

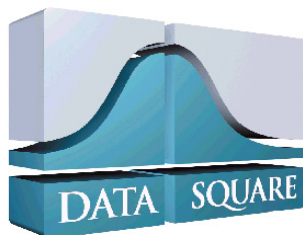
everything
marketing
converges

@ The World's Largest Event for Marketers

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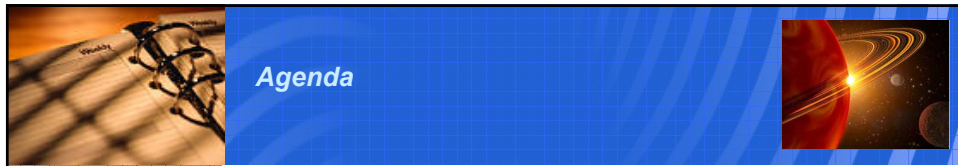
1:1 MARKETING BOOT CAMP

Building Databases, Conducting Analytics, and Creating Contact Strategies to
Build Long-Term Customer Relationships for Enhanced Profitability



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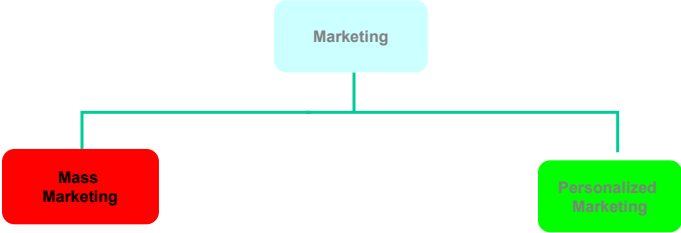
Agenda

- ☐ **Introduction and Strategy**
- ☐ **Marketing Database**
- ☐ **Reporting and Analytics**
- ☐ **Data Mining and Advanced Analytics**
- ☐ **Contact Strategy and Relationship Marketing**
- ☐ **Conclusion**

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Two Types of Marketing



```
graph TD; Marketing[Marketing] --> MassMarketing[Mass Marketing]; Marketing --> PersonalizedMarketing[Personalized Marketing];
```

Marketing can be divided into two main categories: Mass and Personalized.

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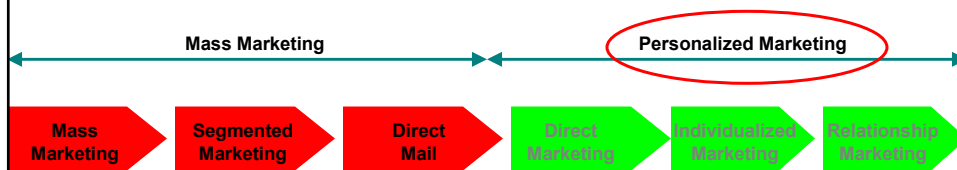
Mass Marketing vs. Personalized Marketing

Mass Marketing	Personalized Marketing
Average customer	Individual customer
Customer anonymity	Customer profile
Standard product	Customized market offering
Mass production	Customized production
Mass distribution	Individualized distribution
Mass advertising	Individualized message
Mass promotion	Individualized incentives
One-way message	Two-way messages
Economies of scale	Economies of scope
Share of market	Share of customer
All customers	Profitable customers
Customer attraction	Customer retention

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The Changing Nature of Marketing



Industry forces are driving companies to maximize the value of each customer interaction through differentiated marketing, sales and service.

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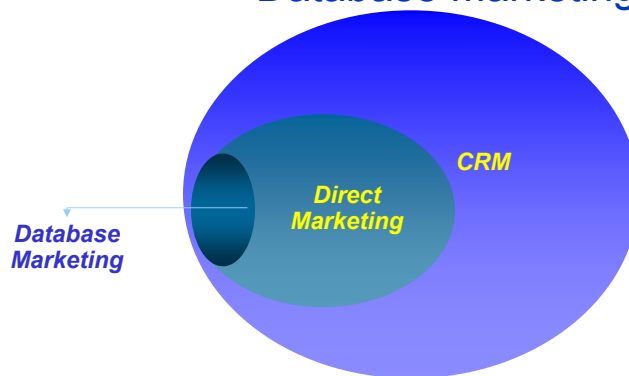
Personalized Marketing

- ❑ Customer Relationship Management - CRM
- ❑ Direct marketing - DM
- ❑ Database marketing - DbM
- ❑ One-to-one marketing
- ❑ Dialog marketing
- ❑ Technology-enabled marketing
- ❑ Permissions marketing
- ❑ Targeted marketing

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Database Marketing



- ❑ Database Marketing (DbM) is a sub-set of CRM.
 - Tactical DBM has a short-term focus and a transactional approach.
 - Strategic DBM has a long term focus aiming at enhancing brand loyalty, brand awareness and brand associations.

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CRM/Direct/Db Marketing Defined...

- ❑ Customer relationship management (CRM) covers methods and technologies used by companies to manage their relationships with clients. Information stored on existing customers (and potential customers) is analyzed and used to this end.
- ❑ Direct marketing is a form of marketing that attempts to send its messages directly to consumers, using "addressable" media, such as mail, e-mail, phone, etc.
- ❑ Database marketing is a form of direct marketing using databases of customers or potential customers to generate personalized communications in order to promote a product or service for marketing purposes. The method of communication can be any addressable medium, as in direct marketing.

Key Objectives of Database Marketing

- ❑ Identify your target customers.
- ❑ Differentiate your customers by their needs and their value to your company.
- ❑ Interact with your customers to form a learning relationship.
- ❑ Customize your products, services, and messages.

Source: Peppers and Rogers, 1 to 1 Marketing

Top Benefit of Database Marketing

- The single most important benefit of database marketing is the ability to target your marketing efforts, which means specific groups in your marketing database get specific messages that are important to them. You can develop loyalty by focusing your marketing dollars on customers that are most likely to buy and spend less on customers that are less likely to buy. The result is an increased return on your marketing investment.
 - A 5% uplift in customer retention can generate up to 70% growth in profitability – Bain Loyalty Effect.
 - It costs five to ten times as much to recruit a new customer as it does to sell to an existing one

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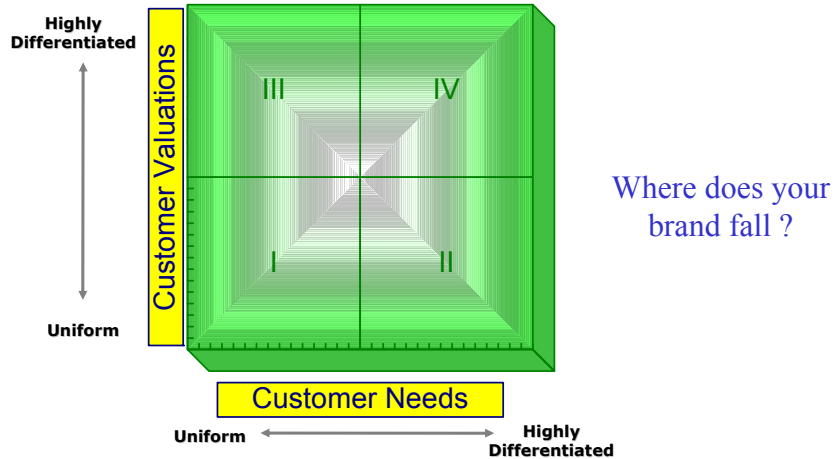
Benefits of Database Marketing

1. Identify Your Best Customers
 2. Develop New Customers
 3. Deliver a Message Consistent with Product Usage
 4. Reinforce Consumer Purchase Decisions
 5. Personalize Customer Service
 6. Improve Delivery of Sales Promotions
 7. Apply Segmented Communications
 8. Cross-Sell and Complementary-Sell Products
 9. Maintain Brand Equity
 10. Take Advantage of Stealth Communications
 11. Conduct Customer, Product and Marketing Research
 12. Increase the Effectiveness of Distribution Channel Marketing
 13. Provide Program Synergy and Integration
 14. Refine the Marketing Process
 15. Establish a Management Resource
- Targeting
- Loyalty and Growth
- Other

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Key Success Factor for Database Marketing



The success of direct marketing lies in the degree of differentiation in customer valuations and customer needs

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Database Marketing Components



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Database Marketing Components

Phase 1: Database Marketing Strategy

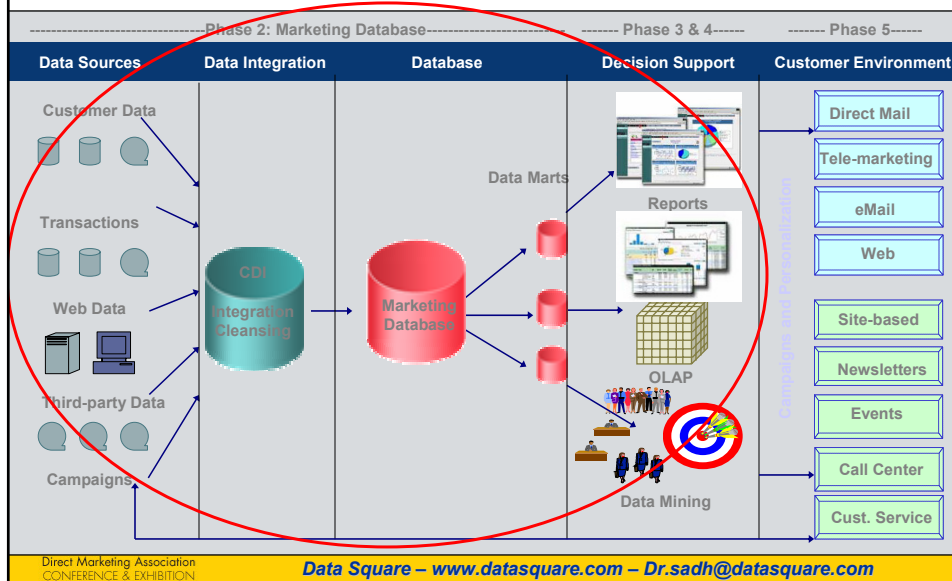
- ❑ Situational Analysis
- ❑ Marketing Objectives
- ❑ Strategy Development
- ❑ Marketing Programs
- ❑ Monitor and Control



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Marketing Database Defined

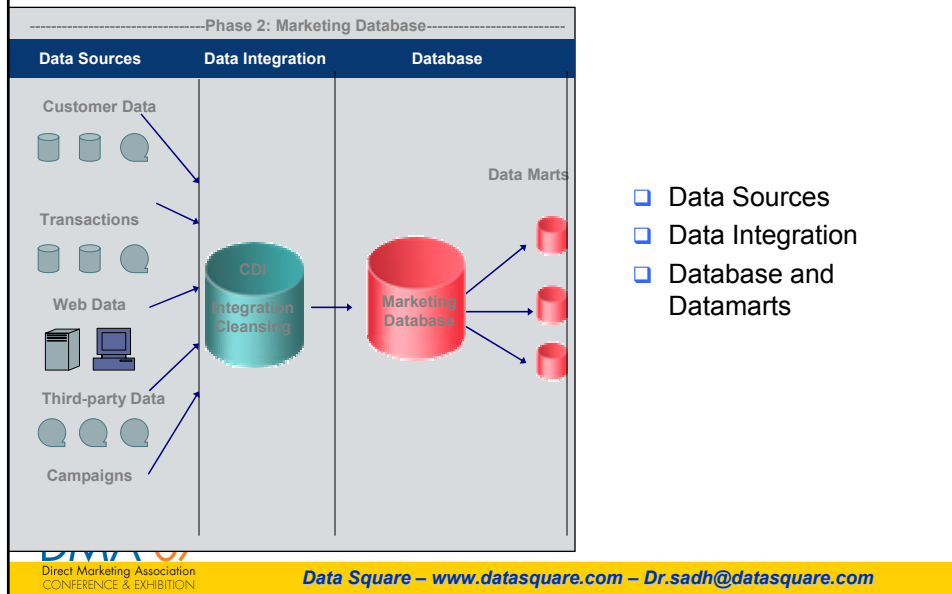
A Marketing Database is a collection of marketing and sales information about consumers and prospects held on a computer providing a high level of flexibility and versatility, supporting a wide range of business applications.

- B2B databases hold information about businesses level and include both contact and company level data whereas.
- B2C databases are at the consumer or consumer level and may include household-level data
- Consumer databases contain information about a companies past and present consumers
- Prospect databases contain information about a companies' future consumers

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Key Components of a Marketing Database



Data Sources: Internal

- Contact Data
 - Name, address, zip, phone, fax, e-mail, etc.
- Core customer data
 - Registrations, Warranty Cards, Payment Method, Application Forms
- Transaction data
 - Purchases, Returns, Customer Service, Customer Contact
 - Credit and payment history
- Contact and Promotion history
 - Telemarketing records
 - Mail / e-mail history
- Web Data
- Market research, Research panels, Custom and Co-op Surveys
- Relationship enhancement programs

Data Sources: Internal - Web Data

- ❑ Registration Data
 - Name, Title
 - Business title (if B2B)
 - E-mail address
 - Postal address (business or home)
 - Phone / Fax number
 - Age, Income, Gender
 - Competitive product usage
 - Current consumption level
 - Product attributes
- ❑ Behavioral Data
 - Visits
 - Total pages views
 - Specific page views
 - Time spent at the site
 - Products purchases
 - Customer service requests
 - Access to personal account information
 - Discounts used
- Source Data
 - ✓ Construction of unique URLs for each link or online ad
 - ✓ Construction of unique URLs for specific e-mail lists or direct mail lists
 - ✓ Evaluation of log files to identify search engines referring customers
 - ✓ Collection of survey data at registration of customers who were driven by print or broadcast ads, magazine articles or word of mouth

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Data Sources: Third-party

- B2C**
 - ❑ Compiled List Data
 - Demographics
 - Activities and Lifestyle
 - Leisure interests
 - Opinions
 - Financial / credit data
 - Product purchase data
 - Direct response data
 - Promotional data
 - ❑ Modeled Data
 - ❑ Syndicated Panels
 - ❑ Geo-demographic Data
- B2B**
 - ❑ Firmographics
 - ❑ Predictive complementary product information
 - ❑ Competitive sales data
 - ❑ Industry surveys, Surveys of competitors
 - ❑ Research
 - ❑ Vertical publications for your industry
 - ❑ Trade show lists
 - ❑ Salesperson, prospect, customer lists

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Data Sources: Third-party Data Providers

B2C

Demographics

- ❑ Acxiom Infobase
- ❑ Equifax
- ❑ Experian
- ❑ InfoUSA / Donnelley

Behavioral Coops

- ❑ Doubleclick / Abacus
- ❑ CMS / Prefer Network
- ❑ Experian / Z24, Circbase
- ❑ I-Behavior
- ❑ Next Action

B2B

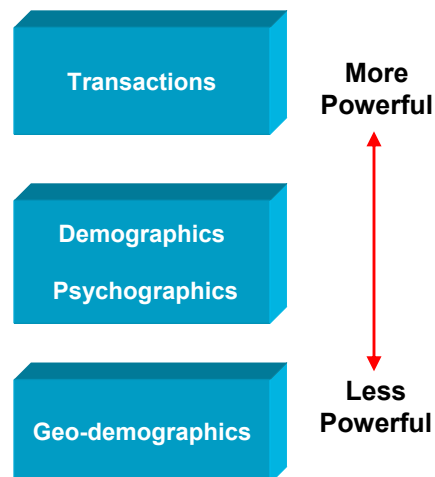
Firmographics

- ❑ Dun & Bradstreet
- ❑ InfoUSA / Database America
- ❑ Acxiom Infobase
- ❑ Experian
- ❑ Equifax

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Data Sources: A Comparison of Key Sources



Note: Some exceptions apply.

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Consumer Data Integration (CDI) Defined

A recent article on consumer data quality indicated that "The half-life of consumer address data is around two years." Assuming your company has 500,000 consumers and prospects, a half-life of two years means that 125,000 (or 25 percent) of these names and addresses will change every year.

Consumer Data Integration is the process of consolidating and managing consumer information from all available sources, including contact details, consumer valuation data, and information gathered through direct marketing. CDI is useful because it ensures that all relevant departments in the company have access to the most up to date and accurate consumer information available.

- ❑ Link together all data for a consumer
- ❑ Accurate and complete linkage essential for database building and analysis
- ❑ Traditional name/address de-duplication processes
 - Match different forms of the same name
 - Control “overkill” and “underkill”
 - Group into households or businesses

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Data Marts

- ❑ A datamart is a database, or collection of databases, designed to help managers make strategic decisions about their business. Whereas a data warehouse combines databases across an entire enterprise, data marts are usually smaller and focus on a particular subject or department. Some data marts, called dependent data marts, are subsets of larger data warehouses.

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Database Development: Key Processes

Key processes required to prevent degrading data quality and financial risks include:

- ☐ De-duplication
- ☐ Householding
- ☐ Changing Contact Information
- ☐ Standardizing Addresses
- ☐ Flagging Names based on Customer Request
- ☐ Flagging Old Consumer Records
- ☐ Identifying Consumers With Match Coding
- ☐ Merge/Purge Processing
- ☐ Coding Source and Promotional Offers
- ☐ Seeding Files and Decoy Records
- ☐ Identifying Credit Risks and Frauds
- ☐ Field Updating Rules
- ☐ Reporting Summary/Aggregate-Level Information
- ☐ Database Storage and Security
- ☐ Database Maintenance Schedules

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Sample Database Fields

- | | |
|---|---|
| <ul style="list-style-type: none">☐ Consumers<ul style="list-style-type: none">– ID (Individual, Company, Site)– Name(s)– Company Name, Division, Department, Site– Phone number– Original source– Acquisition Date– Do not rent / mail / phone / fax / e-mail– SIC, size☐ Marketing contacts<ul style="list-style-type: none">– Consumer ID– Medium ID– Date– Source Code– Referral Code | <ul style="list-style-type: none">☐ Items<ul style="list-style-type: none">– SKU (“Stock Keeping Unit”)– Quantity– Price– Status– Ship Date– Return Code– Gift Indicator☐ Purchases<ul style="list-style-type: none">– Consumer ID– Date– Media, Channel– Type (Purchase, Return, Exchange)– Placement Method– Payment Method |
|---|---|

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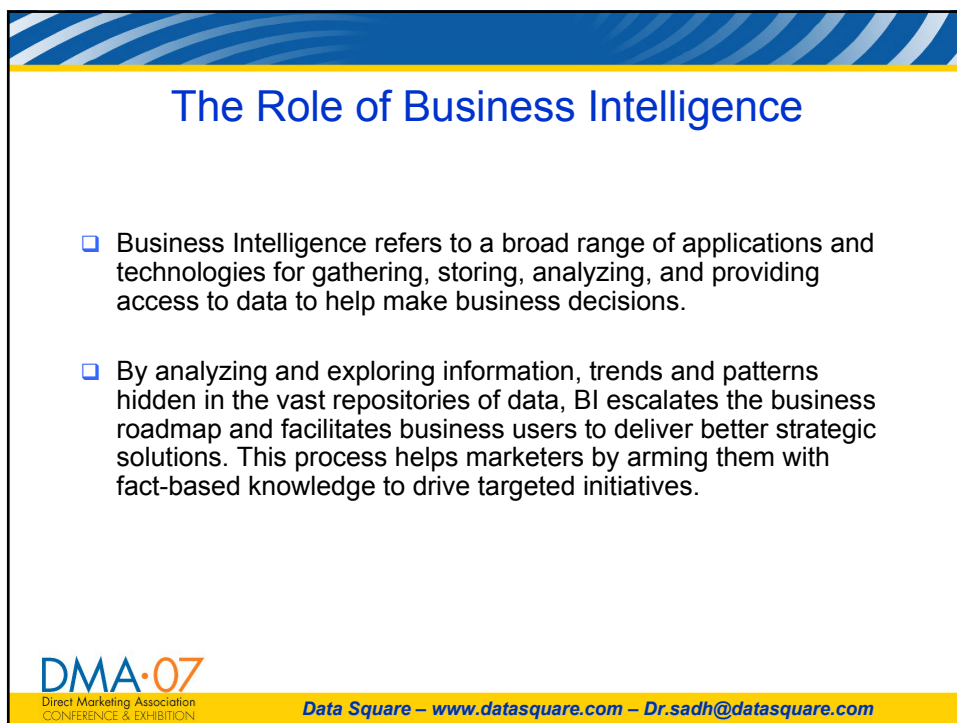
The slide features a blue header with the word "Agenda" in white. To the left of the header is a small image of a spiral notebook, and to the right is a small image of a planet with rings. The main content area is white with a blue grid background on the left. It contains a list of six agenda items, each preceded by a blue square icon. The third item, "Reporting and Analytics", is highlighted with a blue rectangular border. At the bottom left is the DMA 07 logo, and at the bottom right is the contact information for Data Square.

Agenda

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The slide has a blue header with the title "The Role of Business Intelligence" in white. The main content area is white with a blue grid background on the left. It contains two bullet points, each preceded by a blue square icon. At the bottom left is the DMA 07 logo, and at the bottom right is the contact information for Data Square.

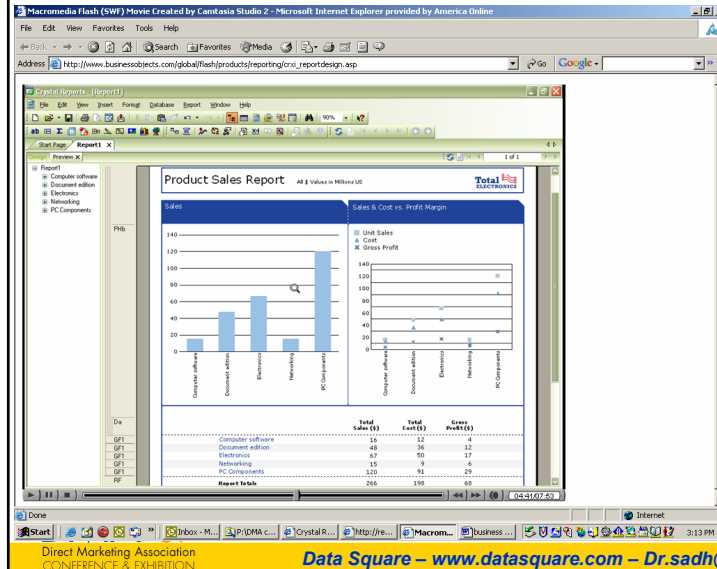
The Role of Business Intelligence

- Business Intelligence refers to a broad range of applications and technologies for gathering, storing, analyzing, and providing access to data to help make business decisions.
- By analyzing and exploring information, trends and patterns hidden in the vast repositories of data, BI escalates the business roadmap and facilitates business users to deliver better strategic solutions. This process helps marketers by arming them with fact-based knowledge to drive targeted initiatives.

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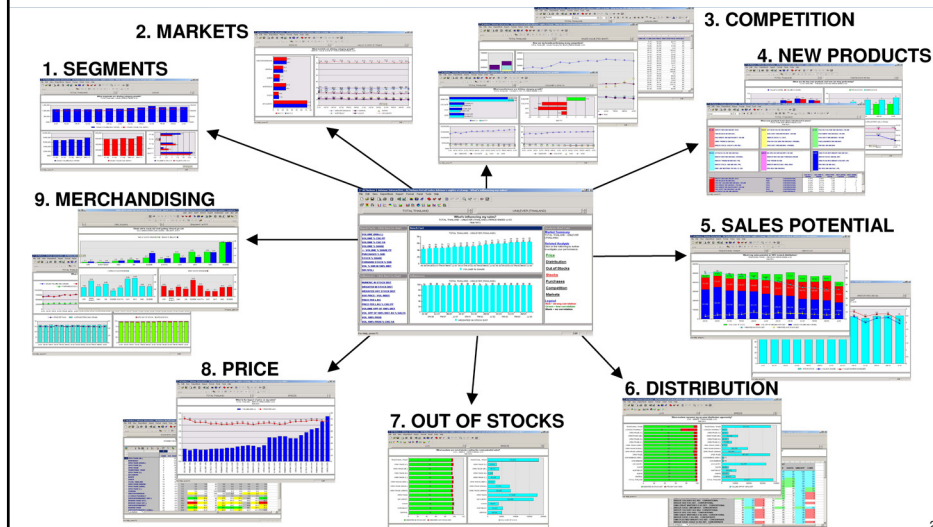
Query and Reporting



Query: A question designed to retrieve information from a database. The result can be a count, a cross tab or a report.

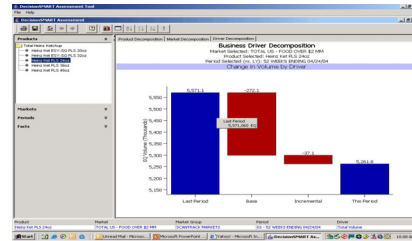
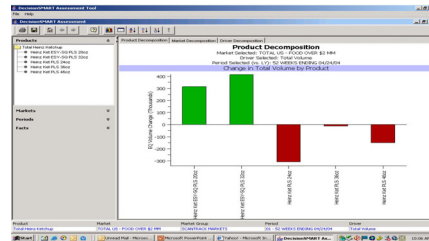
Report: The summation of business intelligence efforts/data that can be easily utilized by marketing managers

Reporting

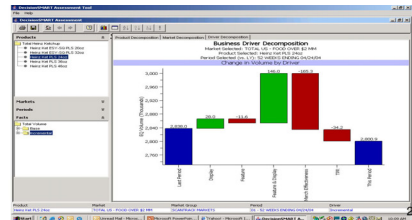
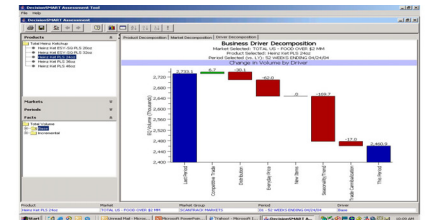


Reporting

Product Overview Business Driver Overview



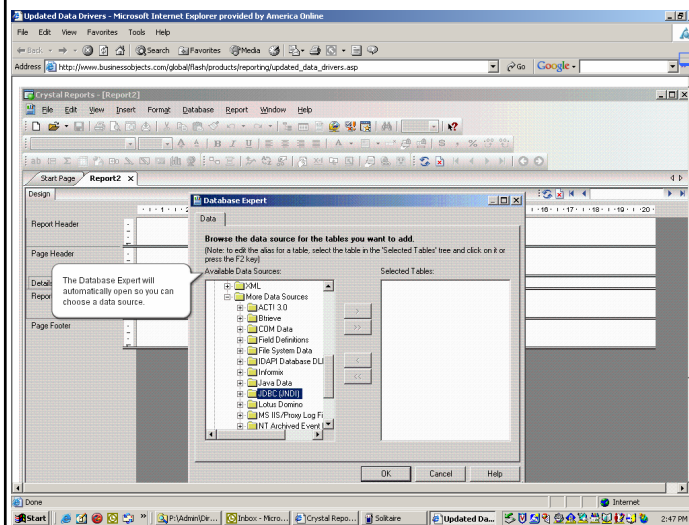
Baseline Driver Detail Incremental Volume Driver



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OLAP



On-line Analytical Processing (OLAP) is enabled by software designed for manipulating multidimensional data from a variety of sources that has been stored in a data warehouse. The software can create various views and representations of the data. OLAP software provides fast, consistent, interactive access to shared, multidimensional data.

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OLAP

Dynamic and Cascading Prompts - Microsoft Internet Explorer provided by America Online

Dynamic Cascading Prompt.rpt

Start Page

Enter prompt values.

Show customers in this city:

Choose a country:

Available Values:

Argentina

Choose a region:

Available Values:

Choose a city:

Available Values:

Charting

DrillDown Pie Chart

3D Bar Chart

3D Surface Chart

Area Chart

Bar Chart

Bubble Chart

Grouped Chart

Funnel Chart

Numeric Axis Chart

treme Mountain Bikes

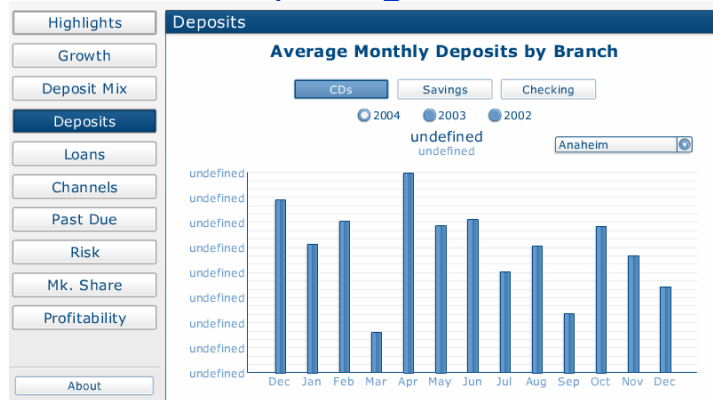
Main Report

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Interactive Reporting and Dashboards



A marketing dashboard is a collection of the most critical diagnostic and predictive metrics, organized to promote the recognition of patterns of performance. Metrics are typically organized into "families". Clicking on any one tab allows one to see key metrics pertaining to that general aspect of marketing performance – with the data sliced and diced by geo, business unit, market segment, or any combination thereof.

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Profiling Defined

Consumer profiling involves matching consumer information with third party data such as demographics (e.g. age, gender, income, presence of children, etc.) and psychographics (e.g. likes cultural events, wine drinker, golfer, etc.). This allows a business to understand what consumers of specific products or genre interest "look like" and find more households that look just like them. Targeting marketing campaigns at consumer households that have a higher propensity to buy, increases response while saving on costs associated with marketing to households that do not share the same attributes.

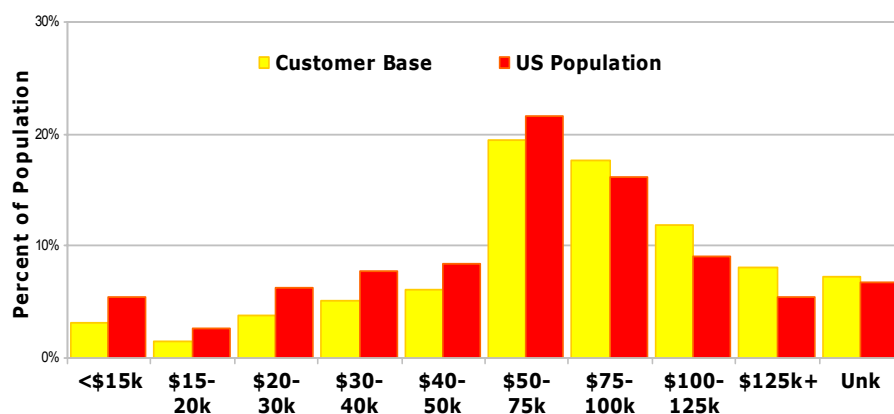
Profiles are most useful when they are recreated with a reference point. The most frequently used comparison is that between the consumer universe and the available prospect universe. Other comparisons could be "best consumer universe" vs. "overall consumer base" or "overall prospect base". The comparison is conducted by computing an index.

$$\text{Index} = \frac{\text{Incidence of Variable Category in Target Group}}{\text{Incidence of of Variable Category in Overall Base}}$$

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Example: Profile of Customers vs. US Population

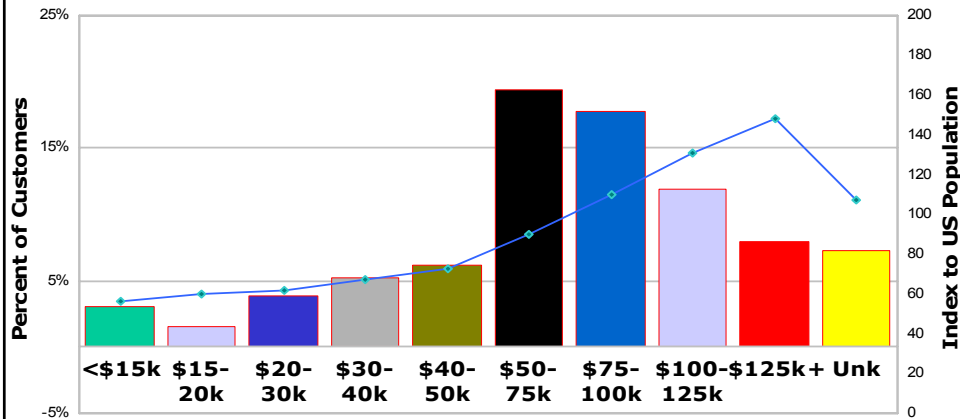


Which income categories are likely to deliver above-average response rates in a prospect mailing ?

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Example: Profile of Customers vs. US Population



While most of the consumers in the database have an income of \$50 - \$75k, the most affluent group (\$125k+) has the highest relative incidence of consumers in the overall population.

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RFM Defined

A proven technique for waste elimination is an analysis of consumers by recency, frequency, and monetary (RFM) values. By performing a decile (or quartile) analysis, marketers can test which RFM segments respond at a profitable rate and which do not. The roll-out of the marketing campaign could then (logically) be delivered to only the profitable cells. This enables the prediction of who will respond to an offer and who won't.

- ❑ Recency: The number of days between the last purchase and the time of analysis; the smaller the number the higher the probability of next purchase.
- ❑ Frequency: The number of purchases during a period of time; the higher the frequency the higher the loyalty of a consumer.
- ❑ Monetary: Total amount of purchase during a period of time; the higher the amount the higher the contribution of a consumer.

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RFM Implementation

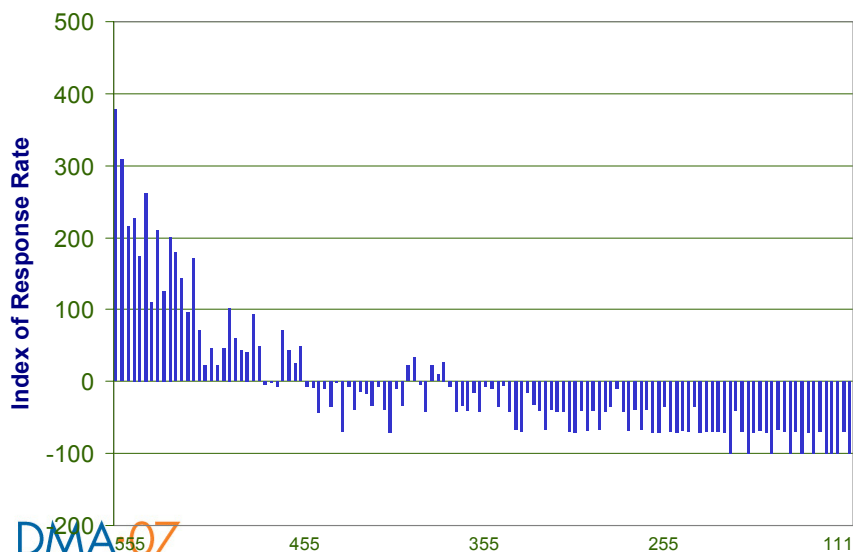
- Recency: Divide the sorted purchase dates into five equal intervals; then assign a weight 5 to the first 20 percent, 4 to the next 20%, and so forth.
- Frequency: Divide the total purchase counts in an interval into five equal intervals; then assign a weight 5 to the first 20%, 4 to the next 20%, and so forth.
- Monetary: Divide the total purchase amounts in an interval into five equal intervals; then assign a weight 5 to the first 20%, 4 to the next 20%, and so forth.

RFM	R	F	M	Response Rate
555	5	5	5	Highest
554	5	5	4	..
553	5	5	3	..
552	5	5	2	..
551	5	5	1	..
455	4	5	5	..
454	4	5	4	..
453	4	5	3	..
452	4	5	2	..
451	4	5	1	..
445	4	4	5	..
..	..	..	..	..
..	..	..	..	..
..	..	..	..	..
111	1	1	1	Lowest

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Response Rates by RFM Cell



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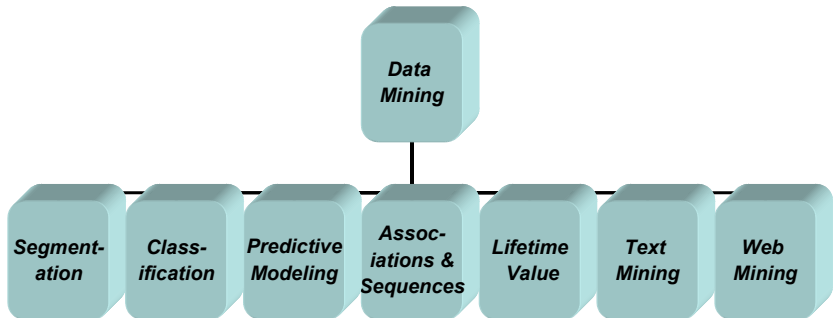
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- ❑ *Contact Strategy and Relationship Marketing*
- ❑ *Conclusion*



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Data Mining Categories

Data mining is the process of sorting through data to identify patterns and establish relationships.



```

graph TD
    DM[Data Mining] --- S[Segmentation]
    DM --- C[Classification]
    DM --- PM[Predictive Modeling]
    DM --- AS[Associations & Sequences]
    DM --- LV[Lifetime Value]
    DM --- TM[Text Mining]
    DM --- WM[Web Mining]

```



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Data Mining and Advanced Analytics



☐ **Predictive Modeling**

☐ **Classification**
☐ **Segmentation**
☐ **Association and Sequence Analysis**
☐ **Consumer Lifetime Value**





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Predictive Modeling: Basic Principles

☐ Predictive Modeling pertains to discovering patterns in data that can lead to reasonable predictions about the future.

☐ Predictive Modeling can help identify 20% of the consumers that are likely to generate 80% of the future response or revenue*

- Focusing on the 20% that really matter can enable a more targeted and differentiated marketing approach

☐ Predictive Modeling is frequently used by marketers to:

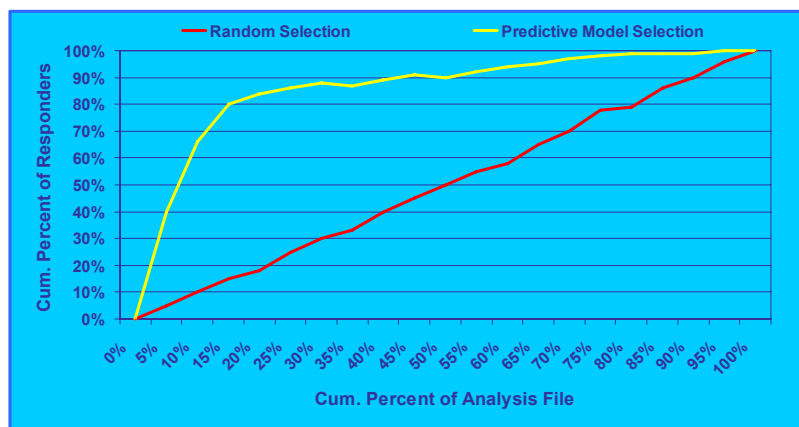
- Increase Cross-sell/Upsell rates within the consumer base by identifying those that are most likely to buy/upgrade a given offering
- Increase Consumer Retention by identifying those most likely to attrite
- Reduce CPA (Cost per Consumer Acquisition) by targeting prospects with the highest predicted response rates

**Results differ by industry, sector and application*



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The 80% - 20% Rule



Targeting 20% of the universe captured 80% of the responders for a large marketer.

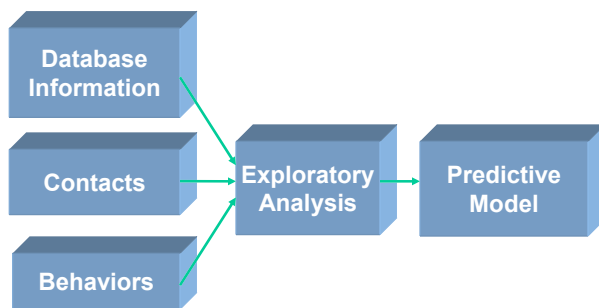
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What Is a Predictive Model?

A predictive model provides the ability to predict behaviors stimulated by a marketing contact based on information available on the marketing database

Using the model and current data enables behavioral predictions



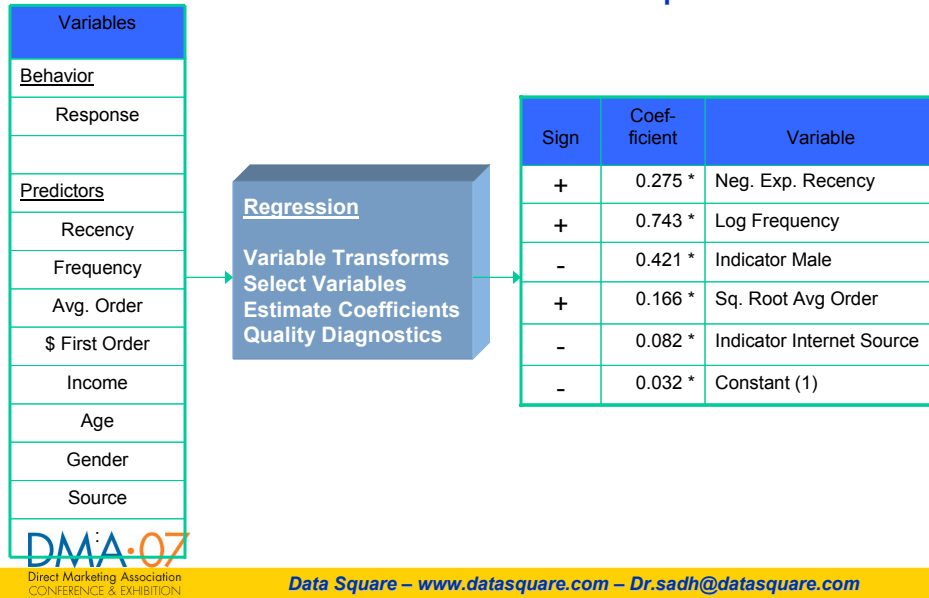
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Current Data

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Predictive Model Example



Key Considerations for Marketers

Overview

- ❑ Defining Marketing Objective
- ❑ Model Specification
 - Dependent Variable and Predictors
 - Modeling and Application Universe
- ❑ Finding Analogous Prior Marketing Campaign
- ❑ Model Evaluation

Key Considerations for Marketers

Model Specification

- Dependent Variable is the attribute whose future value needs to be predicted. For example:
 - Response (yes/no) to a marketing promotion
 - Purchase (yes/no) as a result of communications
 - Likelihood of churn (e.g. reduction of usage, termination of membership, subscription or opt-outs)
 - Total dollars (\$\$) spent on a product
- Predictors refer to the variables used to predict the behavior of interest. For example,
 - Demographics
 - Geo-demographics
 - Psychographics
 - Behavioral Data

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Key Considerations for Marketers

Model Specification

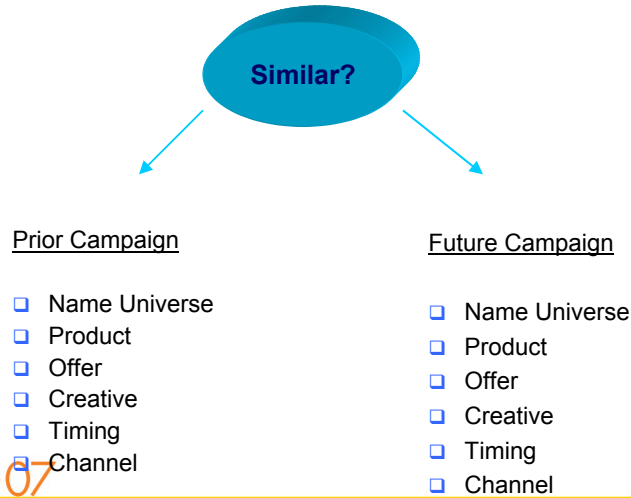
- Modeling Universe refers to the universe or sample on which the model will be built. This dataset contains both the dependent variable and predictors variables (following data overlay). For example:
 - Syndicated panel with usage data
 - Consumer base with response / purchase history
- Application Universe refers to the universe that needs to be ranked or scored. This dataset does not have the dependent variable but has the predictor variables. For example,
 - Compiled List with demographics
 - Consumer base without purchase history

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Key Considerations for Marketers

Finding Analogous Prior Marketing Campaign



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Key Considerations for Marketers

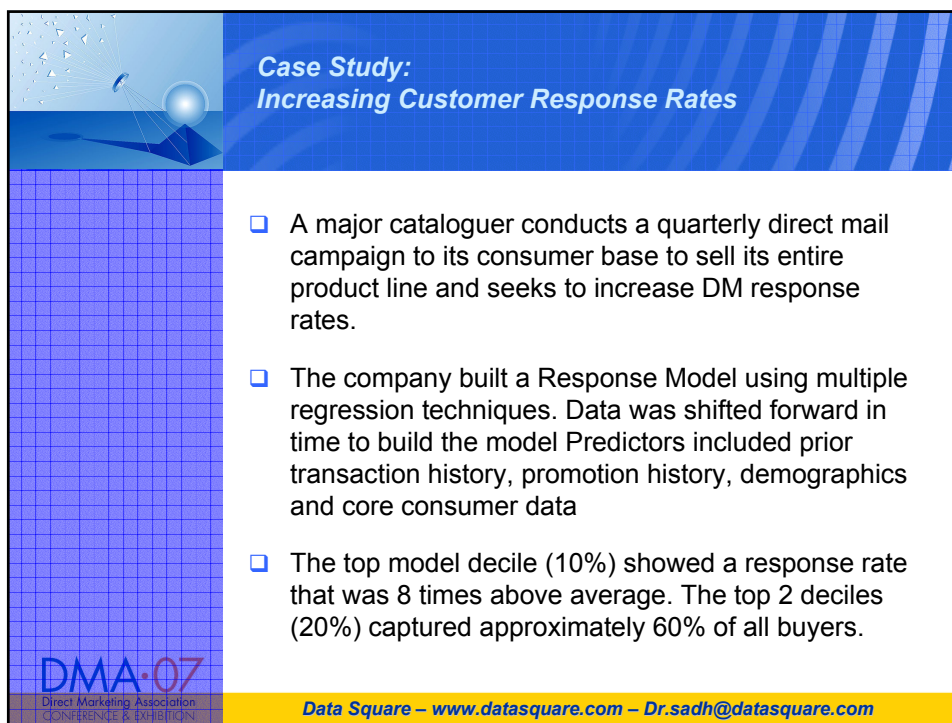
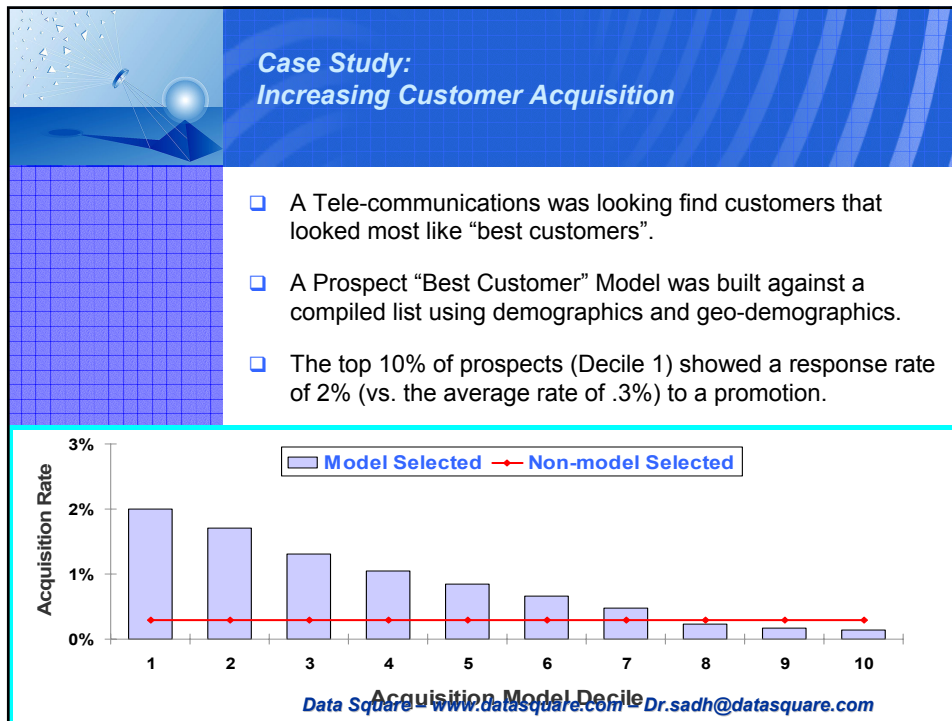
Model Evaluation with Gains Charts

Decile	Total Mailed	Decile Responders	Decile Resp. Rate	Cum Resp. Rate	Decile Pct. Gain	Cum Pct. Gain
1	100,000	2,400	2.4%	2.40%	167%	167%
2	100,000	1,500	1.5%	1.95%	67%	117%
3	100,000	1,300	1.3%	1.73%	44%	93%
4	100,000	1,100	1.1%	1.58%	22%	75%
5	100,000	1,000	1.0%	1.46%	11%	62%
6	100,000	700	0.7%	1.33%	-22%	48%
7	100,000	500	0.5%	1.21%	-44%	35%
8	100,000	300	0.3%	1.10%	-67%	22%
9	100,000	100	0.1%	0.99%	-89%	10%
10	100,000	100	0.1%	0.90%	-89%	0%
Overall	1 Million	9,000	0.9%	0.90%	0%	-

The top 10% (Decile 1) of consumers show a 167% higher response rate than the overall base.

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Computing the ROI on a Model

	Previous Mailing	Modeled Mailing
Number Mailed	500,000	500,000
Cost @ \$0.50	\$250,000	\$250,000
Response Rate	2.0%	3.5%
Buyers	10,000	17,500
Buyers @ \$100	\$1,000,000	\$1,750,000
Gross Profit	\$750,000	\$1,500,000

The above example shows an Return of Investment of \$750,000 as a result of the model. Note: Modeling costs are not included.

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Data Mining and Advanced Analytics

- ☐ **Predictive Modeling**
- ☐ **Classification**
- ☐ **Segmentation**
- ☐ **Association and Sequence Analysis**
- ☐ **Consumer Lifetime Value**

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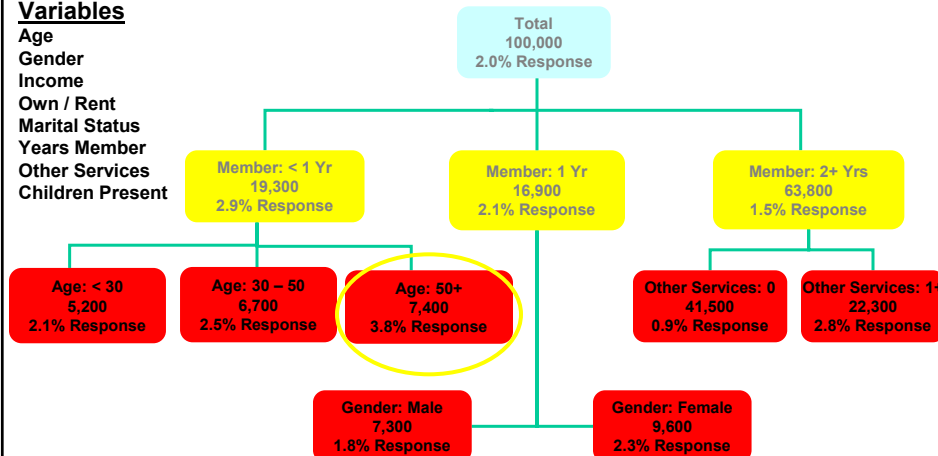
Classification

- Classification is the most common use of data mining. Classifications look at the behavior and attributes of pre-determined groups. The groups might include responders to direct marketing programs, loyal buyers, or “best consumers”.
- Classifications are assigned to new data by examining existing data that has already been classified and by using the results to infer a set of rules. The set of rules is then applied to any new data to be classified.
- Examples of commonly used classification techniques include CHAID and CART.

Example B2C CHAID Analysis

Variables

Age
Gender
Income
Own / Rent
Marital Status
Years Member
Other Services
Children Present



New members that are 50+ years old are most responsive.

CHAID: Pros & Cons

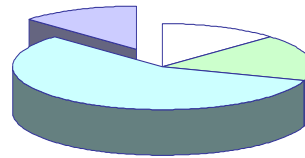
- ❑ Pros
 - Minimal expertise required
 - Easily displayed and explained
 - Finds variable interactions
 - Effective with categorical data
- ❑ Cons
 - Underperforms other techniques
 - May overfit — needs validation
 - All data categorical
 - No variable weightings

Data Mining and Advanced Analytics

- ❑ **Predictive Modeling**
- ❑ **Classification**
- ❑ **Segmentation**
- ❑ **Association and Sequence Analysis**
- ❑ **Consumer Lifetime Value**

Segmentation

- ❑ Segmentation is the division of an universe (e.g. market) into sub-groups (e.g. consumer segments) that share common needs or characteristics.
 - Individuals in the same segment are similar to one another on key attributes.
 - Individuals in different segments are different from one another on key attributes.
- ❑ Segmentation schemes can be:
 - Univariate
 - Bivariate
 - Multivariate
 - ✓ e.g. Factor Analysis, Cluster Analysis



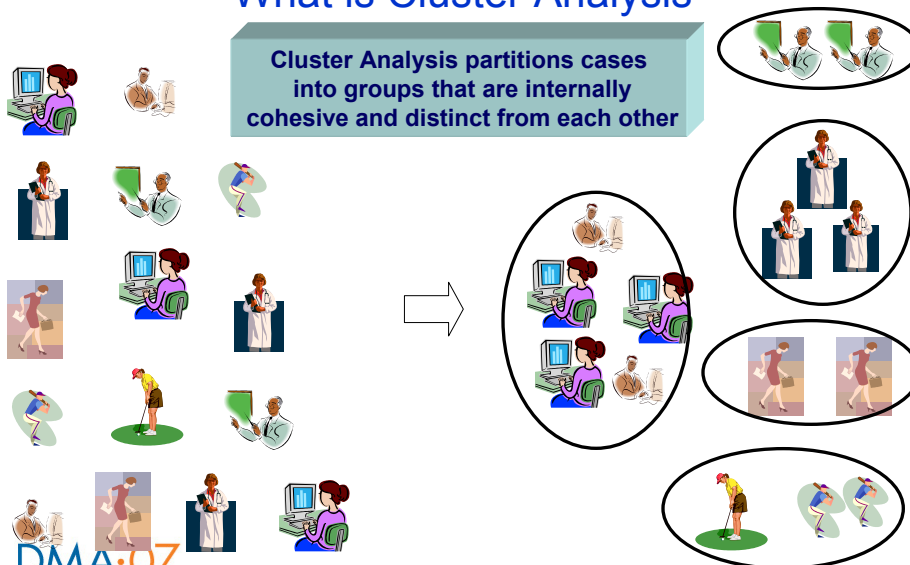
Segmentation schemes can be custom or off-the-shelf

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What is Cluster Analysis

Cluster Analysis partitions cases into groups that are internally cohesive and distinct from each other



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What Do Marketers Segment?

- ❑ Consumers
 - based on behaviors, demographics, psychographics, needs or benefits
- ❑ Geographic areas
 - using demographics or geo-demographics
- ❑ Products
 - using affinities, features or benefits
- ❑ Markets
 - reflecting company success, media, and demographics

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Segmentation Applications: Overview

- ❑ Developing specialized strategy by segment
 - Management of creative, media, and product
- ❑ Evaluation of media and channel fit with segments
- ❑ Product development and bundling
- ❑ Geographic screening
- ❑ Constructing market tests

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Data Mining and Advanced Analytics

- ☐ **Predictive Modeling**
- ☐ **Classification**
- ☐ **Segmentation**
- ☒ **Association and Sequence Analysis**
- ☐ **Consumer Lifetime Value**

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Association and Sequences

- ☐ Association analysis is used to identify the behavior of specific events or processes. Associations link occurrences within a single event.
 - An example might be the discovery that companies that purchase hardware are three times more likely to buy software than those who buy only services.
- ☐ Sequences are similar to associations, but they link events over time and determine how items relate to each other over time.
 - For example, sequence discovery might predict that a person who buys a camera may buy a related accessory within six months with a probability of 0.8. To increase their chances over the 80% probability, the marketer may choose to offer a 10% discount on all camera-related accessories within 3-4 months following their camera purchase.

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Product Affinity Analysis

- ❑ DB marketing applications of association and sequence analysis are market basket analysis and product affinity analysis and collaborative filtering. These analyses:
 - Calibrate similarity of products or services by the consumers they appeal to
 - Integrate marketing and merchandising
 - Use detailed consumer buying data
- ❑ Supports important applications:
 - Product recommendations
 - Highly specialized targeting
 - Targeted offers
 - Custom presentation or script optimization
- ❑ Grouping of products

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Product Affinity Concept

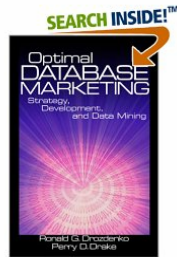
Product affinity calibrates the similarity of products or services from a consumer perspective by looking at cross-buying rates



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Product Affinity Example



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Case Study



- **Based on business Intelligence reports, Retail Giant Wal-mart identified a strong correlation between beer and nappies sales on Friday evenings. Wal-mart strategically placed premium beer next to the nappies.**
- **Wal-mart saw its Friday evening beer sales across the US soar. The men that didn't buy beer previously began to purchase it when it was so visible (cross-sell) and the fathers who usually bought beer now bought the premium quality (up-sell).**



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Data Mining and Advanced Analytics

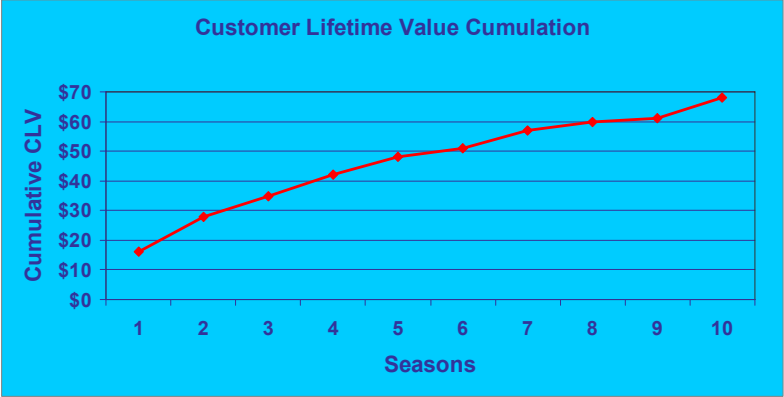
- ☐ **Predictive Modeling**
- ☐ **Classification**
- ☐ **Segmentation**
- ☐ **Association and Sequence Analysis**
- ☐ **Consumer Lifetime Value**



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What is Consumer Lifetime Value?

Consumer Lifetime Value is the net present value of a consumer's future contributions to profit and overhead.



Seasons	Cumulative CLV (\$)
1	15
2	28
3	35
4	42
5	48
6	52
7	58
8	60
9	62
10	68



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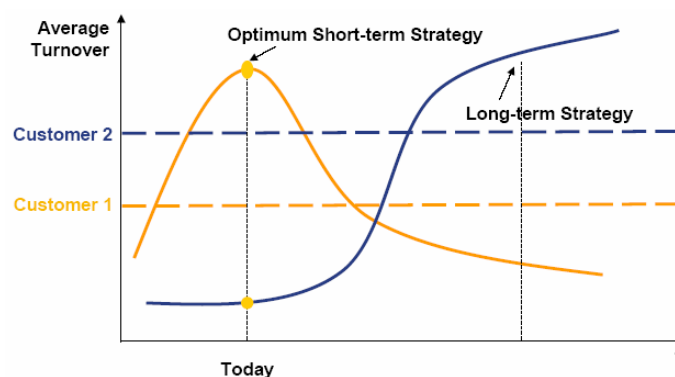
Consumer Lifetime Value (CLV)

- ❑ Fundamental DB Marketing concept
 - Consumer centric
 - Information intensive
 - Long-term perspective
- ❑ Strategic view of consumers as an asset
- ❑ Marketing and finance perspective
- ❑ Marketing decision making tool

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Why is Lifetime Value Important?



Measuring current value alone could lead to different (sub-optimal) marketing decisions.

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Why is Lifetime Value Important?

- ❑ Compared with low-CLV consumers, high-CLV consumers
 - Have higher tenure and retention rates
 - Buy more per year
 - Buy higher priced options
 - Buy more often
 - Are less price sensitive
 - Are less costly to serve
 - Are more loyal
 - Tend to be multi-channel buyers and more engaged

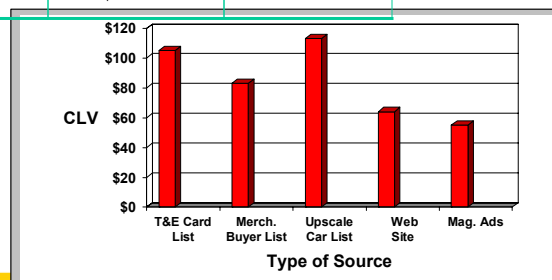
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Lifetime Value Applications

Source	CLV	Acquisition Cost	Value Ratio
T&E Card List	\$ 105.43	\$ 32.74	3.22
Merch. Buyer List	\$ 84.39	\$ 24.18	3.49
Upscale Car List	\$ 113.22	\$ 34.21	3.31
Web Site	\$ 64.16	\$ 22.67	2.83
Magazine Ads	\$ 55.29	\$ 31.77	1.74

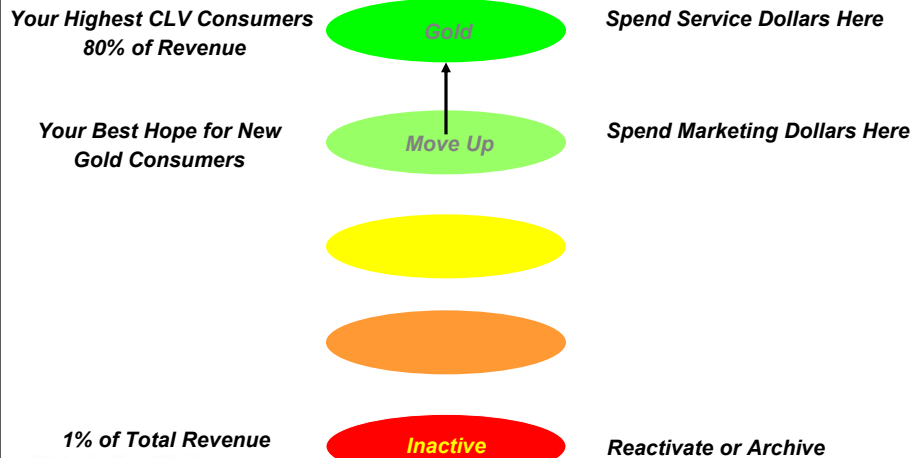
- ❑ Prioritize sources by value ratio
- ❑ Set budgets by value ratio opportunities



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Lifetime Value Applications



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Increasing Lifetime Value

- ☐ Increase the retention rate
- ☐ Increase the referral rate
- ☐ Increase the spending rate
- ☐ Decrease the direct costs
- ☐ Decrease the marketing costs

One way to maximize LTV is to earn the loyalty of the most profitable consumers by giving them superior value.

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Agenda

- ❑ *Introduction and Strategy*
- ❑ *Marketing Database*
- ❑ *Reporting and Analytics*
- ❑ *Data Mining and Advanced Analytics*
- ❑ ***Contact Strategy and Relationship Marketing***
- ❑ *Conclusion*

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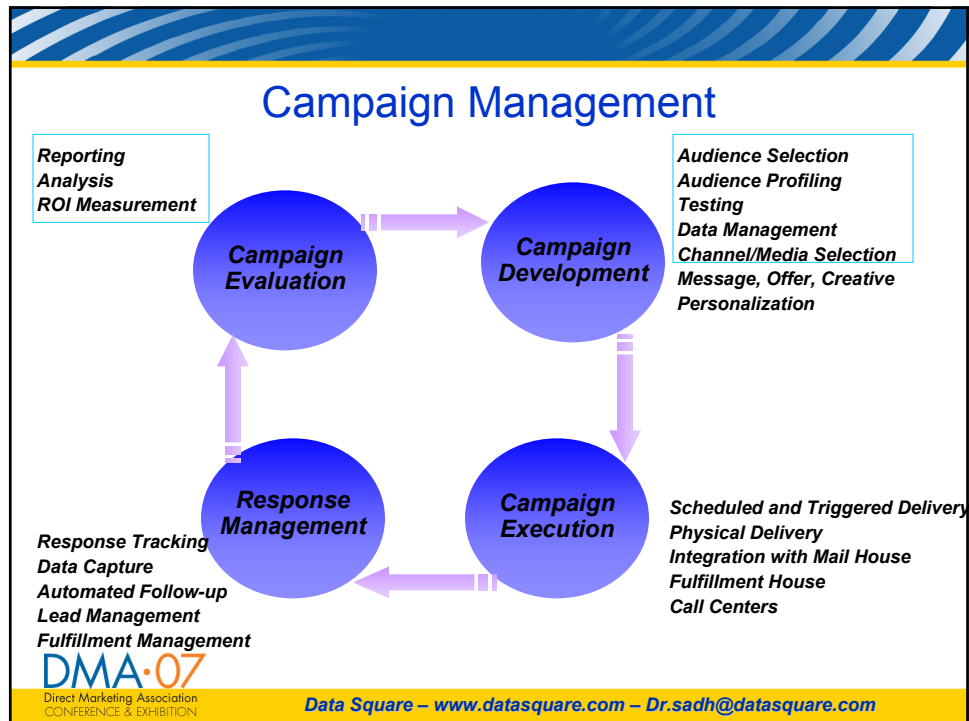


Campaign Management Overview

- ❑ The process for organizations to develop and deploy multiple-channel marketing campaigns to target groups or individuals and track the effect of those campaigns, by consumer segment, over time.
 - Optimize your marketing spend
 - Improve the quality of the leads you generate
 - Measure campaign performance and effectiveness
 - Determine which marketing activities generate the most revenue

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Why Segment, Target, Manage Contact Strategies

- ❑ Achieve highest possible efficiency
 - Eliminate wasted contacts
 - Find all profitable names
- ❑ Usually provides the core of ROI for a marketing database
- ❑ Key types of applications:
 - Select names for an addressable contact
 - Manage multi-step sales processes
 - Optimize multiple contact strategies

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Single Contact Decision Table

Segment	Prior \$/K Revenue	Project \$/K Revenue	Project \$/K Cost	Project \$/K Profit	Contact Decision
1	\$ 6,170	\$ 6,479	\$ 4,562	\$ 1,917	Yes
2	\$ 3,250	\$ 3,412	\$ 2,630	\$ 782	Yes
3	\$ 2,184	\$ 2,293	\$ 1,924	\$ 369	Yes
4	\$ 1,959	\$ 2,057	\$ 1,776	\$ 281	Yes
5	\$ 1,461	\$ 1,534	\$ 1,447	\$ 87	Yes
6	\$ 1,122	\$ 1,179	\$ 1,222	\$ (43)	No
7	\$ 897	\$ 941	\$ 1,073	\$ (132)	No
8	\$ 604	\$ 635	\$ 880	\$ (245)	No
9	\$ 511	\$ 536	\$ 818	\$ (282)	No
10	\$ 342	\$ 359	\$ 706	\$ (347)	No

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Targeting Improves Profit

Segment	Project \$/K Profit	Contact Decision	Optimal Profit \$/K
1	\$ 1,917	Yes	\$ 1,917
2	\$ 782	Yes	\$ 782
3	\$ 369	Yes	\$ 369
4	\$ 281	Yes	\$ 281
5	\$ 87	Yes	\$ 87
6	\$ (43)	No	\$ 0
7	\$ (132)	No	\$ 0
8	\$ (245)	No	\$ 0
9	\$ (282)	No	\$ 0
10	\$ (347)	No	\$ 0
Total	\$ 2,387		\$ 3,437

- Profit improves by selecting only profitable Segments 1 – 5
- Total improves 44% from \$2,387 to \$3,437

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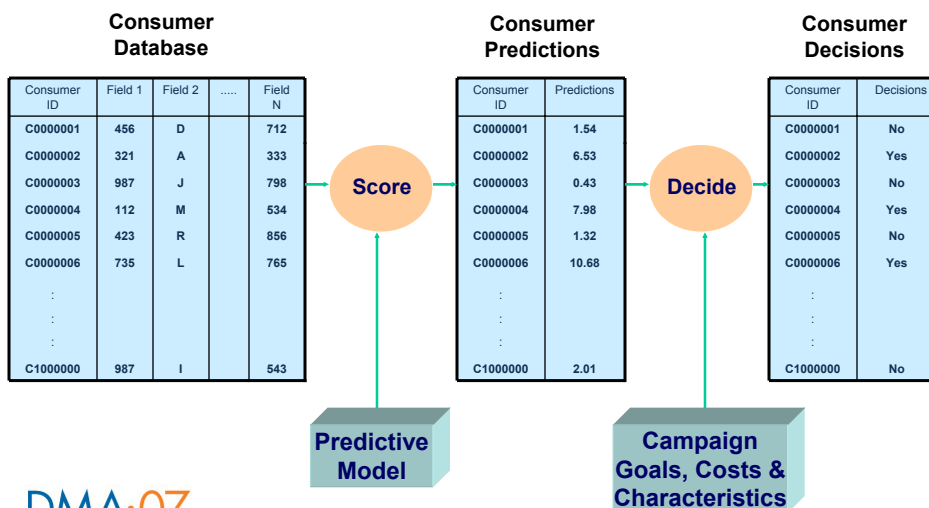
Segmentation, Targeting, Contact Management

- ❑ Marketing objectives and challenge definition
- ❑ Consumer database
- ❑ Predictive models of consumer behavior
- ❑ Marketing campaign description
 - Contact media characteristics
 - Creative/Offer and Message
 - Audience Selection
 - Interaction between the audience, offer, creative and message
 - Market conditions
 - Costs

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Segmentation and Targeting Process



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Example Ranking Report

Ranking Group	Decile \$/K Revenue	Decile % Revenue	Cum. \$/K Revenue	Cum. % Revenue
1	\$ 6,170	33.4%	\$ 6,170	33.4%
2	\$ 3,250	17.6%	\$ 4,710	50.9%
3	\$ 2,184	11.8%	\$ 3,868	62.7%
4	\$ 1,959	10.6%	\$ 3,391	73.3%
5	\$ 1,461	7.9%	\$ 3,005	81.2%
6	\$ 1,122	6.1%	\$ 2,691	87.3%
7	\$ 897	4.8%	\$ 2,435	92.1%
8	\$ 604	3.3%	\$ 2,206	95.4%
9	\$ 511	2.8%	\$ 2,018	98.1%
10	\$ 342	1.9%	\$ 1,850	100.0%

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Applying a Ranking Report

- ❑ Estimate prior vs. future relative revenue performance
 - Offer
 - Macro-economic conditions
 - Timing or seasonality
 - Competition
- ❑ Estimate costs for future campaign
- ❑ Select financial criteria
 - Short-term profit
 - Reactivation / retention value

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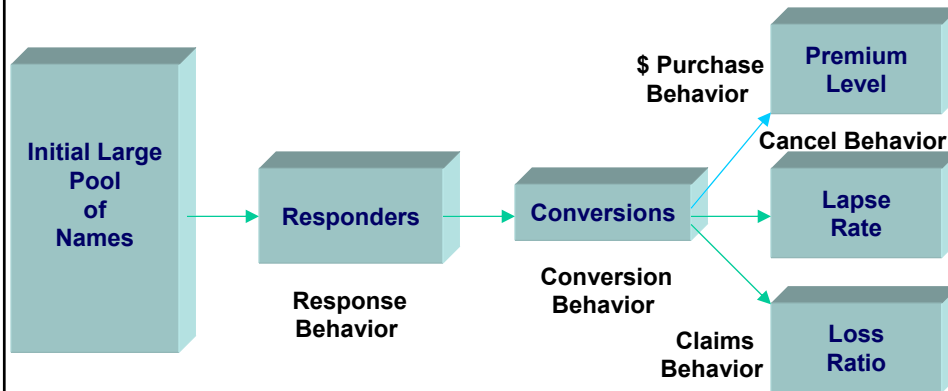
Ranking Report Based Contact Selection

- ❑ Evaluate offer, macro-economic conditions, timing and competition – project 5% higher productivity
- ❑ Add cost of goods, service, marketing, etc.
- ❑ Calculate profit = revenue – costs
- ❑ If short-term profit is the goal, then contact each group with positive profit

Example Ranking Decision Table

Ranking Group	Prior \$/K Revenue	Project \$/K Revenue	Project \$/K Cost	Project \$/K Profit	Contact Decision
1	(\$ 6,170	*1.05)=(\$ 6,479	- \$ 4,562)	= \$ 1,917	-->Yes....
2	\$ 3,250	\$ 3,412	\$ 2,630	\$ 782	Yes
3	\$ 2,184	\$ 2,293	\$ 1,924	\$ 369	Yes
4	\$ 1,959	\$ 2,057	\$ 1,776	\$ 281	Yes
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9	\$ 511	\$ 536	\$ 818	\$ (282)	No
10	\$ 342	\$ 359	\$ 706	\$ (347)	No

Multi-Step Sales Segmentation and Targeting



Multi-step sales processes (e.g., insurance) involve multiple consumer behaviors each of which can have an impact on profitability.

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Response and Conversion Profitability Table

Convert Rank	1	2	3	4	5	6	7	8	9	10
Response Rank	1	2	3	4	5	6	7	8	9	10
1	Highly Profitable Highly Unprofitable									
2										
3										
4										
5										
6										
7										
8										
9										
10										

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Multi-Step Sales Segmentation and Targeting

- ❑ Do not base decisions on one behavior only – others may be inversely correlated
- ❑ Predict (model) separately each behavior
 - More accurate than one profit model
 - Gives visibility to drivers of each behavior
 - Adapts to changes in cost or process
- ❑ Build profit calculation off all behaviors and relevant costs
 - Calculate profit at each decision step
 - Available data may change at each step which can be incorporated into predictive models

Multi-Step Decision Table

Name	Predict Resp.	Predict Convert	Predict Premium	Predict Lapse	Predict Claims	Project Profit	Contact Decision
1	2.4%	33.6%	\$ 932	14.2%	85.1%	\$ (0.63)	No
2	2.5%	34.2%	\$ 1,563	12.4%	86.1%	\$ 5.18	Yes
3	1.9%	28.4%	\$ 1,228	13.1%	84.2%	\$ 1.86	Yes
4	2.8%	35.2%	\$ 1,439	21.3%	97.2%	\$ (9.23)	No
5	2.7%	24.7%	\$ 1,332	19.4%	82.4%	\$ (2.35)	No
6	2.1%	29.8%	\$ 1,498	23.8%	83.6%	\$ (1.21)	No
:							
:							
:							
N	1.6%	32.7%	\$ 1,195	14.2%	84.3%	\$ (4.10)	No

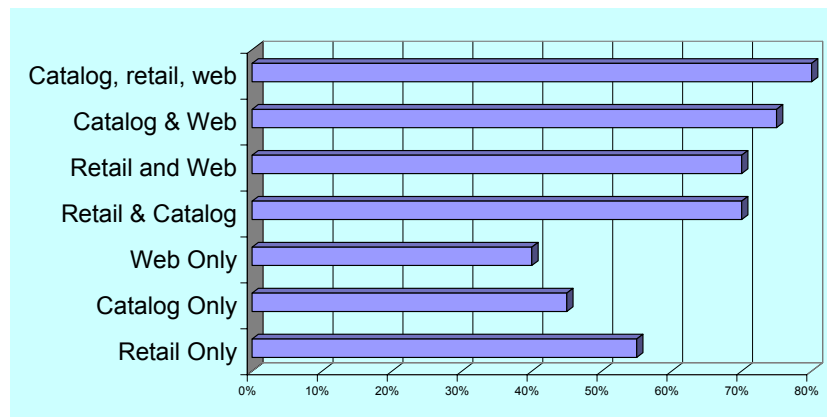
Optimal Contact Strategies

- ❑ Multi-channel contact often increases effectiveness
 - Multi-channel users tend to be more loyal
- ❑ Marketing contacts often interact (“cannibalize”) when:
 - Same or similar product offerings
 - Small time interval between contacts
- ❑ Diminishing impact with added contacts
- ❑ Seasonal consumer based strategies are chosen to maximize profitability:
 - Finding the best combination of contacts
 - Within a time period

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Multi-channel Contact Strategies



Multi-channel users tend to be more loyal.

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Seasonal Contact Strategies

Name	Mailing #1	e-Mail #1	Telemark. #1	Mailing #2	e-Mail #2	Mailing #3
1	Yes	Yes	No	No	Yes	Yes
2	Yes	No	No	Yes	No	Yes
3	Yes	Yes	Yes	Yes	Yes	Yes
4	No	No	No	Yes	Yes	Yes
5	Yes	No	No	No	No	No
6	Yes	No	No	Yes	No	Yes
:						
:						
N	Yes	Yes	No	Yes	No	No

Consumer based view finds best mix of contacts for each consumer

Planning a contact in isolation mistakenly ignores effects from other contacts

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Optimize Each Consumer's Seasonal Strategy

Name	Strategy	Mailing #1	e-Mail #1	Tele-Marketing #1	Mailing #2	e-Mail #2	Mailing #3	Project Season Profit
1	1	Yes	No	No	No	No	No	\$ 2.14
1	2	No	Yes	No	No	No	No	\$ 0.12
1	3	Yes	Yes	No	No	No	No	\$ 2.23
1	4	No	No	Yes	No	No	No	\$ 4.72
1	5	Yes	No	Yes	No	No	No	\$ 5.89
1	6	No	Yes	Yes	No	No	No	\$ 4.74
:	:							
:	:							
1	63	Yes	Yes	Yes	Yes	Yes	Yes	\$ 5.27

Find the seasonal strategy for this consumer with the highest projected profit

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Seasonal Contact Strategy Evaluation

- ❑ For each consumer, predictions of behavior and profitability on each contact
- ❑ Estimated interactions (cannibalizations) among the media
- ❑ Financial data
- ❑ Evaluation and optimization software to:
 - Project the consumer profit for each strategy
 - Fit strategy selection to operating constraints (e.g., circulation quantities)

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Issues in Contact Strategy Optimization

- ❑ Estimating interactions is hardest part
 - Ignoring interactions is a mistake
 - Better to be approximately right than precisely wrong!
- ❑ Interaction factor strength derives from:
 - Similarity of product, offer and media
 - Time interval between contacts
- ❑ Optimization is much easier if consumer revenue ranking is the same for all strategies
 - Optimization can be by segment
 - Spreadsheets can be used

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Example Contact Management Optimization

- ❑ 10 consumer segments representing deciles from a predictive scoring model
- ❑ 5 possible contact strategies:
 - Aggressive – all 6 contacts
 - Frequent mail – all 5 mail and e-mail
 - Offline only – 3 mail contacts only
 - E-mail only – 2 e-mail contacts only
 - Light – 1 mail contact only
- ❑ Project by segment both revenue and profit

Projected Revenue by Contact Strategy

Segment	Aggressive	Frequent Mail	Offline Only	E-mail Only	Light
1	\$ 26.89	\$ 15.14	\$ 14.16	\$ 1.06	\$ 5.73
2	\$ 14.16	\$ 7.97	\$ 7.70	\$ 0.56	\$ 3.02
3	\$ 9.52	\$ 5.36	\$ 5.17	\$ 0.38	\$ 2.03
4	\$ 8.54	\$ 4.81	\$ 4.64	\$ 0.34	\$ 1.82
5	\$ 6.37	\$ 3.59	\$ 3.46	\$ 0.25	\$ 1.36
6	\$ 4.89	\$ 2.75	\$ 2.66	\$ 0.19	\$ 1.04
7	\$ 3.91	\$ 2.20	\$ 2.12	\$ 0.15	\$ 0.83
8	\$ 2.63	\$ 1.48	\$ 1.43	\$ 0.10	\$ 0.56
9	\$ 2.23	\$ 1.25	\$ 1.21	\$ 0.09	\$ 0.47
10	\$ 1.49	\$ 0.84	\$ 0.81	\$ 0.06	\$ 0.32

More aggressive marketing leads to greater seasonal revenue per consumer

Projected Profit by Contact Strategy

Segment	Aggressive	Frequent Mail	Offline Only	e-mail Only	Light
1	\$ 6.87	\$ 5.58	\$ 5.38	\$ 0.45	\$ 2.17
2	\$ 1.14	\$ 2.36	\$ 2.26	\$ 0.22	\$ 0.95
3	\$ (0.95)	\$ 1.18	\$ 1.13	\$ 0.14	\$ 0.50
4	\$ (1.39)	\$ 0.93	\$ 0.89	\$ 0.12	\$ 0.41
5	\$ (2.36)	\$ 0.38	\$ 0.36	\$ 0.08	\$ 0.20
6	\$ (3.03)	\$ 0.01	\$ (0.00)	\$ 0.06	\$ 0.06
7	\$ (3.47)	\$ (0.24)	\$ (0.24)	\$ 0.04	\$ (0.04)
8	\$ (4.04)	\$ (0.56)	\$ (0.56)	\$ 0.02	\$ (0.16)
9	\$ (4.23)	\$ (0.67)	\$ (0.66)	\$ 0.01	\$ (0.20)
10	\$ (4.56)	\$ (0.85)	\$ (0.84)	\$ (0.00)	\$ (0.27)

Most profitable strategy for a segment has the highest value in the row

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Segmentation, Targeting, Contact Management

- ❑ Define the marketing situation
 - Single, stand-alone contact only
 - Multi-step selling
 - Multiple interacting contacts
- ❑ Identify and model all relevant behaviors
 - Apply database information from past
 - Demonstrate effectiveness with ranking report
- ❑ Apply financial criteria
 - Short-term profit
 - Longer-term business development

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Agenda

- ☐ Introduction and Strategy
- ☐ Marketing Database
- ☐ Reporting and Analytics
- ☐ Data Mining and Advanced Analytics
- ☐ Contact Strategy and Relationship Marketing
- ☐ Conclusion



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Questions and Contact



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