MARKET SEGMENTATION ANALYSIS

Market Segmentation:

Market segmentation involves strategic and tactical marketing approaches. Strategic marketing focuses on long-term planning for organizational goals, while tactical marketing addresses short-term plans for immediate product or service needs. Market segmentation is a strategic approach that divides a broad target market into subsets. Three strategies include concentrated (precision targeting), differentiated (diversity and customization), and undifferentiated (mass-market approach).

Benefits of Market Segmentation:

- Aligns long-term plans with diverse customer needs.
- Utilizes extreme segmentation for highly targeted groups (micro-marketing).
- Applies "finer segmentation" for individualized experiences in E-commerce.
- Informs decision-making by addressing unique needs of different segments.
- Customizes products/services for small, specific consumer groups.

Layers of Market Segmentation Analysis:

Market segment analysis is a multifaceted process that involves various layers and approaches to effectively identify, target, and tailor marketing strategies to specific customer groups. The key components of this analysis can be summarized as follows:

Extraction: Gathering relevant information through research, providing a foundation for decision-making.

Collection of Data: Gathering data through various methods such as surveys, interviews, focus groups, observation, or by analyzing existing market research.

Implementation: The goal of implementation is to maximize the effectiveness of marketing efforts by customizing strategies to agree with the identified segments.

Marketing Plan and Marketing Mix: Making and translating market segmentation insights into actionable strategies that identifies the needs of various customer segments.

Approaches to Market Segment Analysis:

- Categorizing consumers based on engagement levels.
- Using structured surveys for quantitative identification.
- Employing qualitative methods (interviews, focus groups) for in-depth insights.
- Conducting exploratory research to uncover potential segments.
- Defining segments based on organizational goals.
- Identifying segments based on short-term plans.
- Creating efficient processes for targeting specific consumer groups.
- Utilizing multiple segmentation variables for data-driven strategies.

1. STEP 1 - Deciding (not) to segment:

1.1 Implications of Committing to Market Segmentation:

When an organization decides to commit to a market segmentation strategy, it involves a long-term commitment with various implications:

- Long-term commitment with sustained effort required.
- Potential need for new or modified products.
- Adjustment of pricing strategies for different market segments.
- Tailoring distribution strategies for effective reach.
- Customized communication strategies for advertising, messaging, and promotions.

1.2 Implementation Barriers:

Implementing market segmentation faces various barriers:

- Lack of leadership involvement and commitment.
- Resistance to change, cultural challenges, and short-term focus.
- Absence of formal marketing function and qualified experts.
- Identification of barriers early for proactive measures.
- Active involvement and championing by senior leadership.
- Challenges related to a customer-centric mindset and communication.
- Significance of marketing expertise and data analysis.

1.3 Checklist:

Some key considerations for organizations before initiating market segmentation:

- Determine if the organization has a market-oriented culture before proceeding with segmentation.
- Evaluate the organization's willingness for change.

- Verify if the organization adopts a long-term perspective.
- Evaluate the organizations willingness for implementing new ideas.
- Check the quality of communication across organizational units.
- Check if the organization can make significant structural changes.
- Verify if the organization has ample financial resources to support segmentation.
- Obtain visible commitment from senior management for successful implementation of market segmentation.
- Ensure necessary financial commitment is secured from senior management for the segmentation initiative.
- Conduct training to ensure that the market segmentation concept is fully understood before proceeding.
- Conduct training to ensure that the implications of pursuing a market segmentation strategy are fully understood.
- Create a dedicated segmentation team of 2-3 individuals to conduct the market segmentation analysis.
- Verify that the market segmentation concept is fully understood by the team; provide additional training if needed.

2. STEP 2 - Specifying the Ideal Target Segment:

Those Organizations focus on specifying the ideal target segment by evaluating different market segments based on specific criteria. This involves two sets of criteria, Knock-Out Criteria and Attractiveness Criteria.

2.1 Segment Evaluation Criteria:

1. Knock-Out Criteria:

These are non-negotiable features that automatically eliminate segments not meeting fundamental requirements. Criteria include homogeneity, distinctiveness, adequate size, matching organizational strengths, identifiability, and reachability.

2. Attractiveness Criteria:

These criteria are not binary and involves rating each market segment based on attractiveness. Segments are rated more or less attractive across various criteria, and the cumulative ratings determines the target segment selection.

2.2 Implementing a Structured Process:

- Use a segment evaluation plot for comparative analysis.
- Customize values for segment attractiveness and competitiveness.
- Identify distinct criteria and negotiate with the segmentation team.
- Conclude with a list of attractiveness criteria and assigned weights.
- Seek approval from an advisory committee for diverse perspectives.

2.3 Checklist:

This checklist outlines essential steps before targeting a market segment:

- Initiate a team meeting to discuss and agree on knock-out criteria, including homogeneity, distinctness, size, match, identifiability, and reachability.
- Establish knock-out criteria to automatically eliminate non-compliant market segments, ensuring alignment with segmentation objectives.
- Share the knock-out criteria with the advisory committee for discussion and potential adjustments, seeking collective insights.
- Individually checkout the criteria for assessing market segment attractiveness, preparing for collaborative discussions within the segmentation team.
- Engage with team members to discuss and agree on a subset of no more than six criteria for evaluating market segment attractiveness.
- Collaborate with team members to discuss and agree on weightings for each attractiveness criterion on their importance.
- Present the selected attractiveness criteria and proposed weights to the advisory committee for discussion and potential adjustments.

3. STEP 3 - Collecting Data:

3.1 Segmentation Variables:

Segmentation variables are base characteristics used to divide a diverse market into distinct groups.

1. Commonsense Segmentation: commonsense segmentation is a market segmentation approach that involves grouping consumers into segments based on a single characteristic**.**

- Uses one characteristic as the segmentation variable.
- Other descriptors include age, vacation frequency, and preferred benefits.

2. Data-Driven Segmentation: Data-driven segmentation is a method that businesses use to divide their customer base into groups based on the data.

- Depends on multiple segmentation variables for a comprehensive approach.
- Considers various characteristics for defining market segments.

3.2 Segmentation Criteria:

In market segmentation, "segmentation criteria" broadly refers to the information and quality needs that are used for making segmentation. Here are some types of operations with advantages,

1. Geographic Segmentation:

Categorizing consumers based on location, adapting offerings to local characteristics, residing in the same area doesn't guarantee shared characteristics.

- Easy assignment of consumers to geographic units facilitates targeted communication using local media channels.

2. Socio-Demographic Segmentation:

Utilizing the age, gender, income, and education, relevant in industries like luxury goods and tourism resorts, but may not fully explain product preferences.

- Useful in specific industries, explaining a portion of consumer behavior variance, but may not search into underlying reasons.

3. Psychographic Segmentation:

Explores psychological aspects such as beliefs, interests, and lifestyle, offering a comprehensive view but adding complexity in determining segment memberships.

- Reflects underlying reasons for consumer behavior more comprehensively, considering beliefs, interests, and lifestyle.

4. Behavioral Segmentation:

Focuses on similarities in behavior, considering prior experience, purchase frequency, and spending patterns; limited by data availability, especially for potential customers.

- Groups individuals based on relevant similarities in behavior, focusing on the most applicable criteria.

3.3 Data from Survey Studies:

- Crucial in both commonsense and data-driven segmentation, ensuring the quality of segmentation outcomes.
- Include all relevant variables, avoiding "noisy variables" to prevent respondent fatigue and maintain focus.
- Essential for meaningful survey data, with binary or metric options simplifying subsequent analyses based on distance measures.
- Use a limited number of ordered answer options larger than two to avoid complications in data-driven segmentation analysis.

- Sample sizes are at least 2p or better five times 2p ("p" = no. of variables) or ten times the number of segmentation variables are recommended.
- Larger sample sizes enhance correctness of extracted segments, although correlated variables and noise can complicate tasks.
- High-quality, unbiased data is crucial for effective market segmentation analysis.

3.4 Data from Internal Sources:

Internal data are valuable for segmentation due to their abundance, automated generation, and ease of accessibility. Organizations should be cautious about potential biases in these data, particularly in over-representing existing customers. To address this limitation, organizations should complement internal data with external sources to gain a more comprehensive understanding of current and potential customer segments. Balancing internal and external data sources enhances the effectiveness of segmentation analyses, allowing organizations to develop strategies that provided for both existing and future customer needs.

3.5 Data from Experimental Studies:

These studies allow researchers to control variables, present carefully crafted stimuli to consumers, and observe their responses. Whether conducted in the field or laboratory, these studies generate insights, such as consumer responses to advertisements or preferences in choice experiments. Responses to stimuli, like ad reactions, become segmentation criteria. Conjoint studies and choice experiments displays how specific product attributes influence consumer choices. This information serves as effective segmentation criteria, guiding businesses in tailoring offerings based on dynamic consumer responses. Experimental data, complemented by other sources, enhances the depth of market segmentation analyses, influencing strategic decisions for targeting specific customer segments.

3.6 Checklist:

- Check the data quality for inconsistencies and systematic contaminations.
- Addressing any identified issues by cleaning and pre-processing the data as needed for accuracy.
- Evaluate if the number of segmentation variables is suitable based on a minimum of consumers per variable.
- If variables are excessive, employ appropriate approaches to select a subset for efficient analysis.
- Evaluate if segmentation variables are correlated.
- Ensure the data is cleaned, pre-processed, and ready for the segment extraction process.

4. STEP 4 - Exploring Data:

Data exploration in market segmentation analysis is a step that involves understanding and preparing the data collected for the segmentation process. It aims to uncover patterns, insights, and relationships within the dataset, providing guidance on the most suitable algorithms for extracting meaningful market segments. Here are key components of data exploration in market segmentation analysis:

1. Data Inspection:

Inspecting the raw dataset. Understand the variables present, their data types (e.g., numeric or categorical), and the general structure of the data. This initial inspection provides an overview of what we are working with.

2. Variable Measurement Levels:

Identify the measurement levels of the variables. Measurement levels categorize variables into types such as nominal, ordinal, interval, or ratio. This information is essential for selecting appropriate statistical methods and segmentation algorithms.

3. Univariate Analysis:

Conduct univariate analysis for each variable individually. For numeric variables, this may involve calculating summary statistics (mean, median, standard deviation) and creating histograms. For categorical variables, examine frequency tables and bar charts. Univariate analysis helps understand the distribution and central tendencies of each variable.

4. Handling Categorical Data:

If the data contains categorical variables, consider transforming them into a format suitable for analysis. This might include converting categorical variables into numerical representations or creating dummy variables for each category.

5. Dependency Structures:

Explore relationships between variables. For numeric variables, perform correlation analysis to identify patterns of association. For categorical variables, use contingency tables or chi-square tests to assess dependencies. Understanding how variables are related can guide the segmentation approach.

6. Data Pre-processing:

Clean the data by addressing missing values, outliers, and other inconsistencies. This step is crucial for ensuring the reliability of subsequent analyses. Impute missing values, remove outliers, and handle any data anomalies that may impact segmentation results.

7. Transformation Techniques:

Consider applying data transformation techniques, such as normalization or standardization, to prepare the data for segmentation algorithms. Some algorithms are sensitive to the scale of variables, and transforming them can ensure fair representation in the analysis.

8. Visualization Techniques:

Use visualization tools to gain a visual understanding of the data. Scatter plots can reveal relationships between two variables, while heatmaps can display patterns in correlation matrices. Visualizations aid in identifying clusters or groups in the data.

9. Principal Component Analysis (PCA):

If dealing with high-dimensional data, consider applying Principal Component Analysis (PCA) for dimensionality reduction. PCA identifies the most important variables that contribute to the variance in the data, simplifying the analysis while retaining key information.

10. Segmentation Algorithm Suitability:

Based on insights gained from data exploration, choose segmentation algorithms that align with the characteristics of the data. For example, k-means clustering is suitable for numeric data, while latent class analysis may be used for categorical data.

4.1 Exploration Process:

- Inspect the dataset after data collection, checking if data values are categorical.
- Change categorical data to numeric for segmentation.
- Inspect the average value of each transformed segmentation variable.
- Utilize PCA technique for exploratory analysis.
- Create plots for a better understanding of the projected data.
- Initial exploratory methods provide valuable information for segment extraction.

5. STEP 5 - Extracting Segments:

Segment extraction is the process of identifying and defining distinct groups or segments within a larger dataset based on specific characteristics, behaviors, or patterns. In the context of market segmentation analysis, segment extraction refers to the application of segmentation techniques to divide a target audience into meaningful and homogenous segments. The goal is to group similar individuals or entities together while maximizing the differences between these groups. Here are common techniques for segment extraction:

1. Identifying Variables:

Start by identifying relevant variables or criteria that can be used to differentiate customer groups. These variables can be demographic (age, gender, income), geographic (location), psychographic (lifestyle, values), or behavioral (purchasing habits, usage patterns).

2. Data Collection:

Gather data on the identified variables. This can be done through surveys, interviews, focus groups, or by analyzing existing market research data. The data should provide insights into the preferences and characteristics of different customer groups.

3. Data Analysis:

Analyze the collected data to identify patterns and trends. Use statistical techniques and tools to find correlations and relationships between variables. This step helps in understanding the similarities and differences among customers.

4. Segmentation Criteria:

Based on the analysis, establish criteria for segmenting the market. This could involve creating clusters of customers who share similar characteristics or exhibit similar behaviors. The goal is to group customers in a way that makes marketing efforts more effective.

5. Profile Creation:

Develop detailed profiles for each segment. These profiles should include a combination of demographic, psychographic, and behavioral characteristics. This helps in creating a clear understanding of the needs and preferences of each segment.

6. Validation and Testing:

Validate the segments by testing them against real-world data and market responses. Refine the segments as needed based on the feedback and outcomes of marketing strategies implemented for each segment.

7. Targeting and Positioning:

Once the segments are identified and validated, tailor marketing strategies to target each segment effectively. Develop unique value propositions and positioning strategies that resonate with the specific needs and preferences of each segment.

5.1 Approaches for Extracting Segments:

- Calculate solutions for two to eight market segments using standard k-means analysis.
- Relabel segment numbers consistently across segmentations.
- Use a plot to compare different solutions.
- Perform latent class analysis using a finite mixture of binary distributions.

- Compare component members derived from the mixture model with cluster members from k-means.
- Assess similarity between solutions from different extraction methods.
- Gain confidence by using stability-based data structure analysis.
- Extract market segments using finite mixtures of linear regression models.
- Apply the Expectation-Maximization (EM) algorithm for parameter estimation.
- Assess the significance of regression coefficients for each segment.
- Use a plot to compare the regression coefficients of different segments.

6. STEP 6 - Profiling Segments:

Segment profiling is a step in market segmentation analysis that involves creating detailed and comprehensive descriptions of each identified segment within a target market. The objective is to understand the unique characteristics, behaviors, preferences, and needs of each segment. Profiling allows businesses to create a clear and vivid picture of their target audiences, enabling more effective and targeted marketing strategies.

Two Approaches for Profiling the segments:

1. Traditional Approach:

In the traditional approach, businesses may use statistical measures and techniques to analyze and compare segments based on various criteria. This could include means, standard deviations, and other statistical measures to understand the central tendencies and variations within each segment.

2. Graphical Approach:

The graphical approach involves visualizing the characteristics of each segment. This could be done through various types of charts and graphs, allowing for a more intuitive understanding of segment differences. Visualization aids in conveying complex information in an accessible manner.

6.1 Profiling Process:

- Profiling is crucial for interpreting the segments correctly and making informed strategic marketing decisions.
- Identify defining characteristics of market segments with respect to segmentation variables.

- Inspect alternative segmentation solutions for correct interpretation.
- Use the traditional approach or graphical approach for profiling.
- Plot graphs to compare bars within and across segments for distinctiveness.
- Utilize a segment separation plot for visualization and decision-making.