### Market Segmentation BY SUNIL S

### Step 1:

### **Deciding on Segmentation**

Although Market segmentation had developed to be integral prat of successful business. The success depends on the Management involvement and the strategical intent on which the market segmentation is done. The sales play the major role in market segmentation.

Organization will have new modification in the roles and responsibilities because of the new initiative. Man power allocation, marketing, customer segmentation, working capital and many more.

Market research is the most important and the critical component of the market regimentation. It required survey which will have cost impact. Based on all the requirements the management need to decide whether they need to do segmentation or not.

### **Basic Cycle of research.**

**Observation**. Initial observations of a phenomena are made. This sparks an idea or a line of inquiry. Initial empirical data and research into existing information can be done.

**Induction.** A probable explanation of the observed phenomenon is proposed. Inductive reasoning is used to take the specific example from step one and infer a generalized explanation for it.

**Deduction**. A testable hypothesis is proposed that can support the explanation. Deductive reasoning is used to take the generalized explanation and make a specific prediction that can be tested and observed.

**Testing**. Quantitative and qualitative empirical data are gathered. The data is examined, often with statistical analysis. The results can support, refute or be neutral to the hypothesis. Because of the limits of empirical data and human perception, it is not said that the results prove or disapprove the hypothesis, only that they support or don't support it.

**Evaluation**. The reasoning, methodology and findings of the experiment are written down, and the conclusions of the researcher are presented. Information relating to any difficulties, challenges and limits of the test are also included. It may also include further possible avenues of research.

### Step 2:

### **Specifying the Ideal Target Segmentation**

The Segmentation is mainly on user input. Segmentation criteria determines how the segmentation works and the how it is going to evolve at the end. One set of evaluation criteria can be referred to as knock-out criteria. These criteria are the essential, non-negotiable features of segments that the organization would consider targeting. The second set of evaluation criteria can be referred to as

attractiveness criteria. These criteria are used to evaluate the relative attractiveness of the remaining market segments – those in compliance with the knock-out criteria.

### Step 3:

### **Collecting Data.**

Empirical data forms the basis of the both commonsense and data-driven market segmentation. Empirical data is used to identify or create market segmentation and later in the process describe these segments in detail. The type of collecting the data is a business decision. It can be based on the analysis of the past data of the company or be survey from market. If organization looking for a new segmentation, then market survey is the best way. If organization is looking for create a focus segmentation within the existing business the past data will be helpful.

Data for segmentation studies can move from a range of sources, such as survey studies, from observations from purchase data, or the individual purchase history of individual customers based on customer detail stored in system. Mostly data used in segmentation should reflect customer behavior. Wide range of sources should be used rather than default sources. It can be also from multiple sources not form single sources.

The components of the data can be decided based on the requirement.

### Geographic

Target customers based on a predefined geographic boundary.

Differences in interests, values, and preferences vary dramatically throughout cities, states, regions, and countries.

### **Demographic**

The process of dividing a market through variables such as age, gender, education level, family size, occupation, income, and more. This is one of the most wildly used strategies amongst marketers.

### **Psychographic**

Focus on the intrinsic traits the target customer has. Psychographic traits can range from values, personalities, interests, attitudes, conscious and subconscious motivators, lifestyles, and opinions.

### **Behavioral**

Break down the way customers go through their decision making and buying processes. Attitudes towards the brand, the way they use it, and their knowledge base are all behavioral examples.

Below are some of Quantitative methods and qualitative methods of collecting data which can be used.

# Quantitative methods Experiments Surveys Polls Causal-comparative research Correlational research Cross-sectional research

Longitudinal study

# Interviews Observation Textual analysis Case studies Focus groups (e.g., in market research)

**Qualitative methods** 

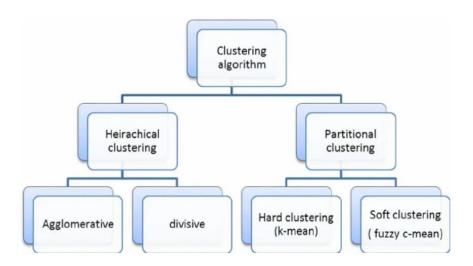
### Step 5:

### **Extracting Segments**

Data driven market segmentation is exploratory by nature. Customer data sets are not well structured, most information available will be incomplete or wrong information. Consumers come in all types and forms and data is scattered every were. Many segmentation methods used to extract market segment form cluster analysis.

A proper clustering technique need to be used based on the researcher need and the data type we are going to use. It is, therefore, important to explore market segmentation solutions derived from a range

of different clustering methods. It is also important to understand how different algorithms impose structure on the extracted segments. Below are the some of the methods used in AL.



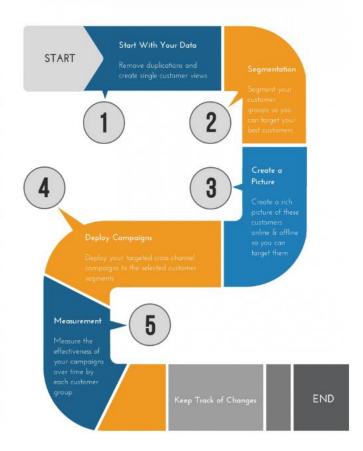
Step 6:

### **Profiling segments**

Identifying the key characteristics of the market segmentation is the most important process. Profiling the segments is to know the market segments resulting from the extraction step. Profiling is only required when data driven segmentation is used. Profiling consists of characterizing the market segments individually, but also in comparison to the other market segments.

At the profiling stage, we inspect a number of alternative market segmentation solutions. This is particularly important if no natural segments exist in the data, and either a reproducible or a constructive market segmentation approach has to be taken. Good profiling is the basis for correct interpretation of the resulting segments. Correct interpretation, in turn, is critical to making good strategic marketing decisions.

### THE FIVE ELEMENTS



Visualizations can be used for profiling complex data sets. Graphical representation and tabular representation the most used types. Visualizations 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 many alternative solutions. Selecting one of the possible solutions is a critical decision. Visualizations of solutions assist the data analyst and user with this task. A good way to understand the defining characteristics of each segment is to produce a segment profile plot. The segment profile plot shows – for all segmentation variables – how each market segment differs from the overall sample.

Segment separation can be visualized 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.

### Step 7:

### **Describing Segments.**

Segment profiling is about understanding differences in segmentation variables across market segments. We can use a wide range of charts to describe the segmentation. When describing differences between market segments in one single nominal or ordinal descriptor variable, the basis for all visualizations and statistical tests is a cross-tabulation of segment membership with the descriptor variable. Simple statistical tests can be used to formally test for differences in descriptor variables across market segments. The simplest way to test for differences is to run a series of independent tests for each variable of interest. The outcome of the segment extraction step is segment membership, the assignment of each consumer to one market segment. Segment membership can be treated like any other nominal variable. It represents a nominal summary statistic of the segmentation variables. Therefore, any test for association between a nominal variable and another variable is suitable.

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.