Assessing consumer needs and developing new products

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How do we know what a customer needs?

Marketing Research!
Marketing research process

Step 1: Formulating the problem

Step 2: Developing an Approach to the Problem

Step 3: Formulating a Research Design

Step 4: Data Collection (Field Work)

Step 5: Analyzing Data

Step 6: Reporting the Research
Marketing research process

Step 1: Formulating the problem
Formulating a research problem in cross-cultural settings

• Comparability ➔ similarities and differences
  • Define the marketing research problem in terms of domestic and foreign environmental and cultural factors. Then, compare.

• Equivalence
  • The problem must have the same meaning and role across cultures.
  • Must be measured using the same methods and measures.
Example of formulating the problem in cross cultural research

Sheep/Goat meat consumers and non consumers

ES, FI, FR, GR, IT, TR, UK.

Management problem: Should we change the advertising message, the product label?
Example of formulating the problem in cross cultural research

Comparability:

• Familiar with Lamb consumption → special occasion (Christmas, Easter).
• Different levels of interest in health

Equivalence:

• Popular cuts vary between countries
• Preference → local, except Finland

⇒ Consumer preferences → What are consumer preferences and barriers regarding their consumption of lamb meat?
Marketing research process

Step 1: Formulating the problem

Step 2: Developing an Approach to the Problem
Step 2: Developing an Approach to the Problem

• Marketing research → cognitive approach

• Two main views:
  
  • Etic → Universal view
    • Investigating many cultures, an absolute or universal criteria applies.
  
  • Emic → Culturally specific
    • Examines the phenomenon from within the system (only one culture).
Marketing research process

Step 1: Formulating the problem

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Step 3: Formulating a Research Design
Step 3: Formulating a Research Design

• A **research design** is a framework or blueprint for conducting the marketing research project.

• Affected by the nature of the research problem
  
  • **Quantitative**: What?
  
  • **Qualitative**: How? Why?
  
  • **Mixed**: Enhance the scope and comprehensiveness.
## Qualitative vs. Quantitative Research

<table>
<thead>
<tr>
<th></th>
<th>Qualitative Research</th>
<th>Quantitative Research</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Objective</strong></td>
<td>To gain a deeper understanding, contextualize a phenomenon, the why and how of things</td>
<td>To quantify the data and generalize the results from the sample to the population</td>
</tr>
<tr>
<td><strong>Process</strong></td>
<td>Inductive, subjective, recurrent</td>
<td>Deductive, objective, sequential</td>
</tr>
<tr>
<td><strong>Sample</strong></td>
<td>Small number of non-representative cases</td>
<td>Large number of representative cases</td>
</tr>
<tr>
<td><strong>Data Analysis</strong></td>
<td>Non-statistical</td>
<td>Statistical</td>
</tr>
<tr>
<td><strong>Outcome</strong></td>
<td>Develop an initial understanding, theory development</td>
<td>Recommend a course of action</td>
</tr>
<tr>
<td><strong>Examples</strong></td>
<td>In-depth interviews, focus groups case studies</td>
<td>Surveys, Experiments</td>
</tr>
</tbody>
</table>
Marketing research process

Step 1: Formulating the problem

Step 2: Developing an Approach to the Problem

Step 3: Formulating a Research Design

Step 4: Data Collection (Field Work)
Qualitative research
What we did?

Literature review: 143 papers on lamb/sheep consumption

Results:
- Gender differences
- Different consumer groups by use, taste
- Origin, cut, nutritional information → really important

Qualitative research

Focus groups
- 7 countries, regular & occasional consumers
- Responsible for food purchasing
- Between 25-65 years old

In-depth interviews (laddering)
- 7 countries, including non-consumers
- Responsible for food purchasing
- Between 25-65 years old

Qualitative results
Qualitative research: Laddering and means-end chain analysis

Interviewing technique that attempts to understand and uncover the link between product attributes, personal outcomes (benefits), and values → It is achieved by repeating the following question:

Why is this important for you?

![Diagram of product knowledge and self knowledge]
Qualitative results

Cognitive structure of motivations to purchase sheep/goat meat
Qualitative results

Cognitive structure of barriers linked to the consumption of ewe/goat meat
Qualitative research: focus groups

- Pre-screened, homogeneous group (per country)
- Requires a moderator, assistant, video/voice recorder, comfortable place and refreshments
- Participants are encouraged to talk openly about their opinions and respond to other members
- Audiovisual assistance might be used
- Everybody gets a chance to talk
- Focus on a specific topic
Qualitative results: focus groups

Situation

“I prefer ‘arrosticini’ when I’m with my friends, but for me and my family I usually cook the lamb in the oven”

“Meat from young animals is purer and has less hormones, so I trust to consume more of it”

“I would never consider buying sheep/goat meat from a supermarket or from a butcher whom I don’t know personally”

Safety

“I must admit I don’t cook much, just easy things, so regarding lamb, I usually buy chops that are very easy to cook”

Convenience

“I reduced the purchase of meat in general…I usually purchase beef meat because it is less fatty but I know that lamb meat is better in terms of genuineness”

Health

“I would never consider buying sheep/goat meat from a supermarket or from a butcher whom I don’t know personally”
Results summary - MEAT

Likes

- Unique taste
- Sheep and goat raised more naturally
- More genuine and authentic

Dislikes

- Fatty
- High cooking skills required
- Less variety and availability
- Taste not familiar to young people
Quantitative research
Quantitative research: developing a questionnaire

Remember: ask only relevant questions that will provide accurate information
Steps to develop a good cross-cultural questionnaire

• Check previous studies and literature

• Decide on the order and wording of questions and the layout of the questionnaire
  • Use specific questions related to the concept of interest
  • Keep it simple → avoid “and”, “/”, “or”, double negations
  • Avoid bias questions → desirability, leading

• Work with an international team (advisable)
  • Translate and back-translate

• Select the sample

• Pilot test for omissions and ambiguity
  • Correct the problems and pretest again, if necessary
Literature review (99 papers)

• Most meat choice experiments have been done in Spain and United States

• Studies tend to focus on beef, only a few specialize on Lamb meat

  • Most studied attributes: Price, origin, animal welfare (not one unique label), fat content, Organic.

  • Results show that cooking method, origin, safety, fat content, animal welfare and color are the most important attributes for consumers.
Questionnaire structure

Introduction

Screening questions:
Lamb/goat meat/cheese consumption, responsible for buying, no farmer, quota.

Behavior/ Benefits
- Usage (frequency)
- Acquisition place (e.g. supermarket)
- Benefits/ behaviors (health) 
  Choice experiment

Psychographics
- Lifestyle (e.g.: I like to try new products)
- Motives (e.g.: easy to cook; contains iron)

Sociodemographic and geographic
- Education
- Employment
- Rural vs Urban

Thank you!
Question formats

**Question types**

- **Close-ended**: pre-determined set of responses
  - Easier to answer, tabulate and analyze
  - Respondents are directly comparable
  - Mutually exclusive and exhaustive

- **Open-ended**: respondents answer in their own words
  - Provides detail information
  - Measure sensitive behaviors, verbatims
  - Used when too many responses are possible.
  - Needs to be re-coded.

- **Single dichotomy**: only 2 alternatives
- **Multiple category**: More than 2 alternatives
Examples

• Open questions

Will you please describe your thoughts about a person who shoplifts items from a grocery store to keep from going hungry?

______________________________

• Dichotomous Questions

Have you ever eaten lamb meat?

( ) Yes    ( ) No

• Multiple choice

Which of the following lamb cuts is your preferred one?

( ) Lamb chops    ( ) Lamb cutlets    ( ) Lamb leg    ( ) Other: __________
Liker scales

• Frequency

<table>
<thead>
<tr>
<th>How frequently do you eat lamb meat in restaurants?</th>
</tr>
</thead>
<tbody>
<tr>
<td>( ) Never</td>
</tr>
</tbody>
</table>

• Agreement

<table>
<thead>
<tr>
<th>I choose products for their taste rather than for their nutritional value</th>
</tr>
</thead>
<tbody>
<tr>
<td>( ) Strongly</td>
</tr>
</tbody>
</table>

• Bi-polar scales

<table>
<thead>
<tr>
<th>Familiar product</th>
<th>( ) ( ) ( ) ( ) ( ) ( ) New product</th>
</tr>
</thead>
</table>
Who do you want to interview?

1) Who is your population?
   • All people who might provide you with key information → consumers

2) Sampling

- Convenience sample
- Random sample
- Stratified sample
Our stratified sample

• Based on Eurostat 2016/2017
• 7 countries
  • Finland, France, Greece, Italy, Spain, Turkey and UK
• Gender/occupation
  • Female, Male
  • Employed, Unemployed, Retired/Student (inactive population)
• Age
  • 18-24, 25-34, 35-44, 45-54, 55-64 years old
Additional filters

• Responsible or partially responsible for household grocery shopping

• Not related to the food industry

• Specific filters:
  • For meat → Lamb/goat meat consumers
Choice experiment
Discrete Choice method

- Based on Lancaster’s theory of demand →
  “The total utility gained from a product is the sum of the individual utilities provided by the attributes of that good” (Lancaster, 1966).

- Respondents (Decision makers) are asked to choose their favorite alternative among several hypothetical alternatives (characterized from a certain numbers of attributes $k_j$) in a sequence of experimentally designed choice tasks.

- The **Purpose** is to obtain estimates of the taste parameter vector $\beta_j$ which contains marginal utilities of attributes.

- **Willingness-to-pay** is measured by the ration of the marginal utility of attributes and that of cost (price)
Methods: choice experiment structure - MEAT

• 4 types of labels tested
  • Halal, Organic, Carbon footprint, PGI/PDO

• Choice experiment
  • 12 choice sets, 9 attributes
  • Labeled: 4 alternatives
    • Lamb leg, lamb chops, goat chops, Beef T-bone
  • A no-choice alternative
Choice experiment attributes

Price (+/- average)

Origin (National, EU, out EU)

Presence or not of:

- Fat
- Ready to cook
- High protein content
## Choice experiment design for meat

<table>
<thead>
<tr>
<th>Attributes</th>
<th>Lamb leg</th>
<th>Lamb chops</th>
<th>Goat chops</th>
<th>Beef T-bone</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Price</strong></td>
<td>• Average price</td>
<td>• Average price</td>
<td>• Average price</td>
<td>• Average price</td>
</tr>
<tr>
<td></td>
<td>• -30%</td>
<td>• -30%</td>
<td>• -30%</td>
<td>• -30%</td>
</tr>
<tr>
<td></td>
<td>• +30%</td>
<td>• +30%</td>
<td>• +30%</td>
<td>• +30%</td>
</tr>
<tr>
<td><strong>Slaughter</strong></td>
<td>• Halal</td>
<td>• Halal</td>
<td>• Halal</td>
<td>• Halal</td>
</tr>
<tr>
<td></td>
<td>• None</td>
<td>• None</td>
<td>• None</td>
<td>• None</td>
</tr>
<tr>
<td><strong>Origin</strong></td>
<td>• National</td>
<td>• National</td>
<td>• National</td>
<td>• National</td>
</tr>
<tr>
<td></td>
<td>• EU</td>
<td>• EU</td>
<td>• EU</td>
<td>• EU</td>
</tr>
<tr>
<td></td>
<td>• Out of EU</td>
<td>• Out of EU</td>
<td>• Out of EU</td>
<td>• Out of EU</td>
</tr>
<tr>
<td><strong>PDO/PGI</strong></td>
<td>• PDO/PGI</td>
<td>• PDO/PGI</td>
<td>• PDO/PGI</td>
<td>• PDO/PGI</td>
</tr>
<tr>
<td></td>
<td>• None</td>
<td>• None</td>
<td>• None</td>
<td>• None</td>
</tr>
<tr>
<td><strong>Organic</strong></td>
<td>• Organic</td>
<td>• Organic</td>
<td>• Organic</td>
<td>• Organic</td>
</tr>
<tr>
<td></td>
<td>• None</td>
<td>• None</td>
<td>• None</td>
<td>• None</td>
</tr>
<tr>
<td><strong>Low carbon footprint</strong></td>
<td>• Low carbon footprint</td>
<td>• Low carbon footprint</td>
<td>• Low carbon footprint</td>
<td>• Low carbon footprint</td>
</tr>
<tr>
<td></td>
<td>• None</td>
<td>• None</td>
<td>• None</td>
<td>• None</td>
</tr>
<tr>
<td><strong>Fat content</strong></td>
<td>• Low fat</td>
<td>• Low fat</td>
<td>• Low fat</td>
<td>• Low fat</td>
</tr>
<tr>
<td></td>
<td>• Fatty</td>
<td>• Fatty</td>
<td>• Fatty</td>
<td>• Fatty</td>
</tr>
<tr>
<td><strong>Protein content</strong></td>
<td>• High protein content</td>
<td>• High protein content</td>
<td>• High protein content</td>
<td>• High protein content</td>
</tr>
<tr>
<td></td>
<td>• None</td>
<td>• None</td>
<td>• None</td>
<td>• None</td>
</tr>
<tr>
<td><strong>Format</strong></td>
<td>• Ready to cook</td>
<td>• Ready to cook</td>
<td>• Ready to cook</td>
<td>• Ready to cook</td>
</tr>
<tr>
<td></td>
<td>• Normal</td>
<td>• Normal</td>
<td>• Normal</td>
<td>• Normal</td>
</tr>
</tbody>
</table>
Choice experiment attributes

1. PDO
2. Halal
3. Organic
4. Protein content
5. Carbon footprint
6. Product name
7. Price
8. Origin
# Labels per country

<table>
<thead>
<tr>
<th>Labels/Country</th>
<th>Spain</th>
<th>Finland</th>
<th>France</th>
<th>Greece</th>
<th>Italy</th>
<th>UK</th>
<th>Turkey</th>
</tr>
</thead>
<tbody>
<tr>
<td>Halal</td>
<td><img src="image1" alt="Halal Spain" /></td>
<td><img src="image2" alt="Halal Finland" /></td>
<td><img src="image3" alt="Halal France" /></td>
<td><img src="image4" alt="Halal Greece" /></td>
<td><img src="image5" alt="Halal Italy" /></td>
<td><img src="image6" alt="Halal UK" /></td>
<td><img src="image7" alt="Halal Turkey" /></td>
</tr>
<tr>
<td>PDO/PGI</td>
<td><img src="image8" alt="PDO/PGI Spain" /></td>
<td>-</td>
<td><img src="image9" alt="PDO/PGI France" /></td>
<td><img src="image10" alt="PDO/PGI Greece" /></td>
<td><img src="image11" alt="PDO/PGI Italy" /></td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Organic</td>
<td><img src="image12" alt="Organic" /></td>
<td><img src="image13" alt="Organic" /></td>
<td><img src="image14" alt="Organic" /></td>
<td><img src="image15" alt="Organic" /></td>
<td><img src="image16" alt="Organic" /></td>
<td><img src="image17" alt="Organic" /></td>
<td><img src="image18" alt="Organic" /></td>
</tr>
<tr>
<td>Carbon footprint</td>
<td><img src="image19" alt="Carbon footprint" /></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Choice experiment instructions

Imagine that it is a regular weekday and you decided that you want to eat a dish based on some sort of meat for the next meal with your family. You go to the usual place in which you buy meat and the following alternatives are presented to you. If you want to see the image in more detail, you can zoom on it by clicking on top of it.

Please click "BUY" on the image with the meat that you would like to buy the most. Then write below how many trays of 500gr you would like to buy. If you think you would not buy any of the options, then you can select the option "None".

If you need to refresh the meaning of the labels, click here.
Choice experiment for meat
Choice experiment for meat

GOAT CHOPS

Origin: UK
Price: £ 7.80 (£ 15.60/kg)
Data collection for the meat survey

• Data collected from Mid-March to mid-May, 2019

<table>
<thead>
<tr>
<th>Country</th>
<th>Respondents by May 14th, 2019</th>
<th>Valid responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Finland</td>
<td>417</td>
<td>413</td>
</tr>
<tr>
<td>France</td>
<td>416</td>
<td>414</td>
</tr>
<tr>
<td>Greece</td>
<td>403</td>
<td>400</td>
</tr>
<tr>
<td>Italy</td>
<td>419</td>
<td>417</td>
</tr>
<tr>
<td>Spain</td>
<td>420</td>
<td>417</td>
</tr>
<tr>
<td>Turkey</td>
<td>405</td>
<td>391</td>
</tr>
<tr>
<td>UK</td>
<td>420</td>
<td>414</td>
</tr>
</tbody>
</table>
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Step 5: Analyzing Data

• Coding, data entry and consistency checks
  • Check control questions, time spent, answering patterns.
  • Check for typos when coding data
  • Check for “strange” outliers

• Descriptive and inferential statistics
Results on sheep and goat meat
WTP PGI/PDO

- **Greece**: 1.20
- **Spain**: 1.07
- **Turkey**: 1.73 (₺11.50)
- **UK**: 0.63 (£0.56)
WTP Halal

-0.58
-1.79
-1.47
-1.00
-0.50
0.00
0.50
1.00
1.50
2.00
2.50
3.00

Turkey: 2.74 (₺18.24)
UK: -0.65 (-£0.58)

iSAGE Training
3-4 December 2019 – Wetherby, UK
Market Segmentation

The process of dividing a market of potential customers into homogeneous sub-groups based on different characteristics.

1. Latent class choice experiment → most important attributes and willingness to pay (WTP)

2. Regress the class probability by sociodemographic, behavioral, knowledge and psychographic variables
WTP – UK (Latent class)

Class 1 (12%) – Goat regulars
Class 2 (28%) – Lamb at home
Class 3 (60%) – Healthy

- Halal
- National
- IGP
- Less fat
- Organic
- Ready to cook
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Step 6: Reporting the Research
Thank you for your attention!

Gracias!  Merci!

Grazie!  شكراً!