Conducting Marketing Research and Forecasting Demand

Marketing information system (intelligence)
What will we learn?

• What is MIS (Marketing information system)?
• What is marketing research?
• Examples of marketing productivity measuring
• How to forecast demand?
What managers want to know and marketing managers have to know?

• Are my customers satisfied? Who are my competitors? Why isn’t my product sold? Target audience? How should I set up price for my product? Where should I sell my product?

• ........
From where to get the knowledge?
What is knowledge

<table>
<thead>
<tr>
<th>Level</th>
<th>Definition</th>
<th>Learning process</th>
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<tbody>
<tr>
<td>Data</td>
<td>Raw facts</td>
<td>Accumulating truths</td>
</tr>
<tr>
<td>Information</td>
<td>Meaningful, useful data</td>
<td>Giving form and functionality</td>
</tr>
<tr>
<td>Knowledge</td>
<td>Clear understanding of information</td>
<td>Analysis and synthesis</td>
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<tr>
<td>Wisdom</td>
<td>Using knowledge to establish and achieve goals</td>
<td>Discerning judgments and taking appropriate action</td>
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</table>
Knowledge is made....

Information is created from data

Can be very individual

Social artefact

Data <-> Information <-> Knowledge

Input -> Process -> Output

Shared social context
Marketing data and information…
So what is marketing information system?
Marketing Information System

- An MIS consists of people, equipment, and procedures to gather, sort, analyze, evaluate, and distribute needed, timely, and accurate information to marketing decision makers.
- The MIS helps managers to:
  1. Assess Information Needs
  2. Develop Needed Information
  3. Distribute Information
What is marketing research

- Marketing research is the **systematic** and objective identification, collection, analysis, dissemination, and use of information for the purpose of assisting management in decision making related to the identification and solutions of problems and opportunities in marketing

(Naresh Malhotra)
Purposes of Marketing Research

- Identify changes in the existing market
- Build up a knowledge bank
- Improve market awareness & opportunities
- Reduce risk and uncertainty
- Support marketing mix decisions
- Support marketing planning and controls
- Improve understanding of marketing
- Solve ad hoc problems

Short, middle and long term purposes
Outcomes of marketing research

- Price Analysis
- Identify Trends
- Market Research / Analysis Reports
- Marketing Plans
- SWOT Analysis Report
- Location Analysis Report
- Competitive Analysis
- Target Market Analysis
- Domestic / International Competitors

Market Research
Marketing and Market Research

- **Marketing research** - is the gathering of information on all activities of marketing
- **Market research** - is the gathering of information on a particular market for a product or service
- **Marketing research has a wider scope than market research**
Types of research information

- **Market research** - information about the market for a given product/service
  - likely demand
  - market characteristics & trends
  - market share

- **Promotion research** - effects of advertising on sales
  - effectiveness of promotion methods/media; sales areas

- **Product research** covers information about the proposed/improved product:
  - competing products
  - customer acceptance
  - test marketing of potential new users

- **Price research**
  - customer perception of price/quality/value
  - profit margin

- **Distribution research**
  - location & design of distribution centre
  - costs of transportation/storage
Why Research?

• To Avoid ...
• To Reduce ...
• To Obtain ...

Focus

• What do you want to know?
• Why do you want to know it?
• Specifically, how are you going to use the information obtained?
The marketing research process

1. Defining the Problem and the Research Objectives
2. Developing the Research Plan
3. Implementing the Research Plan – collecting and analysing the data
4. Interpreting and Reporting the Findings
1. Defining the problem and research objective

**Management Decision Problem**
- Should a new product be introduced?
- Should the advertising campaign be changed?
- Should the price of the brand be increased?

**Marketing Research Objective:**
- To determine consumer preferences and purchase intentions for the proposed new product.
- To determine the effectiveness of the current advertising campaign.
- To determine the price elasticity of demand and the impact on sales and profits of various levels of price changes.
3 general types of objectives:

- **Exploratory** – to gather preliminary information that will help to better define problems and suggest hypothesis.

- **Descriptive** – to better describe marketing problems, situations or markets, such as the market potential for a product or a demographics and attitudes of consumers.

- **Casual research** – to test hypotheses out case and effect relationships.
United Airlines, as other major airlines, had to deal with passenger loyalty (management decision problem: how to attract more and more loyal passengers). The broad marketing research problem was to identify the factors that influence loyalty of airline travelers. The basic answer is to improve service.

Exploratory research, theoretical framework, and empirical evidence revealed that the consumers’ choice of an airline is influenced by: safety, price of the ticket, frequent-flyer program, convenience of scheduling, and brand name.
Case

- Secondary data, like the J. D Power & Associates' survey on "current and future trends in airline food industry," indicated that "food service is a major contributor to customers’ loyalty." This survey also emphasized the importance of food brands.

- The airline's Marketrak survey told United Airlines that "customers wanted more varied and up-to-date food."
- The following research questions and hypotheses may be posed:
  - RQ1 How important is food for airline customers?
  - H1: Food is an important factor for airline travelers.
  - H2: Travelers value branded food.
  - H3: Travelers prefer larger food portions, but with consistent quality.
  - H4: Travelers prefer exotic food.
2. Developing research plan

- What, how, when, who, where??????
- Includes:
  - Determining the exact information needed
  - Developing a plan for gathering it efficiently
  - Deciding the form of the final results presentation
- Outlines:
  - Sources of data and information
  - Specific research approaches
  - Contact methods
  - Sampling plans
  - Instruments for data collection
Types and sources of data and information

Data
- Facts and figures pertinent to the problem

Secondary data
- Facts and figures already recorded prior to the project

Internal data (inside the firm)
- Financial statements, research reports, files, customer letters, sales call reports, and customer lists

External data (outside the firm)
- U.S. Census reports, trade association studies and magazines, business periodicals, and Internet-based reports

Observational data (watching people)
- Mechanical and electronic approaches
- Personal approaches

Questionnaire data (asking people)
- Idea generation through in-depth interviews and focus groups
- Idea evaluation by mail, online, telephone, and personal surveys

Primary data
- Facts and figures newly collected for the project
Using secondary data

- As a backdrop to primary research eg. when doing basis research in unfamiliar territory
- As a substitute for research - information already available or in cases where it is not worth doing primary research
- As a technique in itself – eg. for collecting historic data on market trends
TYPES OF SECONDARY DATA

- **Internal**
  - Examples: Sales invoice, Salesperson's call reports, Salesperson's expense account, Credit memos, Warranty cards

- **Published**
  - General works: Directories, Periodicals, Statistical sources, Financial records, Geodemographic data, Diary panel data, Store audit data, Scanner data, Advertising exposure data

- **External**

- **Commercial**

**Secondary Data**
Primary Data

• **Research Approach:**

  • Observation research using people or machines
    – Discovers behavior but not motivations
  • Survey research
    - who, what, when, why, where, how….
  • Experimental research
    – investigates cause and effect relationships
    – What if….

  The gathering of primary data by observing relevant people, actions, and situations.

  Ethnographic research:
    - Observation in “natural environment”
  Mechanical observation:
    - People meters
    - Checkout scanners
Qualitative V Quantitative Research

• Qualitative research - seeks in-depth, open-ended and unquantifiable information describing opinions, values etc, rather than sizes and amounts in numerical form.

• Quantitative research - seeks structured responses that can be quantified in numerical form rather than general, open-ended information.
Collection methods

• Communication
  – Mail questionnaires
  – Telephone interviews
  – Face-to-face interviews
  – Online questionnaires

• Observation + recording
  – Personal
  – Mechanical ... People Meters, Supermarket Scanners, Galvanometer, Eye Cameras
Choosing the Sample

• Sample – segment of the population selected to represent the population as a whole.

• Requires 3 Decisions:
  – Who is to be surveyed?
    • Sampling unit
  – How many people should be surveyed?
    • Sample size
  – How should the people in the sample be chosen?
    • Sampling procedure
– Sampling
  • Population—all the elements, units, or individuals of interest to researchers for specific study
  • Sample—a limited number of units chosen to represent the characteristics of a total population

– Types of sampling
  – Probability—each element has an known chance for study
  – Random—each element has an equal chance for study
  – Stratified—study population divided into like groups
  – Nonprobability: element’s likelihood of study is unknown
  – Quota: population is grouped and elements are arbitrarily chosen
3. Implementing the research plan
Collecting and analysing the data

- Pilot research – to test the research approach, sample, objectives, quality of ..... 
- Collection 
- Coding 
- Tabulating 
- Calculating, summarizing, analysing 
- Interpretation
4. Interpreting and Reporting the Findings

Prepare the Research Report

- Executive summary
- A description of research methods
- Discussion of results
- Limitations of study
- Conclusions and recommendations
Simple questions

- The Sample: Who are you going to ask? The Method: How are you going to ask them?
- The Questions: What are you going to ask them?
- The Results: What will you do with the information?
- The Cost: How much do you want to pay for the answer?
- The Time Scale: By when do you need the information?
Types of questionnaire

There are several types of questionnaire and each is designed to explore different aspects or elicit different responses. Some of the more common include also different type of questions/answers:

- **Dichotomous**

  "Do you eat whale meat?"

  Yes  No
• Importance

Having a butcher in my village is:

1 extremely important
2 very important
3 somewhat important
4 not very important
5 not at all important

• Multiple choice

Which products do you have? Select those applicable:

Current
Deposit
Mortgage
Loan
ISA
PEP

• Likert scale

How would you describe the local branch of ASDA:

Convenient     X     X     X     X     X     inconvenient
Friendly      X     X     X     X     X     unfriendly
Service oriented X     X     X     X     X     unhelpful
Efficient     X     X     X     X     X     inefficient
Buying propensity

If a multi-change CD was standard in a car would you be more likely to buy it?

Definitely probably be unsure probably not definitely not
1 2 3 4 5
- Semantic Differential

<table>
<thead>
<tr>
<th>Semantic Differential</th>
<th>Value</th>
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<tbody>
<tr>
<td>American Airlines</td>
<td></td>
</tr>
<tr>
<td>Large</td>
<td></td>
</tr>
<tr>
<td>Small</td>
<td></td>
</tr>
<tr>
<td>Experienced</td>
<td></td>
</tr>
<tr>
<td>Inexperienced</td>
<td></td>
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<tr>
<td>Modern</td>
<td></td>
</tr>
<tr>
<td>Old-fashioned</td>
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**Thematic Apperception Test** - What do you think is happening in this picture?
Completely unstructured - opinion

Describe in your own words your opinion of your local garage.

________________________________________
________________________________________
________________________________________

- Word Association
- What is the first word that comes to your mind when you hear the following?
- Airline __________________________________
- American __________________________________
- Travel ____________________________________
Sentence completion

When I choose an airline, the most important consideration in my decision is:

_________________
_________________
_________________
_________________.
Sources of Information

- Surveys: 92% (2008), 96% (2007), 94% (2005)
- Focus Groups: 80% (2008), 74% (2007), 77% (2005)
- Syndicated Research: 81% (2008), 83% (2007), 81% (2005)
- Company Sales Data: 67% (2008), 66% (2007), 63% (2005)
- Scanner Data: 26% (2008), 16% (2007), 25% (2005)
- Other: 21% (2008), 18% (2007), 13% (2005)
Marketing metrics is the set of measures that helps marketers quantify, compare, and interpret marketing performance.

**External**
- Awareness
- Market share
- Relative price
- Number of complaints
- Customer satisfaction
- Distribution
- Total number of customers
- Loyalty

**Internal**
- Awareness of goals
- Commitment to goals
- Active support
- Resource adequacy
- Staffing levels
- Desire to learn
- Willingness to change
- Freedom to fail
- Autonomy
Customer or stakeholders performance scorecard/dashboard
The Measures of Market Demand

Ninety Types of Demand Measurement (6 x 5 x 3)
Defining the market

- **Market** = the set of all actual and potential buyers of a product or service
- **Industry** = a group of firms which offer a product or a class of products that are close substitutes for each other
- **Potential market** = the set of customers who profess some level of interest in a particular product or service
- **Available market** = the set of customers who have interest, income and access to a particular product or service
- **served market** = the part of market that the company decides to pursue (target)
- **Penetrated market** = the set of customers who have already bought a particular product or service

- **TOTAL MARKET DEMAND**
  \[ Q = n \times q \times p \]
  - number of buyers in the market
  - quantity purchased by an average buyer per year
  - price of an average unit
Forecasting future demands

WHAT PEOPLE SAY?
• Survey of Buyers’ Intentions
• Composite of Sales Force Opinions
• Expert Opinion

WHAT PEOPLE HAVE DONE?
• Past-Sales Analysis

WHAT PEOPLE DO?
• Market-Test Method