Applied Dashboard Design and Analysis

The data set is from a direct marketing company and contains 226,129 records reflecting 137,576 orders and 100,000 customers. It contains records reflecting 219 catalog mailing events across 100,000 customers.

Here are some analyses that the data can support

- 1. Analyze channel-buying patterns
- 2. Analyze aggregate, channel, and product category rebuy rates.
- 3. Analyze life time value by product category, channel, or original source.
- 4. Measure performance and estimate return on the marketing investment in total or by some RFM groups.
- 5. Analyze contact frequency for ROI optimization
- 6. Predict future revenues, offers that have performed better, the most popular channel through which purchase was made and the products which are most likely to be returned.

Scope:

The data has information on 18 product categories. Two divisions – web and catalog - sell these product categories. The number of products vary within each category and across divisions. Some products may be exclusive to a division.

The data dictionary is as follows:

CUSTNO Unique customer identification

ZIP 5 digits ZIP Code

ORDER_NO Unique order number

ORDER_LINE Line number for each unique product in an order

PRODUCT_NO Unique Product Identification Number

BO_DATE Date that item went on back order

CANCEL_DATE Date that item was cancelled

CANCEL_QUANTITY Quantity of units cancelled

PRODUCT_CATEGORY_ID Top Level Product Categorization (Single character categories, "A,

B, C ..." etc)

CHANNEL Channel through which purchase was made (see below)

DIVISION_ID Business division that was assigned credit for the sale,

regardless of the channel through which the order was

placed (see below)

OFFER_ID Unique code that identifies the marketing activity credited

with the sale. (See 2_DMEF_offer_xref.txt)

ORDER_DATE Date the order was placed

EXT_COST Extended Item Cost (cost x quantity)

EXT_PRICE Extended Item Retail Price (retail price x quantity)

PAY_METHOD Payment method (see below)

QUANTITY Quantity of unit orders

SHIP_DATE Date line item was shipped

SHIP_QUANTITY Quantity of items shipped

RETN_DATE Date line item was returned

RETN_QTY Quantity of items returned

RETN_REVENUE Retail value of items returned

RETN_LINE Line number for each unique product in a return

order

MAILED_OFFER_CUST Mailing and offer details of customers

LEVELS:

MAILED_OFFER_CUST

- 0: No offer has been mailed to the customer
- 1: Offer ID used in transaction was mailed to the customer
- 2: Offer ID used in the transaction was not mailed to the customer

DIVISION_ID

01 = Catalog, 05= Web

PAY_METHOD

AX – American Express

AZ – Amazon Pay Method

BM – Bill Me Later

DC - Diner's Club

DI – Discover

MC - Master Card

MO – Money Order

MX – Multi Credits

OA – Open Account

PC – Personal Check

PX – Prepaid Exchange

PY – Paypal

VI – Visa

XX – Invalid CC Number

CHANNEL

ML – Mail

PH – Phone

WE – Web

OFFER REFERENCE

Contains records reflecting 464 unique offers

OFFER_ID Unique code that identifies the marketing activity

DIVISION_ID Business division associated with the marketing activity

regardless of the channel (see below)

OFFER_YEAR Year offer was published

ACTUAL_DROP_DATE Date offer was published

ACTUAL_END_DATE Date offer expired

OFFER_DESC Generic description of offer

GENDER Gender of individual mailed (see below)

LEVELS

Gender

F = Female

M = Male

U = Unknown