

# Shivam Rana

## Step1: Deciding (not) to Segment

The document "Step 1" discusses the implications of committing to a market segmentation strategy and outlines potential barriers to its implementation. Here's a summary of the key points:

### **Implications of Committing to Market Segmentation :**

- **Long-Term Commitment:** Market segmentation is a significant long-term commitment that involves substantial changes and investments within an organization. It is not just a one-time strategy but a continuous process that requires dedication. Organizations must be willing to adapt their structures, develop new products, modify existing ones, and change pricing and distribution channels. The internal structure may also need adjustments to focus on different market segments. The decision to investigate a market segmentation strategy must be made at the highest executive level and communicated across all organizational units.
- **Costs and Benefits:** Implementing market segmentation isn't free. It involves costs like conducting research, surveys, designing different packages, and creating various advertisements. The increase in sales must justify these expenses. If the benefits of segmentation do not outweigh the costs, it might not be worth pursuing. Companies may need to develop new products or modify existing ones, adjust pricing, and change distribution channels. Changes required may include developing new products, modifying existing products, and altering pricing and distribution channels, which can also impact the internal structure of the organization.

### **Implementation Barriers:**

#### **1. Leadership and Management:**

- **Lack of Leadership and Commitment:** A significant barrier to successful market segmentation is the lack of leadership and commitment from senior management. Without active involvement and championing by senior leadership, it is challenging to implement segmentation strategies meaningfully. Senior management must understand the process, see the need for segmentation, and show active interest. Additionally, they need to allocate sufficient resources for both the initial market segmentation analysis and its long-term implementation.

- **Resource Allocation:** Adequate resources must be made available for the initial analysis and the long-term implementation of a market segmentation strategy. Insufficient resources can hinder the successful rollout of segmentation efforts.

## 2. Organizational Culture:

- **Resistance to Change:** Organizational culture can impede successful implementation if there is a lack of market or consumer orientation, resistance to change, and new ideas. Poor communication, lack of information sharing, short-term thinking, unwillingness to make changes, and office politics are also significant barriers. Organizations need a culture that supports market orientation and consumer focus.
- **Creative Thinking and Communication:** A lack of creative thinking, poor communication, and unwillingness to share information across organizational units can prevent successful implementation. Organizations need to foster an environment that encourages innovation and open communication.

## 3. Training and Expertise:

- **Lack of Understanding:** Without proper training and understanding of market segmentation principles, attempts to introduce segmentation are likely to fail. Both senior management and the team tasked with segmentation need to comprehend the foundations and consequences of the strategy. Organizations also need qualified marketing experts and data analysts.
- **Formal Marketing Functions:** The absence of a formal marketing function or qualified marketing experts can be a major obstacle. Larger organizations with high market diversity require a high degree of formalization to manage segmentation effectively.

## 4. Resources and Planning:

- **Financial Constraints:** Limited financial resources can restrict an organization's ability to make the necessary structural changes required for market segmentation. Companies with limited resources must choose only the best opportunities to pursue.
- **Objective Clarity:** Lack of clarity in the objectives of the market segmentation exercise, poor planning, and unstructured processes can impede success. Clear objectives, structured processes, and proper allocation of responsibilities are essential. Time pressure can also hinder finding the best possible segmentation outcome.
- **Operational Barriers:** Management science techniques may face resistance if they are not understood by management. Making market segmentation analysis easy to understand and presenting results in a way that facilitates interpretation by managers can counteract this challenge. Using graphical visualizations can help in making the results more comprehensible.

## References

- **Key Sources:** The chapter references key sources such as Beane and Ennis (1987), Cahill (2006), Croft (1994), Dibb and Simkin (2008), Doyle and Saunders (1985), and McDonald and Dunbar (1995). These sources provide foundational knowledge and insights into market segmentation and its implementation.

## Step 2: Specifying the Ideal Target Segment

**Purpose of Step 2:** This step involves defining criteria to evaluate potential market segments to determine which ones are ideal for targeting. It's crucial for organizations to contribute conceptually to this step, guiding data collection and segment selection in later steps.

1. **Segment Evaluation Criteria:** In Step 2 of market segmentation analysis, organizations must determine two sets of criteria for evaluating market segments: knock-out criteria and attractiveness criteria. Knock-out criteria are non-negotiable features that segments must possess to be considered. These include substantiality, measurability, accessibility, homogeneity, distinctiveness, size, alignment with organizational strengths, identifiability, and reachability. Attractiveness criteria are used to evaluate the relative attractiveness of segments that meet the knock-out criteria. These criteria are more diverse and subjective, requiring negotiation and assessment by the segmentation team.
- **Knock-out Criteria:** These are the essential, non-negotiable criteria that a market segment must meet to be considered viable. If a segment does not meet any of these criteria, it is immediately eliminated from consideration. The main knock-out criteria include:
    - **Substantiality:** The segment must be large enough to be profitable.
    - **Measurability:** The characteristics of the segment must be quantifiable.
    - **Accessibility:** The segment must be reachable through marketing and distribution channels.
    - **Homogeneity:** Members of the segment must share similar characteristics.
    - **Distinctiveness:** The segment must be distinctly different from other segments.

**2. Attractiveness Criteria:** These criteria are used to evaluate how attractive a segment is relative to others that meet the knock-out criteria. Unlike knock-out criteria, which are binary, attractiveness criteria are more subjective and involve rating segments on various factors. The attractiveness criteria include:

- **Market Growth Rate:** Segments with higher growth rates are generally more attractive.
- **Competitive Intensity:** Less competitive segments may be more attractive.
- **Profitability:** Segments with higher potential profitability are preferred.
- **Customer Needs and Behavior:** Segments that align well with the organization's offerings and capabilities are more attractive.
- **Compatibility with Organizational Objectives:** Segments that align with the strategic goals of the organization are prioritized.

## Implementing a Structured Process

**Segment Evaluation Plot:** The segment evaluation plot is a popular method for assessing and visualizing the attractiveness of market segments. It typically has two axes:

- **Segment Attractiveness:** One axis represents the attractiveness of the segment based on the criteria discussed above.
- **Organizational Competitiveness:** The other axis represents how well the organization can compete in that segment

## Benefits:

- Ensures comprehensive data collection in Step 3.
- Simplifies the final selection of target segments in Step 8 by having pre-defined criteria.
- Facilitates a structured and transparent decision-making process.

By following these guidelines in Step 2, organizations can effectively narrow down their potential target segments to those that are both viable and attractive, ensuring a strategic approach to market segmentation

## References

- **Kotler, P.** (1994). *Marketing Management*.
- **Lilien, G.L., & Rangaswamy, A.** (2003). *Marketing Engineering: Computer-Assisted Marketing Analysis and Planning*.
- **McDonald, M., & Dunbar, I.** (2012). *Market Segmentation: How to do it and how to profit from it*.

## **Step 3: Collecting Data**

### **Segmentation Variables:**

- Empirical data is crucial for market segmentation, both commonsense and data-driven.
- Segmentation variables split samples into market segments, typically based on one consumer characteristic in commonsense segmentation (e.g., gender).
- Data-driven segmentation uses multiple variables to identify or create market segments.
- Describing segments with descriptor variables (e.g., socio-demographics, media behavior) helps tailor marketing strategies effectively.

### **Data Sources:**

- Empirical data can come from surveys, observations (e.g., scanner data), or experiments.
- The quality of empirical data is essential for accurate segmentation and effective marketing strategies.
- Survey data is common but can be unreliable for socially desirable behaviors.

### **Segmentation Criteria:**

- Organizations must choose segmentation criteria (geographic, socio-demographic, psychographic, or behavioral) based on market knowledge.
- Simpler approaches are generally recommended for cost-effectiveness.

### **Types of Segmentation:**

#### **1. Geographic Segmentation:**

- Based on consumer's location.
- Simple and useful for targeting local communication channels.
- May not reflect other relevant characteristics.

#### **2. Socio-Demographic Segmentation:**

- Uses criteria like age, gender, income, and education.
- Useful in industries where these factors influence product preferences.
- May not provide deep insights into consumer behavior.

### **3. Psychographic Segmentation:**

- Groups people by beliefs, interests, preferences, or benefits sought.
- Reflects underlying reasons for consumer behavior.
- More complex and dependent on reliable measures.

### **4. Behavioral Segmentation:**

- Based on actual or reported behavior (e.g., purchase history, frequency).
- Directly relates to behavior of interest.
- Limited by availability of behavioral data, especially for potential customers.

### **Data Collection and Quality:**

- Survey data should be carefully designed to avoid unnecessary or redundant questions.
- Variables included should be relevant and sufficient for accurate segmentation.
- Data scales (binary, nominal, metric, ordinal) influence the suitability for segmentation analysis.
- Preferably, use binary or metric response options for clearer distance measures in data-driven segmentation.

In summary, collecting high-quality empirical data and choosing appropriate segmentation criteria are fundamental for effective market segmentation. Different segmentation approaches have their advantages and limitations, and the choice depends on the specific marketing context and available data.

## **Step 4: Preparing Data for Analysis**

In Step 4 of the market segmentation analysis process, the focus is on preparing the collected data for analysis. This involves several key activities to ensure the data is clean, complete, and ready for segmentation. The preparation process can be broken down into the following steps:

### **1. Data Cleaning:**

- Identifying and handling missing data.
- Correcting or removing inaccurate records.
- Ensuring consistency in data formats.

## 2. Data Transformation:

- Converting data into a suitable format for analysis.
- Creating new variables if needed, such as aggregating data or calculating ratio.

## 3. Data Reduction:

- Simplifying the data set by removing redundant or irrelevant variables.
- Using techniques such as factor analysis to reduce the dimensionality of the data.

## 4. Data Integration:

- Combining data from different sources into a single data set.
- Ensuring that the integrated data is coherent and matches the analysis requirements.

## 5. Validation:

- Verifying that the data preparation steps have been completed correctly.
- Ensuring the prepared data set accurately represents the original data and is suitable for segmentation analysis.

### Table Summarizing Key Points of Data Preparation

Step	Description
<b>Data Cleaning</b>	Identifying and addressing missing or incorrect data to ensure accuracy and consistency.
<b>Data Transformation</b>	Converting data into a format suitable for analysis and creating new variables if necessary.
<b>Data Reduction</b>	Simplifying the data set by removing unnecessary variables and using techniques like factor analysis.
<b>Data Integration</b>	Combining data from multiple sources to create a comprehensive data set.
<b>Validation</b>	Ensuring that all data preparation steps are correctly implemented and that the data is ready for segmentation analysis.

This summary and table encapsulate the main activities involved in preparing data for market segmentation analysis, emphasizing the importance of clean, well-structured, and validated data for accurate and effective segmentation.

## **Step5: Extracting Segments**

### **Introduction to Market Segmentation:**

- Defines market segmentation as the process of dividing a broad consumer or business market into sub-groups of consumers based on shared characteristics.
- Emphasizes the importance of segmentation for targeted marketing strategies and better resource allocation.
- 

### **Types of Market Segmentation:**

- **Demographic Segmentation:** Based on age, gender, income, education, occupation, etc.
- **Geographic Segmentation:** Dividing the market based on location such as country, state, city, or neighborhood.
- **Psychographic Segmentation:** Based on lifestyle, values, attitudes, and interests.
- **Behavioral Segmentation:** Focuses on consumer knowledge, attitudes, uses, or responses to a product.

### **Steps in Market Segmentation:**

- **Identify the Market:** Determine the overall market that needs to be segmented.
- **Determine Segmentation Criteria:** Choose the basis on which the market will be segmented (demographic, geographic, psychographic, or behavioral).
- **Segment the Market:** Divide the market into distinct groups based on the chosen criteria.
- **Evaluate the Segments:** Assess the segments for their size, growth potential, accessibility, and compatibility with the company's resources.

### **Benefits of Market Segmentation:**

- Enhanced ability to meet consumer needs.
- More efficient use of marketing resources.
- Better customer retention and acquisition.
- Improved competitive advantage.



## **Challenges in Market Segmentation:**

- Difficulty in accurately identifying segments.
- High costs associated with research and data analysis.
- Risk of over-segmentation leading to too narrow target markets.
- Dynamic nature of market segments requiring continuous monitoring and adjustment.

The document provides a comprehensive framework for understanding and implementing market segmentation strategies to optimize marketing efforts and achieve better business outcomes.

## **Step6: Profiling Segments**

### **Definition and Importance:**

- Market segmentation involves dividing a broad consumer or business market into sub-groups based on shared characteristics.
- It helps businesses tailor their marketing efforts and allocate resources more efficiently, leading to better customer satisfaction and increased profitability.

### **Types of Market Segmentation:**

- **Demographic Segmentation:** Categorizing consumers by age, gender, income, education, and occupation.
- **Geographic Segmentation:** Dividing the market based on location, such as countries, regions, cities, or neighborhoods.
- **Psychographic Segmentation:** Grouping consumers based on lifestyle, values, attitudes, and interests.
- **Behavioral Segmentation:** Segmenting the market based on consumer behaviors, such as purchasing habits, product usage, and brand loyalty.

### **Steps in Market Segmentation:**

- **Identify the Market:** Determine the overall market that needs segmentation.
- **Choose Segmentation Criteria:** Select the basis for segmentation (demographic, geographic, psychographic, or behavioral).

- **Segment the Market:** Divide the market into distinct groups based on the chosen criteria.
- **Evaluate Segments:** Assess the segments for size, growth potential, accessibility, and alignment with the company's objectives.
- **Select Target Segments:** Choose the most promising segments to target with marketing efforts.
- **Develop Positioning Strategy:** Create a marketing mix that positions the product uniquely in the minds of the target segments.

### **Benefits of Market Segmentation:**

- Better understanding of consumer needs and preferences.
- More effective and focused marketing strategies.
- Improved customer retention and acquisition.
- Enhanced competitive advantage and market positioning.

### **Challenges of Market Segmentation:**

- Difficulty in accurately identifying and categorizing segments.
- High costs of conducting research and data analysis.
- Risk of over-segmentation, leading to overly narrow target markets.
- Constantly changing market dynamics require ongoing monitoring and adjustment of segmentation strategies.

### **Segment Profiling with Visualisations:**

Visualisations are useful in the data-driven market segmentation process to inspect, for each segmentation solution, one or more segments in detail. Statistical graphs facilitate the interpretation of segment profiles. They also make it easier to assess the usefulness of a market segmentation solution. The process of segmenting data always leads to a large number of alternative solutions. Selecting one of the possible solutions is a critical decision. Visualisations of solutions assist the data analyst and user with this task.

### **Assessing Segment Separation:**

Segment separation can be visualised in a segment separation plot. The segment separation plot depicts – for all relevant dimensions of the data space – the overlap of segments. Segment

separation plots are very simple if the number of segmentation variables is low, but become complex as the number of segmentation variables increases. But even in such complex situations, segment separation plots offer data analysts and users a quick overview of the data situation, and the segmentation solution.

## **Step7: Describing Segments**

The main goal of Step 7 in market segmentation analysis is to describe market segments using additional information that wasn't used to initially extract these segments. This involves understanding the characteristics and behaviors of each segment to tailor marketing efforts effectively.

### **Segmentation Variables:**

- Segmentation variables are chosen early in the market segmentation process.
- These variables form the basis for extracting market segments from empirical data.

### **Profiling vs. Describing:**

- **Profiling:** Focuses on the variables used to extract the segments, providing insights into the differences in these variables across segments.
- **Describing:** Involves using additional variables (descriptor variables) not used in the extraction process to provide a more detailed understanding of the segments.

### **Descriptor Variables:**

- These include demographic, psychographic, socio-economic variables, media exposure, specific product and brand attitudes, and other relevant information.
- Descriptor variables help in painting a comprehensive picture of each segment's characteristics and behaviors.

### **Importance of Segment Descriptions:**

- Provides detailed insights into the nature of the segments.
- Essential for developing a customized marketing mix.
- Helps avoid "nasty surprises" by thoroughly understanding the target segments.

### **Example from Australian Travel Motives Data Set:**

- Profiling involves investigating differences in travel motives across segments.
- Describing involves additional information such as age, gender, past travel behavior, media use, expenditure patterns, etc.

- Effective segment description can identify actionable insights, such as communication channels and behaviors (e.g., reading habits or volunteer activities).

### **Methods of Analysis:**

- Differences between segments can be studied using descriptive statistics and visualizations or inferential statistics.
- Traditional methods include statistical testing and tabular presentations, while visualizations offer a more user-friendly approach.

### **Predicting Segments from Descriptor Variables:**

- Another way of learning about market segments is to try to predict segment membership from descriptor variables. To achieve this, we use a regression model with the segment membership as categorical dependent variable, and descriptor variables as independent variables. We can use methods developed in statistics for classification, and methods developed in machine learning for supervised learning.
- In R, regression models are specified using a formula interface. In the formula, the dependent variable AGE is indicated on the left side of the `~`. The independent variables are indicated on the right side of the `~`. In this particular case, we only use segment membership C6 as independent variable. Segment membership C6 is a categorical variable with six categories, and is coded as a factor in the data frame `vacmotdesc`. The formula interface correctly interprets categorical variables, and fits a regression coefficient for each category. For identifiability reasons, either the intercept  $\beta_0$  or one category needs to be dropped. Using `- 1` on the right hand side of `~` drops the intercept  $\beta_0$ . Without an intercept, each estimated coefficient is equal to the mean age in this segment. The output indicates that members of segment 5 are the youngest with a mean age of 39.4 years, and members of segment 6 are the oldest with a mean age of 49.6 years. Including the intercept  $\beta_0$  in the model formula drops the regression coefficient for segment 1. Its effect is instead captured by the intercept. The other regression coefficients indicate the mean age difference between segment 1 and each of the other segments:

The output contains the table of the estimated coefficients and their standard errors, the test statistics of a z-test, and the associated p-values. The z-test compares the fitted model to a model where this regression coefficient is set to 0. Rejecting the null hypothesis implies that the regression coefficient is not equal to 0 and this effect should be contained in the model. This means that the null hypothesis.

## **Tree-Based Methods:**

Classification and regression trees (CARTs; Breiman et al. 1984) are an alternative modelling approach for predicting a binary or categorical dependent variable given a set of independent variables. Classification and regression trees are a supervised learning technique from machine learning. The advantages of classification and regression trees are their ability to perform variable selection, ease of interpretation supported by visualisations, and the straight-forward incorporation of interaction effects. Classification and regression trees work well with a large number of independent variables. The disadvantage is that results are frequently unstable. Small changes in the data can lead to completely different trees. The tree approach uses a stepwise procedure to fit the model. At each step, consumers are split into groups based on one independent variable. The aim of the split is for the resulting groups to be as pure as possible with respect to the dependent variable. This means that consumers in the resulting groups have similar values for the dependent variable. In the best case, all group members have the same value for a categorical dependent variable. Because of this stepwise splitting procedure, the classification and regression tree approach is also referred to as recursive partitioning.

## **Conclusion:**

Good descriptions of market segments are critical for developing effective marketing strategies. They provide the necessary insights to customize marketing efforts and ensure that each segment is targeted in the most effective way possible. Understanding descriptor variables and their implications is essential for successful market segmentation and targeted marketing.

This step ensures that marketers have a comprehensive understanding of their segments, allowing them to create more personalized and impactful marketing campaigns.

## **Step8: Selecting the Target Segment(s)**

Step 8 focuses on making the critical decision of selecting which market segments to target. This decision is strategic and has a long-term impact on the organization's performance.

## **Strategic Importance:**

- The selection of target segments is a significant, long-term strategic decision.
- This step involves committing to one or more segments after detailed analysis.

## **Process Overview:**

- By Step 5, a global market segmentation solution is chosen, providing several segments for detailed inspection.
- In Step 6, these segments are profiled, and in Step 7, they are described in detail.
- Step 8 involves selecting the segments to target based on the profiling and description stages.

## **Building on Previous Steps:**

- The selection process builds on the knock-out criteria and segment attractiveness criteria established in Step 2.
- Previous steps (Steps 6 and 7) should have already applied the knock-out criteria, identifying segments that are large, homogeneous, distinct, identifiable, and reachable.

## **Knock-Out Criteria:**

- Before proceeding, ensure all segments under consideration meet the knock-out criteria.
- This includes checking if the segments are viable in terms of size, distinctiveness, identifiability, and reachability.

## **Evaluating Attractiveness and Competitiveness:**

- After verifying the knock-out criteria, evaluate the attractiveness of the remaining segments and the organization's competitiveness for these segments.
- Key questions to ask:
  1. Which segments does the organization most want to target and commit to?
  2. Which segments are most likely to choose the organization over competitors?

## **Market Segment Evaluation:**

Most books that discuss target market selection (e.g., McDonald and Dunbar 1995; Lilien and Rangaswamy 2003), recommend the use of a decision matrix to visualise relative segment attractiveness and relative organisational competitiveness for each market segment. Many versions of decision matrices have been proposed in the past, and many names are used to describe them, including: Boston matrix (McDonald and Dunbar 1995; Dibb and Simkin 2008) because this type of matrix was first proposed by the Boston Consulting Group; General Electric / McKinsey matrix (McDonald and Dunbar 1995) because this extended version of the matrix was developed jointly by General Electric and McKinsey; directional policy matrix (McDonald

and Dunbar 1995; Dibb and Simkin 2008); McDonald four-box directional policy matrix (McDonald and Dunbar 1995); and market attractiveness. Business strength matrix (Dibb and Simkin 2008). The aim of all these decision matrices along with their visualisations is to make it easier for the organisation to evaluate alternative market segments, and select one or a small number for targeting. It is up to the market segmentation team to decide which variation of the decision matrix offers the most useful framework to assist with decision making.

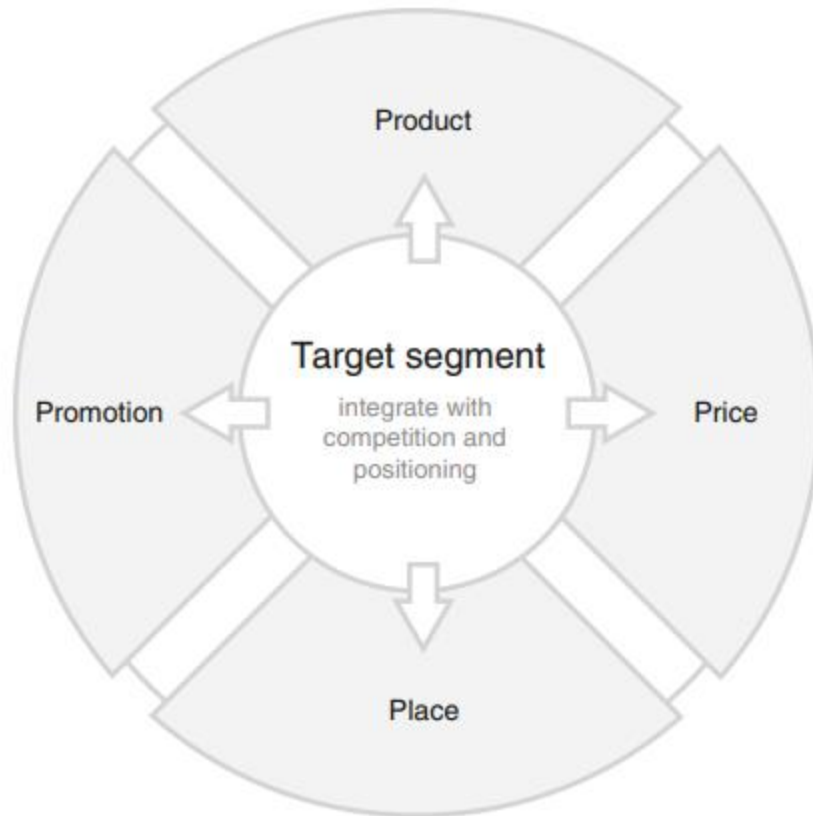
Whichever variation is chosen, the two criteria plotted along the axes cover two dimensions: segment attractiveness, and relative organisational competitiveness specific to each of the segments. Using the analogy of finding a partner for life: segment attractiveness is like the question Would you like to marry this person? given all the other people in the world you could marry. Relative organisational competitiveness is like the question Would this person marry you? given all the other people in the world they could marry.

## **Step9: Customising the Marketing Mix**

### **Implications for Marketing Mix Decisions:**

Marketing was originally seen as a toolbox to assist in selling products, with marketers mixing the ingredients of the toolbox to achieve the best possible sales results (Dolnicar and Ring 2014). In the early days of marketing, Borden (1964) postulated that marketers have at their disposal 12 ingredients: product planning, packaging, physical handling, distribution channels, pricing, personal selling, branding, display, advertising, promotions, servicing, fact finding and analysis. Many versions of this marketing mix have since been proposed, but most commonly the marketing mix is understood as consisting of the 4Ps: Product, Price, Promotion and Place (McCarthy 1960).

Viewing market segmentation as the first step in the segmentation-targeting positioning approach is useful because it ensures that segmentation is not seen as independent from other strategic decisions. It is important, however, not to adhere too strictly to the sequential nature of the segmentation-targeting-positioning process. It may well be necessary to move back and forward from the segmentation to the targeting step, before being in the position of making a long-term commitment to one or a small number of target segments.



---

### **Product:**

One of the key decisions an organisation needs to make when developing the product dimension of the marketing mix, is to specify the product in view of customer needs. Often this does not imply designing an entirely new product, but rather modifying an existing one. Other marketing mix decisions that fall under the product dimension are: naming the product, packaging it, offering or not offering warranties, and after sales support services.

### **Price:**

Typical decisions an organisation needs to make when developing the price dimension of the marketing mix include setting the price for a product, and deciding on discounts to be offered. To be able to compare members of segment 3 to tourists not belonging to segment 3, we construct a binary vector containing this information from the bicluster solution. We first extract which rows (respondents) and columns (activities) are contained in a segment using:

### **Place:**

The key decision relating to the place dimension of the marketing mix is how to distribute the product to the customers. This includes answering questions such as: should the product be made available for purchase online or offline only or both; should the manufacturer sell directly to



customers; or should a wholesaler or a retailer or both be used. Returning to the example of members of segment 3 and the destination with a rich cultural heritage: the survey upon which the market segmentation analysis was based also asked survey respondents to indicate how they booked their accommodation during their last domestic holiday. Respondents could choose multiple options. This information is place valuable; knowing the booking preferences of members of segment 3 enables the destination to ensure that the MUSEUMS, MONUMENTS & MUCH, MUCH MORE product is bookable through these very distribution channels.

### **Promotion:**

Typical promotion decisions that need to be made when designing a marketing mix include: developing an advertising message that will resonate with the target market, and identifying the most effective way of communicating this message. Other tools in the promotion category of the marketing mix include public relations, personal selling, and sponsorship. Looking at segment 3 again: we need to determine the best information sources for reaching members of segment 3 so we can inform them about the MUSEUMS, MONUMENTS & MUCH, MUCH MORE product. We answer this question by comparing the information sources they used for the last domestic holiday, and by investigating their preferred TV stations.

### **References:**

Borden NH (1964) The concept of the marketing mix. *J Advert Res* 4:2–7 Dolnicar S, Ring A (2014) Tourism marketing research – past, present and future. *Ann Tour Res* 47:31–47 Lilien GL, Rangaswamy A (2003) *Marketing engineering: computer-assisted marketing analysis and planning*, 2nd edn. Prentice Hall, Upper Saddle River McCarthy JE (1960) *Basic marketing: a managerial approach*. Richard D. Irwin, Homewood.