘In addition to building better products, a more open world will also encourage businesses to engage with their customers directly and authentically.’
- ‘We don't want to push our ideas on to customers, we simply want to make what they want.’
- ‘Our purpose is to deliver products and services that help people look and feel their best.’



# Analytics Provides Insight

## All information

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

## All perspectives

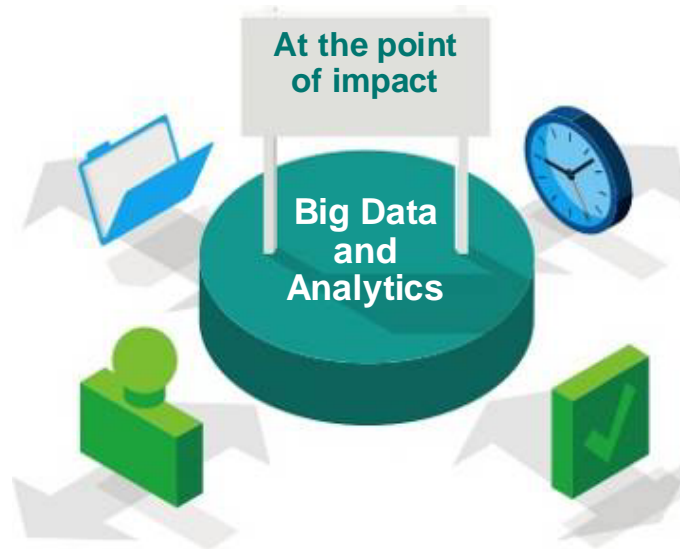
- Past (historical, aggregated)
- Present (real-time)
- Future (predictive)

## 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



# How organisations are evolving their Analytics journey



• *What are the key business issues or opportunities that Analytics and Big Data can help me to address?*

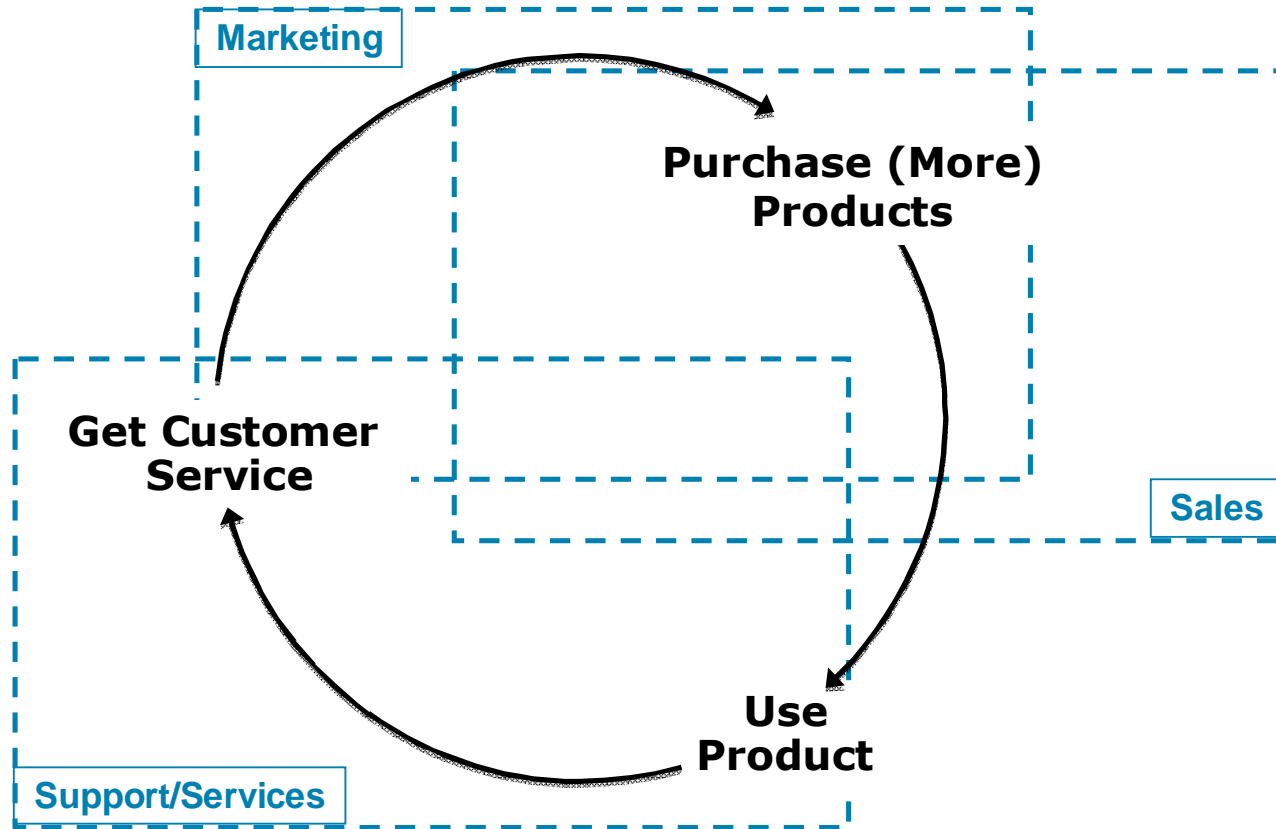


• *What are the essential analytics capabilities we need to ensure we have in place?*

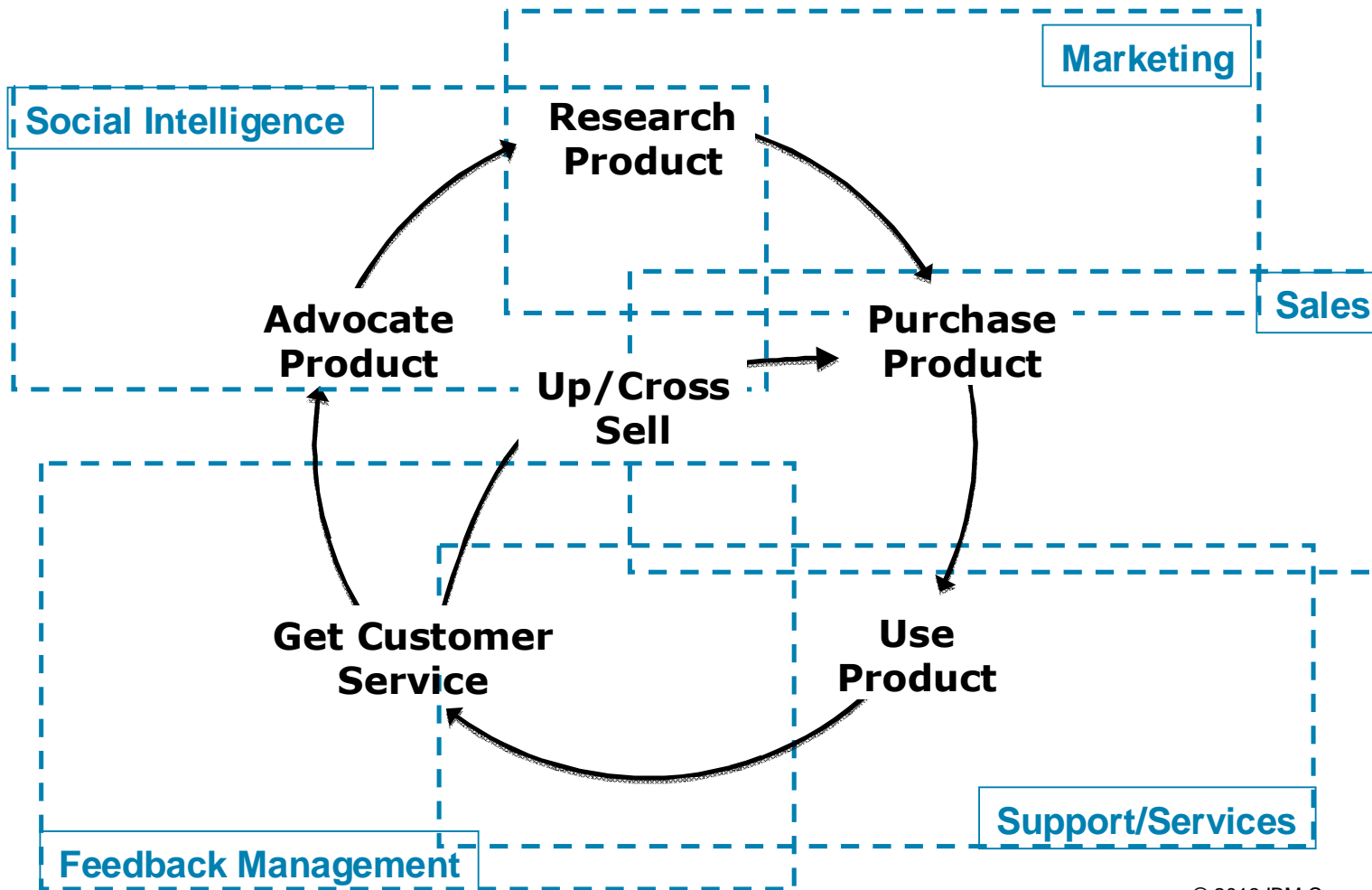


• *What analytics skills and processes do I need to add or modify to be successful?*

# Consumer Experience Framework – 10 years ago



## Customer Experience Framework today



# The CMO - an IBM Point of View

Caroline Taylor  
VP Marketing, Communications & Citizenship  
IBM UK & Ireland



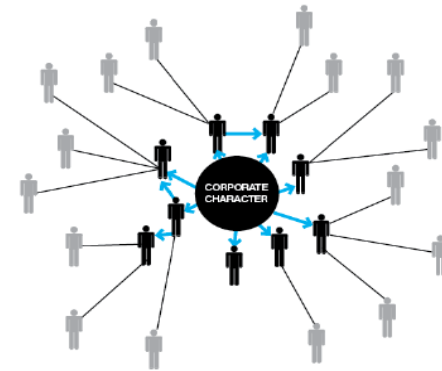
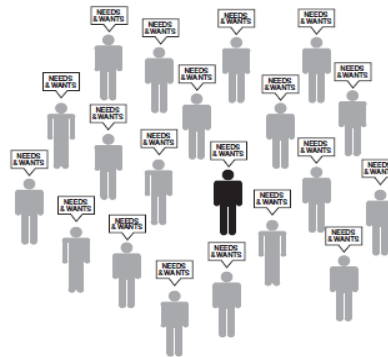
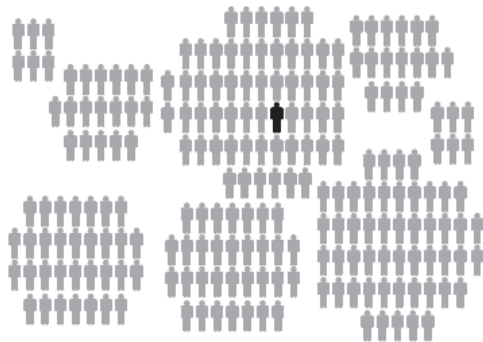


## Chief Marketing Officers – radically remaking our profession

Marketers have always been responsible for **knowing** the customer

Marketers have always been responsible for defining **what** to market, and **how** to market it

Marketers have always protected the **brand promise**



Understanding each customer as an **individual**

Creating a **system of engagement** that maximises value creation at every touch

Designing your culture and brand so they are **authentically** one



# How to Win Customers and Grow Your Business

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**Customer & Marketing Insights – Loyalty**

**Team**

April 2013

*Rachel Pillsbury*

*CRM Manager – Data Mining*



# What is Our Role?

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To Deliver Outstanding Insight Driven Direct Communications:



# Today's Presentation

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## The Journey Towards Delivering Feel Good



# The Boots Brand Mission

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## Why Have We Transformed Our CRM Capability?

- The Changing Role Of Boots in Customers' Lives
- Dynamic Relationships with Customers
- Building a Great Customer Relationship

# The Role Of Boots In Customers' Lives

1870



Champion  
Everyone's  
Right to Survival

1950



Champion  
Everyone's  
Right to a Basic  
Standard  
of Health &  
Beauty

2012



Champion  
Everyone's  
Right to FEEL  
GOOD

Motivation is Consistent, Expression Changes

# Changing Relationships With Our Customers



**Pre-2012**

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**Personal Relationships**

**High Street but Local Use**

**Understanding Your Customer**

**2012**

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**Continue Previous Relationship**

**Relationships Develop in Many Different Ways**

**Stores: 2,600+**

**People: 71,000+**



**The Objective Is To Be Customer Led**



# Building A Great Customer Relationship

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To Deliver 'Feel Good' We Must...





# To Deliver 'Feel Good' We Must Understand Women

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- Women Account for the Majority of Sales in All Major Categories
- 95% of Our Card Holders are Women
- 80% of Our Colleagues are Women



**Boots Understands Women Through Great Insight**

# Advantage Card is at the Core

Shops on weekdays at lunchtime in a local store



Buys vitamins – health conscious



Buys into meal deal offer



Boots UK Limited		
YATE - 255		
(01454) 312589		
13/10/2000	12:25	
Served by: LISA		
<b>*** 3 FOR 2 ***</b>		
<del>Viva</del> silhouettes		13.08
<del>Milk</del> Thistle		6.99
<del>Stra</del> Bk Cobarb		2.41
SAVING	£2.41 NOW	.00
<del>Co</del> Act Maxi+48		8.00
<del>Bk</del> B/Soft Wipes7		1.05
<b>*** LUNCH ***</b>		
Diet Coke 500ml		.85
Spr Blueberry Bar		.45
Del Dk Asia Wrap		2.03
SAVING	34p NOW	2.99
No7 Vouron Earn		.00
<b>TOTAL TO PAY</b>		<b>32.11</b>
<b>CARD SALES</b> £32.11		
Total Saving Today £2.75 Including 30.34 Cash And £2.41 Discount		
Points Received		48
Points to Spend In Store		889
228 1632 0499 134		*487752857

3 for 2 offers



Is a parent with a young baby



Advantage Card number

# Understanding Laura every time she shops



Shops in large store Saturday mornings

Boots UK Limited		PLYMOUTH 399		(01752) 663627	
18/10/2008		10:16		Served by: NATIE D	
£					
Evian Water 750ml					.99
No7 A/Eye Pencil					
<del>No7 Voucher, Redeem</del>	SAVING	£5.00	NOW		0.49
<del>LP Ext Voucher Mascara</del>	SAVING	£2.00	NOW		7.99
<del>Dior A/FLSH Lgt/Bge 70ml</del>					29.99
<del>QALWAX Tabs 10</del>					2.00
<del>Heat Mug</del>					1.65
<del>Aussie 3min 250ml</del>					4.17
<del>Santitas 100g</del>					.79
<del>Lynx Click App 150ml</del>	SAVING	87p	NOW		1.00
<b>TOTAL TO PAY</b>				<b>48.58</b>	
CASH				50.00	
CHANGE				1.42	
Total Saving Today £7.87					
ADVANTAGE CARD STATEMENT					
Points Received				194	
Points to Spend In Store				1083	
211 8192 8499 131				*487752857	



Purchases self-selection cosmetics, but also premium cosmetics  
Could have a partner?



Advantage Card number – same as previous receipt!

Redeems coupons

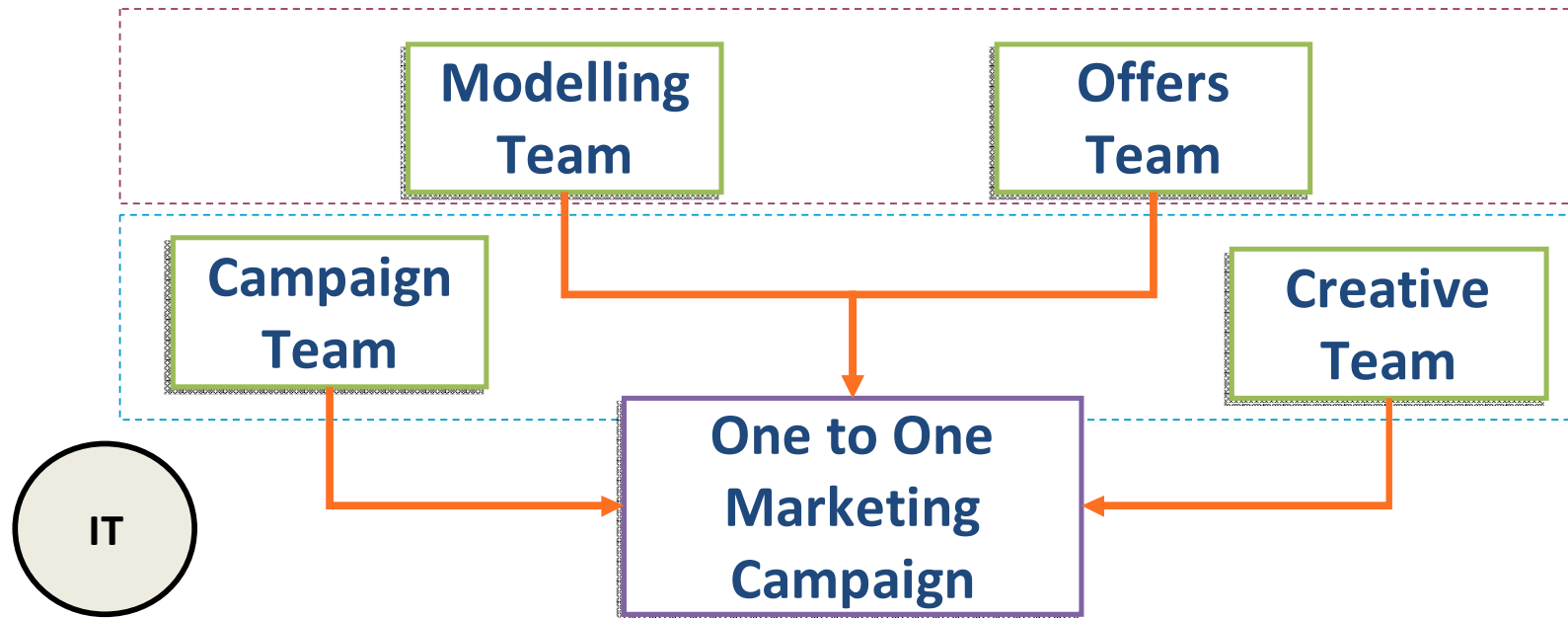


## A Fantastic Database of Facts



# Empowering People

## Structuring to Maximise Potential



Allowing Marketers to do What they do Best

# Understanding the Boots Customer: Data Mining

## Demographic Data:

We know who the customer is



## Transactional Data:

We know what they bought



**Contact Data:**  
We know who  
Received Comms and Offers



**Response Data:**  
We know who  
responds to offers



**Who to Speak to? About What?**

# Targeting to Deliver Feel Good

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## The Role of the Data Mining Team

- **Case Study 1: Quarterly Statement**
- **Case Study 2: No7 CRM Programme**
- **Case Study 3: Targeting at the Till**
- **Case Study 4: Customer Evenings**





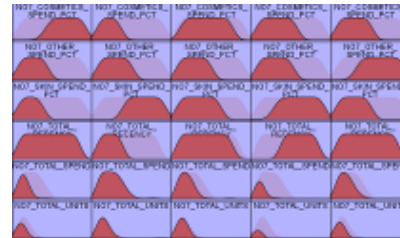
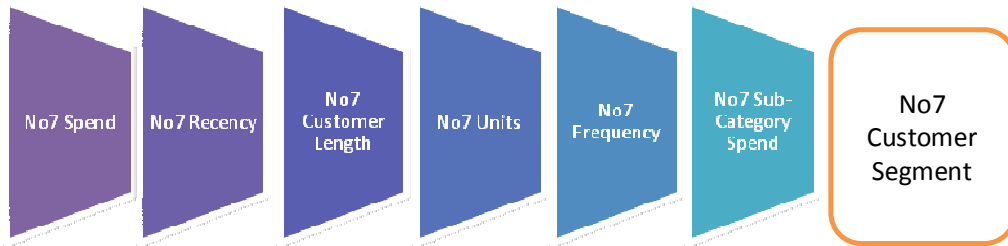
# Case Study 2: No7 CRM Programme

## OBJECTIVES:

- Drive No7 engagement, breadth and incremental spend through regular targeted direct communications
- Understand customer behaviour during the programme and how it changes
- Test and learn

Broad targeting with detailed segmentation and strict control groups to understand what works and what doesn't

K-means Clustering used to identify important variables for defining segments



Segmentation refreshed monthly to track changes in behaviour

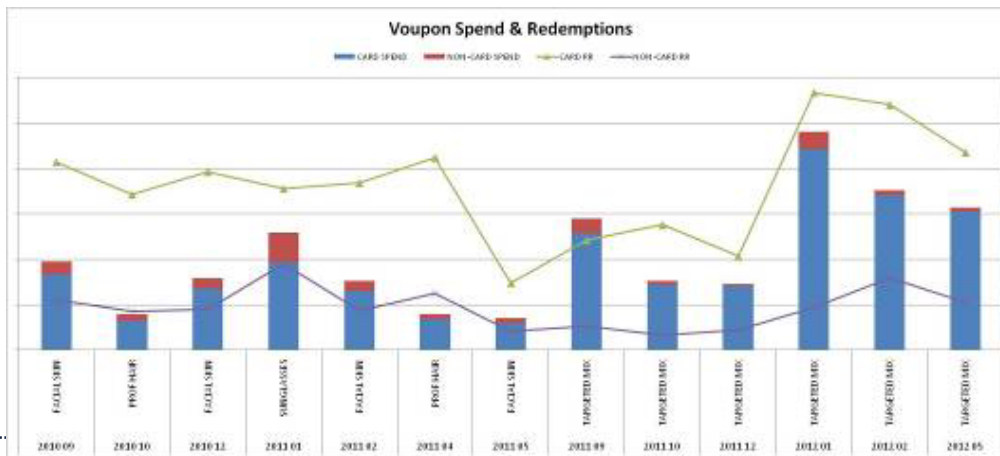
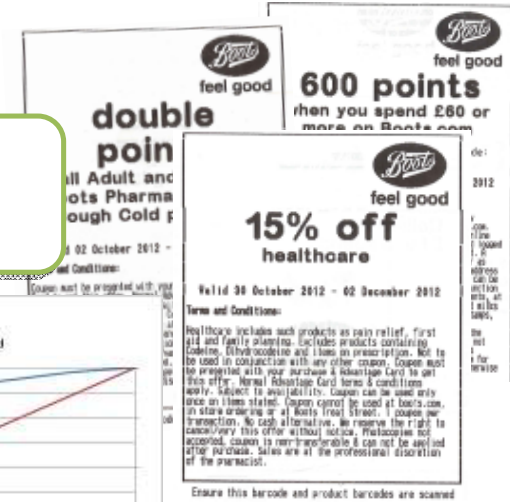
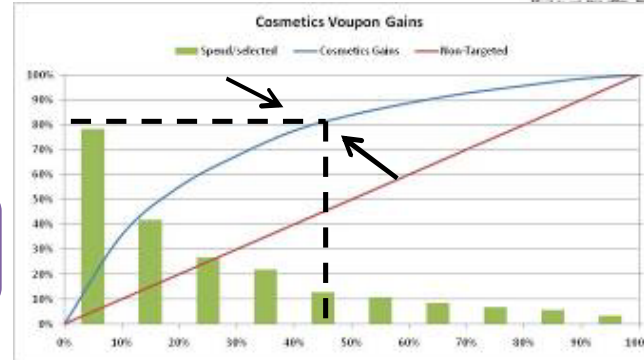
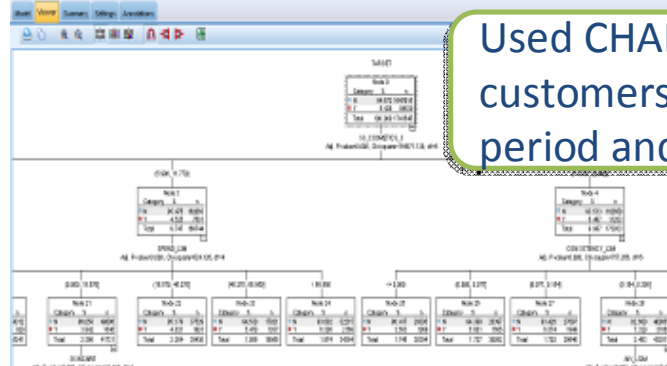


# Case Study 3: Targeting at the Till

Move from one offer per period that was untargeted

Used CHAID models to identify which customers were the most likely to visit in a period and use a till-generated offer

Applied gains chart logic to refine targeting and improve response rates

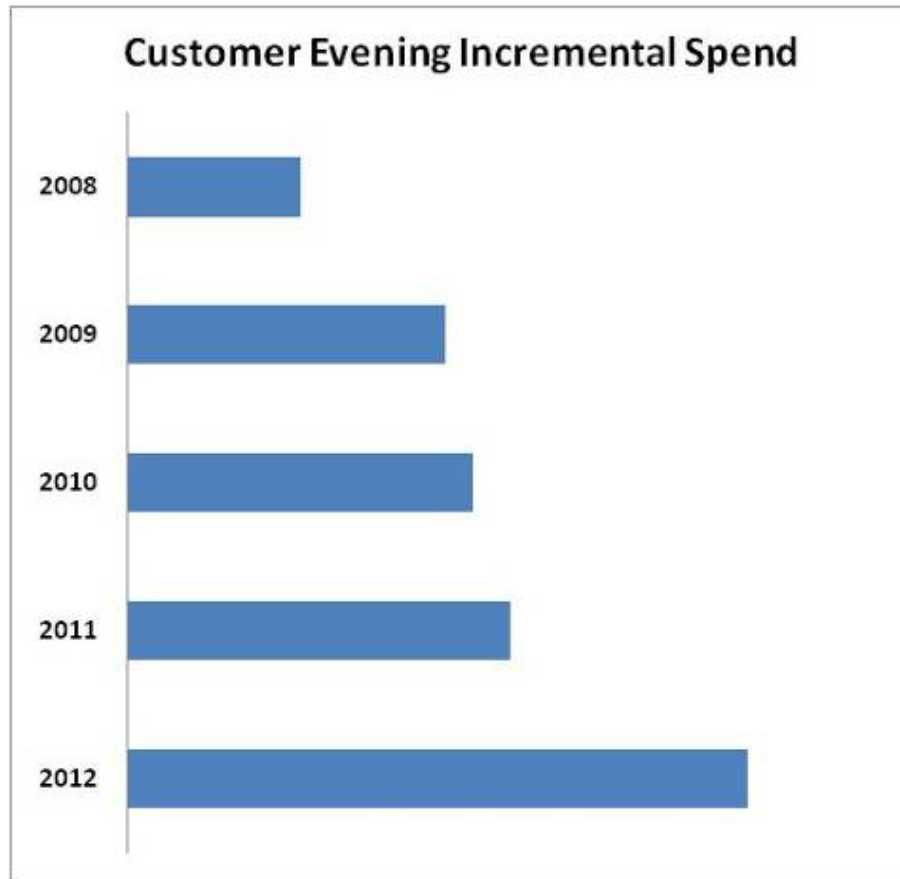


Increase in Customer Engagement  
 Increase in Spend  
 Increase in Redemption Rates  
 Increase in Customer Frequency





# Case Study 4: Customer Evenings



2008: Poor Targeting

2009: Applied RFM targeting to find customers' favourite stores

2010: Applied propensity modelling to achieve maximum responses from minimum mailings

2011: Introduced multi-channel targeting to increase customer awareness

2012: Refined propensity model and store list to attract the best customers

**Bringing all elements of targeting together to maximise spend and minimise costs.**

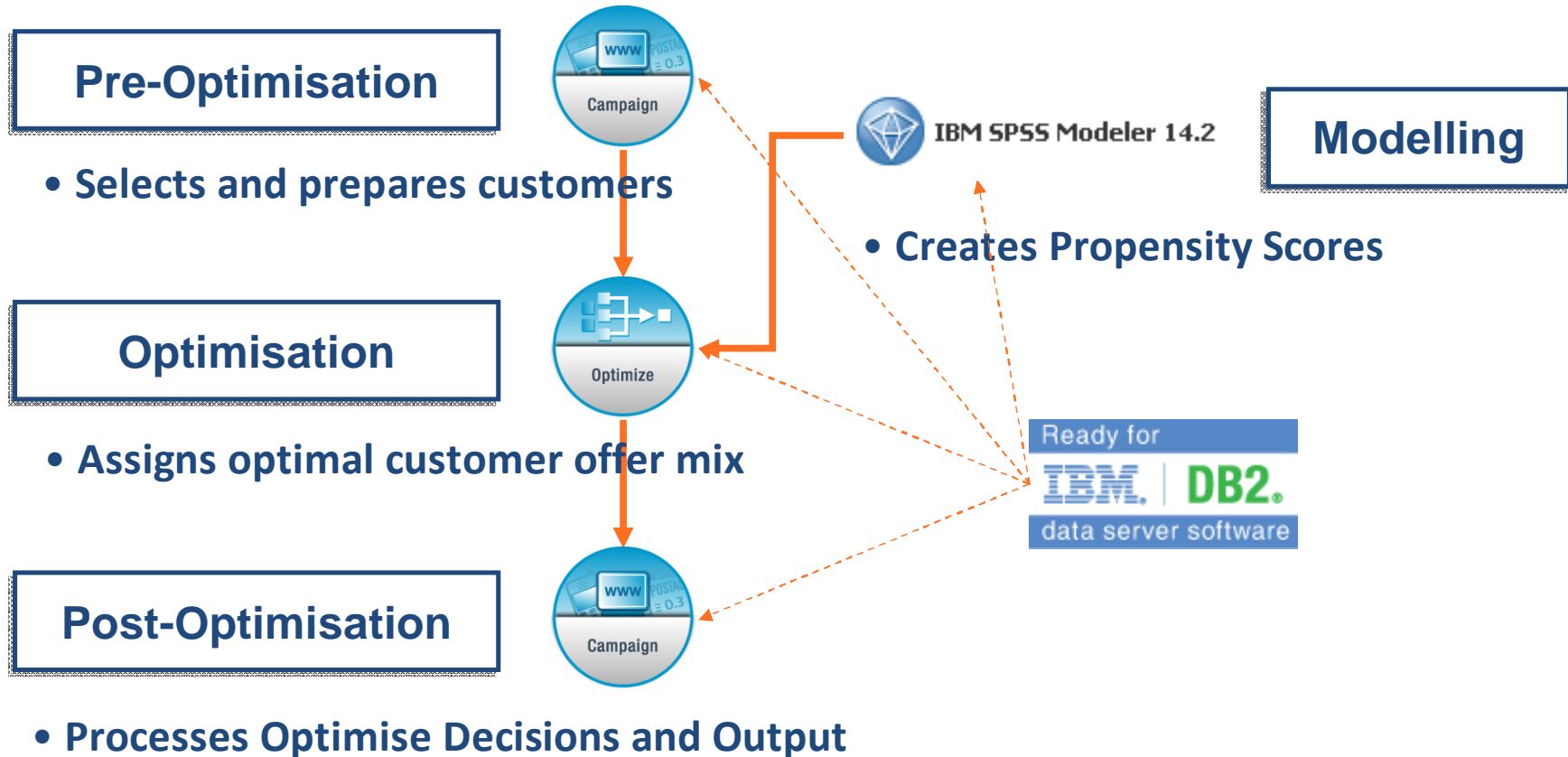
# Joined Up Communications

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## Getting the Message Out to Customers

- The role of Optimisation
- Multi-Channel Optimisation
- Future Challenges

# Delivering a Clear, Manageable Process



**Efficient Process Increases Output Quality**

# Multi-Channel Optimisation



**Traditionally a Direct Mail Focus**

**Now Active via Multiple Channels**

**Delivering Feel Good in All Interactions**

# The Challenge of Growing Complexity



**Coherent, Planned, and Profitable Touch-Points**



# Delivering the Boots Mission and 'Feel Good'

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# Thank You & Questions

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[rachel.pillsbury@boots.co.uk](mailto:rachel.pillsbury@boots.co.uk)



# ***Big Data and why it is critical to successful growth***

Noel Garry, European Big Data Insurance Leader



# Business Models are under Constant Threat

**Demanding and connected customers**

**Brands built and destroyed in days**

**Great relationships trump great products**



## Telecommunications

Transforming their use of network data into new revenue streams



## Electronic Retailing

Disrupted by social media, networks and mobile commerce

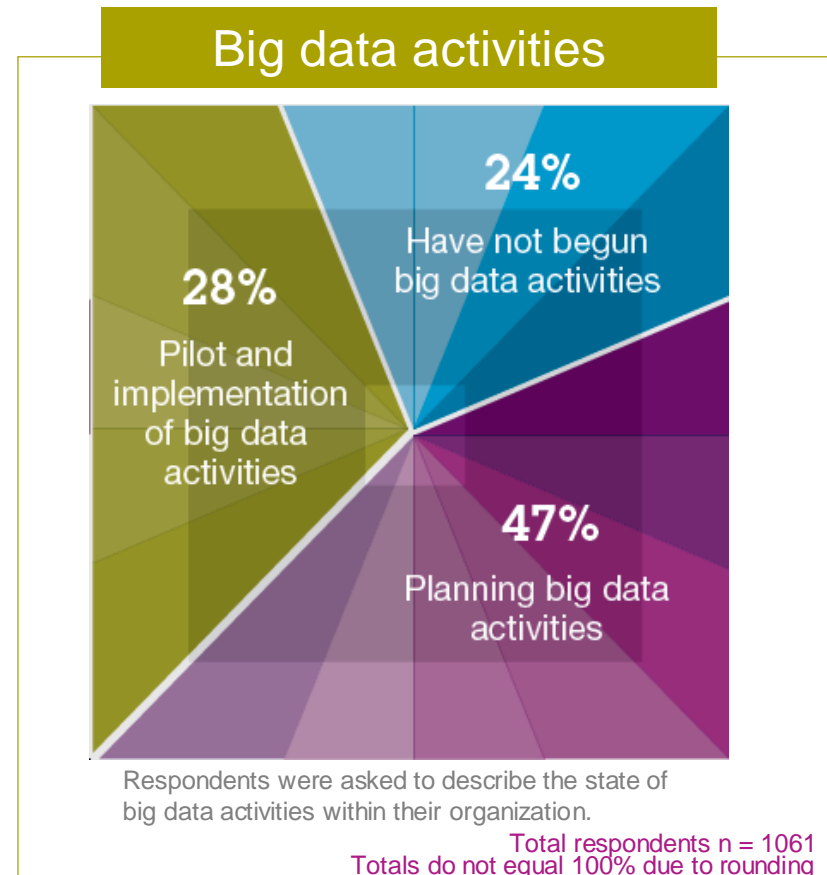


## Political Campaigns

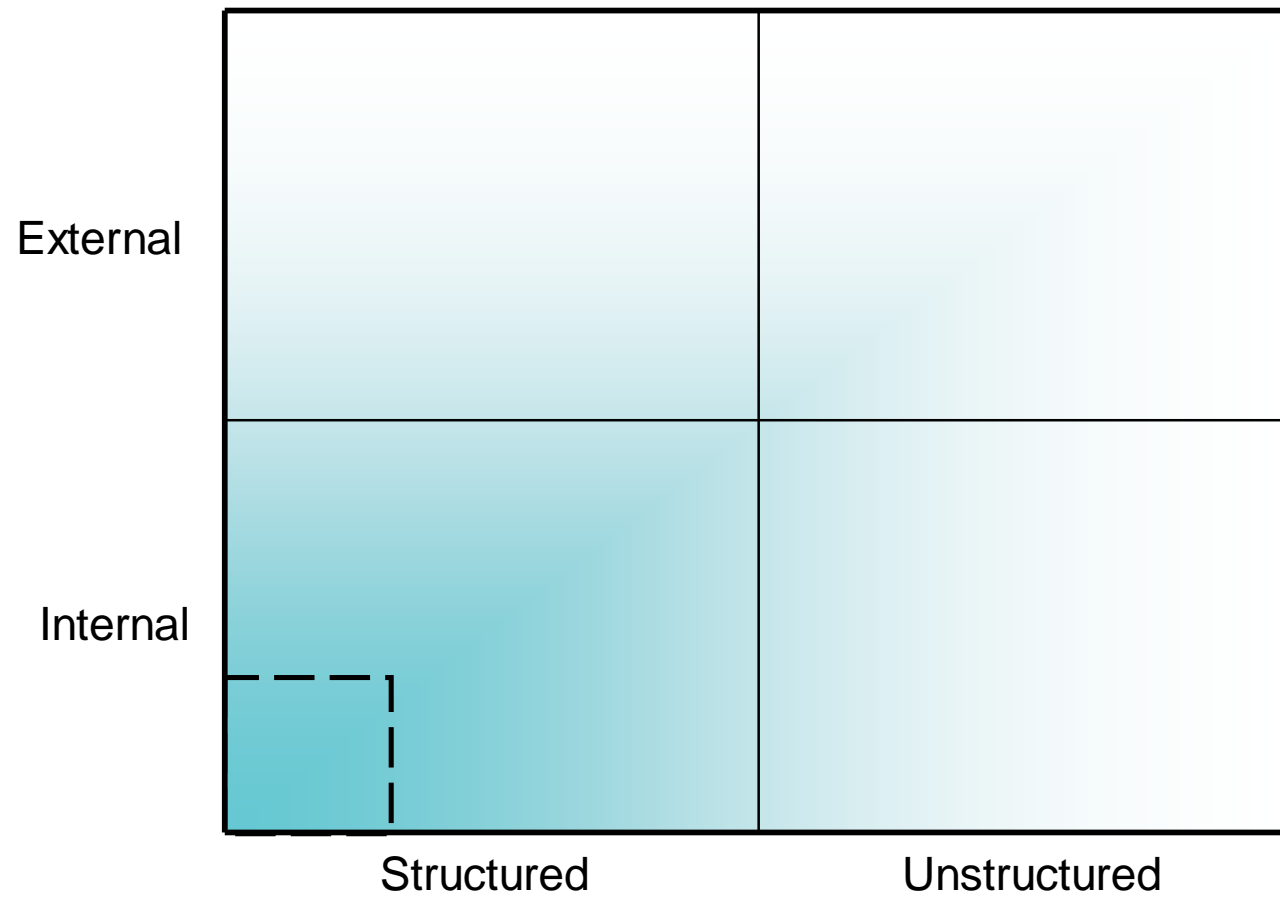
Game changing targeting and recruitment of individual voters

***Not changing is the same as losing***

## Three out of four organizations have big data activities underway; and one in four are either in pilot or production



## Most companies only use a fraction of available data



# Change is Being Fueled by Disruptive Technology Factors



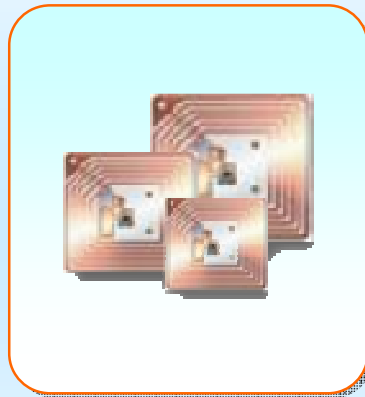
# Big Data is All Data and All Paradigms

## Transactional & Application Data



- Volume
- Structured
- Throughput

## Machine Data



- Velocity
- Semi-structured
- Ingestion

## Social Data



- Variety
- Highly unstructured
- Veracity

## Enterprise Content



- Variety
- Highly unstructured
- Volume



# Every Industry can Leverage Big Data and Analytics

<p><b>Banking</b></p> <ul style="list-style-type: none"> <li>• Optimize Offers and Cross Sell</li> <li>• Contact Center Efficiency and Problem Resolution</li> <li>• Payment Fraud Detection &amp; Investigation</li> <li>• Counterparty Credit Risk Management</li> </ul>	<p><b>Insurance</b></p> <ul style="list-style-type: none"> <li>• Claims Fraud</li> <li>• Customer Retention</li> <li>• Catastrophe Modeling</li> <li>• Telematics</li> <li>• Producer Management</li> </ul>	<p><b>Telco</b></p> <ul style="list-style-type: none"> <li>• Pro-active Call Center</li> <li>• Network Analytics</li> <li>• Location Based Services</li> <li>• IT/Network Infrastructure Transformation</li> <li>• Smarter Campaigns</li> </ul>	<p><b>Energy &amp; Utilities</b></p> <ul style="list-style-type: none"> <li>• Smart Meter Analytics</li> <li>• Distribution Load Forecasting/Scheduling</li> <li>• Condition Based Maintenance</li> <li>• Create &amp; Target Customer Offerings</li> </ul>	<p><b>Media &amp; Entertainment</b></p> <ul style="list-style-type: none"> <li>• Business process transformation</li> <li>• Audience &amp; Marketing Optimization</li> <li>• Multi-Channel Enablement</li> <li>• Digital commerce optimization</li> </ul>
<p><b>Retail</b></p> <ul style="list-style-type: none"> <li>• Actionable Customer Insight</li> <li>• Merchandise Optimization Playbook</li> <li>• Dynamic Pricing</li> </ul>	<p><b>Travel &amp; Transport</b></p> <ul style="list-style-type: none"> <li>• Customer Analytics &amp; Loyalty Marketing</li> <li>• Capacity &amp; Pricing Optimization</li> <li>• Predictive Maintenance Analytics</li> </ul>	<p><b>Consumer Products</b></p> <ul style="list-style-type: none"> <li>• Optimized Promotions Effectiveness</li> <li>• Micro-Market Campaign Management</li> <li>• Real Time Demand Forecast</li> </ul>	<p><b>Government</b></p> <ul style="list-style-type: none"> <li>• Threat Prediction and Prevention</li> <li>• Health and human services fraud, waste &amp; abuse</li> <li>• Tax compliance - fraud and abuse</li> <li>• Crime prevention and prediction</li> </ul>	<p><b>Healthcare</b></p> <ul style="list-style-type: none"> <li>• Measure &amp; Act on Population Health</li> <li>• Engage Consumers in their Healthcare</li> </ul>
<p><b>Automotive</b></p> <ul style="list-style-type: none"> <li>• Data Warehouse Optimization</li> <li>• Predictive Asset Optimization (PAO)</li> <li>• Actionable Customer Intelligence</li> <li>• Connected vehicle</li> </ul>	<p><b>Chemical &amp; Petroleum</b></p> <ul style="list-style-type: none"> <li>• EDW Smart Consolidation &amp; Augmentation</li> <li>• Operational Surveillance, Analysis &amp; Optimization</li> <li>• Engineering &amp; Operational Data Exploration &amp; Mining</li> </ul>	<p><b>Aerospace &amp; Defense</b></p> <ul style="list-style-type: none"> <li>• Uniform Information Access Platform</li> <li>• Data Warehouse Optimization</li> <li>• Predictive Asset Optimization (PAO)</li> </ul>	<p><b>Electronics / Industrial Products</b></p> <ul style="list-style-type: none"> <li>• Channel Driven Customer Analytics (CDCA)</li> <li>• Predictive Asset Optimization (PAO)</li> </ul>	<p><b>Life Sciences</b></p> <ul style="list-style-type: none"> <li>• Increase visibility into drug safety and effectiveness</li> </ul>

## The 5 Key Use Cases



### Big Data Exploration

Find, visualize, understand all big data to improve decision making



### Enhanced 360° View of the Customer

Extend existing customer views (MDM, CRM, etc) by incorporating additional internal and external information sources



### Security/Intelligence Extension

Lower risk, detect fraud and monitor cyber security in real-time



### Operations Analysis

Analyze a variety of machine data for improved business results



### Data Warehouse Augmentation

Integrate big data and data warehouse capabilities to increase operational efficiency

# 1. Big Data Exploration



Explore and mine big data to find what is interesting and relevant to the business for better decision making

## Requirements

Explore new data sources for potential value

Mine for what is relevant for a business imperative

Assess the business value of unstructured content

Uncover patterns with visualization and algorithms

Prevent exposure of sensitive information

## Industry Examples

- Customer service knowledge portal
- Insurance catastrophe modeling
- Automotive features and pricing optimization
- Chemicals and Petroleum conditioned base maintenance
- Life Sciences drug effectiveness



Global automotive manufacturer gains a timely, integrated view of vehicles

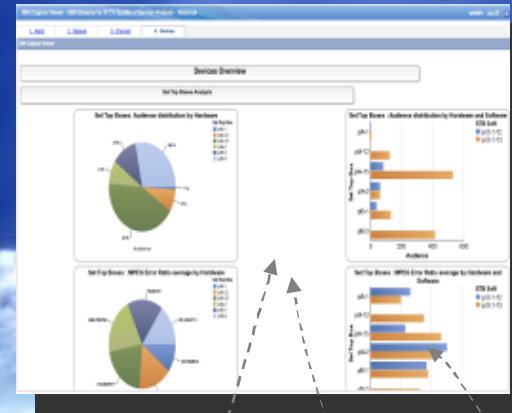
The IBM Big Data platform combines at-rest vehicle data with real time data-in-use from vehicles for single, integrated, near real-time view of the vehicle and its usage.

- Monetize telematics data
- Predict demand for replacement parts and service
- Provide drivers assistance

# Single, integrated view of vehicle - functional architecture



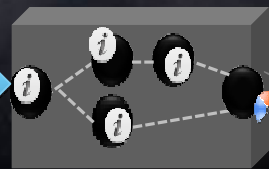
Visualization & Discovery



Stream Computing



Reliability of



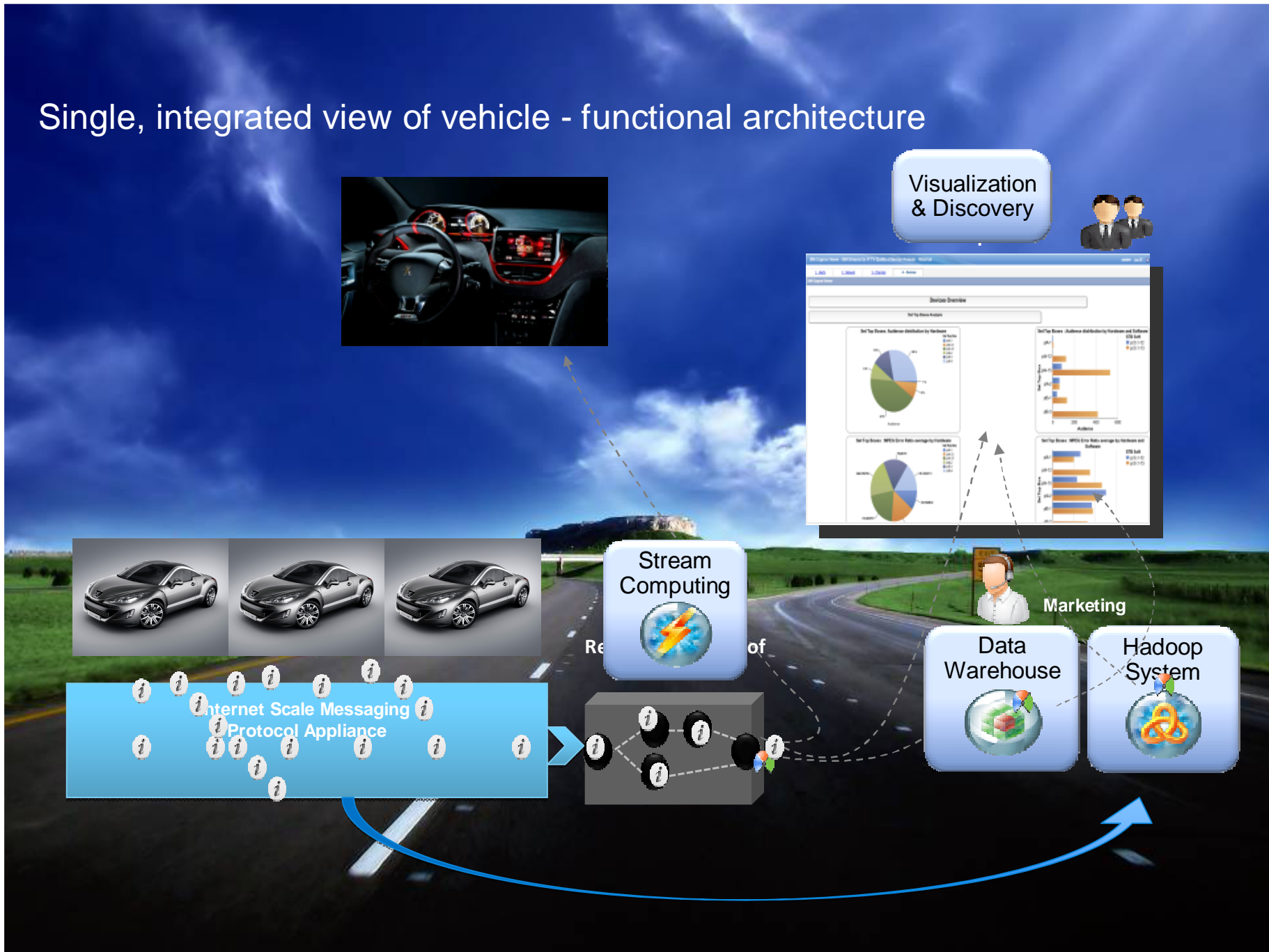
Data Warehouse



Hadoop System



Marketing



## 2. Enhanced 360° View of the Customer



Optimize every customer interaction by knowing everything about them

### Requirements

Create a connected picture of the customer

Mine all existing and new sources of information

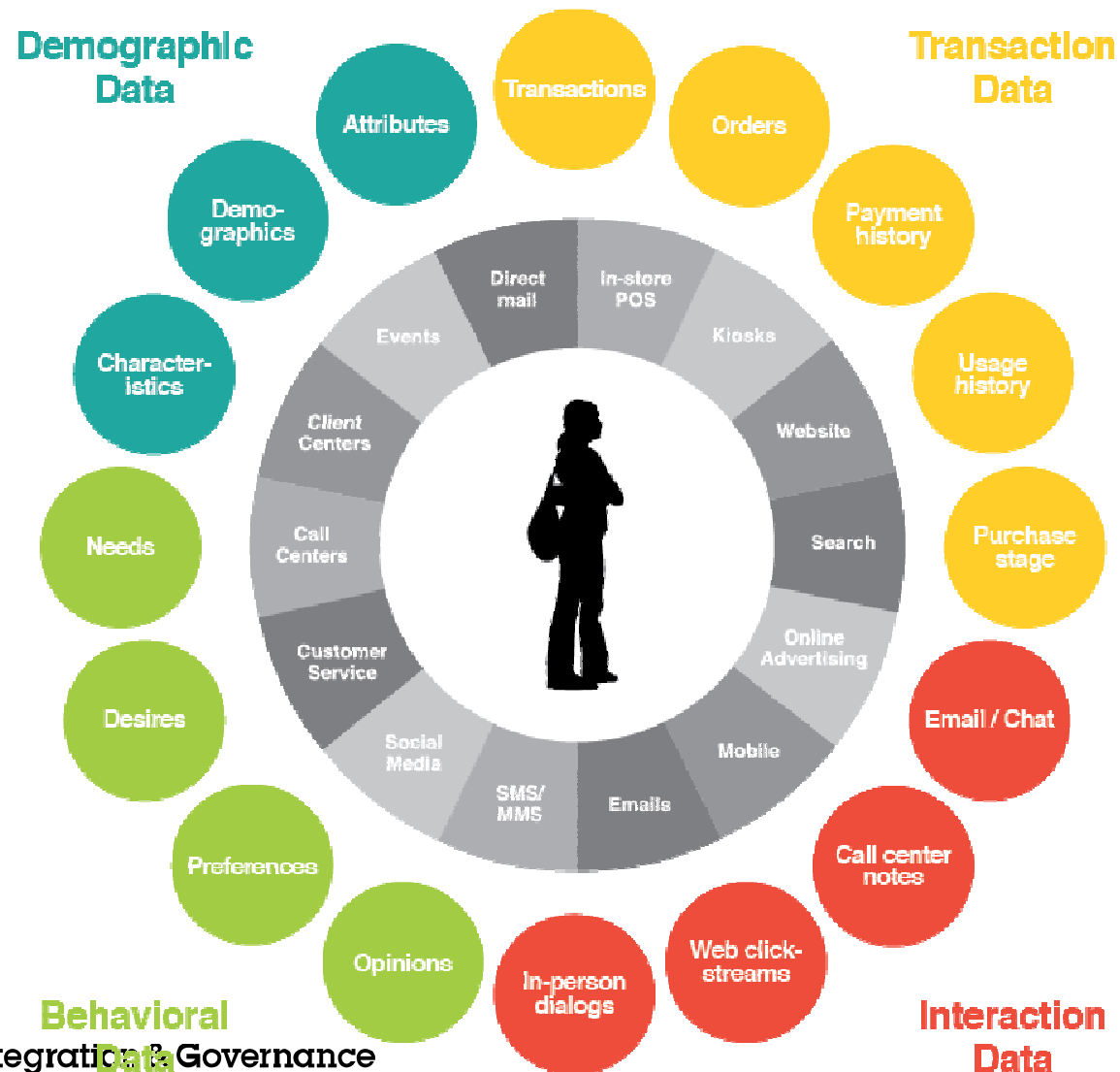
Analyze social media to uncover sentiment about products

Add value by optimizing every client interaction

### Industry Examples

- Smart meter analysis
- Telco data location monetization
- Retail marketing optimization
- Travel and Transport customer analytics and loyalty marketing
- Financial Services Next Best Action and customer retention
- Automotive warranty claims

# How well do we know our customers?



# Would you insure her?



## NORMAL CRITERIA

Young  
First time driver  
No experience

REJECT





Jane Smith

Add a Cover

Update Info Activity Log

From: Beverly Hills, California  
Studying: Medicine at Harvard University  
Current Location: On holiday in Mauritius

Sponsored

WOMEN on Facebook



Find Your Next Hot Date. Join Zoosk®. Chat, Browse Pictures, Meet Single Women Near You!

02 Business All In



Fixed Broadband, Landline, Mobile and Cloud Services. All from €79 a month with 02.

Photos



Here is a photo of me on my pony

Photos



Holiday photos from Mauritius

Activities

Looking for my first flat in the Harvard area next week

Taking more driving lessons at the driving school

News

My Mum and Dad have just had their first ever insurance claim after 30 years of driving when somebody scratched the side of their new Bentley when it was parked at the cricket match

Now

- September
- 2012
- 2011
- 2010
- 2009
- 2008
- Born

## 2. Enhanced 360° View of the Customer

**SOURCE SYSTEMS**

**CRM**  
 Name: J Robertson  
 Address: 35 West 15<sup>th</sup>  
 Address: Pittsburgh, PA 15213

**ERP**  
 Name: Janet Robertson  
 Address: 35 West 15<sup>th</sup> St.  
 Address: Pittsburgh, PA 15213

**Legacy**  
 Name: Jan Robertson  
 Address: 36 West 15<sup>th</sup> St.  
 Address: Pittsburgh, PA 15213

360° View of Party Identity

**InfoSphere MDM**

First: Janet  
 Last: Robertson  
 Address: 35 West 15<sup>th</sup> St  
 City: Pittsburgh  
 State/Zip: PA / 15213  
 Gender: F  
 Age: 48  
 DOB: 1/4/64



Cognos BI

Cognos Consumer Insight



**OPTIMUM INVESTMENTS**

Home > Janet Robertson

Logged in as Frank Galato | Help

**Personal Information**  
 Janet Robertson  
 Senior Regional Sales Manager  
 Department: Sales  
 Office: Pittsburgh, PA  
 robertson@wakefield.com  
 412.422.2409 x555

**Associated Accounts**  
 Wakefield Investments

**LinkedIn History**  
 Wakefield Investments  
 Title: Senior Regional Sales Manager  
 Years worked: Nov 2005 - Present

**Purchase History**

Date	Amount	Fund
2011-04	23k	Western Asset U.S. Treasury Reserves
2011-01	25k	Optimum Short Duration Municipal Income Fund
2010-10	19k	Optimum Dividend Income Fund
2010-07	10k	Optimum BatteryMarch S&P 500 Index Fund
2010-04	11k	Optimum ClearBridge Large Cap Growth Fund

**Owned Products**

- Optimum Bond Fund
- Western Asset U.S. Treasury Reserves
- Optimum Western Asset Short Duration Municipal Income Fund
- Optimum Dividend Value Fund
- Western Asset New York Municipal Money Market Fund
- Optimum Western Asset Oregon Municipal Fund
- Optimum Special Equity Fund
- Optimum Western Asset New Jersey Municipal Fund

**Recent Conversations**

Email: Optimum Fund Management Overview  
 Janet, please find an overview of Optimum and the funds we offer. This is only a high level...  
 Exchange - 3 hours ago

Note: Janet is new to Wakefield but has been a wholesaler for 10 years. New to Optimum Funds.  
 Salesforce - 2 days ago

Title: Optimum Introduction  
 Welcome Janet to Wakefield. I wanted to introduce you...

InfoSphere Data Explorer



Unified View of Party's Information



### 3. Security and Intelligence Extension



Enhance traditional security solutions to prevent crime by analyzing all types and sources of big data

#### Requirements

Enhanced Intelligence and Surveillance Insight

Analyze data-in-motion and at rest to:

- Find associations
- Uncover patterns and facts
- Maintain currency of information

Real-time Cyber Attack Prediction and Mitigation

Analyze network traffic to:

- Discover new threats sooner
- Detect known complex threats
- Take action in real-time

Crime Prediction and Protection

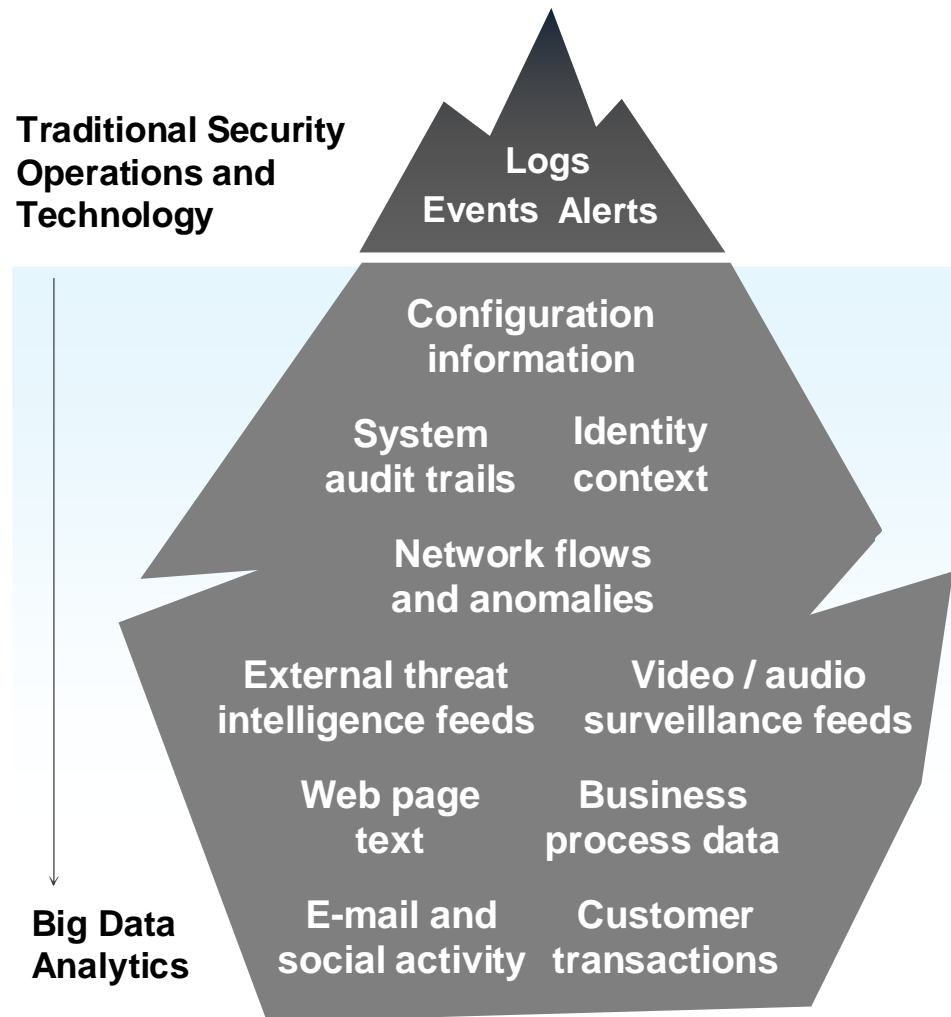
Analyze telco and social data to:

- Gather criminal evidence
- Prevent criminal activities
- Proactively apprehend criminals

#### Industry Examples

- Government threat and crime prediction and prevention
- Insurance claims fraud
- Credit card fraud

### 3. Security/Intelligence Extension



#### New Considerations

##### Collection, Storage and Processing

- Collection and integration
- Size and speed
- Enrichment and correlation

##### Analytics and Workflow

- Visualization
- Unstructured analysis
- Learning and prediction
- Customization
- Sharing and export

## 4. Operations Analysis



Apply analytics to machine data for greater operational efficiency

### Requirements

Analyze machine data to identify events of interest

Apply predictive models to identify potential anomalies

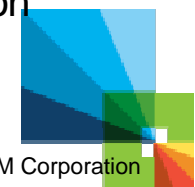
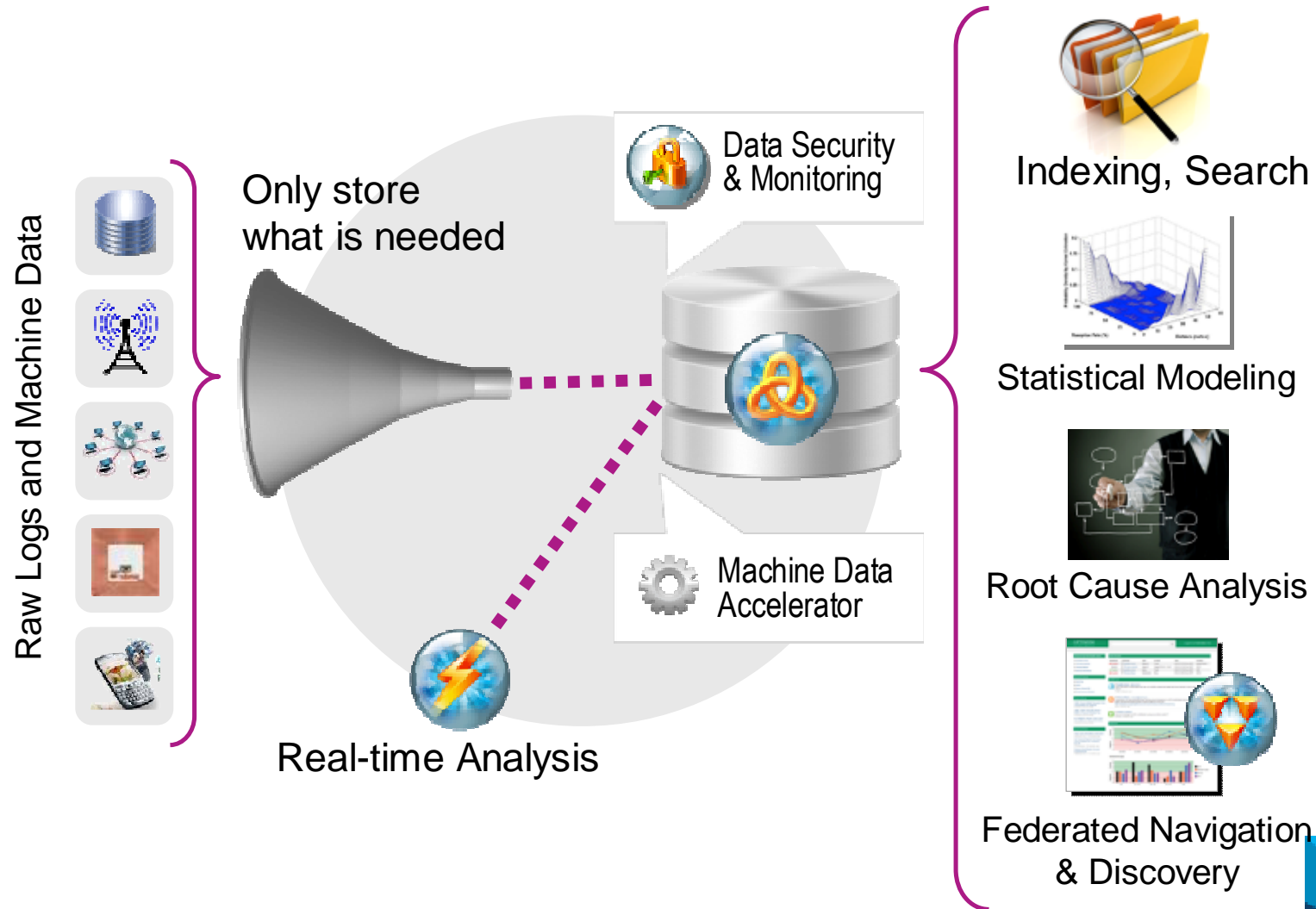
Combine information to understand service levels


Monitor systems to avoid service degradation or outages

### Industry Examples

- Automotive advanced condition monitoring
- Chemical and Petroleum condition-based Maintenance
- Energy and Utility condition-based maintenance
- Telco campaign management
- Travel and Transport real-time predictive maintenance

# 4. Operations Analysis





## Battelle, helping reduce energy costs and enhancing power grid reliability and performance

### Need

- Assess the viability of one smart grid technique called transactive control

### Benefits

- Engages consumers and responsive assets throughout the power system to help optimize the system and better integrate renewable resources
- Provides the capability to analyze and gain insight from up to 10 PB of data in minutes
- Increases grid efficiency and reliability through system self-monitoring and feedback
- Enables a town to avoid a potential power outage

**Battelle**  
*The Business of Innovation*

## 5. Data Warehouse Augmentation



Exploit technology advances to deliver more value from an existing data warehouse investment while reducing cost

### Requirements

Add new sources to existing data warehouse investments

Optimize storage and provide query-able archive

Rationalize for greater simplicity and lower cost

Enable complex analytical applications with faster queries

Scale predictive analytics and business intelligence

### Examples

- Pre-Processing Hub
- Query-able Archive
- Exploratory Analysis
- Operational Reporting
- Real-time Scoring
- Segmentation and Modeling



## Data Warehouse Augmentation



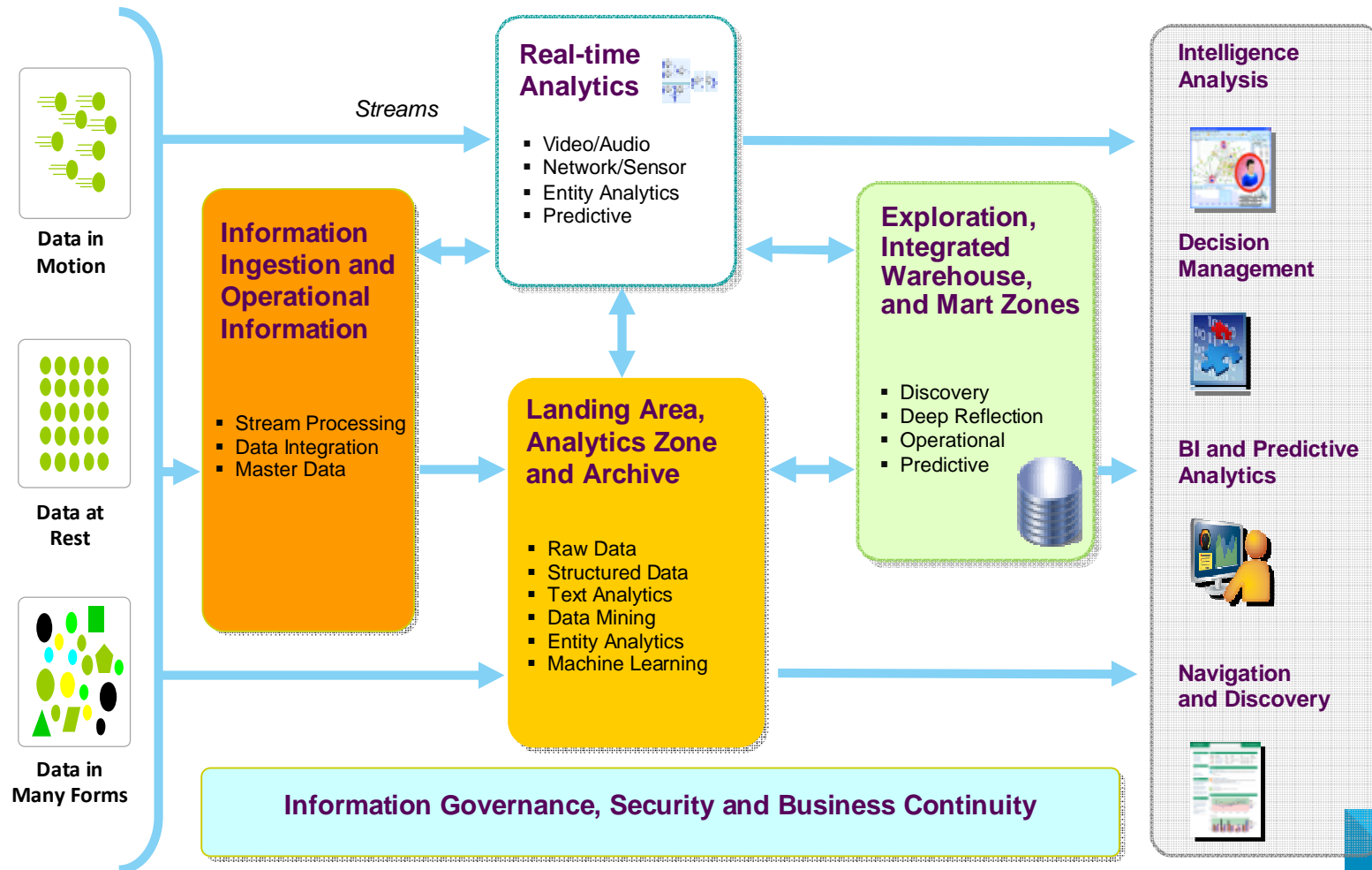
Improved analysis performance by over 40 times, reduced wait time from hours to seconds, and increased campaign effectiveness by 20+%.

### Could Data Warehouse Augmentation benefit you?

- ✓ Are you drowning in very large data sets (TBs to PBs) that are difficult and costly to store?
- ✓ Are you able to utilize and store new data types?
- ✓ Are you facing rising maintenance/licensing costs?
- ✓ Do you use your warehouse environment as a repository for all data?
- ✓ Do you have a lot of cold, or low-touch, data driving up costs or slowing performance?
- ✓ Do you want to perform analysis of data in-motion to determine what should be stored in the warehouse?
- ✓ Do you want to perform data exploration on all data?
- ✓ Are you using your data for new types of analytics?

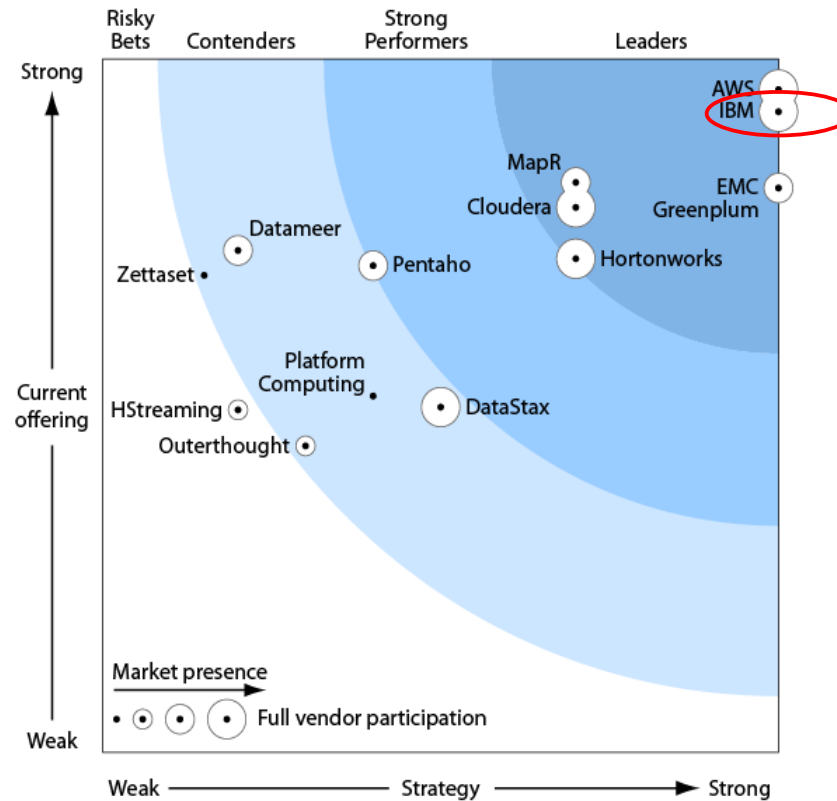
**Product Starting Point:** InfoSphere BigInsights, InfoSphere Streams

# New Architecture to Leverage All Data and Analytics



# Recognized for our Leadership

**“IBM has the deepest Hadoop platform and application portfolio.”**



February 2012 “The Forrester Wave™: Enterprise Hadoop Solutions, Q1 2012”



## Get Started

### Get Educated

- Forum content
- IBMBigDataHub.com
- Big Data University
- IBV study on big data
- Books / Analyst papers

### Schedule a Big Data Workshop

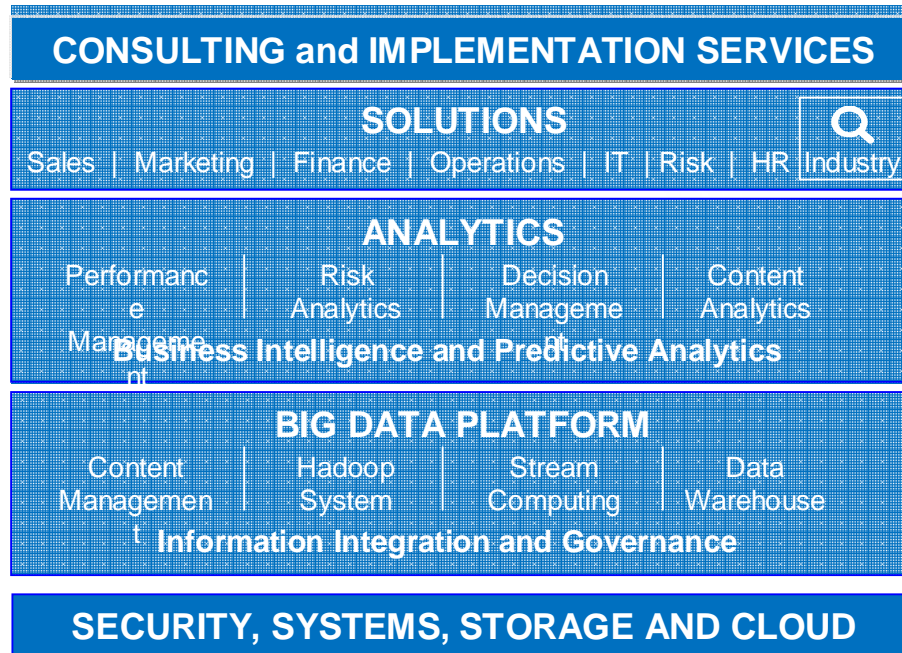
- Free of charge
- Best practices
- Industry use cases
- Business uses
- Business value assessment



Thank you



# IBM provides a holistic and integrated approach to Analytics and Big Data



**Only IBM has expanded and evolved Analytics for Big Data to...**

- Fuel all decision-making with powerful analytics
- Broaden analytic adoption without silos
- Analyze all data wherever it lives
- Accelerate business value with solutions that have built-in analytics expertise

**...so organizations can find what is business relevant in big data and make it instantly actionable**



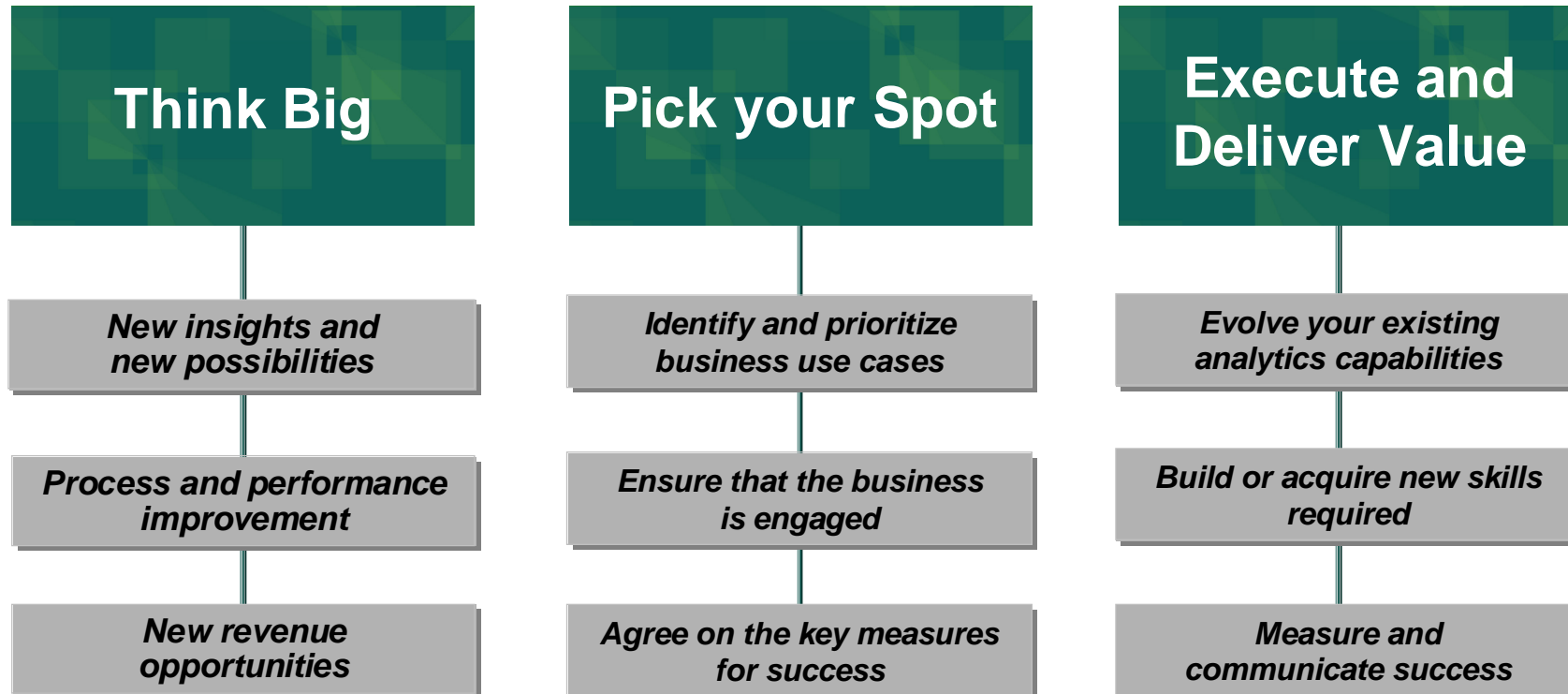
IBM offers support to help organizations achieve success with their Analytics and Big Data initiatives

## AnalyticsZone by IBM

CMO Study : [www.ibm.com/services/c-suite/cmo/](http://www.ibm.com/services/c-suite/cmo/)



## Get started!





# Thank you for attending today

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