Chapter 10

Marketing Research
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DATA

Collecting & Storing

Analyzing

Interpreting

Decision Making
Why marketing research is important?

1. Better understanding of your customers
2. Knowledge about your competitors
3. Testing your product before launch
4. Business growth
5. ...
• Always define a direction first!
• You’ll notice that these “processes” or “progressions” in your text always begin with a definition of objectives.
• Defining objectives leads to more effective use of your resources (funds, talent, etc.)
Step 1: Defining the Objectives and Research Needs

What exactly are we trying to accomplish (GOAL) with this marketing research project?

1. Which data do you need?
2. How do you obtain this data?
Step 1: Defining the Objectives and Research Needs

What exactly are we trying to accomplish (GOAL) with this marketing research project?

1. Which data do you need?
2. How do you obtain this data?

Example: Movie studios do a lot of research to predict Oscars winners
(Think about which data studios would need to do this and how they would obtain it)
Step 2: Designing the Research

Type of data
- Qualitative
- Quantitative
- Over time
- One instance
- ...

Type of research to obtain the data
Step 3: Data collection process

Types of data

Quantitative vs qualitative

- Numerical, countable, data
  - E.g.,
    - The age of your car
    - The number of files on your PC

- Descriptive data (qualities or characteristics) that cannot be measured
  - E.g.,
    - A TripAdvisor/Yelp review
    - The color of your car
    - Images, videos, audios
Step 3: Data collection process

Types of data

We can classify the data depending on:

1. Whether the data is specifically collected for the research (primary data) or whether it already exist (secondary data)

2. Whether the data is from within the company performing the research (internal) or from an external source (external)
Step 3: Data collection process

Types of data

- Generally quantitative
- Structured data is highly-organized and formatted

<table>
<thead>
<tr>
<th>LineItem</th>
<th>OrderID</th>
<th>ProductID</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1234</td>
<td>765</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>1234</td>
<td>987</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>...</td>
<td>...</td>
<td>...</td>
</tr>
<tr>
<td></td>
<td>5588</td>
<td>765</td>
<td>1</td>
</tr>
</tbody>
</table>

- Generally qualitative
- To extract information from it we need Machine Learning
- Examples: Images, Videos, Audio
Step 3: Data collection process

Types of data

- **Cross-sectional data**: one observation for every “individual” in the dataset

<table>
<thead>
<tr>
<th>Patient ID</th>
<th>Weight</th>
<th>Age</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>150</td>
<td>33</td>
</tr>
<tr>
<td>2</td>
<td>140</td>
<td>23</td>
</tr>
<tr>
<td>3</td>
<td>180</td>
<td>26</td>
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<tr>
<td>4</td>
<td>220</td>
<td>39</td>
</tr>
<tr>
<td>5</td>
<td>130</td>
<td>70</td>
</tr>
<tr>
<td>6</td>
<td>170</td>
<td>22</td>
</tr>
</tbody>
</table>

- **Panel data (or longitudinal data)**: repeated observations over time for every “individual” in the dataset

<table>
<thead>
<tr>
<th>City</th>
<th>Date</th>
<th>MaxTemperature</th>
<th>Humidity</th>
<th>Wind</th>
</tr>
</thead>
<tbody>
<tr>
<td>NYC</td>
<td>1/1/2015</td>
<td>55</td>
<td>45%</td>
<td>4 mph</td>
</tr>
<tr>
<td>NYC</td>
<td>1/1/2014</td>
<td>30</td>
<td>39%</td>
<td>16 mph</td>
</tr>
<tr>
<td>NYC</td>
<td>1/1/2013</td>
<td>47</td>
<td>65%</td>
<td>21 mph</td>
</tr>
<tr>
<td>SFO</td>
<td>1/1/2015</td>
<td>70</td>
<td>35%</td>
<td>21 mph</td>
</tr>
<tr>
<td>SFO</td>
<td>1/1/2014</td>
<td>75</td>
<td>23%</td>
<td>2 mph</td>
</tr>
<tr>
<td>SFO</td>
<td>1/1/2013</td>
<td>71</td>
<td>39%</td>
<td>13 mph</td>
</tr>
<tr>
<td>Boston</td>
<td>1/1/2015</td>
<td>34</td>
<td>39%</td>
<td>16 mph</td>
</tr>
<tr>
<td>Boston</td>
<td>1/1/2014</td>
<td>26</td>
<td>17%</td>
<td>27 mph</td>
</tr>
<tr>
<td>Boston</td>
<td>1/1/2013</td>
<td>45</td>
<td>46%</td>
<td>18 mph</td>
</tr>
</tbody>
</table>
Step 3: Data collection process

Examples of secondary data

- **Scanner data** (think about store receipts)
  - Internal and secondary

- **Syndicated data** (not free!)
  - There are companies specialized in collecting and selling data, e.g., Nielsen or IRI
  - External and secondary

- **Census Bureau data**, e.g.:
  - Pct. People with college degree in a zipcode, unemployment rate
  - External and secondary
Step 3: Data collection process

Some specific examples

Whole Foods
- Uses its **scanner data** to determine shoppers’ favorite brand of sliced bread and make inventory decisions on the basis of their findings.
- The data used in this case is **secondary** and **internal**.

Netflix
- Content watched by each user (**secondary** and **internal**)
- Very advanced use of data/data analytics:
  - Machine learning  $\rightarrow$ Netflix
Collecting primary data
Step 3: Data collection process

Surveys

How often could you find a use for this [Product/Service]?

- Once a week or more often
- 2-3 times a month
- Once a month
- Every 2-3 months
- 2-3 times a year
- Once a year
- Do not use

Please describe your ideal vacation in the space below:
Step 3: Data collection process

Tools to create surveys

SurveyMonkey
www.surveymonkey.com

Qualtrics

Useful for the group projects!
Step 3: Data collection process

Focus groups

In person interviews with a small group of consumers

Watch this video to learn more about focus groups: https://www.youtube.com/watch?v=3TwgVQIZPsw
Scraping data from websites

Essentially scraping consists in downloading HTML pages from a website and extract information from them.

For more info:
https://www.youtube.com/watch?v=Ct8Gxo8StBU&feature=emb_rel_pause
Step 3: Data collection process

Experimental research, e.g., A/B Testing
Converting data into information to explain, **predict**, and/or evaluate a particular situation.

**Step 4: Analyzing data and developing insights**
Step 5: Action plan and implementation

Executive summary, supplements including tables, figures, etc.

‘Daybreak’ Canceled By Netflix After One Season
Two additional activities

1. Video case + 2 questions
2. Data ethics article