MARKET SEGMENTATION ANALYSIS(Step 1-3,6)

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Marketing's goal is to connect customers' true requirements and wants with suppliers' offers that are best suited to meet their wants and needs. A company's marketing planning activities are driven by this matching process, which is advantageous to both suppliers and customers.

Strategic marketing planning plays an important role since it establishes an organization's long-term course. It involves assessing the wants and needs of the customer, organisational strengths and weaknesses, and potential external opportunities and threats. An organisation can determine its strengths, weaknesses, opportunities, and threats using a SWOT analysis, which can aid in the development of the strategic marketing plan.

Decisions on which consumers to target (segmentation and targeting) and what representation of the company to project in the market (positioning) can be made once the strategic marketing plan has been defined. Because they set the organization's long-term course and are difficult to change, these choices are crucial. Only once these choices have been taken can the tactical marketing plan be put into action.

The tactical marketing plan involves creating and altering the product to satisfy the target segment's needs and desires, establishing the price in consideration of cost, competition, and the target segment's willingness to pay, choosing the best distribution channels to reach the target segment, and communicating and promoting the offer in a manner that is most appealing to the target segment. The strategic marketing plan is the only thing that the tactical marketing plan depends on; nevertheless, the opposite is also true.

Benefits of market segmentation:

- Enables businesses to target certain customer groups with their marketing initiatives, thus enhancing the success and efficiency of marketing campaigns.
- Assists businesses in discovering and comprehending the distinct requirements and preferences of various consumer groups, enabling them to create goods and services that more effectively satisfy those requirements.
- As consumers feel that their particular demands are being satisfied, it may boost customer satisfaction and loyalty.
- Enables businesses to follow consumer response patterns to more precisely assess the effectiveness of their marketing initiatives.

Costs of market segmentation:

- The research required to recognise and comprehend various consumer segments can be time- and money-consuming.
- Because businesses must create unique marketing plans and campaigns for each category, marketing initiatives may become more difficult.
- As businesses fight for the interest and allegiance of customers within particular segments, it may result in more rivalry within those segments.

Variables of market segmentation:

- Demographic segmentation: the division of the customer population into groups according to attributes including age, gender, income, education, and occupation.
- **Psychographic segmentation:** the division of the consumer population into groups according to personality characteristics, values, attitudes, and interests.
- **Behavioural segmentation:** which classifies customers into groups according to their actions and how they engage with goods and services.
- Geographic segmentation: putting customers into categories according on where they are located.

Segmentation based on the choice of Segmentation variables:

Variable	Dimensions	Sample survey questions	
Age	Unidimensional	How old are you?	
Gender	Unidimensional	What is your gender identity?	
Country of	Unidimensional	Where do you live?	
Origin			
Prior Purchase	Unidimensional	Have you purchased our service before?	

Benefits sought	Multidimensional	When booking flights online, do you care		
		about		
		Convenience		
		Value for money		
		Speed		
		Ability to compare fares		
Motives	Multidimensional	When choosing a vacation, do you		
		 Rest and relax 		
		 Explore new things 		
		 Meet new people 		
		 Learn about other cultures 		
		Getaway from everyday routine		

Data driven Market segmentation approach:

	Common	Common	Data driven/	Data driven/
	sense/	sense/ data	Common sense	data driven
	Common	driven	segmentation	segmentation
	sense	segmentation		
	segmentation			
Primary	Commonsense	Commonsense	Data driven	Data driven
segmentation	e.g. age,	e.g. age,	e.g.expenditure,	e.g. travel
variables	country of	country of	vacation	motives,
	origin	origin	activities	expenditures
Secondary	Commonsense	Data driven	Commonsense	Data driven
segmentation	e.g. gender,	e.g. travel	e.g. Gender.	e.g. vacation
variables	seeking	motives,	Family status	activities,
	adventure or	vacation		information
	not	activities		sources used
Example	Young female tourists	Mature aged who play golf, enjoy winetastings and fine-dining	Tourists who engage in many activities that attract entrance fee like theme park, zoo	Tourists who want to learn about the culture and local people, who attend local cultural events and food festivals

Market Segmentation Analysis Step by step:

As indicated in the following picture, a market segmentation analysis can be performed utilising a ten-step methodology. The method works with both intuitive segmentation strategies and data-driven segmentation strategies. Assessing the advantages and disadvantages of implementing a segmentation strategy is the first step before choosing whether to move on. Prior to gathering actual information, the organisation then establishes the desired market segment characteristics. Before market segments are extracted, profiled, and thoroughly characterised, the data is analysed. Following the selection of one or more target segments, the organisation creates a unique marketing mix and assesses the effectiveness of the plan. It is vital to keep an eye out for any potential changes in the segments' size or characteristics that can call for adjusting the segmentation method.

STEP 1 - Deciding (not) to segment

Is the market suitable? Can you make a long-term commitment?

Is the market suitable?
Can you make a long-term commitment?

STEP 2 - Specifying the ideal target segment

What would your ideal target segment look like?

What would your ideal target segment look like?

STEP 3 - Collecting data

Collect data

(segmentation variable and descriptor variables)

Collect data (segmentation and descriptor variables)

STEP 4 - Exploring data

Explore data, pre-process if required.

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STEP 5 - Extracting segments

Split consumers into segments using the segmentation variable. Use distance-based, model-based or hybrid algorithms.

STEP 6 - Profiling segments

Determine key features of the extracted market segments.

STEP 7 - Describing segments

Describe segments in detail.

Describe segments in detail.

STEP 8 - Selecting (the) target segment(s)

Evaluate segments and select target segment(s).

Evaluate segments and select target segment(s).

STEP 9 - Customising the marketing mix

Develop a customised marketing mix

Develop a customised marketing mix.

STEP 10 - Evaluation and monitoring

Evaluate success, monitor changes.

Evaluate success, monitor changes.

STEP-1: Deciding (not) to Segment:

Implications of Committing to Market Segmentation

The organisation must make a long-term commitment to the segmentation strategy in order to successfully pursue a market segmentation strategy. This commitment encompasses the organization's readiness and capacity to invest significantly and make significant changes, such as creating new products, updating existing ones, altering prices and distribution methods, and engaging the market. These adjustments may also have an impact on the organization's internal structure, which might need to adapt to, say, target various market segments. The top executive level must make the choice to look into the possibility of a market segmentation plan, and all organisational units must be informed of it consistently and methodically.

Implementation Barriers

A market segmentation strategy's successful execution could run into a number of obstacles. A lack of leadership, proactive championing, dedication, and involvement in the market segmentation process are among the first category of challenges that senior management faces. Lack of resources, either for the initial market segmentation investigation or for the long-term implementation of a market segmentation plan, can also thwart market segmentation success.

The second set of barriers is related to organisational culture and includes short-term thinking, resistance to change, lack of creativity, lack of sharing of information and insights across organisational units, lack of market or consumer orientation, and office politics. Major roadblocks can also include a lack of competent data managers and analysts, institutionalised marketing functions, or qualified marketing experts within the organisation.

The organisation may also encounter objective limitations, such as a lack of funding or the inability to implement the necessary structural adjustments. The lack of clear objectives for the market segmentation exercise, poor planning, a lack of structured processes to lead the team through every step of the market segmentation process, a lack of responsibility allocation, and time constraints are examples of process-related barriers.

Checklist

Task	Who is responsible?	Completed?
Ask if the organisation's culture is market-oriented. If yes, proceed. If no, seriously consider not to proceed.		
Ask if the organisation is genuinely willing to change. If yes, proceed. If no, seriously consider not to proceed.		
Ask if the organisation takes a long-term perspective. If yes, proceed. If no, seriously consider not to proceed.		
Ask if the organisation is open to new ideas. If yes, proceed. If no, seriously consider not to proceed.		
Ask if communication across organisational units is good. If yes, proceed. If no, seriously consider not to proceed.		
Ask if the organisation is in the position to make significant (structural) changes. If yes, proceed. If no, seriously consider not to proceed.		
Ask if the organisation has sufficient financial resources to support a market segmentation strategy. If yes, proceed. If no, seriously consider not to proceed.		
Secure visible commitment to market segmentation from senior management.		
Secure active involvement of senior management in the market segmentation analysis.		
Secure required financial commitment from senior management.		
Ensure that the market segmentation concept is fully understood. If it is not: conduct training until the market segmentation concept is fully understood.		
Ensure that the implications of pursuing a market segmentation strategy are fully understood. If they are not: conduct training until the implications of pursuing a market segmentation strategy are fully understood.		
Put together a team of 2-3 people (segmentation team) to conduct the market segmentation analysis.		
Task	Who is responsible?	Completed?
Ensure that a marketing expert is on the team.		
Ensure that a data expert is on the team.		
Ensure that a data analysis expert is on the team.		
Set up an advisory committee representing all affected organisational units.		
Ensure that the objectives of the market segmentation analysis are clear.		
Develop a structured process to follow during market segmentation analysis.		
Assign responsibilities to segmentation team members using the structured process.		
Ensure that there is enough time to conduct the market segmentation analysis without time pressure.		

STEP-6: Exploring Data:

This step can be further broken down to smaller steps. Data cleaning is a crucial step in the data analysis process that involves identifying and correcting or removing errors, inconsistencies, and inaccuracies in the data.

Data Cleaning

Handling missing values:

Identify the variables with missing values and assess the percentage of missing values for each variable. If the missing values are systematic or missingness is related to the outcome variable, imputation techniques can be used to estimate the missing values. Common imputation methods include mean imputation, median imputation, mode imputation, regression imputation, or using advanced techniques like multiple imputation.

Handling duplicate values:

Remove the duplicate rows or observations from the dataset to avoid biasing the analysis. It is essential to determine the criteria for identifying duplicates and decide whether to keep the first occurrence or the last occurrence of a duplicated record.

Data transformation:

Convert categorical data into numeric data using techniques such as one-hot encoding, label encoding, or ordinal encoding, depending on the nature of the categorical variables and the requirements of the analysis.

Handling outliers:

Identify outliers by visualizing the data using techniques like box plots, scatter plots, or histograms, or by using statistical methods such as the z-score or modified z-score approach.

Data integration:

This step involves combining multiple datasets into a single dataset for analysis. It may include merging data from different sources or databases.

Data formatting and labeling:

format the data in a consistent manner, such as using consistent date formats or units of measurement. Also need to label the data appropriately, such as labelling variables or features to make them more understandable.

Quality control:

Finally, you need to perform quality control checks on the cleaned dataset to ensure that the data is accurate, consistent, and ready for analysis. This may involve running statistical tests or visualizing the data to identify any remaining issues.

Descriptive Analysis

Data summarization:

This involves summarizing the key features of the dataset, such as the mean, median, mode, range, standard deviation, and variance.

Data visualization:

This step involves creating graphical representations of the data to identify patterns, trends, and anomalies. Examples of visualization techniques include scatter plots, histograms, box plots, and heat maps.

Pre-processing

Categorical variables:

Categorical variables can be transformed into equally sized intervals or encoded using label, one-hot, or dummy encoding.

Numerical variables:

Numerical variables can be standardized to balance their influence on segmentation or analysis methods.

Principal Components Analysis

PCA (Principal Component Analysis) is a popular technique used for dimensionality reduction and feature extraction from high-dimensional datasets. It is a mathematical algorithm that transforms a set of correlated variables into a new set of uncorrelated variables, called principal components. The steps involved in PCA are:

Standardization:

The data is standardized by subtracting the mean and dividing by the standard deviation to ensure that all variables are on the same scale.

Calculation of Covariance Matrix:

The covariance matrix is computed for the standardized dataset. The covariance matrix is a square matrix that contains the covariances between all pairs of variables in the dataset.

Eigenvector Decomposition:

The eigenvectors and eigenvalues of the covariance matrix are computed. The eigenvectors are the directions in which the data varies the most, while the eigenvalues represent the amount of variation explained by each eigenvector.

Selection of Principal Components:

The principal components are selected based on the eigenvalues. The first principal component is the eigenvector that explains the most variation in the dataset, the second principal component is the eigenvector that explains the most variation remaining after the first principal component has been removed, and so on.

Projection of Data:

The data is projected onto the new set of variables, or principal components, to obtain a reduced dimensional representation of the original dataset.