NOTES

MARKET SEGMENTATION ANALYSIS

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STEPS Covered

Step 1: Deciding (not) to Segment

Step 2: Specifying the Ideal Target Segment

Step 3: Collecting Data

Step 5: Extracting Segments

Step1: Deciding (not) to Segment

Implications of Committing to Market Segmentation

1. **Long-Term Commitment**: Market segmentation is a long-term strategy, requiring a sustained commitment from the organization.

2. **Not Always the Best Decision**: While widely used, market segmentation may not always be the optimal strategy, and its pursuit requires careful consideration.

3. **Costs and Investments**: Market segmentation involves significant costs such as research, surveys, focus groups, packaging, and communication design. The expected increase in sales must justify these expenses.

4. **Profitability Consideration**: The use of segmentation should be more profitable than marketing without it, factoring in the costs of developing and implementing the segmentation strategy.

5. **Necessity for Change**: Committing to market segmentation may necessitate changes in product development, modifications, pricing, distribution channels, and communication strategies.

6. **Internal Organizational Impact**: The internal structure of the organization may be influenced by market segmentation, leading to potential adjustments in response to targeting different market segments.

7. **Organizational Structure**: To maximize the benefits, organizations are advised to organize around market segments rather than products. Strategic business units focused on segments can ensure ongoing alignment with market needs.

8. **Executive Level Decision**: The decision to pursue market segmentation must be made at the highest executive level due to its significant organizational and financial implications.

9. **Continuous Communication**: The decision to adopt market segmentation should be systematically and continuously communicated and reinforced across all organizational levels and units.

Implementation Barriers

1. **Senior Management Barriers**:

- Lack of leadership, pro-active championing, commitment, and involvement by senior leadership can undermine the success of market segmentation.

- Inadequate allocation of resources by senior management, both for initial analysis and long-term implementation, can hinder the process.

2. **Organizational Culture Barriers**:

- Barriers related to organizational culture include lack of market or consumer orientation, resistance to change, lack of creative thinking, poor communication, and a reluctance to share information across units.

- Short-term thinking, unwillingness to make changes, and office politics are also identified as obstacles to successful market segmentation.

3. **Training and Expertise**:

- Lack of understanding among senior management and the segmentation team about the foundations and consequences of market segmentation can lead to failure.

- The absence of a formal marketing function or a qualified marketing expert can impede the process.

4. **Objective Restrictions**:

- Objective restrictions, such as lack of financial resources or the inability to make necessary structural changes, may pose challenges.

- Companies with limited resources must prioritize opportunities wisely.

5. **Process-Related Barriers**:

- Process-related barriers include unclear objectives, lack of planning, bad planning, absence of structured processes, lack of allocation of responsibilities, and time pressure during the market segmentation process.

6. **Operational Level Challenges**:

- Management's resistance to using techniques it doesn't understand is noted.

- Making market segmentation analysis easy to understand and presenting results graphically can address this challenge.

7. **Proactive Identification and Removal of Barriers**:

- Most barriers can be identified at the outset of a market segmentation study and should be proactively addressed.

- If barriers cannot be removed, serious consideration should be given to abandoning the attempt to explore market segmentation as a future strategy.

8. **Resolute Sense of Purpose**: McDonald and Dunbar (1995) recommend a resolute sense of purpose, dedication, patience, and an appreciation for inevitable problems when proceeding with market segmentation analysis.

Step 2: Specifying the Ideal Target Segment

Segment Evaluation Criteria

Key Points from the Paragraph:

1. User Input in Market Segmentation Analysis:

- The third layer of market segmentation analysis heavily relies on user input, emphasizing the importance of involving users throughout the process.

2. Continuous User Involvement:

- User input should not be limited to the beginning briefing or the end marketing mix development; instead, users need to be engaged in most stages of the analysis.

3. Conceptual Contribution in Step 2:

- After committing to a segmentation strategy in Step 1, the organization makes a significant conceptual contribution in Step 2, guiding subsequent steps, especially in data collection and selecting target segments.

4. Segment Evaluation Criteria in Step 2:

- In Step 2, the organization defines two sets of segment evaluation criteria: knock-out criteria and attractiveness criteria.

  - Knock-out criteria: Essential, non-negotiable features that segments must possess for the organization to consider targeting them.

  - Attractiveness criteria: Used to evaluate the relative attractiveness of remaining segments that comply with knock-out criteria.

5. Critical Role of Step 2:

- Step 2 plays a crucial role in shaping the analysis and determining the criteria for segment selection.

6. Importance of Detailed Criteria:

- The literature offers various segment evaluation criteria at different levels of detail, emphasizing the need for thorough consideration in the analysis.

Knock-Out Criteria

1. Purpose of Knock-Out Criteria:

- Knock-out criteria are employed to assess if market segments resulting from segmentation analysis qualify for evaluation using segment attractiveness criteria.

2. Key Knock-Out Criteria:

- The suggested knock-out criteria include:

  - Homogeneity: Members within the segment must be similar.

- Distinctiveness: Members of the segment should be distinctly different from members of other segments.

- Size: The segment must be large enough to justify customizing the marketing mix.

- Match with Organizational Strengths: The organization must have the capability to satisfy the needs of segment members.

- Identifiability: Members of the segment must be identifiable in the marketplace.

- Reachability: There must be a means of getting in touch with segment members to make the customized marketing mix accessible to them.

3. Understanding Knock-Out Criteria:

- It is crucial for senior management, the segmentation team, and the advisory committee to understand knock-out criteria.

4. Specification of Criteria:

- While some knock-out criteria may not require further specification, others, like size, may need details such as the exact minimum viable target segment size.

Attractiveness Criteria

1. Non-Binary Nature of Attractiveness Criteria:

- Attractiveness criteria are not binary; segments are not simply categorized as either complying or not complying with the criteria.

2. Rating System for Segments:

- Each market segment is subjected to a rating system based on attractiveness criteria.

- Segments are rated as more or less attractive concerning specific criteria.

3. Overall Attractiveness Determination:

- The collective attractiveness across all criteria influences the decision on whether a market segment is chosen as a target segment in Step 8 of market segmentation analysis.

Step 3: Collecting Data

Segmentation Variables

1. Empirical Basis for Market Segmentation:

   - Empirical data forms the basis for both commonsense and data-driven market segmentation.

   - It is used to identify or create market segments and describe them in detail later in the process.

2. Segmentation Variable Definition:

   - The term "segmentation variable" is used to refer to the variable in empirical data that is utilized in commonsense segmentation to divide the sample into market segments.

3. Commonsense Segmentation:

   - In commonsense segmentation, the segmentation variable is typically one single characteristic of consumers in the sample.

   - An example in the text uses gender as the segmentation variable, resulting in segments of women and men.

4. Descriptor Variables:

   - Other personal characteristics in the data (e.g., age, number of vacations taken, and benefits sought during vacations) are referred to as "descriptor variables."

   - Descriptor variables help describe the segments in detail and are crucial for developing an effective marketing mix targeting the segment.

5. Commonsense vs. Data-Driven Segmentation:

   - Commonsense segmentation relies on a single segmentation variable, while data-driven segmentation is based on multiple segmentation variables.

   - Data-driven segmentation identifies naturally existing or artificially created market segments that are beneficial to the organization

Segmentation Criteria

Key Points from the Paragraph:

1. Early Decision in Market Segmentation:

- Long before extracting segments or collecting data, the organization must decide on the segmentation criterion to use.

2. Segmentation Criterion vs. Variable:

- The term "segmentation criterion" is broader than "segmentation variable."

- Segmentation variable refers to one measured value (e.g., a survey item), while segmentation criterion relates to the nature of information used for market segmentation.

3. Importance of Prior Knowledge:

- Choosing a segmentation criterion requires prior knowledge about the market and cannot be easily outsourced to consultants or data analysts.

4. Common Segmentation Criteria:

- Common segmentation criteria include geographic, socio-demographic, psychographic, and behavioral factors.

6. Choosing the Best Criterion:

- With various segmentation criteria available, the choice of the best criterion is subjective.

- Hoek et al. (1996) note a lack of clear guidelines for selecting the most appropriate base, recommending the use of the simplest possible approach.

7. Simplicity and Cost-Effectiveness:

- The general recommendation is to use the simplest approach that works for the product or service at the least possible cost.

Geographic segmentation

1. Geographic Information as Original Segmentation Criterion:

- Geographic information is considered the original segmentation criterion for market segmentation

2. Simple Nature of Geographic Segmentation:

- Geographic segmentation often involves using the consumer's location of residence as the sole criterion to form market segments.

3. Applicability of Geographic Segmentation:

- Geographic segmentation is particularly appropriate in cases where language differences or practical reasons justify treating consumers from different neighboring countries as distinct segments.

4. Advantages of Geographic Segmentation:

- Geographic segmentation facilitates easy assignment of consumers to geographic units, making it straightforward to target communication messages and select appropriate communication channels.

5. Disadvantages of Geographic Segmentation:

- The disadvantage lies in assuming that people sharing the same geographic location necessarily have other relevant characteristics in common, such as product preferences or benefits sought when purchasing.

6. Shortcomings in Product Preferences:

- Living in the same area does not necessarily imply shared preferences in product choices, and differences are often better explained by socio-demographic criteria.

Socio-demographic Segmentation

1. Socio-demographic Segmentation Criteria:

- Common socio-demographic segmentation criteria include age, gender, income, and education.

2. Usefulness in Specific Industries:

- Socio-demographic segments are particularly useful in certain industries, such as luxury goods (linked with high income), cosmetics (linked with gender), baby products (linked with gender), retirement villages (linked with age), and tourism resort products (linked with family structure).

3. Advantages of Socio-demographic Segmentation:

- Similar to geographic segmentation, socio-demographic segmentation allows for easy determination of segment membership for every consumer.

4. Explanatory Power of Socio-demographic Criteria:

- In some cases, socio-demographic criteria may explain specific product preferences, such as family vacation choices based on having children.

5. Limitations of Socio-demographic Criteria:

- Despite its advantages, socio-demographic criteria are not always the primary cause for product preferences, providing limited market insight for optimal segmentation decisions.

Psychographic Segmentation:

1. Psychographic Segmentation:

- Psychographic segmentation involves grouping people based on psychological criteria such as beliefs, interests, preferences, aspirations, or benefits sought when purchasing a product.

2. Definition of Psychographics:

- Haley (1985) defines psychographics as an umbrella term covering all measures of the mind.

3. Popular Types of Psychographic Segmentation:

- Benefit segmentation, credited to Haley (1968), is a popular form of psychographic segmentation. Lifestyle segmentation, based on activities, opinions, and interests, is another commonly used approach (Cahill 2006).

4. Complexity of Psychographic Criteria:

- Psychographic criteria are inherently more complex than geographic or socio-demographic criteria because a single characteristic may not provide sufficient insight into the psychographic dimension.

5. Use of Multiple Segmentation Variables:

- Psychographic segmentation studies often use multiple segmentation variables, such as different travel motives or perceived risks when going on vacation.

6. Advantages of Psychographic Approach:

- The psychographic approach is generally more reflective of the underlying reasons for differences in consumer behavior.

8. Disadvantages of Psychographic Approach:

- Challenges with the psychographic approach include increased complexity in determining segment memberships for consumers.

- The effectiveness of the psychographic approach heavily relies on the reliability and validity of the empirical measures used to capture the psychographic dimensions of interest.

Behavioural Segmentation

1. Approach to Segment Extraction - Similarities in Behavior:

- Another approach to segment extraction involves searching directly for similarities in behavior or reported behavior.

2. Variety of Behavioral Variables:

- Various behaviors can be used for segmentation, including prior experience with the product, purchase frequency, amount spent on each occasion, and information search behavior.

3. Comparison of Segmentation Criteria:

- In a comparison of segmentation criteria, behaviors reported by tourists were found to be superior to geographic variables (Moscardo et al. 2001).

4. Advantage of Behavioral Approaches:

- The key advantage of behavioral approaches is that, when based on actual behavior rather than stated or intended behavior, the very behavior of interest is used as the basis for segment extraction.

5. Benefits of Using Behavioral Data:

- Using behavioral data avoids the need for developing valid measures for psychological constructs.

6. Challenges with Behavioral Data Availability:

- However, behavioral data may not always be readily available, especially when aiming to include potential customers who have not previously purchased the product, rather than limiting the analysis to existing customers of the organization.

Step 5: Extracting Segments

Grouping Consumers

Key Points from the Paragraph:

1. Overview of Market Segmentation Methods:

- The chapter aims to provide an overview of popular extraction methods in market segmentation and highlight their tendencies in imposing structure on segments.

2. No Superior Method:

- No single method outperforms others in all situations; each has its own advantages and disadvantages.

3. Distance-Based Methods:

- Describes distance-based methods that rely on a notion of similarity or distance between observations to identify groups of similar observations as market segments.

4. Model-Based Methods:

- Describes model-based methods that formulate stochastic models for market segments.

5. Methods with Multiple Aims:

- Some methods perform variable selection during the extraction of market segments, achieving multiple aims in one step.

6. Importance of Investigation and Comparison:

- Because no single best algorithm exists, it is crucial to investigate and compare alternative segmentation solutions based on data characteristics and expected or desired segment characteristics.

7. Considerations for Algorithm Selection:

- Table 7.1 provides information to guide algorithm selection, considering factors such as the size of the data set, the scale level of segmentation variables, and the nature of the data structure.

8. Role of Sample Size and Variable Selection:

- Sample size influences the extraction of segments, with larger samples allowing more fine-grained segmentation. Algorithms that simultaneously select variables are useful when dealing with a large number of segmentation variables.

9. Scale Level of Segmentation Variables:

- The scale level of segmentation variables determines the choice of distance measures in distance-based methods and the suitable variants of extraction algorithms.

10. Consideration of Data Structure:

- Special structures in the data, such as repeated measurements over time, may restrict the set of suitable algorithms, requiring a model-based approach.

Distance Measures

Key Points from the Paragraph:

1. Euclidean Distance:

- Euclidean distance is a common distance measure in market segmentation analysis. It represents the direct "straight-line" distance between two points in two-dimensional space.

2. Manhattan Distance:

- Manhattan distance is another distance measure that considers the distance between two points based on the assumption that streets on a grid (like in Manhattan) need to be used to travel from one point to another.

3. Asymmetric Binary Distance:

- This distance measure is used for binary data and is asymmetric. It considers only dimensions where at least one of the vectors has a value of 1. It treats 0s and 1s differently, focusing on common 1s as a measure of similarity.

4. Implications for Market Segmentation:

- The choice of distance measure is crucial in market segmentation. For example, in a tourist activity profile, focusing on common engaging activities (e.g., horseback riding or bungee jumping) is more informative for segment extraction than common non-engaging activities.

5. Symmetric Binary Distance:

- A symmetric binary distance measure, treating 0s and 1s equally, can be obtained using the Manhattan distance between two vectors. This measure considers the number of differences in values between the vectors.

Hierarchical Methods

1. Hierarchical Clustering:

- Hierarchical clustering methods simulate how a human might approach the task of dividing a set of n observations (consumers) into k groups (segments).

2. Divisive Hierarchical Clustering:

- Divisive hierarchical clustering starts with the complete data set X and splits it into two market segments in the first step. This process continues, splitting each segment into two until each consumer has their own market segment.

3. Agglomerative Hierarchical Clustering:

- Agglomerative hierarchical clustering begins with each consumer representing their own market segment. Step-by-step, the two closest market segments are merged until the complete data set forms one large market segment.

4. Sequence of Nested Partitions:

- Both divisive and agglomerative approaches result in a sequence of nested partitions. A partition is a grouping of observations, ranging from partitions containing only one group (segment) to n groups (segments).

5. Unifying Framework:

- The unifying framework for agglomerative clustering, developed by Lance and Williams (1967), serves as the basis for many hierarchical clustering methods. Standard implementations perform optimal steps in each iteration, resulting in a deterministic algorithm with no random component.

6. Deterministic Algorithm:

- Hierarchical clustering algorithms are deterministic, meaning that applying the algorithm to the same data set will always produce the exact same sequence of nested partitions. There is no randomness involved in the process.

Partitioning Methods

1. Suitability for Small Data Sets:

- Hierarchical clustering methods are well-suited for small data sets with up to a few hundred observations.

2. Challenges with Larger Data Sets:

- For larger data sets, dendrograms become challenging to read, and the matrix of pairwise distances may not fit into computer memory.

3. Limitation for Data Sets with More Than 1000 Observations:

- Clustering methods that create a single partition are more suitable for data sets with more than 1000 observations.

4. Computation of Pairwise Distances:

- In hierarchical partitioning, distances between all pairs of observations need to be computed at the beginning, leading to a high computational load.

5. Advantages of Partitioning Clustering for Large Data Sets:

- Partitioning clustering algorithms that extract a predefined number of segments compute fewer distances (between each consumer and the center of the segments) and are more efficient for large data sets.

6. Efficiency in Extracting Few Segments:

- When only a few segments are needed, it is more efficient to optimize specifically for that goal rather than constructing the complete dendrogram and then cutting it into segments.

k-Means Clustering:

1. Objective: The primary goal of k-Means clustering is to partition a dataset into 'k' distinct, non-overlapping subsets or clusters.

2. Algorithm: It is an iterative algorithm that assigns each data point to one of the 'k' clusters based on the mean (centroid) of the points in that cluster. The algorithm iteratively refines the cluster assignments until convergence.

3. Initialization: The choice of initial centroids can affect the algorithm's performance. Common methods include randomly selecting data points as initial centroids or using more sophisticated techniques.

4. Distance Metric: Euclidean distance is commonly used to measure the dissimilarity between data points and centroids. The algorithm aims to minimize the sum of squared distances between data points and their assigned cluster centroids.

5. Convergence: The algorithm converges when there is minimal change in cluster assignments between iterations or when a specified number of iterations is reached.

k-Centroid Clustering:

1. Generalization of k-Means: k-Centroid clustering is a more general term that encompasses various clustering algorithms, including k-Means. It refers to methods that involve assigning data points to 'k' centroids or representatives.

2. Centroid Definition: The term "centroid" in k-Centroid clustering doesn't necessarily imply the mean. It could represent the center or representative of a cluster, and the method used for determining centroids can vary across algorithms.

3. Different Approaches: While k-Means is a specific type of k-Centroid clustering where centroids represent means, other algorithms may use different strategies for determining centroids, such as medians or other representative measures.

4. Flexibility: k-Centroid clustering provides flexibility in defining the characteristics of centroids, allowing for adaptations to different types of data and applications.

5. Applications: k-Centroid clustering methods find applications in various fields, including image segmentation, customer segmentation in marketing, and pattern recognition.