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Overview

One purpose of marketing is to identify customers' needs and consequently determine the best way to meet those needs. However, it is nearly impossible for organizations to satisfy every customer's unique needs. Instead, it is more efficient to allocate resources to target specific groups of customers. Because customers' needs vary, marketers must identify common needs within similar groups of customers and recognize distinctive needs between different groups of customers. This understanding of the market is the basis for Gelb's Growth PlayBook.

As one of the more well-known research techniques, market segmentation is an indispensible step for implementation of a successful marketing strategy. The true value of market segmentation lies in differentiating customers into groups so as to effectively reach subsets of customers. Market segmentation strives to identify groups of customers who share commonalities yet whose characteristics are distinguishable from other customer groups.

It is extremely helpful to profile each segment with classification information and assign each segment a descriptive nickname, e.g., fighter, innovator, etc. Moreover, each segment should be profiled in detail with regard to shared characteristics by individual members within the segment. This profiling process helps researchers validate whether segment solutions align with market reality as well as describe each segment in a comprehensive and insightful manner.

In addition to the profiling process, there are other general rules of thumb to help validate segmentation solutions. Segments should be evaluated using the following criteria:

- Identifiable and distinctive: specific needs within groups should be unique and unambiguous
- Meaningful: market size should be large enough for organizations to pursue from an economic standpoint
- Measurable: segments should be clearly identified and described so as to prioritize segments
- Reachable: segments should be accessible so that organizations can effectively communicate their messages about products or services
- Stable: segments should be stable enough to justify marketing efforts

The next challenge in segmentation is to prioritize segments based on market attractiveness and the organization's competitive advantage. Generally, it is neither efficient nor cost-effective to go after each distinctive segment. The market segment organizations decide to pursue should be in line with their strategic objectives and vision.

Benefits of Segmentation

The purpose of segmentation is to concentrate marketing energy and focus on a subset of customers to gain a competitive advantage in the marketplace. Organizations will gain significant benefits if they gain a solid grasp of who their customers are, how groups of

customers differ, and how to successfully deliver their message. How segmentation could help organizations in realizing business objectives can be seen in the following aspects:

- Focus limited resources on the most profitable and promising segments
- Improve communication between sellers and buyers
- Allow organizations to find a strategic position and identify growth opportunities
- Monitor changes in existing segments and identify the emergence of new segments

Segmentation Methods

The benefits of segmentation are clear, but the real challenge is to determine the best grouping solution. Market segmentation is a complex process of identifying and targeting groups of individuals who are similar to one another. There are different methods for segmentation: by geographic profile, by demographic profile (for consumer markets) or by firmographic profile (for B-to-B markets), by customers' attitudes or perception, and so on.

Additionally, we have to keep in mind that segmentation methods are characterized differently from consumer markets to B-to-B markets. The following showcase different segmentation methods between consumer markets and B-to-B markets.

Basic Consumer Market Segmentation Methods

Geographic Demographic Psychographic Segmentation Segmentation Segmentation •Geographic region Age Attitudes •Size of metropolitan Gender Perception/opinion area • Family size Value Population Education Lifestyle Income Occupation Ethnicity and nationality Social class

Basic B-to-B Market Segmentation Methods

Geographic Segmentation

- •Geographic location
- •Language
- Population

Firmographic Segmentation

- Company size
- Industry
- Product line
- Market share
- Revenue
- Decision-making unit
- •Purchase criteria
- •Usage rate

Psychographic Segmentation

- •Business objective
- •Future vision
- Decision- making process
- •Value and perception

Segmentation Analytical Techniques

Let's imagine your team consulted with knowledgeable experts and discussed ideas with all stakeholders within your organization. After thorough consideration in strategic planning, your team has defined a clear business objective. The decision was made to conduct market segmentation research so as to accomplish this objective. Qualitative research has been conducted and insightful market information was derived from the preliminary qualitative analysis. Certain assumptions and hypotheses have been developed. Then, a well-constructed quantitative questionnaire has been crafted and put into an online survey. After weeks of field work, data from a significant sample of qualified respondents have been collected. Now, one question arises for researchers: which are the appropriate techniques to use for market segmentation?

There are different approaches for segmentation. In general, all segmentation is based upon the analysis of correlation between all the characteristic variables which have been identified in the survey. Again, the theme for segmentation is to form groups that express similar characteristics while maximizing the distinctiveness between groups. The most widely used techniques for segmentation in marketing research are factor analysis, hierarchical clustering analysis and K-means clustering analysis.

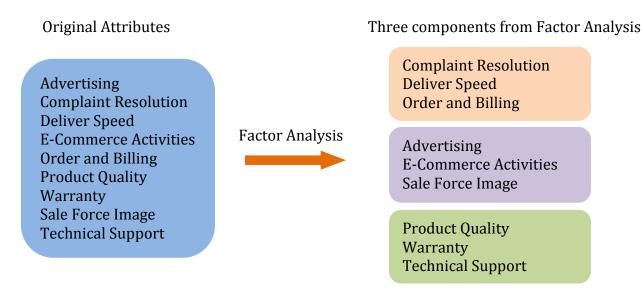
Factor Analysis

Factor analysis is a multivariate analysis technique and is used when researchers need to identify and understand among a large number of attributes the common underlying factors which fundamentally contribute to forming a specific market segment. It attempts to reduce a large number of numeric attribute variables into small subsets of groups based on the pattern of correlations within a set of observed variables. This procedure leads to forming groups of attributes variables that present a high level of commonality. The number of factors is determined while considering research industry norms and using multiple statistics tools. For

example, variance explained for each factor is considered and all factors whose eigenvalues exceed 1 are usually retained in the factor solution. Once the number of factors has been determined, each attribute is given a score for each factor. Highly correlated attributes are combined into one particular factor. Summated scale approach is used to calculate average scores for similar attributes group for each respondent. Summated scale scores serve as the base for clustering analysis which requires minimum multicollinearity among the clustering variables. If highly correlated attributes are included in clustering analysis, the segment solution will be heavily skewed towards those correlated attributes.

EXAMPLE:

A manufacturing company wanted to understand what underlying perceptions customers have of its products and services among several attributes. Factor analysis was performed, three factors which have an eigenvalues value greater than 1 were retained and those three factors have a total explained variance of 90 percentage. In short, factor analysis revealed the underlying structure among these attributes and these three factors represented 90% of the total variance. Three summated scale scores for each respondent were computed by taking the average scores for those attributes within a particular factor component. Each respondent could be assigned to the factor group that has the highest score and therefore the respondent's membership information could be provided. Furthermore, the results from factor analysis warrant the appropriate use of clustering analysis if needed.



Hierarchical Clustering

Hierarchical clustering analysis attempts to identify homogeneous groups of cases (or variables) based on selected characteristics. To do so, a procedure is used, that starts with each case (or variable) in a separate cluster and combines clusters with nearest distance until only one cluster is left. Hierarchical clustering is a treelike process appropriate for smaller data sets.

Raw variables can be analyzed, or, if attribute variables contain different scales, you can choose from a variety of standardizing transformations. Distance or similarity measures are generated during the procedure. Statistics and visual charts, such as dendrograms, are displayed at each stage to help you select the best solution.

EXAMPLE:

A healthcare service provider endeavored to identify and assess patient attitudes and preferences regarding its service. The provider also sought to learn how different healthcare services would appeal to distinctive patient segments. Hierarchical cluster analysis was performed and each respondent was grouped based on selected attitudinal attributes. Dendrogram and other statistics indicated that there were distinguishable patient segments. All segments were further profiled with demographic and behavioral information. Then segments were prioritized based on accessibility and attractiveness. This insightful information was used in determining which patient segments were ideal for the healthcare provider to target.

K-Means Clustering

K-means clustering analysis attempts to identify homogeneous groups of respondents based on selected characteristics. Unlike other segmentation techniques, K-means clustering requires that researchers specify in advance the desired number of clusters. Then, each respondent is assigned to the closest cluster based on respondent's pattern of scores. After all respondents are assigned, centers for each cluster are recomputed. This procedure repeats until there is no more change in group assignment and the distance between clusters is maximized.

Information about cluster membership, cluster distance, and final cluster centers are provided during the process. K-means is mostly used for datasets with a large number of respondents.

EXAMPLE:

A national cancer research center previously conducted qualitative research about current patients, during which patients and physicians empowerment in decision process was examined. The hypothesis that the market could be divided into "Non-Chooser" and "Chooser" segment was made according to the pattern of patients' decision-making process. In order to validate this hypothesis, research used "2" as initial number of groups and performed K-means cluster analysis on selected variables. Detailed clustering information proved the validity and reliability of this hypothesis. Researchers created full profiles for these two distinctive segments with respect to information on demographic, values and perceptions, preferences and so on. The segmentation process enabled this cancer research center to effectively target patients in their marketing communication efforts.

Hybrid Clustering (Hierarchical and K-mean)

This hybrid method requires performing hierarchical clustering first and then uses the numbers of groups from hierarchical clustering results as starting seeds in K-mean Clustering.

This procedure yields the benefits of two different clustering analysis techniques and is considered an ideal analytical tool for segmentation under most circumstances.

Cluster Analysis Limitation

The purpose of cluster analysis is to reduce a large dataset to meaningful subgroups of individuals or objects. This is a great tool for market segmentation. However, the highly exploratory nature of cluster analysis calls for strong framing and conceptual support. When arriving at a conclusion, careful consideration should be given to the following:

- Past research and theory
- Pre-analysis hypothesis
- Managerial judgment
- And most importantly, interpretability

Segment Validation and Profiling

Oftentimes researchers can be too engrossed in the nitty-gritty details of the complex cluster analysis and neglect the helpfulness of simple cross-tabulations. Researchers should use the determined segment solution to crosstab against original characteristic variables and demographic information (some researchers may even suggest crosstabs against all the other variables in the survey). This profiling process not only enables one to validate whether the solution make sense but also helps to further characterize each segment. As a result, researchers can paint a much clearer picture of each segment and provide an insightful description of potential customer groups.

Taking Action

Understanding your customers is an essential step toward a successful marketing strategy. If you share any of the below questions, then market segmentation solutions will help you gain the market information your organization needs.

- Question: How do customers differ by their geographic, demographic and psychographic profiles? Solution: Identify underlying characteristics that distinguish each market segment.
- Question: How can distinctive needs within each segment be satisfied? Solution: Identify optimal product or service attributes (both functional and emotional) that best appeal to segment members' needs.

- Question: Which market segments should organizations target in order to maximize profitability? Solution: Prioritize market segment entry based on segment attractiveness and organizations' competitive advantages.
- Question: How can effective messages be conveyed from sellers to buyers? Solution: Understand customers' behaviors, attitudes and perceptions so as to develop messaging that most appeal to buyers.

About Endeavor

Endeavor Management, is an international management consulting firm that collaboratively works with their clients to achieve greater value from their transformational business initiatives. Endeavor serves as a catalyst by providing pragmatic methodologies and industry expertise in Transformational Strategies, Operational Excellence, Organizational Effectiveness, and Transformational Leadership.

Our clients include those responsible for:

- Business Strategy
- Marketing and Brand Strategy
- Operations
- Technology Deployment
- Strategic Human Capital
- Corporate Finance

The firm's 40 year heritage has produced a substantial portfolio of proven methodologies, deep operational insight and broad industry experience. This experience enables our team to quickly understand the dynamics of client companies and markets. Endeavor's clients span the globe and are typically leaders in their industry.

Gelb Consulting Group, a wholly owned subsidiary, monitors organizational performance and designs winning marketing strategies. Gelb helps organizations focus their marketing initiatives by fully understanding customer needs through proven strategic frameworks to guide marketing strategies, build trusted brands, deliver exceptional experiences and launch new products.

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