<h1 style="text-align:center">Project-2</h1>

Market Segmentation Using Mcdonald's data

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Summary on Market Segmentation Analysis

1 Introduction to Market Segmentation

Market Segmentation is a marketing strategy in which select groups of consumers are identified to improve market growth and fulfil customers' needs. Market segmentation enables businesses to highly focus various categories of consumers who recognize the full value of certain products and services based on their interest. Market segmentation is performed based on consumer's age, like, profession, sex and other factors. For example, an athletic footwear company mainly focus on long-distance runner and basketball player as it leads to very different advertisements. Hence, appropriate segmentation enables company to market its branding as per the categories of players. Aim of market segmentation is to minimize the risk of loss and increase revenue by targeting group of consumers to deliver the products to the market. This improves chance of gaining share of target market.

To improve company's revenue, marketing plan is made up of two components; a strategic and tactical marketing plan. A strategic plan is long-term direction plan towards growth but does not highlight short-term steps to achieve that goal. While, Tactical marketing plan is short-term direction plan. Tactical plan converts strategic plan into short term detailed plan to achieve goal. Strategic plan is where organization wants to be and

its goals. In opposite, Tactical plan is instructive step to reach to that goal. For example, a student can target result score which is long term plan – strategic plan and to achieve that student requires routine plan and effort – tactical plan.

1.1 Importance of Market Segmentation

Market segmentation has a number of benefits. At the most general level, market segmentation forces organisations to take stock of where they stand, and where they want to be in future. Market segmentation offers an opportunity to think and rethink, and leads to critical new insights and perspectives.

- To improve sale management and reduce cost of marketing
- To provide appropriate products to segmented groups
- To reduce risk and improve shares to the market
- To grow company revenue

2 The layers of Market Segmentation Analysis

Market segmentation is the process of grouping consumers into naturally existing or artificially created segments of consumers who share similar product preferences or characteristics. The layers of market segmentation are explained below:

- **Conducting high quality market segmentation analysis:**
  Analysing market and extract information to segment consumers based on their requirement and interest

- **Enabling high quality market segmentation analysis:**
  To enable qualitative market segmentation, it requires meaningful data records of consumers' purchase, need to pre-process and explore data and implementation to segment consumers.

- **Making it happen in practice:**
  Based on segmentation, need to decide segment and select best segment among them. By selecting target segment, build strategy to

fulfil customer needs, assessing effectiveness and monitoring new changes achieved through segmentation.

3 Approaches to Market Segmentation Analysis

- **Based on Organizational Constraint**
  It includes qualitative research on segmentation, implementing segmentation based on classification of consumer data and exploratory data analysis on consumer purchase data.

- **Based on Choice of Segmentation Variable**
  Segmentation based on considering a base nature attribute which gives more weighted information about consumers. This statistical problem is unidimensional. One example is age. The resulting segments are age groups, and older consumers could be selected as a target segment.

4 Step-by-Step Market Segmentation Analysis

4.1 Deciding (not to) Segment
The key implication is that the organisation needs to commit to the segmentation strategy on the long term. Segmentation is not free, it requires investment for performing research, keep records, fielding surveys and mainly focus ideal segment interest. It potentially requires changes based on consumers willingness of purchase new products, which leads to change price of existing products and distribution channel. It is first and mandatory step to decide whether organization is ready to invest and segment consumers.

4.2 Specifying the Ideal Target Segment
For ideal segmentation, organization needs to consider two criteria: Knock-out criteria and Attractiveness criteria. Knock-out criteria is essential and non-negotiable factor of market segmentation. Attractiveness criteria is use to evaluate the relative attractiveness of remaining market segments in compliance with the knock-out criteria.

4.3 Collecting Data

For effective segmentation, we require qualitative and valuable data. Data must include mandatory information about consumers. Throughout this book we use the term segmentation variable to refer to the variable in the empirical data used in commonsense segmentation to split the sample into market segments. In commonsense segmentation, the segmentation variable is typically one single characteristic of the consumers in the sample. The difference between commonsense and data-driven market segmentation is that data-driven market segmentation is based not on one, but on multiple segmentation variables. These segmentation variables serve as the starting point for identifying naturally existing, or artificially creating market segments useful to the organisation.

- Geographic Segmentation
- Socio-Demographic Segmentation
- Psychographic Segmentation
- Behavioural Segmentation

4.4 Exploring Data

In this step, collected data is explored to extract information about it. Which kind of data it contains, size of database, which attribute is more effective, how data can be segmented etc. So, after data collection, exploratory data analysis cleans and – if necessary – pre-processes the data. This exploration stage also offers guidance on the most suitable algorithm for extracting meaningful market segments. At a more technical level, data exploration helps to (1) identify the measurement levels of the variables; (2) investigate the univariate distributions of each of the variables; and (3) assess dependency structures between variables.

4.5 Extracting Segments

Many segmentation methods used to extract market segments are taken from the field of cluster analysis. In that case, market segments correspond to clusters. It is 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. Market segmentation aims at grouping consumers into groups with similar needs or behaviour. Then we need to apply various clustering algorithm to check results, i.e.; Kmeans, DBScan, Hierarchical, mean-shift, etc.

4.6 Profiling Segments

The aim of the profiling step is to get to know the market segments resulting from the extraction step. Profiling is only required when data-driven market segmentation is used. For commonsense segmentation, the profiles of the segments are predefined. If, for example, age is used as the segmentation variable for the commonsense segmentation, it is obvious that the resulting segments will be age groups. 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. 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.

4.7 Describing Segments

Segment profiling is about understanding differences in segmentation variables across market segments. Segmentation variables form the basis for extracting market segments from empirical data. In this step, we need to describe extracted segments in detail to identify best segment.

4.8 Selecting Target Segments

As per above step, detailed information analysis takes place and retrieve ideal segment to improve organization marketing plan. Organization decide which segment is crucial to take place as per investment required and long-term plan.

4.9 Customising the Marketing Mix

Market segmentation does not stand independently as a marketing strategy. Rather, it goes hand in hand with the other areas of strategic marketing, most importantly: positioning and competition. In fact, the segmentation process is frequently seen as part of what is referred to as the segmentation-targeting-positioning approach. To best ensure maximising on the benefits of a market segmentation strategy, it is important to customise the marketing mix to the target segment. The selection of one or more specific target segments may require the design

of new, or the modification or re-branding of existing products (Product), changes to prices or discount structures (Price), the selection of suitable distribution channels (Place), and the development of new communication messages and promotion strategies that are attractive to the target segment (Promotion).

4.10 Evaluation and Monitoring

As a final step of market segmentation analysis, after applying segmentation, it is mandatory to evaluate and monitor changes of revenue and sales management. The effectiveness of the segmentation strategy needs to be evaluated. Much effort goes into conducting the market segmentation analysis, and customising the marketing mix to best satisfy the target segment's needs. The market is not static. Consumers change, the environment, and actions of competitors change. As a consequence, a process of ongoing monitoring of the market segmentation strategy must be devised. This monitoring process can range from a regular review by the segmentation team, to a highly automatised data mining system alerting the organisation to any relevant changes to the size or nature of the target segment.

Github Links:-

Name of Member	Link
Dakshita Reebadiya	Link
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