



Predictive Analytics for Database Marketing

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www.sv-europe.com

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FAQ's

- Is this session being recorded? Yes
- Can I get a copy of the slides? Yes, we'll email a PDF copy to you after the session has ended.
- Can we arrange a re-run for colleagues? Yes, just ask us.
- How can I ask questions? All lines are muted so please use the chat facility – if we run out of time we will follow up with you.



Predictive Analytics for Smarter Business



- Premium, accredited partner to IBM specialising in the SPSS Advanced Analytics suite.
- Team each has 15 to 20 years of experience working in the predictive analytic space - specifically as senior members of the heritage SPSS team



What do we mean by 'Predictive Analytics'?



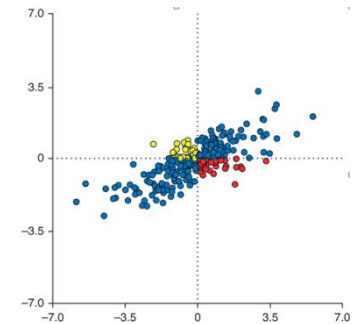
Predictive analytics encompasses a variety of techniques from **statistics** and **data mining** that analyze current and historical data to make predictions about future events



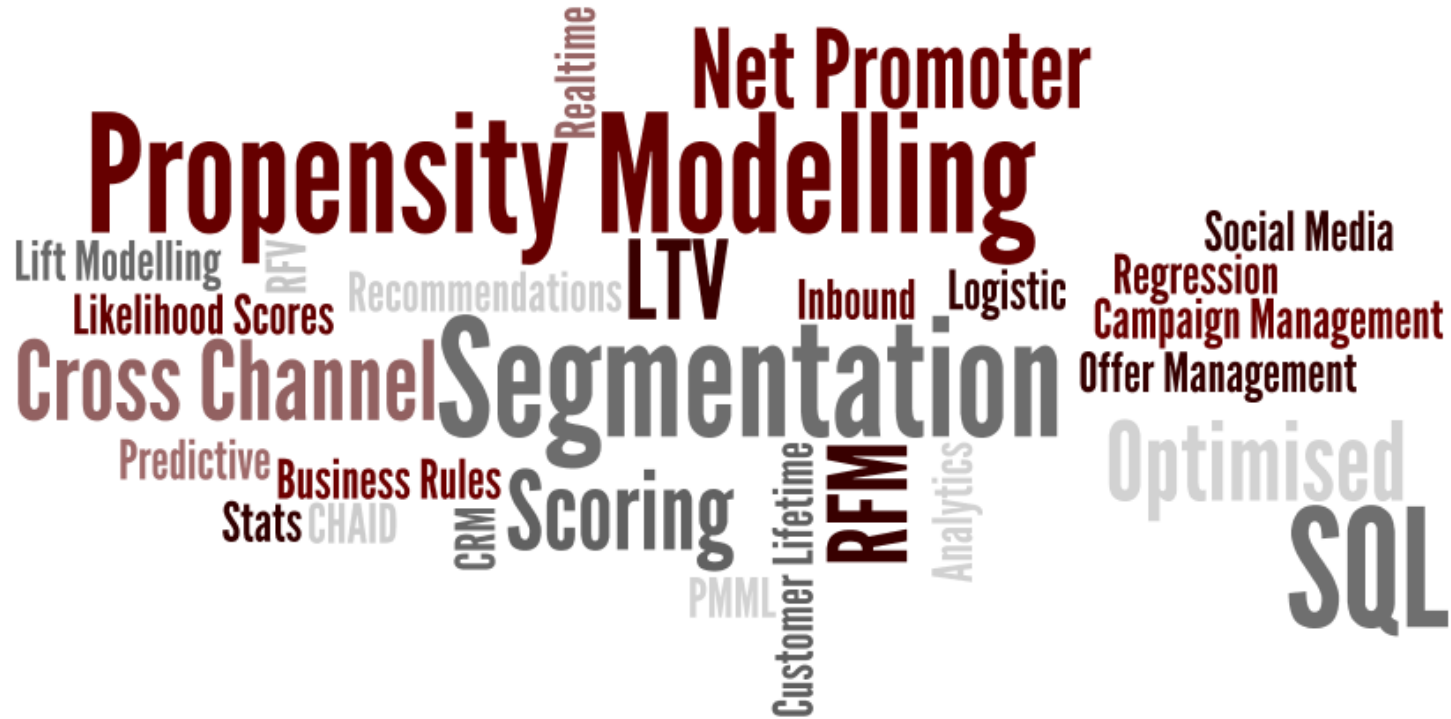
Analysis of structured and unstructured information with mining, predictive modeling, and 'what-if' scenario analysis.

What do we mean by 'Predictive Analytics'?

- It's different from Business Intelligence or MI reporting
- Actually, it's not *always* about prediction
- However, Predictive Analytics *does* create important new data
- These data take the form of estimates, probabilities, forecasts, recommendations, propensity scores, classifications or likelihood values
- Which in turn can be incorporated into key operational and/or insight systems



Predictive Analytics for Database Marketing



Core Applications in Marketing



attract

Acquire customers:

- Understand who your best customers are
- Connect with them in the right ways
- Take the best action maximize what you sell to them



grow

Grow customers:

- Understand the best mix of things needed by your customers and channels
- Maximize the revenue received from your customers and channels
- Take the best action every time to interact



retain

Retain customers:

- Understand what makes your customers leave and what makes them stay
- Keep your best customers happy
- Take action to prevent them from leaving

Predictive
Customer Analytics

Acquire
Grow
Retain



Why is this important to organizations?

- **Acquiring customers is expensive**
 - Not unusual to cost **6 times** as much as retaining them
 - Understanding who is *most likely* to convert is very cost effective
- **80% of a company's profits come from 20% of its customers**
 - Need to understand these customers needs
 - How they behave and what keeps them happy
- **Increasing customer retention rates by 5% increases profits by 25% to 95%.**
 - Study by Bain & Company, working with Earl Sasser of Harvard Business School

Incremental gains in one business area can lead to *extremely* compelling ROI

Typical Analytical Applications

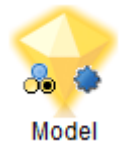
- **Segmentation**
 - Customer Behaviour
 - Life Time Value
 - Loyalty
- **Predictive Modelling**
 - Campaign Response
 - Cross-Sell/Up-Sell
 - Customer Acquisition
 - Retention Scoring
 - Satisfaction Modelling
 - Real Time Recommendations
- **Other Applications**
 - Basket Analysis
 - Sequence Modelling
 - Sentiment Analysis

At the heart of Predictive Analytics is the model

- Predictive Analytics uses historical data from many people/incidents
- Age, Gender, Average Spend, Product Category, Region, Tenure etc.
- With known outcomes/results
- Responded, upgraded, defaulted, recommended, cancelled, donated, failed, renewed etc.
- To build a reusable model



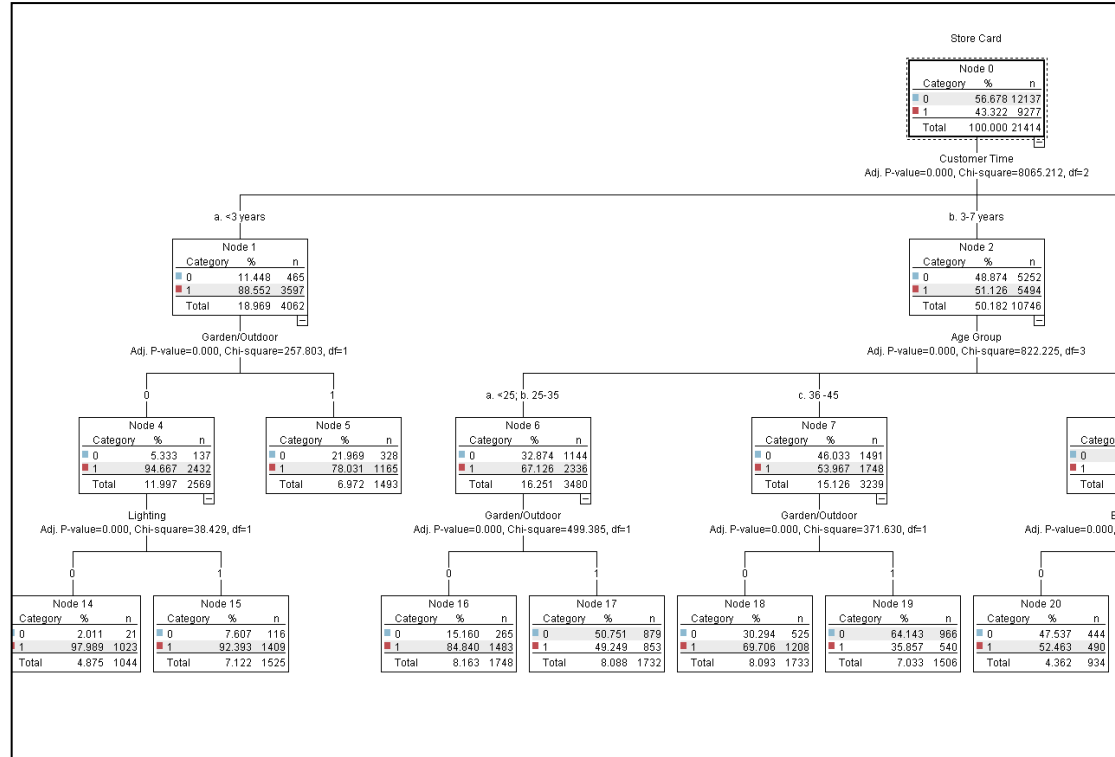
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At the heart of Predictive Analytics is the model



- The resultant model is a *pattern or formula* that can be examined and tested
- Moreover, it can be treated as a *physical object*
- Or an important asset that can be deployed in a wide variety of ways before being archived



At the heart of Predictive Analytics is the model

- We can take new data from individuals or incidents...
- Age, gender, average spend, sentiment, tenure, time since last visit
- Using a model based on the same information...
- Generate probability values, likelihood scores and estimates
- In other words.....predictions



Model

**32% CHANCE OF
CANCELLATION**

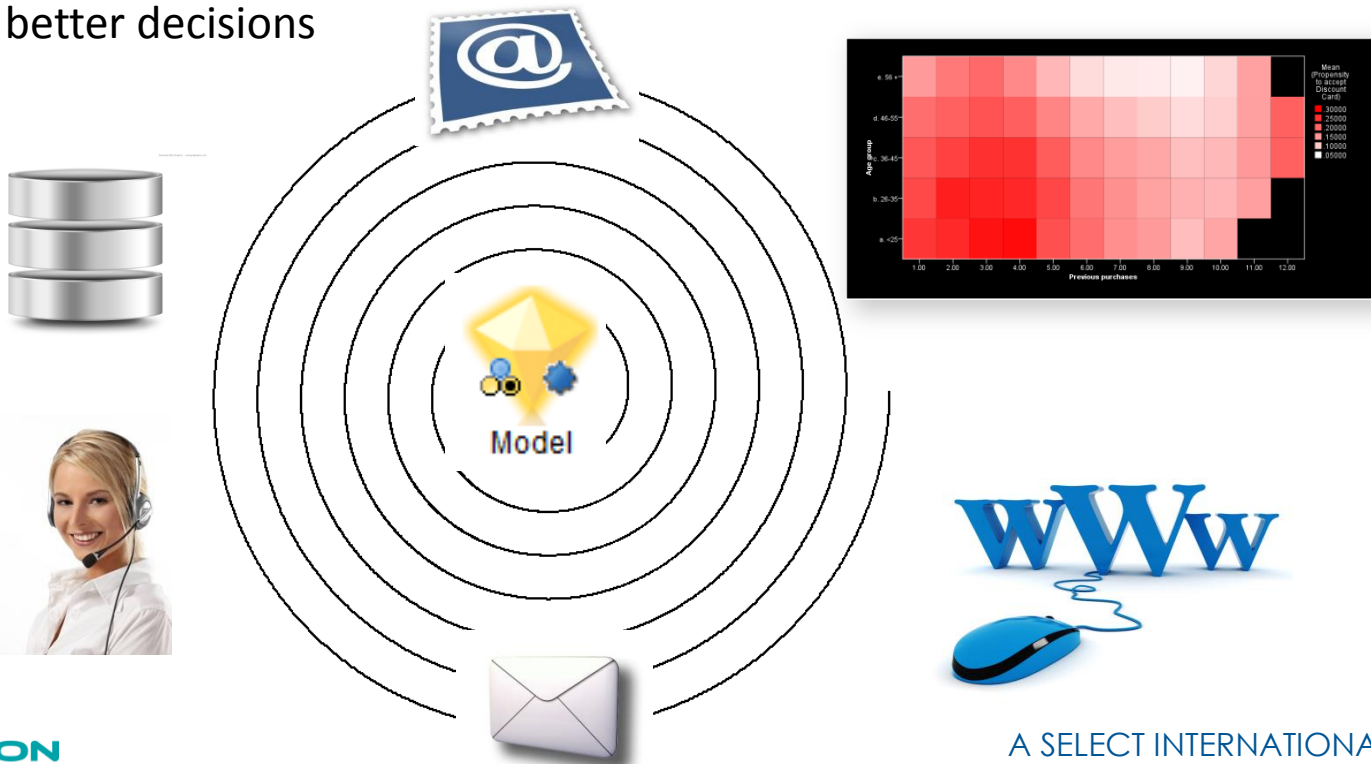
**Predicted Lifetime
Value = £938**

0.13 probability
of defaulting

**Estimated
NPS = 6**

At the heart of Predictive Analytics is the model

- We can then deploy the predictions through multiple channels to make better decisions



Proactive vs. Dynamic Deployment

- **Proactive (outbound)**

- Integrated with existing campaigns
- Can set the decision agenda
- Can be planned in advance
- Less costly and simpler than dynamic but also *less timely & accurate*

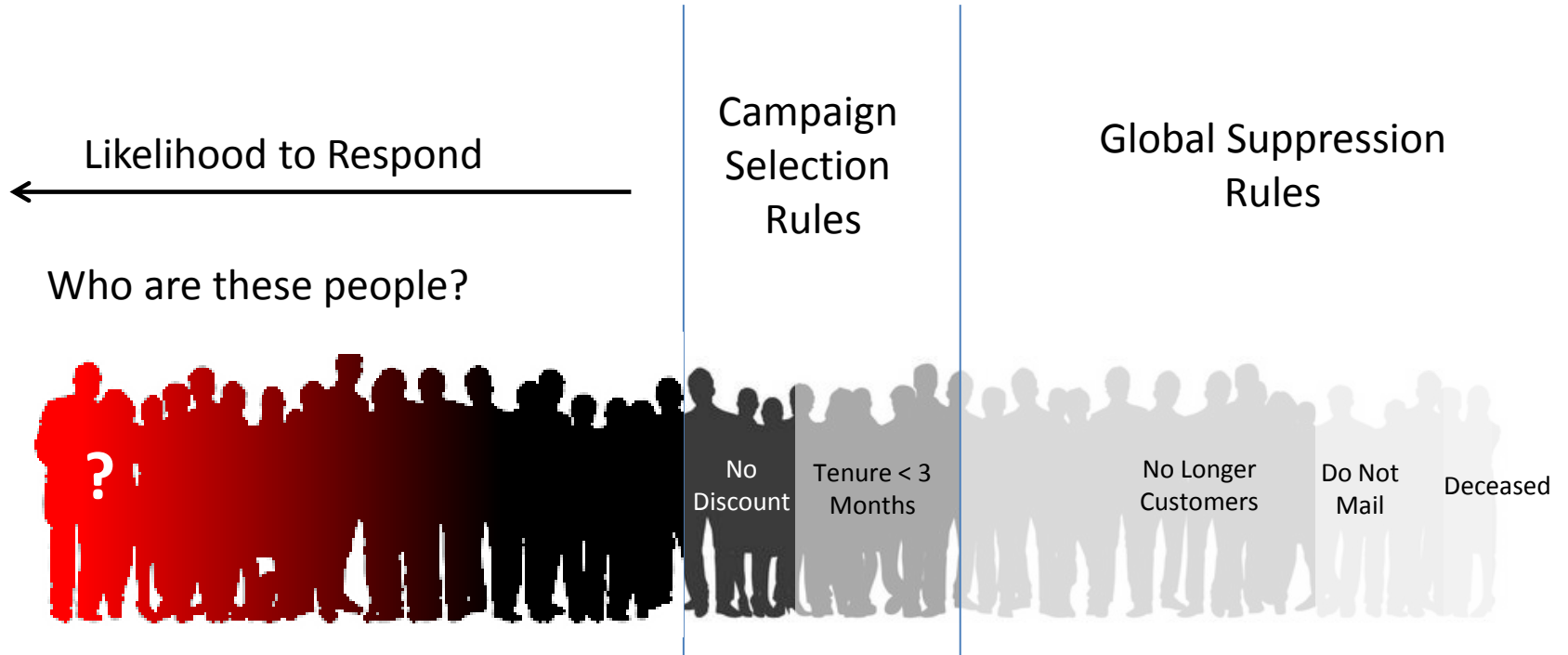


- **Dynamic (inbound)**

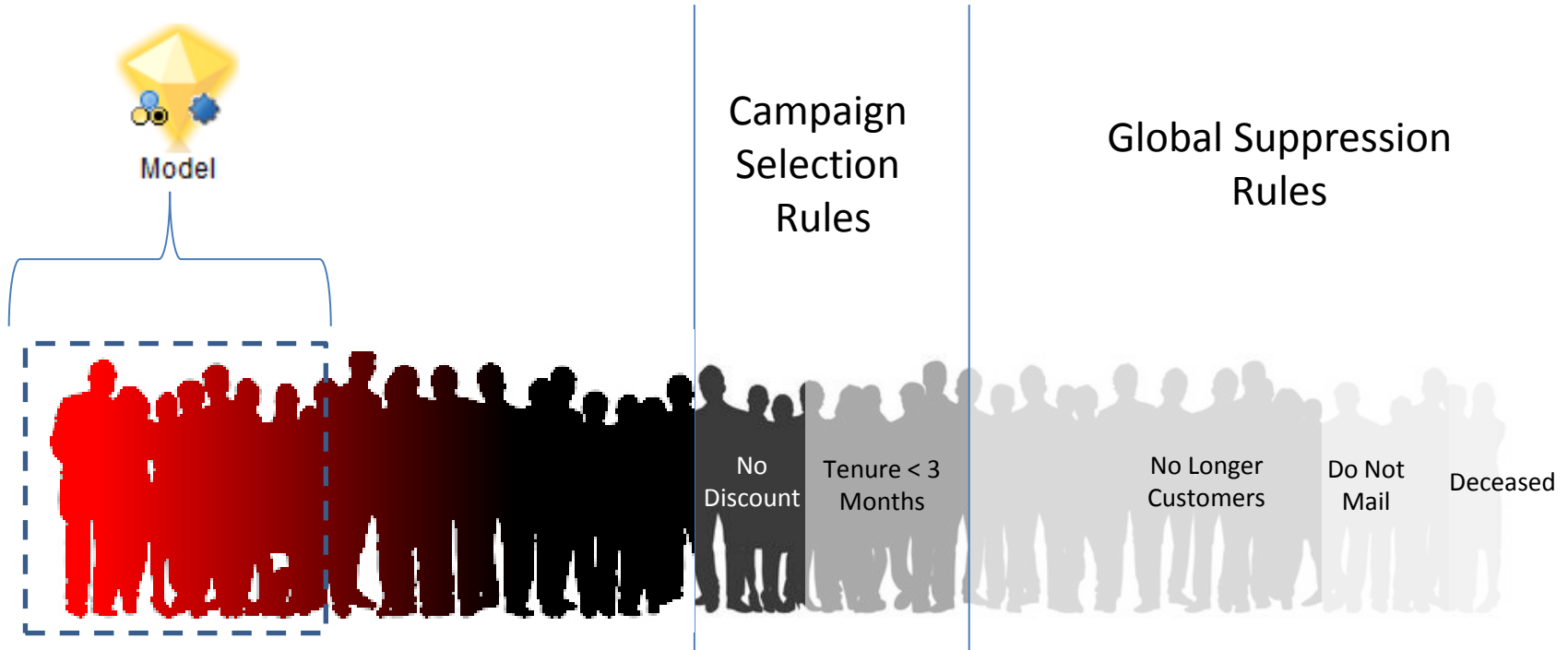
- Offers based on *new data* in real time
- Opportunity to gather new, important information
- Opportunity to revise offer/action – e.g. retain, cross-sell
- Outcome can be captured immediately
- Requires greater investment than proactive approaches



In Marketing, Predictive Analytics enhances the existing campaign selection process..



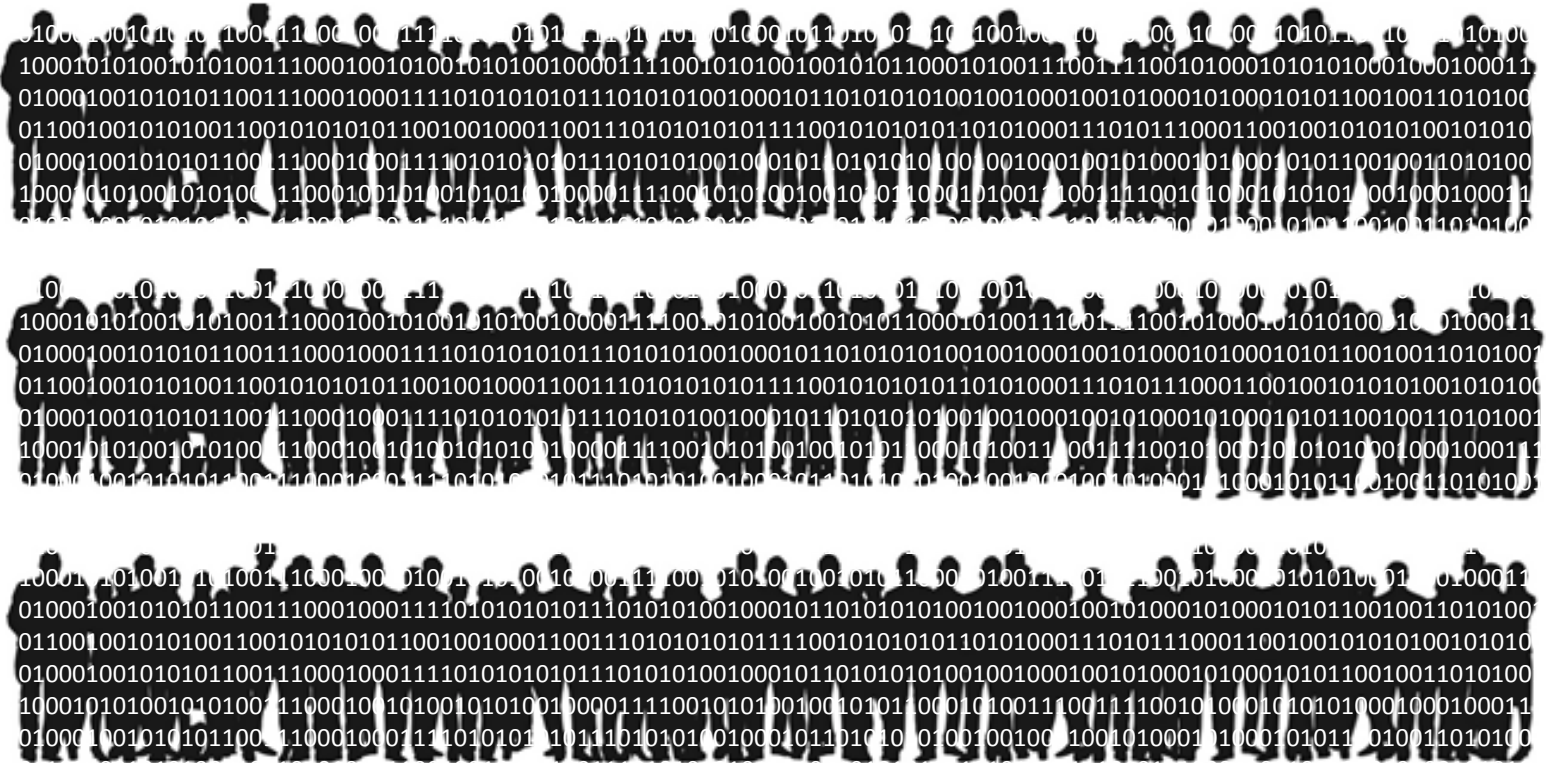
By finding the *most likely* responders...



Even when the application isn't a predictive model...

- We can still use historical data to better understand our customers
- Find strong correlators or drivers of behaviour
- Carry out text mining and analyse changing sentiment
- Develop a segmentation strategy that is *data-driven*
- Go beyond recency, frequency monetary to incorporate
 - Who – Demographics
 - What – Product/Service Categories
 - Interactions – Web, Call Centre, Payment methods
 - History – Tenure, Customer Journey,

Using data to uncover customer segments



Deeper customer understanding = more appropriate interactions

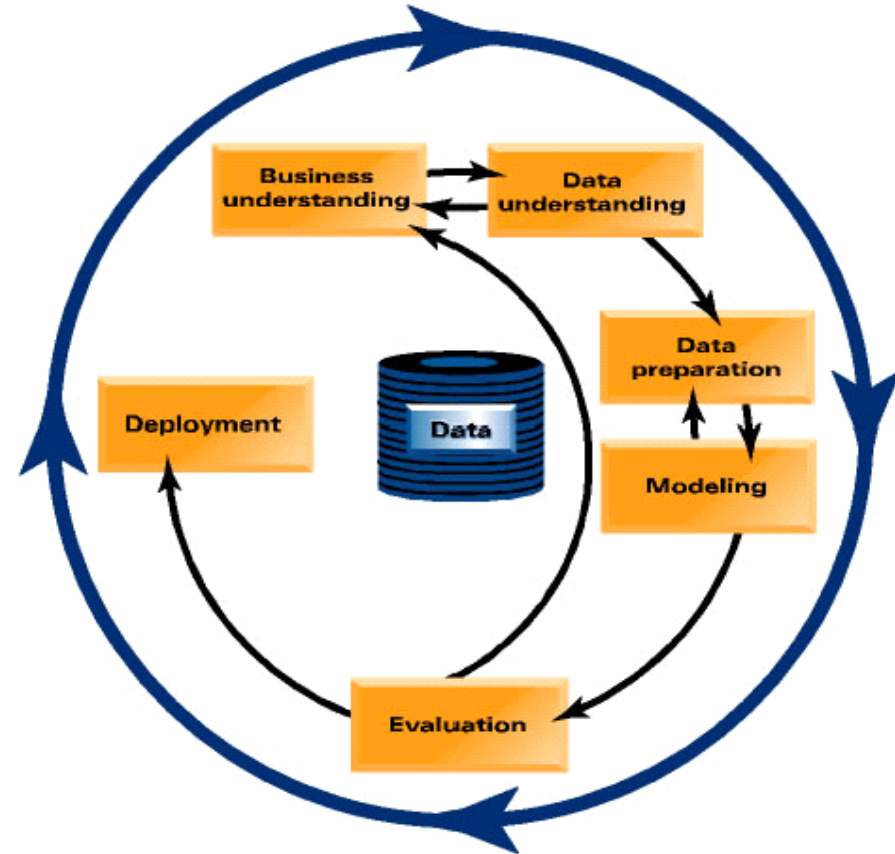


Techniques like cluster analysis can uncover subtle differences and previously hidden groups

How do our clients maximise success?

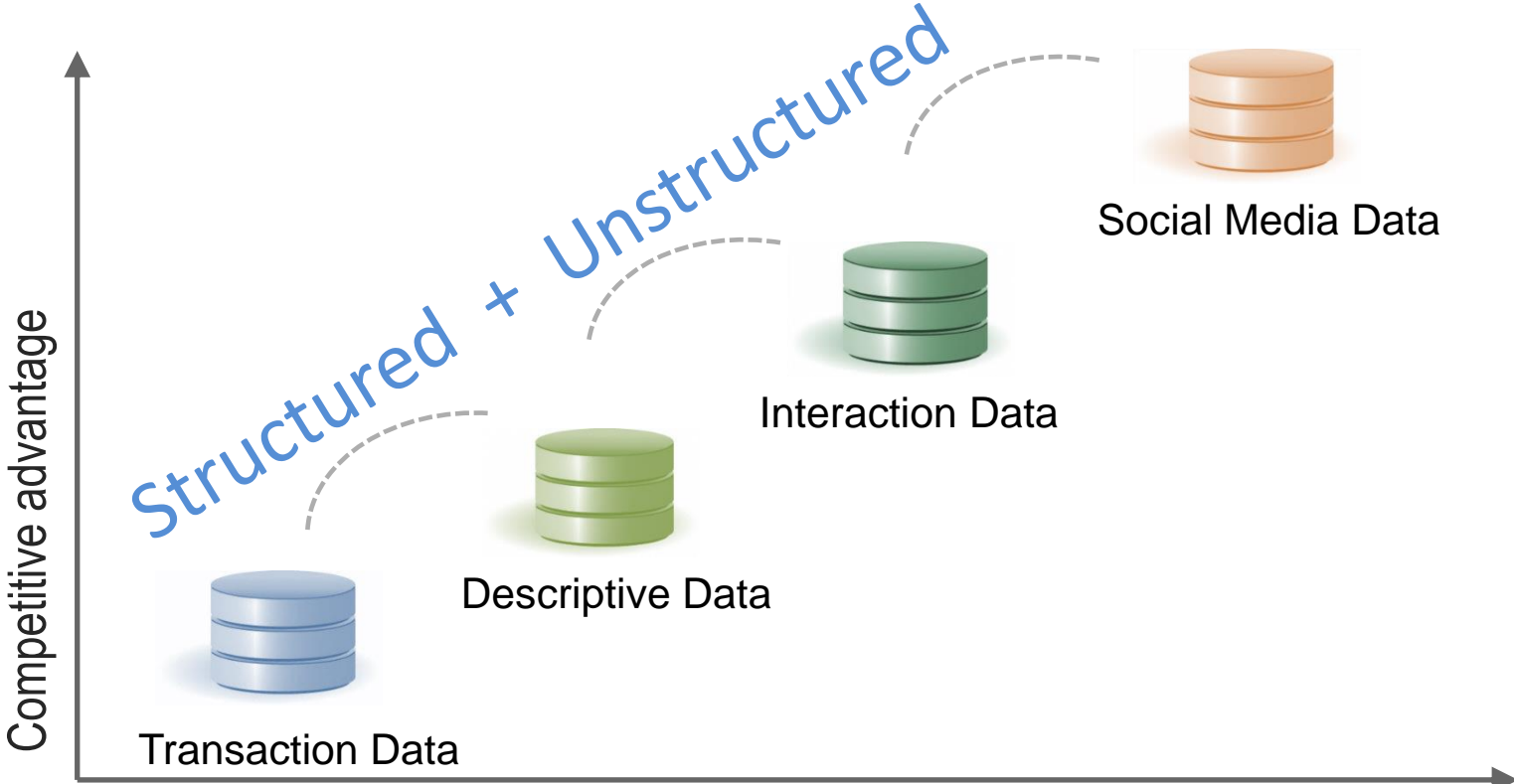
By utilising a powerful, proven methodology

- CRISP-DM: Cross-Industry Standard Process for Data Mining
- Each application can be developed and progressed through a series of key phases
- www.CRISP-DM.eu



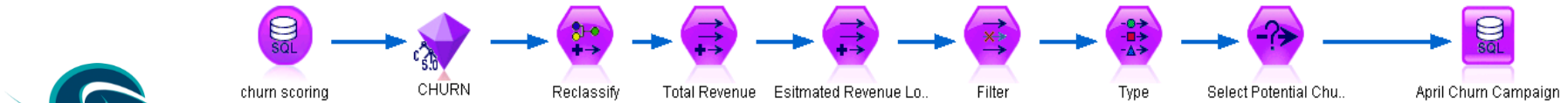
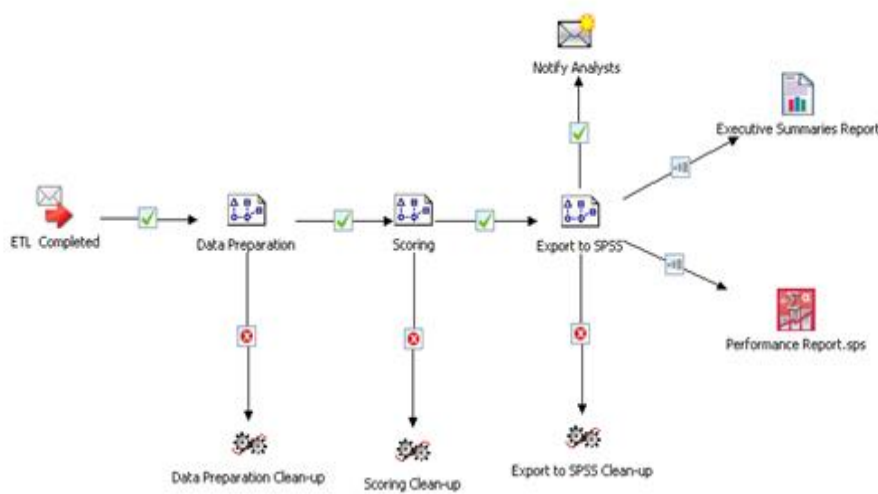
How do our clients maximise success?

By exploiting a wide data landscape



How do our clients maximise success?

By using powerful IBM advanced analytics technology



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How do our clients maximise success?

By integrating the resultant insight with existing systems

Cognos
software

infosphere™

WebSphere

SPSS

NETEZZA

ILOG
Changing the rules of business™

salesforce
CRM

COREMETRICS

SMART VISION
Europe



What do we offer Anna?

- 31 years old
- Estimated income > £28K
- On average spends £26
- Usually pays with credit card
- Not eligible for discount offer
- In the last 6 weeks bought these items -



What is the next most relevant product to offer her?

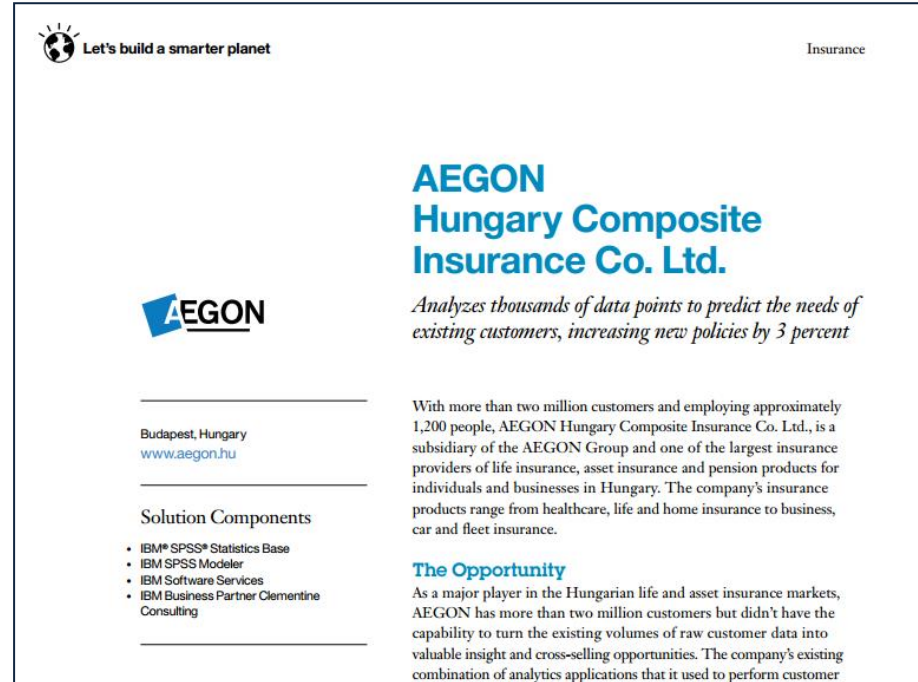




Let's look at an example...

AEGON

- Improved customer response by 78% through a targeted direct marketing campaign that precisely reflects customer needs
- Increased policy purchases by 3% , from 5% to 8%
- Expected to boost cross-sell opportunities by selecting qualified customers and predicting type of insurance offerings needed



Let's build a smarter planet

Insurance

AEGON Hungary Composite Insurance Co. Ltd.

Analyzes thousands of data points to predict the needs of existing customers, increasing new policies by 3 percent

With more than two million customers and employing approximately 1,200 people, AEGON Hungary Composite Insurance Co. Ltd., is a subsidiary of the AEGON Group and one of the largest insurance providers of life insurance, asset insurance and pension products for individuals and businesses in Hungary. The company's insurance products range from healthcare, life and home insurance to business, car and fleet insurance.

The Opportunity

As a major player in the Hungarian life and asset insurance markets, AEGON has more than two million customers but didn't have the capability to turn the existing volumes of raw customer data into valuable insight and cross-selling opportunities. The company's existing combination of analytics applications that it used to perform customer

Budapest, Hungary
www.aegon.hu

Solution Components

- IBM® SPSS® Statistics Base
- IBM SPSS Modeler
- IBM Software Services
- IBM Business Partner Clementine Consulting

Eircom

- “Our analytics team discovered that customer experiences during the on-boarding process when they join our mobile network have a significant effect on the likelihood of churn.”
- Enabled eircom to identify the most effective ways to improve the customer experience – reducing churn on key customer journeys by around 6%



The screenshot shows a press release from eircom. At the top left is the IBM logo with the tagline "Let's build a smarter planet". At the top right is the word "Communications". The eircom logo is prominently displayed in the center. The main headline reads "eircom gains deep insights into customer experience". Below it is a sub-headline: "Reducing churn and improving customer experience with predictive analytics from IBM and Presidion". The body text describes how eircom used predictive analytics to reduce churn. A section titled "Smart is..." explains the use of IBM SPSS predictive analytics software. The article concludes by noting that in recent years, economic recession has driven increasing competition between mobile network operators.

Let's build a smarter planet

Communications

eircom gains deep insights into customer experience

Reducing churn and improving customer experience with predictive analytics from IBM and Presidion

Smart is...

Using predictive analytics to identify and mitigate the factors that lead to customer churn.

Ireland-based telecommunications service provider eircom wanted to reduce the business risk of customers switching to its competitors' networks by understanding the factors predicting churn. The company worked with Presidion, an IBM® Premier Business Partner, to implement IBM SPSS® predictive analytics software – enabling it to identify which customers were most likely to switch, and why.

With over two million fixed-line and mobile customers, just under 5,000 employees and an annual turnover of around €1.5 billion, eircom is one of the largest telecommunications service providers in Ireland. Through its Meteor and eMobile brands, the company serves 20 percent of the country's mobile customers and 40 percent of the broadband market, and is currently in the process of deploying a new fibre network that will reach 600,000 homes and businesses by the end of 2013.

In recent years, economic recession has driven increasing competition between mobile network operators. With multiple vendors offering a wide range of tariffs, and the effects of the 2008 Irish financial crisis still being felt strongly across the country, mobile customers in Ireland are now switching between operators far more frequently.

C Spire Wireless

- United States' largest privately held wireless communications company
- Enhanced customer satisfaction levels
- Improved the effectiveness of retention campaigns by 50 %
- Boosts cross-selling and up-selling, with sales of select accessories rising by 270%.

 Let's Build A Smarter Planet



C Spire Wireless connects more closely to customers

Reducing churn and increasing sales through analytical decision management

Smart is...

Giving employees real-time recommendations on how to maximize and enhance every customer interaction

Finding new, more effective ways to reduce customer churn is at the heart of every telecommunications company's strategy, and C Spire Wireless is no exception. With customers expecting more and mass marketing techniques losing their impact, the company felt that the key to success lay in getting to know its customers better and putting this information into the hands of front-line employees.

Consumers have limited patience with being treated as one of the pack: they want their service providers to address their needs as individuals. In the high-stakes telecommunications business, how do companies get the right messages to the right people and create that personal connection?

C Spire Wireless knew that the answer to this question lay in getting to know its customers better and – most importantly – putting this insight into the hands of the employees who interact with these customers in stores, via email or web, and over the telephone.

Customer-led strategy

As the United States' largest privately held wireless communications company, C Spire Wireless competes with public companies that have the advantage of greater size and more resources. Nevertheless, the

Common Misunderstandings

- Revolutionary results overnight!
- You'll need a Ph.D.
 - In fact , data-literate, business focussed people learn how to do this all the time.
- The more *accurate* the model the better
- You need a clean, single-customer-view warehouse

Advice to get started

- **Build Internal Credibility:** *Think* about where you would get *biggest impact* for the *least effort*.
- Consider adopting a proven methodology e.g. CRISP-DM (www.CRISP-DM.eu)
- Don't get hung up on modelling techniques - focus on *Business Understanding* and *Deployment*
- Consider the full data landscape
- Consider the sorts of roles involved /impacted
- Consider integration with other business insight systems (e.g. MI/BI)
- How will you know its worked? Focus on measuring the benefit – e.g. response rate lift, increased cross-sell, revenue/profit impact

Working with Smart Vision Europe Ltd

- As a premier partner we sell the IBM SPSS suite of software to you directly
 - We're agile, responsive and generally easier to deal with
- As experts in SPSS / Analytics / Predictive Analytics we will
 - deliver classroom training courses
 - offer side by side training support
 - offer “skills transfer” consulting
 - run booster and refresher sessions to get more from your SPSS licences
 - Give no strings attached advice
- We are a support providing partner so if you already have SPSS you can source your technical support directly from us (identical costs to IBM)
 - We offer telephone support with real people as well as web tickets / email queries
 - We offer “how to” support to help you get moving on your project quickly





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Thank you