

Market Segmentation Study Report

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1. Summary of Fundamentals of Market Segmentation

Definition of Market Segmentation Market segmentation is the process of dividing a broad consumer or business market into sub-groups of consumers based on shared characteristics. These characteristics can include demographics, behaviors, psychographics, or geographic location.

Benefits of Market Segmentation

1. Enables tailored marketing strategies
2. Increases customer satisfaction
3. Improves resource allocation and efficiency
4. Enhances competitive advantage by identifying niche markets

Costs of Market Segmentation

1. Data collection and analysis can be costly
2. Potential for misinterpretation or segmentation errors
3. Risk of alienating segments not targeted

Overview of the 10 Steps of Market Segmentation

1. **Deciding (not) to Segment:** Evaluating the feasibility and benefits of segmentation for the organization.
2. **Specifying the Ideal Target Segment:** Defining what an ideal segment looks like based on organizational goals and market dynamics.
3. **Collecting Data:** Gathering relevant data using surveys, internal records, and external sources.
4. **Exploring Data:** Cleaning, visualizing, and preparing the data for analysis.
5. **Extracting Segments:** Using statistical methods to identify meaningful segments (e.g., clustering).
6. **Profiling Segments:** Describing key characteristics and traits of identified segments.
7. **Describing Segments:** Using visuals and data-driven insights to provide detailed segment descriptions.

8. **Selecting Target Segment(s):** Choosing segments that align with the business objectives and capabilities.
 9. **Customizing the Marketing Mix:** Adjusting product, price, place, and promotion to cater to target segments.
 10. **Evaluation and Monitoring:** Continuously tracking the effectiveness and stability of segments over time (excluded as per study instructions).
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2. Team Coordination

Task Allocation

1. Steps 1–3: Studied by all team members to ensure a shared understanding of the basics.
2. Steps 4–9: Divided among team members:
 - a. **Step 4 (Exploring Data):** Assigned to Member A.
 - b. **Step 5 (Extracting Segments):** Assigned to Member B.
 - c. **Step 6 (Profiling Segments):** Assigned to Member C.
 - d. **Step 7 (Describing Segments):** Assigned to Member D.
 - e. **Step 8 (Selecting Target Segments):** Assigned to Member E.
 - f. **Step 9 (Customizing the Marketing Mix):** Shared among Members F and G.

Teamwork Strategies

1. Regular meetings on social media platforms for progress updates
 2. Collaborative tools like Google Docs for shared documentation
 3. Clear timelines and deliverables established for each member
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3. Replication of Case Study in Python

Summary of the McDonald's Case Study The case study involves identifying market segments for McDonald's based on customer preferences and behaviors. It uses techniques such as clustering (e.g., k-means) to extract meaningful segments and evaluate their characteristics.

Replication Process

1. **Data Exploration:** Imported and visualized the dataset in Python using pandas and matplotlib.
2. **Data Cleaning:** Handled missing values and standardized numeric features.
3. **Segmentation Analysis:**

- a. Implemented k-means clustering with Scikit-learn.
 - b. Used silhouette scores to determine the optimal number of clusters.
 4. **Segment Profiling:** Created visualizations to describe segment characteristics.
 5. **Individual Contributions**
 6. Each member replicated a specific part of the analysis and submitted their work to individual GitHub repositories. Links are as follows:
 - a. Member A: <https://github.com/adityananaware>
 - b. Member B: [GitHub Link]
 - c. Member C: [GitHub Link]
 - d. Member D: [GitHub Link]
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4. Insights and Learnings

Challenges Faced

1. Time constraints for completing the study
2. Coordinating tasks among members with varying expertise
3. Technical challenges in implementing segmentation techniques

Solutions and Strategies

1. Conducting frequent team discussions to resolve doubts
2. Referring to additional materials and tutorials online
3. Dividing tasks based on individual strengths

Key Learnings

1. The importance of data cleaning and preparation for effective analysis
2. Practical application of statistical and machine learning methods for segmentation
3. Collaboration and communication are critical in project-based learning

Recommendations for the Next Phase

1. Use insights from this study to apply segmentation techniques to the assigned market domain
2. Ensure thorough documentation of the segmentation process
3. Continuously monitor and refine the segmentation strategy for better outcomes .