

# Market Segmentation Analysis

***Understanding It, Doing It, and Making It Useful***

## Team Members

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***"Market segmentation is the sub-dividing of market into homogeneous subsets of customers, where any subset may conceivably be selected as a market target to be reached with a distinct marketing mix."***

--**Philip Kotler**

## Abstract :

Market segmentation analysis is a crucial process in marketing that involves dividing a heterogeneous market into distinct segments based on various characteristics and behaviors of consumers. This project aims to conduct a comprehensive market segmentation analysis to enhance the understanding of consumer preferences, purchasing patterns, and needs within a specific industry or market.

The project utilizes both qualitative and quantitative research methods to gather data and extract valuable insights. Qualitative techniques such as focus groups, interviews, and observations provide a deeper understanding of consumers' attitudes, motivations, and opinions. Quantitative methods, on the other hand, involve surveys, questionnaires, and data analytics to quantify and analyze the collected information.

The analysis involves identifying key demographic factors, including age, gender, income, and geographic location, as well as psychographic variables such as lifestyle, values, and interests. Additionally, behavioral aspects like buying frequency, brand loyalty, and purchase decision-making processes are considered to create meaningful segments.

By segmenting the market, organizations can tailor their marketing strategies and develop targeted campaigns that resonate with specific customer groups. This approach helps companies optimize their resources, improve customer satisfaction, and gain a competitive advantage in a crowded marketplace.

The findings of the market segmentation analysis provide actionable insights for product development, pricing strategies, distribution channels, and promotional activities. It enables companies to allocate resources efficiently, identify new market opportunities, and establish effective communication channels with their target segments.

Overall, this project highlights the significance of market segmentation analysis as a fundamental tool for strategic decision-making in marketing. The outcomes of this analysis can assist businesses in understanding their customers better, effectively positioning their products or services, and achieving sustainable growth in a dynamic and evolving market landscape.

Market segmentation serves as a valuable tool for marketing managers, aiding them in the essential process of identifying a target market for a specific product and creating a suitable marketing strategy. It also plays a vital role in achieving marketing success, as the most prosperous companies base their business strategies on effective segmentation techniques. Consumers within a particular market segment, or groups of buyers, share significant similarities in the consumer characteristics considered important by management. Conversely, consumers in distinct market segments ideally exhibit notable differences in those consumer characteristics. The management-defined consumer characteristics that are crucial for market segmentation are known as segmentation criteria. The market segmentation is very beneficial for the success of an organization. Consider the example of mobile phone market segment. If a mobile phone company attempts to provide a single mobile phone to the entire market, it is improbable that they will be able to meet the needs of every segment and establish a distinctive image in the marketplace that appeals to consumers. This approach would likely result in wasted marketing efforts since the company fails to address any of the specific market segments. Alternatively, focusing on a particular market segment, such as the high-end, high-price segment, and offering a product that precisely meets the desires of that segment, is more likely to generate significant short-term sales within that specific segment and establish a long-term reputation as the leading provider of premium, high-price mobile phones. Such kind of approach is called concentrated approach and other approach is differentiated approach. In latter approach company may produce three type of phones, one for each segment. Generally, such kind of approach is seen in the matured markets where consumers are capable of differentiating between alternating products. Market segmentation offers several benefits. It presents a chance to engage in thoughtful reflection and reconsideration, leading to valuable and crucial fresh insights and perspectives. When effectively implemented, market segmentation also results in tangible advantages, such as enhanced comprehension of consumer distinctions, leading to a better alignment between organizational capabilities and consumer requirements. Sales management can benefit from the effectiveness of market segmentation, as it enables the concentration of direct sales efforts on specific groups of consumers instead of targeting each individual consumer separately. Let's look at the various steps in market segmentation below.

## ***Step-1: Deciding (not) to Segment***

Market segmentation is a long-term strategy. The dedication to market segmentation is closely linked to the organization's readiness and capacity to make significant changes and investments. There are some experts saying that as process of segmentation includes research, fielding surveys, and focus groups, designing multiple packages, and designing multiple advertisements and communication messages; so not to segment if the expected increase in sale doesn't outweigh the cost significantly. To reap the benefits of also segments, organization also needs to make changes in organization structure. It basically means that the organization focus should be around building the team according to the segment rather than building the team around the products. Due to the significant impact of long-term organizational commitment, the choice to explore the potential of a market segmentation strategy should be made by top-level executives. Furthermore, it is crucial to consistently and systematically communicate and reinforce this decision across all levels and units of the organization. There could be also a number of barriers an organization can face while dealing with segmentation process. Here are the lists of some of them:

1. The initial set of obstacles pertains to senior management. The absence of effective leadership, proactive advocacy, commitment, and engagement of senior leaders in the market segmentation process undermines the success of market segmentation. Also, it is undeniable that unless the chief executive recognizes the necessity of conducting a segmentation review, comprehends the process, and demonstrates an active involvement in it, it becomes extremely challenging for a senior marketing executive to effectively implement the derived conclusions. Here a big role is also played by the senior management. Insufficient allocation of resources by senior management can impede the successful implementation of market segmentation. This lack of resources may pertain to both the initial analysis for market segmentation and the long-term implementation of a market segmentation strategy. So, to successfully carry out the segmentation process top-executive levels and senior management should be familiar with the process and be ready to commit.
2. Another set of obstacles is associated with organizational culture. Factors such as a lack of market or consumer focus, resistance to change and innovation, limited creativity, ineffective communication, insufficient sharing of information and insights among organizational units, short-term mindset, reluctance to implement changes, and internal politics have been identified as barriers that hinder the successful implementation of market segmentation. To check whether an organization is ready or not for segmentation, there is need to create a concise questionnaire that can evaluate the degree to which a lack of market orientation within the organizational culture may act as an obstacle to the effective implementation of market segmentation.
3. Insufficient training poses another potential challenge. If senior management and the segmentation team lack a fundamental understanding of market segmentation or are unaware of the implications of implementing such a strategy, the introduction of market segmentation is likely to result in failure. The absence of a formal marketing function or, at the very least, a qualified marketing professional in the organization is closely connected to these barriers. In organizations with greater market diversity and larger scale, the presence of a high level of formalization becomes increasingly crucial. Lack of qualified data manager and analyst can also add to the barriers.

4. There are some additional obstacles as well that can hinder the implementation of market segmentation. Objective restrictions, such as limited financial resources or the inability to make necessary structural changes, can pose challenges for organizations. In such cases, it becomes crucial for companies with limited resources to carefully select the most promising opportunities to pursue. Process-related barriers include unclear objectives for the market segmentation exercise, inadequate or flawed planning, the absence of structured processes to guide the team throughout the segmentation process, lack of defined responsibilities, and time constraints that hinder the ability to achieve the optimal segmentation outcome. Overcoming these obstacles is essential to ensure successful market segmentation.

The majority of these barriers can be identified at the beginning of a market segmentation study, allowing for proactive elimination. If barriers cannot be resolved, it is crucial to seriously consider the possibility of abandoning the pursuit of market segmentation as a potential future strategy.

## ***Step-2: Specifying the Ideal Target Segment***

To make an ideal target segment, user input should not be limited to an initial briefing or the final development of a marketing mix. Instead, user involvement should span across multiple stages, actively engaging with the technical aspects of market segmentation analysis. This comprehensive user involvement is crucial for producing valuable results that are beneficial to the organization. Also, in this step an organization must come up with criteria to evaluate this segmentation. The members of the segmentation team must choose the criteria they wish to utilize in order to evaluate the attractiveness of potential target segments. Additionally, the team needs to evaluate the relative significance of each attractiveness criterion to the organization. Generally two criteria is used: knockout criteria and attractiveness criteria. Let's take a look on both of the criteria:

- 1. Knock-out criteria: Knock-out criteria are used to determine if market segments resulting from the market segmentation analysis qualify to be assessed using segment attractiveness criteria. Following are the characteristics of this criteria:
  - The segment should exhibit homogeneity, where individuals within the segment share similarities with each other.
  - The segment must possess distinctiveness, meaning that individuals within the segment should be notably different from those belonging to other segments.
  - The segment must be large enough to be profitable.
  - The segment must align with the strengths of the organization, meaning that the organization should possess the ability to fulfill the needs of the segment members.
  - The members of the segment should be recognizable and easily identifiable within the marketplace.
  - In order to effectively deliver a customized marketing mix, it is crucial that the segment is reachable, meaning there must be a means to establish communication and connect with the members of the segment. This accessibility ensures that the tailored marketing strategies can be effectively delivered to the intended audience.

It is necessary that these criteria should understood by the senior management, the segmentation team, and the advisory committee. Also, there is challenge to be specify the size of minimum viable target segment.

2. Attractiveness Criteria: The attractiveness criteria are employed to assess the comparative appeal of the remaining market segments that meet the specified criteria. It is to be noted that attractiveness criteria do not possess a binary nature, as segments are not evaluated solely as either meeting or not meeting the attractiveness criteria. Instead, each market

segment is assigned a rating based on its attractiveness, which can vary in terms of its alignment with a specific criterion. In general, the segmentation team is responsible for determining the values of segment attractiveness and organizational competitiveness. This is essential because there is no universally applicable set of criteria that can be used by all organizations. A team of individuals should be responsible for this task, ideally consisting of two to three core members. This team would propose an initial solution and present their choices to an advisory committee composed of representatives from all organizational units. The committee would then engage in discussions and potentially modify the proposed solution. Including representatives from various organizational units is beneficial for two main reasons. Firstly, each unit offers a unique perspective on the organization's business, bringing diverse viewpoints to the deliberations. Secondly, since the implementation of the segmentation strategy will impact every unit within the organization, all units are considered key stakeholders in the market segmentation analysis process. Also, there is significant value in choosing the attractiveness criteria for market segments during the initial stage of the process. By precisely identifying the aspects of market segments that are relevant to the organization, it ensures that all pertinent information is gathered during the data collection phase. After completing this step, the market segmentation team should have compiled a list of approximately six criteria that determine the attractiveness of segments. Each criterion should be assigned a weight that reflects its importance to the organization in relation to the other criteria. Then there needs to be ultimate approval of the advisory committee as it composed of representatives from cross functional units and hence various viewpoints are brought forth when addressing the task of defining segment attractiveness criteria.

## **Step-3: Collecting Data**

Collecting data depends upon what kind of segmentation variable we are using. Segmentation variables, also known as segmentation criteria or factors, are specific characteristics or attributes that are used to divide a market into distinct segments. These variables help in identifying and categorizing consumers or organizations based on their similarities or differences in terms of certain criteria. Segmentation variables can include demographic factors (such as age, gender, income, or occupation), geographic factors (such as location or climate), psychographic factors (such as lifestyle, values, or attitudes), behavioural factors (such as purchasing behaviour or product usage), or any other relevant characteristics that can be used to differentiate and group market segments. The choice of segmentation variables depends on the specific needs and goals of the organization conducting the segmentation analysis. Both common sense and data-driven market segmentation rely on empirical data as their foundation. Empirical data is utilized to identify or construct market segments and, as the process progresses, to provide detailed descriptions of these segments. The distinction between common sense and data-driven market segmentation lies in the fact that data-driven market segmentation relies on multiple segmentation variables, whereas common sense segmentation typically relies on a single criterion. Then there are descriptor variables. Segmentation variables are employed to provide detailed descriptions of the segments. Describing segments in depth is crucial for developing a targeted marketing mix that caters to the specific needs of each segment. These descriptor variables commonly encompass socio-demographic information and may also include data about media behaviour, enabling marketers to effectively communicate their messages to the target segment. In both kind of segmentation criteria, the quality of

empirical data is necessary for developing a valid segmentation solution. Data quality plays a crucial role in both the allocation of individuals to the appropriate market segment and the accurate description of the segments, even when extracting common sense segments with prior knowledge of their nature. The accurate description of segments enables the development of customized products, the selection of suitable pricing and distribution strategies, as well as the identification of effective communication channels for advertising and promotion. Therefore, ensuring data quality is essential for these processes to be successful. There could be several data sources that can be used for customer segmentation including data surveys, internal or external data. While many segmentations are carried out using data survey, it is not perfect. Similarly for the internal data, as there can only limited number of customer's information a company could have. So, going by this way company risks losing out on all new customers. There could be several ways of making customer segmentation after deciding the preferred way of data source. Five top segmentation includes: Geographic Segmentation, Socio-Demographic Segmentation, Psychographic Segmentation, Behavioural Segmentation. Geographic segmentation includes making a segment based on certain geographic area. Geographic segmentation offers the advantage of easily assigning consumers to specific geographic units, allowing for targeted communication messages and the selection of appropriate communication channels to reach those segments. Socio demographic segmentation could include classifying based on the age, gender, income etc. Psychographic segmentation is a marketing approach that categorizes consumers based on their psychological characteristics, attitudes, interests, and lifestyles. This approach categorizes consumers based on their psychological characteristics, attitudes, interests, and lifestyles. This type of segmentation is favoured by many marketers, but it is more complex than earlier two, because no single characteristic provides the insight and hence needed multiple characteristics to define such kind of segmentation. Behavioural segmentation is a market segmentation approach that divides a market based on consumer behaviours, actions, and patterns. It focuses on how consumers behave, interact with products or services, and make purchasing decisions. Behavioural segmentation recognizes that individuals with similar behaviours are more likely to have similar needs and preferences. The primary benefit of behavioural approaches lies in using the actual behaviour of individuals, rather than their stated or intended behaviour, as the foundation for segment extraction. Whatever way of segmentation is chosen, mostly segmentation analysis is based on survey data. Few biases need to be taken into account like choice of variables, introduction of unnecessary variables should be avoided as it makes data noisy. Another is response option; here metric or binary option should prefer. Another is response style. A response bias refers to a consistent inclination to answer questionnaire items based on factors unrelated to the actual content of the items. Another is of sample size. Sample size must be representative of population and should lead to correct market segmentation. Some caution needs to be taken care when using internal data and data from experimental studies.

## ***Step 4: Exploring Data***

After data collection, exploratory data analysis plays a crucial role in cleaning and, if necessary, preprocessing the data. This stage of exploration not only aids in identifying the most appropriate algorithm for extracting meaningful market segments but also delves into technical aspects.

At a more technical level, data exploration serves the purpose of (1) identifying the measurement levels of the variables, (2) investigating the univariate distributions of each variable, and (3) assessing the dependency structures between variables. This comprehensive analysis helps in gaining a deeper understanding of the data and its characteristics.

Moreover, the data may require preprocessing and preparation to ensure its suitability as input for various segmentation algorithms. By engaging in this preparatory phase, the data becomes optimized for effective utilization in different segmentation approaches.

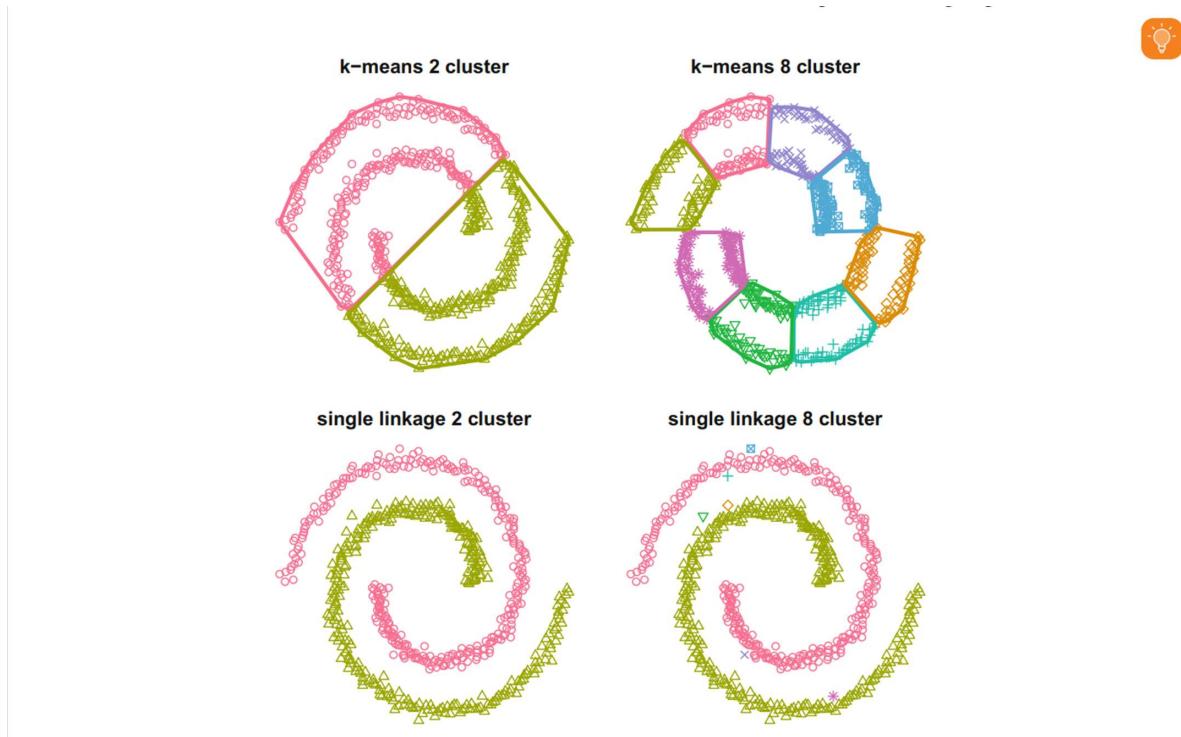
Ultimately, the results obtained from the data exploration stage provide valuable insights into the appropriateness of different segmentation methods for extracting market segments. These insights serve as a foundation for further analysis and decision-making processes related to market segmentation.

1. **Data Cleaning:** Data cleaning is the initial step in data analysis, focusing on ensuring the accuracy and consistency of the data. It involves various tasks, such as checking for correct value recording and consistent labeling of categorical variables. For metric variables, known plausible value ranges are established to identify potential errors during data collection or entry. By meticulously reviewing the dataset, discrepancies and anomalies can be detected. Consistent labeling of categorical variables is essential to prevent confusion in subsequent analysis. Additionally, identifying implausible values in metric variables helps pinpoint data issues. Data cleaning enhances data integrity, providing a reliable foundation for meaningful analysis and insights. Overall, it is a crucial process that ensures data quality and integrity.
2. **Descriptive Analysis:** To avoid misinterpreting results from complex analyses, it is crucial to be familiar with the data. Descriptive numeric and graphic representations provide valuable insights into the dataset. Graphical methods play a vital role in analyzing numeric and categorical data. Histograms, boxplots, and scatter plots are effective for visualizing numeric variables. They offer a visual understanding of data distribution, variability, and potential outliers. Bar plots are useful for displaying the frequency counts of categorical variables, allowing for easy comparison. Mosaic plots are particularly helpful in illustrating the associations among multiple categorical variables.
3. a) **Pre-Processing (Categorical Variables):** Two pre-processing procedures are often used for categorical variables. One is merging levels of categorical variables before further analysis, the other one is converting categorical variables to numeric ones, if it makes sense to do so.
4. b) **Pre-Processing (Numeric Variables):** The range of values of a segmentation variable affects its relative influence in distance-based methods of segment extraction. To balance the influence of segmentation variables on segmentation results, variables can be standardised. Standardising va
5. **Principal Components Analysis:** Principal Component Analysis (PCA) is a powerful statistical technique used to transform a multivariate dataset consisting of metric variables. It aims to create a new set of variables, known as principal components, that are uncorrelated and ordered by their importance. In PCA, the first principal component captures the maximum amount of variability present in the original dataset. It is constructed as a linear combination of the original variables. The second principal component captures the second most variability, orthogonal to the first component. This process continues, with each subsequent component capturing decreasing amounts of variability while remaining uncorrelated with the previous components.

## Step 5: Extracting Segments

### Grouping Consumers:

Market segmentation analysis is exploratory and relies on unstructured consumer datasets. The results of segmentation methods depend on the assumptions and algorithms used. Cluster analysis is often employed, but different algorithms can impose different structures on the segments. For example, k-means cluster analysis may fail to identify natural segments in the data. It is crucial to explore segmentation solutions from various methods and understand how they shape the segments. Market segmentation analysis requires considering data characteristics and selecting appropriate algorithms to obtain meaningful results.



**Fig. 7.1** *k*-means and single linkage hierarchical clustering of two spirals

### 1. Distance-Based Methods:

The problem at hand involves finding groups of tourists with similar activity patterns during their vacations. A fictitious dataset (Table 7.2) is provided, indicating the percentage of time seven individuals spend on BEACH, ACTION, and CULTURE activities. Each person has their own preferences. The goal is to perform market segmentation by grouping tourists with similar vacation activity patterns.

For instance, Anna and Bill share the exact same profile and should be in the same segment. Michael stands out as he is the only one not interested in the beach, distinguishing him from the other tourists. To identify similar groups of tourists, a measure of similarity or dissimilarity is

needed, typically represented by a distance measure in mathematical terms. This distance measure allows for quantifying the similarities or differences between individuals' activity patterns and facilitating the process of grouping them into segments.

## 2. Hierarchical Methods :

Hierarchical clustering methods are intuitive for grouping data as they mimic how humans would approach the task of dividing a set of observations (consumers) into groups (segments). Divisive hierarchical clustering starts with the complete dataset and splits it into two segments, repeating the process until each consumer has their own segment. Agglomerative hierarchical clustering begins with each consumer as a separate segment and gradually merges the closest segments until the entire dataset forms one large segment.

Both approaches result in a sequence of nested partitions, ranging from one group (segment) to n groups (segments). These partitions are nested because each partition with  $k+1$  groups is obtained by splitting one group from the partition with  $k$  groups. Various algorithms have been proposed for both strategies, with Lance and Williams' framework serving as a unifying framework for agglomerative clustering.

Standard implementations of hierarchical clustering perform optimal steps in each iteration, resulting in a deterministic algorithm. There is no random component, meaning that applying the hierarchical clustering algorithm to the same dataset will yield the exact same sequence of nested partitions every time.

Overall, hierarchical clustering provides an intuitive approach to market segmentation, allowing for the division of data into groups based on similarities and dissimilarities between consumers.

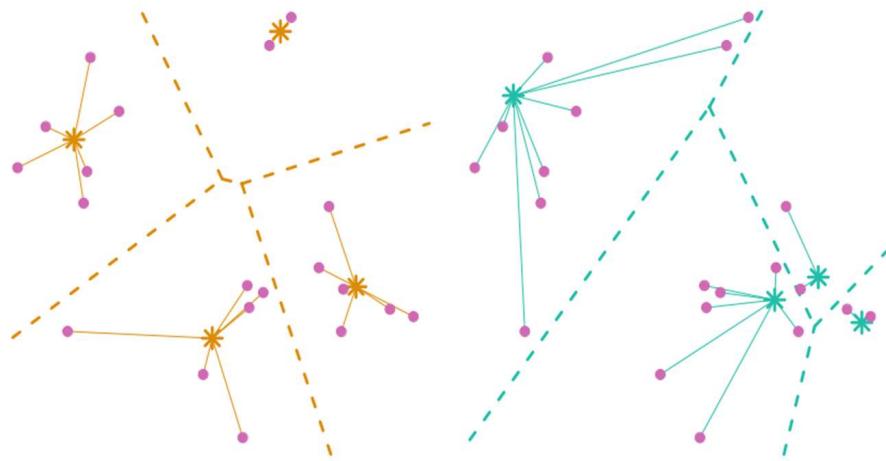
Hierarchical clustering methods are suitable for small data sets, but for larger data sets, single partition clustering algorithms are more appropriate. These algorithms reduce the number of distance calculations and allow for specific optimization towards extracting a fixed number of segments, rather than building and cutting dendograms.

3. Partitioning Methods : A partitioning clustering algorithm aiming to extract five market segments, in contrast, would only have to calculate between 5 and 5000 distances at each step of the iterative or stepwise process (the exact number depends on the algorithm used). In addition, if only a few segments are extracted, it is better to optimise specifically for that goal, rather than building the complete dendrogram and then heuristically cutting it into segments
4. Hybrid Approaches: Several approaches combine hierarchical and partitioning algorithms in an attempt to compensate the weaknesses of one method with the strengths of the other. The strengths of hierarchical cluster algorithms are that the number of market segments to be extracted does not have to be specified in advance, and that similarities of market segments can be visualised using a dendrogram.
5. Model-Based Methods: Model-based methods offer several advantages over distance-based methods. They allow for a more flexible and nuanced representation of the underlying market structure. By estimating model parameters, such as segment means, variances, or probabilities, these methods provide insights into the characteristics and behavior of different market segments. Additionally, model-based approaches can incorporate covariates and capture dependencies among variables, leading to more accurate and comprehensive segment profiles.

6. Finite Mixtures of Regressions : Finite mixtures of distributions are similar to distance-based clustering methods and – in many cases – result in similar solutions. Compared to hierarchical or partitioning clustering methods, mixture models sometimes produce more useful, and sometimes less useful solutions

k-Means and k-Centroid Clustering Neural Gas and Topology Representing Networks  
“Improved” k-Means

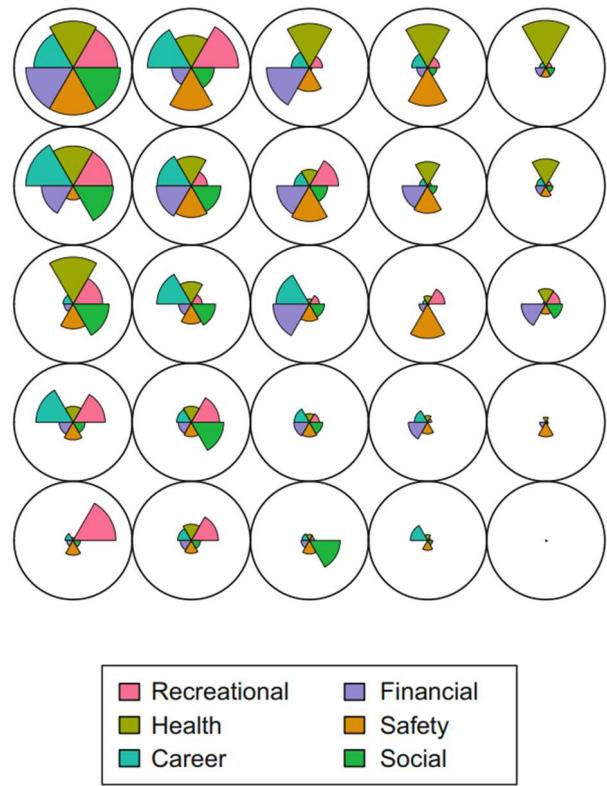
## Hard Competitive Learning



**Fig. 7.15** Examples of good (*left*) and bad (*right*) starting points for  $k$ -means clustering

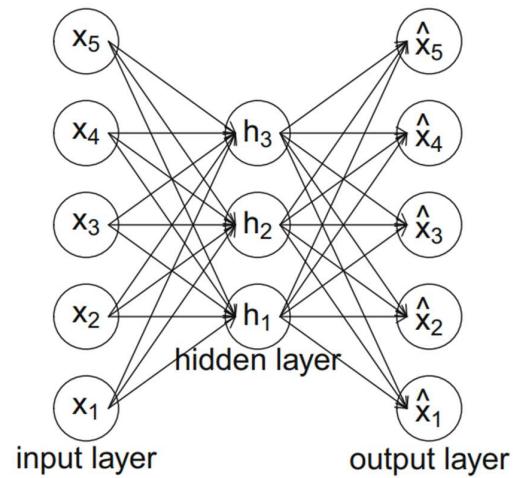
## Self-Organising Maps

**Fig. 7.17**  $5 \times 5$  self-organising map of the tourist risk taking data set



## Neural Networks

**Fig. 7.18** Schematic representation of an auto-encoding neural network with one hidden layer



## Step 6: Profiling Segments

The profiling step in market segmentation analysis is crucial for understanding the resulting market segments, particularly when data-driven segmentation is employed. Profiling involves characterizing and describing each market segment based on the segmentation variables used.

In commonsense segmentation, where predefined segments are based on intuitive criteria like age groups, the profiling step may not be necessary as the characteristics of the segments are already known. For example, if age is used as a segmentation variable, the resulting segments will naturally be age groups.

However, in data-driven segmentation, the defining characteristics of the market segments are unknown until after the analysis of the data. Users of the segmentation solution may have decided to extract segments based on consumer benefits or other factors. Profiling helps identify the defining characteristics of each market segment and compares them to other segments.

During the profiling stage, multiple alternative market segmentation solutions are examined, especially when no natural segments exist in the data. This is important when a reproducible or constructive segmentation approach is required. Effective profiling serves as the foundation for correctly interpreting the resulting segments, which is critical for making informed strategic marketing decisions.

Data-driven market segmentation solutions can be challenging to interpret. Managers often struggle to understand and interpret the segmentation results accurately. Studies have shown that marketing managers may face difficulties in comprehending data-driven segmentation solutions. Proper profiling helps overcome these challenges and enables managers to grasp the implications of the segmentation analysis effectively.

In summary, profiling plays a vital role in market segmentation analysis, particularly in data-driven segmentation. It involves characterizing and comparing market segments based on segmentation variables, enabling accurate interpretation of the results and facilitating sound strategic marketing decisions.

## ***Step 7: Describing Segments***

Segment profiling in market segmentation analysis involves understanding the differences in segmentation variables across market segments. Segmentation variables are chosen early in the analysis process, both conceptually in Step 2 (specifying the ideal target segment) and empirically in Step 3 (data collection). These variables serve as the basis for extracting market segments from the collected data.

Step 7, describing segments, is similar to the profiling step. The main difference is that the variables examined in Step 7 are not used to extract market segments but are additional information available about segment members. Describing segments involves crossing the market segments with other variables such as psychographic, demographic, socio-economic variables, media exposure, and specific product and brand attitudes.

For example, in a data-driven market segmentation analysis using the Australian travel motives data set, profiling would involve investigating differences between segments regarding the travel motives themselves. The profiles would show how each segment varies in terms of their travel motives. On the other hand, segment description would use additional information such as age, gender, past travel behavior, preferred vacation activities, media use, information sources during vacation planning, and expenditure patterns.

Accurate and detailed segment descriptions are crucial for gaining insights into the nature of the segments and developing a customized marketing mix. It enables marketers to understand the characteristics and preferences of each segment and tailor their marketing strategies accordingly. For instance, if segment 4 is identified as caring about nature, segment description can reveal information such as their age, income level, vacation frequency, information sources, and communication preferences. This knowledge helps in developing targeted and effective marketing approaches for segment 4.

Segment descriptions can be analyzed through descriptive statistics, visualizations, or inferential statistics. While the marketing literature traditionally relies on statistical testing and tabular presentations of differences in descriptor variables, visualizations make segment descriptions more user-friendly and accessible.

In summary, segment profiling and description are essential steps in market segmentation analysis. Profiling focuses on understanding differences in segmentation variables across market segments, while description incorporates additional information about segment members to provide a comprehensive picture of each segment. Accurate segment descriptions are vital for developing customized marketing strategies and effectively targeting specific segments.

## **Step 8: Selecting the Target Segment(s)**

Step 8 of market segmentation analysis is the stage where the decision is made regarding which market segment or segments to target. This decision is strategic and has long-term implications for the organization's performance. It signifies the commitment to a specific segment or segments.

After a global market segmentation solution is chosen, typically at the end of Step 5, several segments are available for detailed inspection. These segments are profiled in Step 6 and described in Step 7. In Step 8, the focus shifts to selecting one or more market segments for targeting. The segmentation team can refer back to the outcomes of Step 2, where knock-out criteria for market segments were established and segment attractiveness criteria were identified and weighted based on their importance to the organization.

Ideally, the knock-out criteria have already been applied in previous steps. For example, in Step 6, it would have become apparent if a market segment is not large enough, not homogeneous, or lacks distinctiveness. In Step 7, during detailed segment description using descriptor variables, it would have become evident if a market segment is not identifiable or reachable. Additionally, it would have become clear in both Steps 6 and 7 if a market segment has needs that the organization cannot satisfy.

Nevertheless, it is important to double-check that all the market segments under consideration in Step 8 meet the knock-out criteria. Once this is ensured, the remaining segments' attractiveness and the organization's relative competitiveness for these segments need to be evaluated. This evaluation involves asking two categories of questions:

Which market segment(s) does the organization most prefer to target and commit to? Which organizations offering the same product would each segment prefer to buy from? How likely is it that the organization would be chosen by each segment? How likely is it that each segment would commit to the organization? Answering these questions forms the basis of the target segment decision.

To evaluate market segments and assess their attractiveness and organizational competitiveness, decision matrices are commonly used. These matrices visually represent the relative attractiveness of segments and the organization's competitiveness in each segment. Various versions of decision matrices have been proposed, such as the Boston matrix, General Electric/McKinsey matrix, directional policy matrix, and market attractiveness-business strength matrix. The specific matrix chosen depends on the segmentation team's preferences and what best facilitates decision-making.

In the segment evaluation plot, which is a generic example provided in the text, segment attractiveness is plotted along the x-axis, and relative organizational competitiveness is plotted along the y-axis. Segments are represented as circles, and the size of the circles can reflect additional criteria such as contribution to turnover or loyalty.

To determine the attractiveness value of each segment, the segmentation team needs to assign a value for each attractiveness criterion specified in Step 2. These values are derived from the grouping, profiling, and description of each market segment in Steps 6 and 7. The segment's overall attractiveness is calculated by multiplying the weight of each attractiveness criterion (established in Step 2) by its assigned value and summing up these weighted values.

The same procedure is followed to evaluate relative organizational competitiveness. The criteria used by consumers to select between alternative offers in the market are identified, and each segment is assessed based on these criteria.

By using decision matrices and evaluating segment attractiveness and organizational competitiveness, the segmentation team can make an informed decision on which target segment or segments to select. This decision is based on the segments' attractiveness to the organization and the organization's competitiveness within each segment.

## ***Step 9: Customising the Marketing Mix***

Marketing has evolved over time, initially being perceived as a toolbox for selling products. Marketers would mix various marketing elements to achieve optimal sales results. In the early days, Borden (1964) proposed 12 ingredients or tools for marketers, including product planning, packaging, distribution channels, pricing, personal selling, branding, display, advertising, promotions, servicing, fact finding, and analysis. While different versions of the marketing mix have been proposed, the most common understanding is the 4Ps: Product, Price, Promotion, and Place, as introduced by McCarthy (1960).

Market segmentation, however, is not an isolated marketing strategy but rather closely intertwined with other strategic marketing areas, particularly positioning and competition. The segmentation process is often considered part of the segmentation-targeting-positioning (STP) approach (Lilien and Rangaswamy 2003). This approach suggests a sequential process, starting with market segmentation, followed by targeting, and finally positioning.

Market segmentation involves extracting, profiling, and describing segments within the market. Targeting entails evaluating the segments and selecting a specific target segment. Positioning focuses on differentiating the organization's product from competitors' products and aligning it with the needs of the chosen segment.

Viewing market segmentation as the initial step in the segmentation-targeting-positioning approach is valuable because it emphasizes the interconnectedness of segmentation with other strategic decisions. However, it's important not to strictly adhere to the sequential nature of the process. It may be necessary to move back and forth between segmentation and targeting before making a long-term commitment to one or a few target segments. Flexibility and adaptation based on ongoing evaluation and analysis are essential in the decision-making process.



**Fig. 11.1** How the target segment decision affects marketing mix development

## Step 10: References

The process of market segmentation analysis does not end with the selection of a target segment and the development of a customized marketing mix. It is an ongoing strategic decision process that requires continuous evaluation and monitoring. There are two key tasks that need to be performed on an ongoing basis:

Evaluation of the segmentation strategy: After implementing the segmentation strategy and customizing the marketing mix, it is important to assess its effectiveness. The primary desired outcome for most organizations in the short term is increased profit. For non-profit

organizations, it may be other performance criteria such as the amount of donations raised or the number of volunteers recruited. These measures should be continuously monitored to assess the success of the segmentation strategy. Additionally, the long-term effectiveness of targeted positioning can be evaluated through tracking studies, which provide insights into how the organization is perceived in the marketplace. If the segmentation strategy is successful, the organization should be perceived as particularly good at satisfying the needs of the target segment, leading to a competitive advantage.

Ongoing monitoring of the market: The market is not static, and various factors such as changing consumer preferences, competitive actions, and environmental changes can impact the effectiveness of the segmentation strategy. Therefore, it is essential to have a process of ongoing monitoring in place. This monitoring can range from regular reviews by the segmentation team to highly automated data mining systems that alert the organization to any relevant changes in the size or nature of the target segment. By continuously monitoring the market, organizations can stay proactive and make timely adjustments to their segmentation strategy as needed.

It is important to note that market segments can evolve over time. Factors such as changes in consumer behavior, the introduction of new products, and disruptive innovations can lead to shifts in market segments. Therefore, it is crucial to conduct stability analysis to determine the baseline stability of market segments. Only with this information can the changes over time be correctly interpreted and appropriate actions be taken. Ignoring dynamics in market segments can result in customizing marketing efforts to segments that no longer exist or have changed their expectations and behaviors.

In summary, market segmentation analysis is an ongoing process that requires continuous evaluation, monitoring, and adaptation. By evaluating the effectiveness of the segmentation strategy and monitoring the market for changes, organizations can maintain a competitive advantage and better meet the evolving needs of their target segments.

## Case Study

1. step 4 & 5 : Utkrisht Mallick - <https://github.com/utkrisht14/Feynn-Labs-/blob/main/McDonald%20Segmentation%20Step-4%20%26%205.ipynb>  
[\(https://github.com/utkrisht14/Feynn-Labs-/blob/main/McDonald%20Segmentation%20Step-4%20%26%205.ipynb\)](https://github.com/utkrisht14/Feynn-Labs-/blob/main/McDonald%20Segmentation%20Step-4%20%26%205.ipynb)
2. Step 6 : Chevulamaddi Rahul - [https://github.com/ChevulamaddiRahul/feynn-lab-step-\\_6](https://github.com/ChevulamaddiRahul/feynn-lab-step-_6)  
[\(https://github.com/ChevulamaddiRahul/feynn-lab-step-\\_6\)](https://github.com/ChevulamaddiRahul/feynn-lab-step-_6)
3. Step 7,8 & 9 : Ardra p - <https://github.com/ardranijesh/Market-Segmentation>  
[\(https://github.com/ardranijesh/Market-Segmentation\)](https://github.com/ardranijesh/Market-Segmentation).