

# Market Segmentation Analysis

## Step 1: Deciding (Not) to Segment

- **Long-term Commitment:** Market segmentation is a long-term strategy requiring substantial organizational changes and investments. It involves redesigning products, pricing, and distribution, which must justify the increased sales potential and offset the costs involved in executing the segmentation strategy.
- **Costs of Segmentation:** Segmentation comes with costs, including research, focus groups, and marketing adjustments. Therefore, it's essential that the benefits, like increased profitability, outweigh these costs before committing to segmentation.
- **Organizational Structure Changes:** Effective segmentation may require a company to restructure around market segments, ensuring constant focus on their evolving needs. This change must be supported by top-level executives and communicated consistently throughout the organization.
- **Senior Management Barriers:** Successful segmentation requires active leadership and commitment from senior management. Without their involvement and resource allocation, both the analysis and long-term execution of segmentation can fail. Senior executives need to champion the cause, provide adequate funding, and demonstrate a clear understanding of the process, as their disinterest can undermine efforts, making it difficult for marketing teams to meaningfully implement segmentation strategies.
- **Organizational Culture Barriers:** A company's culture can impede segmentation success if it lacks market orientation or resists change. Resistance to new ideas, poor communication, and internal politics can prevent teams from effectively implementing segmentation strategies. A lack of creativity or understanding within the organization, coupled with a short-term focus and unwillingness to adapt, also create roadblocks. Addressing these issues is vital to align the organization with market segmentation goals.
- **Operational and Resource Barriers:** Limited financial resources, inadequate training, and lack of formal marketing functions or skilled analysts can hinder segmentation efforts. Without clear objectives, proper planning, and structured processes, achieving successful outcomes is difficult. Misunderstanding technical aspects, like data management or segmentation analysis, further complicates the process. To overcome this, organizations should use simple, graphical visualizations to make results more understandable for managers, ensuring smooth implementation.
- **Organizational Readiness:** Before proceeding with market segmentation, evaluate if the organization has a market-oriented culture, willingness to change, a long-term perspective, openness to new ideas, good communication across units, and the ability to make structural changes. If any of these factors are lacking, it may not be wise to proceed with segmentation, as these elements are crucial for successful implementation and long-term strategy alignment.
- **Financial and Leadership Commitment:** Securing visible commitment from senior management is essential for market segmentation success. This includes their active involvement, willingness to allocate necessary financial resources, and a full understanding of the market segmentation concept and its implications. Without such commitment, the segmentation strategy is likely to fail due to lack of support from the leadership and insufficient funding.

- **Process and Planning:** Develop clear objectives for the segmentation analysis, establish a structured process, and assign responsibilities within the team. Allow enough time to conduct the analysis without time pressure, ensuring thoroughness and accuracy. Proper planning and clarity in roles help in avoiding miscommunication or rushed decision-making, thus improving the chances of achieving a successful segmentation outcome.

## Step 2: Specifying the Ideal Target Segment

- **Segment Evaluation Criteria:** Market segmentation analysis requires two sets of evaluation criteria: knock-out criteria and attractiveness criteria. Knock-out criteria represent essential, non-negotiable features of a target segment, while attractiveness criteria are used to assess the relative appeal of remaining segments. Both sets guide data collection and segment selection, ensuring alignment with organizational goals and providing actionable insights for the segmentation team to decide which segments to target.
- **Attractiveness Criteria Framework:** Various scholars, including Day (1984), Croft (1994), and Kotler and Keller (2012), propose criteria for segment evaluation. These range from measurable, substantial, and accessible to more nuanced factors like competitive advantage, market size, profitability, and socio-political considerations. These criteria help organizations evaluate the potential success of targeting specific segments, balancing both organizational capacity and market opportunities to make informed strategic decisions.

### Knock-Out Criteria:

Knock-out criteria help determine whether a market segment qualifies for further evaluation using attractiveness criteria. Initially suggested by Kotler (1994), the criteria include substantiality, measurability, and accessibility. Additional criteria recommend that a segment should be homogeneous, distinct, large enough, and compatible with the organization's strengths. Moreover, segment members must be identifiable and reachable to ensure the marketing mix is effectively customized for them, making it crucial for the organization to specify the minimum viable segment size.

- Attractiveness criteria evaluate market segments based on various factors like size, profitability, and competitive advantage. Unlike knock-out criteria, they offer a graded assessment, helping organizations prioritize segments by weighing their potential appeal. These criteria guide decisions on which segments to target in later stages of market segmentation.
- **Structured Market Segment Evaluation:** Implementing a structured process for market segment evaluation involves using a segment evaluation plot, which assesses segment attractiveness and organizational competitiveness. The segmentation team negotiates key factors and selects up to six crucial criteria, ensuring that representatives from all organizational units are involved for a holistic perspective.
- **Criteria Selection and Weighting:** Early selection of segment attractiveness criteria ensures efficient data collection and easier decision-making in later steps. Each criterion is weighted, with team members distributing points to prioritize them. Approval from an advisory committee, representing various units, helps refine these choices for organizational alignment.

**Step 2 Checklist Overview:** The checklist outlines tasks for market segmentation analysis, including convening a team meeting, agreeing on knock-out criteria (homogeneity, distinctness, size, match, identifiability, and reachability), and ensuring non-compliant market segments are automatically eliminated. Afterward, the knock-out criteria are discussed with the advisory committee for adjustments if necessary.

### Step 3: Collecting Data

- **Segmentation Variables:** Empirical data forms the basis of market segmentation, used to either split the sample (commonsense segmentation) or to identify naturally existing market segments (data-driven segmentation). Segmentation variables in commonsense segmentation often rely on a single consumer characteristic (e.g., gender), while data-driven segmentation uses multiple variables to form more nuanced segments. Descriptor variables (e.g., socio-demographics) then describe these segments in detail to tailor the marketing mix, making segmentation crucial for accurate targeting.
- **Importance of Data Quality:** In both commonsense and data-driven segmentation, the quality of empirical data is critical to accurately assigning individuals to the correct segments and describing those segments properly. High-quality data allows companies to develop more customized products, pricing strategies, distribution channels, and communication approaches. Properly describing the segments ensures more effective targeting of market strategies and helps in crafting well-informed marketing plans.
- **Sources of Empirical Data:** Empirical data for segmentation studies can come from surveys, observational studies (like scanner data), or experimental studies. While surveys are common, they may not always accurately reflect consumer behavior, especially with socially desirable actions. Therefore, segmentation studies should explore a variety of data sources, prioritizing those that best capture real consumer behavior, like purchase history, which offers more reliable insights for data-driven segmentation and effective marketing.
- **Geographic Segmentation Overview:** Geographic segmentation is one of the oldest and simplest methods of dividing a market, relying on a consumer's location (e.g., country, region) to form segments. It's practical for multinational efforts, such as Austria's tourism campaigns or Amazon and IKEA's localization strategies
- **Advantages and Limitations:** While geographic segmentation makes it easy to assign consumers to specific regions and target them with local communications, it often overlooks other factors that influence purchasing behavior. For instance, people living in the same area may have different preferences, so geographic segmentation alone might not capture key factors like socio-demographics, which could better explain consumer preferences.
- **Revival in International Segmentation:** Despite its limitations, geographic segmentation has seen renewed use in international market studies. This approach requires segmentation variables that are meaningful across regions and accounts for cultural biases that might affect data, especially in survey-based studies. An example of such work is Haverila's study on mobile phone users across national borders, highlighting the complexities of international segmentation in today's global markets.
- **Use of Socio-Demographic Segmentation:** Socio-demographic segmentation uses criteria like age, gender, income, and education to create market segments, often applied in industries such as luxury goods, cosmetics, baby products, and retirement services. Its

key advantage is the ease of determining segment membership for each consumer. In some cases, socio-demographic factors directly explain product preferences, such as families with children opting for family-oriented vacation resorts, providing useful insights for targeted marketing.

- **Limitations of Socio-Demographic Segmentation:** While socio-demographic segmentation offers some insights, it often falls short of explaining consumer behavior comprehensively. Research by Haley (1985) suggests that demographics account for only 5% of the variance in consumer behavior, while Yankelovich and Meer (2006) argue that values, preferences, and tastes are more powerful influencers of buying decisions. Thus, relying solely on socio-demographics may not provide sufficient understanding for effective market segmentation.
- **Use of Psychographic Segmentation:** Psychographic segmentation groups consumers based on psychological factors such as beliefs, interests, and benefits sought. Psychographics are more reflective of underlying consumer motivations, such as tourists interested in cultural experiences opting for destinations rich in culture. This approach provides deeper insights into consumer behavior compared to geographic or socio-demographic segmentation.
- **Challenges of Psychographic Segmentation:** Despite its advantages, psychographic segmentation is more complex due to the difficulty of identifying single characteristics that explain consumer behavior. Studies often use multiple segmentation variables, such as travel motives or perceived risks. Moreover, the effectiveness of this approach depends on the accuracy and validity of the psychographic measures used. Determining segment memberships is also more challenging, requiring more in-depth data and analysis compared to simpler segmentation methods.
- **Understanding Behavioral Segmentation:** Behavioral segmentation focuses on grouping consumers based on their actual behaviors or reported experiences with a product. Key behavioral factors include purchase frequency, spending patterns, prior experiences, and information-seeking behaviors. Research shows that behaviors reported by tourists can be more effective than geographic segmentation criteria in identifying market segments. This approach emphasizes understanding real consumer actions, making it a robust method for extracting meaningful market segments.
- **Advantages and Limitations of Behavioral Segmentation:** One major advantage of behavioral segmentation is its reliance on actual consumer behavior, reducing the need for valid psychological measures. By focusing on behaviors that are directly relevant, such as spending habits and brand choices, marketers can create segments that reflect meaningful consumer similarities.
- **Understanding Behavioral Segmentation:** Behavioral segmentation focuses on grouping consumers based on their actual behaviors or reported experiences with a product. Key factors include purchase frequency, spending patterns, prior experiences, and information-seeking behaviors. This approach emphasizes understanding real consumer actions, making it a robust method for extracting meaningful market segments that reflect actual consumer behavior and preferences.
- **Importance of Variable Selection:** Selecting the right variables for market segmentation is crucial, as including irrelevant or unnecessary variables can lead to respondent fatigue and lower quality responses. In data-driven segmentation, all relevant variables must be

included while avoiding unnecessary ones that can complicate the segmentation process. The presence of such "noisy" or masking variables diverts attention from critical information, making it difficult for algorithms to identify optimal market segments.

- **Avoiding Redundant Questions:** Redundant questions in surveys can hinder the segmentation process by interfering with segment extraction algorithms' ability to accurately identify market segments. Developing a good questionnaire should involve a two-stage process of exploratory qualitative research followed by quantitative survey research. .
- **Types of Response Options:** The choice of response options in surveys significantly impacts the data quality available for analysis. Binary or dichotomous response options yield clear, defined distances between data points (0 and 1), making them suitable for segmentation analysis. Nominal variables, which consist of unordered categories (like occupation), can also be transformed into binary data for analysis. In contrast, metric data (e.g., age) allow for a broad range of statistical procedures, while ordinal data (e.g., 5-point agreement scales) present challenges due to the undefined distances between options.
- **Advantages of Binary and Metric Options:** It is generally preferable to use binary or metric response options in surveys, as they simplify subsequent segmentation analyses by avoiding complications with distance measures. While ordinal scales are commonly used in research, they can introduce difficulties in measurement accuracy.
- **Response Styles and Biases:** Survey data can be affected by response biases, which are systematic tendencies to respond based on factors other than the actual content. Common response styles include agreeing with all statements (acquiescence bias), using extreme responses, or favoring the midpoint. These biases can distort segmentation results, leading to misinterpretations of market segments.
- **Importance of Sample Size:** A sufficient sample size is critical for effective market segmentation analysis. Recommendations suggest a minimum sample size of  $60 \times p60$  (where ppp is the number of segmentation variables), with optimal sizes increasing for more complex datasets. Larger sample sizes improve the ability of segmentation algorithms to identify correct segments, especially when addressing challenging characteristics of market data.
- **Data Quality:** To achieve reliable market segmentation results, the data should be high-quality and free from biases. Ideal data should include only necessary items, avoid correlated items, and utilize binary or metric response options. Ensuring the absence of response styles and gathering a suitable sample size is also crucial.
- **Sources of Data:** Organizations can utilize various data sources for market segmentation, including internal data (e.g., purchase records), experimental data (e.g., response to advertisements), and survey data. Internal data offers insights into actual consumer behavior but may over-represent current customers, potentially missing out on insights about potential customers.

## Step 4 to Step 9

1. **Response Bias:** Survey data often contains biases, leading to response styles that affect data interpretation. Consistent biases, such as extreme responding or midpoint use, can misrepresent true beliefs. Recognizing and minimizing these biases is critical to ensure accurate market segmentation outcomes

2. **Sample Size Importance:** Adequate sample size is crucial for effective market segmentation analysis. Insufficient samples can lead to incorrect segment identification. Recommended guidelines suggest a minimum of  $2p$  (where  $p$  is the number of segmentation variables), with better practices advocating for sizes closer to  $60p$  for reliable results.
3. **Market Characteristics:** Various market characteristics, including segment size equality and overlap, impact segmentation outcomes. Unequally sized segments complicate segment extraction, while overlapping segments hinder correct segment identification. Understanding these characteristics aids analysts in refining segmentation strategies and improving the accuracy of their models.
4. **Survey Data Quality:** High-quality survey data is essential for effective market segmentation. Data should contain relevant items, be free from correlation and bias, and utilize suitable measurements. Following these principles ensures the analysis accurately captures consumer behavior and preferences, facilitating effective segmentation strategies.
5. **Internal Data Utilization:** Organizations can leverage internal data, such as purchase history, to enhance market segmentation analysis. This data reflects actual consumer behavior rather than self-reported intentions. However, reliance on internal data may lead to bias by over-representing existing customers, necessitating a broader perspective for future segmentation.
6. **Experimental Data:** Experimental studies provide another valuable source for segmentation analysis. Field or laboratory experiments, including choice experiments, offer insights into consumer preferences and behaviors. This data can reveal critical insights about product attributes that drive consumer choice, informing effective market segmentation strategies.
7. **Data Exploration:** The exploration phase involves a preliminary assessment of collected data, which includes cleaning, descriptive analysis, and preprocessing. This step is crucial for identifying any inconsistencies or issues within the dataset, ensuring that subsequent analyses are based on reliable and valid data.
8. **Segment Extraction Techniques:** Various methods are available for extracting market segments, including distance-based methods, model-based methods, and algorithms that integrate variable selection. Each approach offers unique advantages, allowing analysts to tailor their segmentation strategies based on the data characteristics and desired outcomes.
9. **Segment Profiling:** Once segments are identified, profiling involves understanding the key characteristics that define each segment. Traditional and visual profiling methods can be employed to gain insights into segment behaviors, preferences, and demographics, providing a comprehensive view of the market landscape.
10. **Segment Description:** The final step entails creating a complete picture of market segments, utilizing visualizations and testing for differences across descriptor variables. Predictive modeling techniques, such as logistic regression, further enhance understanding of segments, enabling targeted marketing strategies based on detailed consumer insights.