Study and Analysis of Market Segmentation for Snacks Food
(With Special Reference to Branded Cookies)

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This paper looks at the use of market segmentation as a tool for improving strategies and to understand the needs of the distinct groups of customers in snacks food industry. This paper argues that in spite of the egalitarian approach that underpins the marketing of cookies, market segmentation may be used to better serve the requirements of the distinct customers differently. Theoretical framework was constructed based on the literature. The empirical study was conducted as a quantitative research. Chi square method is used to test the hypothesis and to analyze the association between various parameters. In this paper, the researcher examines the current state of market segmentation and identifies avenues for development. This paper also attempts to address managements concerns about the practicality and usefulness of segmentation

Key Words: *Segmentation, Behavior, Biscuits, price, market*

INTRODUCTION

Gauging the dynamics of today's volatile markets, there is a continuous need to identify the most conducive segmentation strategy. We live in times which are subjected to change, yet the consumers needs, values and behavior will continue to evolve. Marketing consists of organizations with wants, money to spend, accompanied with willingness to spend. A sound marketing strategy begins with identifying the differences that exist within a market, market segmentation, deciding which segment will be pursued as target market and selecting a competitive position that will be conveyed to customers through marketing mix.

However if the market is correctly segmented, a better fit with customers need will actually result in greater efficiency. Deloitte Food and Beverage update (2012) states, "While various social media tools are being used by companies of all types, none have taken advantage of the ability to stay connected with their customers more than large branded multinationals."

In order to make the segmentation effective, emphasis should be made on segmentation which should be measureable with obtainable data. Besides this, the segments must be accessible through existing marketing institutions and should be large enough to be potentially profitable. Segmentation isolates consumers with similar life styles, needs and the likes, and increases the knowledge of their specific requirements. It aims at one or more homogeneous segments and tries to develop a different marketing mix for each segment. Instead of assuming that the whole market consist of a fairly small set of customers, it sees sub markets with their demand and they believe that aiming at one or some of these smaller markets will provide greater satisfaction to the target customers and greater profit potential for the firm. There are two approaches to market segmentation research ex ante and ex post. An ex ante approach begins by studying the motivating conditions that leads people to the tasks and interests in their lives. Such an analysis provides guidance for product strategy as implemented in brand positioning physical and psychological formulation and marketing communications. In principle, if manufacturers had accurate information on all motivating conditions within the focal behavioral domain, and the ability to produce and deliver unique product offerings at low cost, then even individual customization of offerings would be a viable product strategy. As more data are collected from multiple "touch-points" such as the Internet, point-of-purchase and direct marketing, and were a cost of customization to decline, does market segmentation research become obsolete?

An ex post approach to market segmentation research begins with an individual's reaction to marketplace offerings. This may take the form of ratings of product attributes/ benefits (e.g., benefit segmentation, Haley (1968). By focusing on what people must choose among, rather than what the conditions they experience call for, ex post market segmentation research changes from a task of identifying motivating conditions to guide product strategy, to trying to read wants from reactions, to product attributes and benefits as found in the existing offerings.

The benefits offered by segmentation are as follows-

(a) By developing strong position is a specialized market segments, medium sized firms can achieve a rapid growth note

(b) By tailoring the marketing programs to individual market segment, marketers can do a better job and make more efficient use of marketing resources.

(c) It helps in determining the kinds of promotional devices that are effective and also helps to evaluate their results.

(d) Appropriate decisions making relating to introducing of new products, promotion, pricing could be easily taken.

Price represents the value of goods of service for both the seller and the buyer. Price is the only element of the marketing mix which generate revenue otherwise all the elements have cost. Price planning is systematic decision making by an organization regarding all aspects of pricing. For a broader perspective, price is the mechanism for allocating goods and services among potential purchasers and for ensuring competition among sellers in an open market economy. If there is excess of demand over supply, prices are usually decided by the marketer on the higher and if there is an excess of supply over demand, prices are usually reduced by sellers

LITERATURE REVIEW

Majority of the firms have been focusing on the advantages of placing more emphasis on defensive strategies i.e. to retain existing customers than on offensive strategies i.e. to attract the new customers. The existing customers are already familiar with the company's products and services. A portion of this group is likely to be positively predisposed towards the products and services of the company. Hence, the focus is therefore on the individual customers instead of traditional market share. Effective marketing strategies often consist of a combination

of several marketing tactics that work together in a synergistic way to establish brand, reduce sales resistance, and create interest and desire for the products. Every company wants to focus on customers or segments with the distinct needs and wants. Amandeep Singh (2010) reveals in his study that earlier demographic factors were considered as best basis of segmentation but they are no longer effective for segmentation in FMCG sector. An investigation of 500 consumers purchase routine and their demographic attribute are found non-associated in this study. It means that there is a need for developing more affecting marketing segmentation basis. This study is related to only one industry and may not be related to others. But it is rightly proved that demographics, which were considered as the most effective attribute that influenced the purchase of consumers, are not powerful enough in today's life.

Wells, V.K, Chang, S.W. , and Oliveira, J. (2010) in their study presents an idea that benefit sought are more powerful basis of brand choice . They also related the idea that demographic attributes are not very effective in case of brand choice and in price selection.

Mirza, S. (2010) discusses that the demographic variables of interest were age, gender, household size, occupation, education and level of income. Results of this study shows that demographic influence on the choice of retail outlet is partial with household size, education and income having a significant effect on the choice of retail outlet selected. This study shows that some of the demographical factors such as education, income and household size affect the choice of retail outlet and definitely the choice of brands also.

Wedel, M. (2002) in his editorial article states that the market segmentation has now become a necessity of the marketers. One to one marketing is not feasible because it needs great amount of money and efforts for developing strategies focused on the evolution rather than on the proliferation of the products and businesses.

Demographic segmentation identifies those characteristics that are identifiable and measurable statistic of the population. These characteristics include age, gender, marital status, income, occupation and education, which can provide the basis for this particular segmentation. Demographic segmentation can be seen as the major factor when marketers need to locate a target market, as it is often the most accessible and cost-effective way (Schiffman et al., 2001)

OBJECTIVES OF THE STUDY

The Objectives of the study are-

1) To study the demographic segmentation to identify the target market.

2) To study the relationship between various brands and factors affecting consumer behavior.

HYPOTHESES

Accordingly, the following hypotheses were framed for the study:

H0 1 : There is no relationship between Age of the respondents and choice of Biscuits.

HA 1: There is a positive relationship between Age of the respondents and choice of Biscuits.

H0 2 : There is no relationship between Income Level and Factors affecting choice of Biscuits.

HA 2: There is a relationship between Income Level and Factors affecting choice of Biscuits

H0 3 :. There is no relationship between Brand and Consumer Behavior towards Products

HA 3: There is a positive relationship between Brand and Consumer Behavior towards Products

H0 4 : . There is no relationship between Income and use of branded biscuits.

HA 4: There exists a relationship between Income and use of branded biscuits

RESEARCH METHODOLOGY

The study area was confined to Meerut city, Western Uttar Pradesh. A convenient sample (non probability sampling method) of 117 respondents was taken up for the current study in which the respondents both male and female were asked to fill up the self -administered questionnaire. The data collection comprised of both primary as well as the secondary data. The primary data was collected by means of self administered questionnaire by the researcher. The questionnaires were distributed among the respondents personally by the researcher. The data was collected on a Likerts type scale where 1 stands for minimum agreement and 5 stands for maximum agreement. The data presented in this report is based on the information received from the respondents. In order to find out whether there is any significant association between the attributes; Chi-square test is applied to find out the association between demographic variables and identified variables. The testing of hypothesis developed earlier revealed the following results

ANALYSIS AND RESULTS

Marketing success, just as business success, depends on the return from management's investment in designing, producing, promoting, and selling an offering. The offering that is the object of marketplace exchange is a brand. Brand purchase/ use, repeat purchase/ use are the prime measures of marketing and business success. Such measures are central to marketing as a managerial function and disciplinary domain. Correspondingly, the essential focus for research and conceptual development in marketing is the intra product level of analysis, which includes all the variables that are relevant to brand use. Since companies vary between what they can offer to their markets, segmentation has been proven to be efficient and effective in regards to selecting and serving their segment of the market, in which they can provide the best service within that segment.

Table -1
Relationship between Age of the respondents and choice of Biscuits.

Table 1 : Relationship between Age & Choice of Biscuit							
Choice of Brand of Biscuit							
	Attributes	Sun feast	Kids Cream	Parle-G	Digestive	Good Day	Oreo	Total
AGE	Below 15 yrs	2	6	5	2	1	3	19
	15--30	5	3	1	0	7	10	26
	30--45	3	0	0	4	5	10	22
	45--60	2	0	0	10	9	5	26
	60 & Above	2	1	3	15	3	0	24
	Total	14	10	9	31	25	28	117

The table value at 20 df. at 5 % Significance level is 31.4 and the calculated value of Chi-Square is 73.2.

The table value at 20 d.f. at 5 % Significance level is 31.4 and the calculated value of Chi-Square is 73.2. Since the Chi-Square value is more than the calculated value, hence, HO 1 is rejected and alternate hypotheses HA1 is accepted ie there exists a relationship between age of the respondents and choice of Biscuits.

6 respondents out of 19 respondents in the age below 15yrs liked Kids-Cream while 5 respondents liked Parle-G Biscuits. However, 10 respondents out of 26 respondents in the age-group 15-30 yrs liked Oreo biscuits while 7 respondents in the same age-group liked Good-day biscuits. Similarly 10 respondents out of 22 respondents in the age group 20-30 yrs also like Oreo biscuits. It is also depicted that 10 and 9 respondents in the 45-60 yrs age-group liked Digestive and Good-Day biscuits respectively. However 15 respondents out of 24 respondents preferred Digestive biscuits in the age group of 60 and above. However none of the respondents preferred Oreo biscuits.

15 respondents out of 42 respondents having Income level of Rs 45K and above, looks for Quality aspects while 4 respondents in the same income level prefers Nutritious value in the biscuits .However 8 respondents out of 18 respondents opted for Attractive Packaging in the Income level between Rs 30K-45K. It is also evident that 15 and 12 respondents in the Income level of Rs 45K and above and Rs 30K-45K preferred taste as major attribute in biscuits.

6 respondents out of 15 respondents buy Sunfeast biscuits because the product is easily available while 5 respondents buy Sunfeast biscuits because of price factor. While 17 respondents out of 26 respondents prefer Kids Cream biscuits due to its Taste.Similarly,8 respondents out of 24 respondents buy Digestive biscuits of Price factor however 5 respondents out of 22 respondents buy Good-Day biscuits due to attractive Packaging.

Table No-2
Relationship between Income Level and Factors affecting choice of Biscuits

Table-2 : Income level and factors affecting choice of Biscuit Brand						
		Income Level (Rs/month)				
	Attributes	Below Rs 15,000	15,000-30,000	30,000-45,000	45,000-Above	Total
Factor affecting Choice	Quality	6	10	11	15	42
	Nutritious	0	0	0	4	4
	Attractive Packaging	5	3	8	2	18
	Price	3	1	2	5	11
	Availability	2	3	2	2	9
	Taste	0	6	12	15	33
	Total	16	23	35	43	117

The table value at 15 d.f. at 5 % Significance level is 24.99 and the calculated value of Chi-Square is 25.17

The table value at 15 d.f. at 5 % Significance level is 24.99 and the calculated value of Chi-Square is 25.17 Since the Chi-Square value is more than the calculated value. HO 2 is rejected and alternate hypotheses HA 2 is accepted i.e. there exists a relationship between Income Level and Factors affecting choice of Biscuits

Table No-3
Relationship between Brand and Consumer Behavior towards Products

Table-3 : Relationship between Brand and Consumer Behavior towards products								
		Factor effecting consumer Behavior						
	Attributes	Quality	Nutritious Factors	Attractive Packaging	Price	Availability	Taste	Total
Brands	Sun feast	0	1	2	5	6	1	15
	Kids Cream	2	0	0	2	5	17	26
	Parle-G	1	2	0	3	9	5	20
	Digestive	5	4	1	8	3	3	24
	Good Day	2	3	5	3	7	2	22
	Oreo	3	0	2	4	1	0	10
	Total	13	10	10	25	31	28	117

The table value at 16 d.f. at 5 % Significance level is 26.3 and the calculated value of Chi-Square is 65.97.

The table value at 16 d.f. at 5 % Significance level is 26.3 and the calculated value of Chi-Square is 65.97. Since the Chi-Square value is more than the calculated value, HO 3 is rejected and the alternate hypotheses HA 3 is accepted i.e. there is relationship between Brand and Consumer Behavior towards Products

Table No-4
Relationship between Income and use of branded biscuits

Table-4 : Relationship between Income & branded Biscuits					
		Purchase of Branded Biscuits			
	Attributes	Yes	No	Can't Say	Total
Income Rs/Month	Below-Rs 15,000	9	25	1	35
	Rs 15,000-30,000	20	5	5	30
	Rs 30,000-45,000	5	7	5	17
	Rs 45,000 & above	15	15	5	35
	Total	49	52	16	117

The table value at 6 d.f. at 5 % Significance level is 12.6 and the calculated value of Chi-Square is 24.4.

The table value at 6 d.f. at 5 % Significance level is 12.6 and the calculated value of Chi-Square is 24.4. Since the Chi-Square value is more than the calculated value, HO 4 is rejected and alternate hypotheses HA 4 is accepted i.e. there is relationship between Income and use of branded biscuits

25 respondents out of 35 respondents in the Income level below Rs 15K are of the opinion that they do not buy branded biscuits. While 20 respondents in the Income level of Rs 15k-30k prefer to buy branded biscuits. Similarly, 15 respondents out of 35 respondents in the Income level of Rs 30K-45K prefer Branded Biscuits.

The relationship between market segmentation research and the managerial task is the final area where the researcher discusses the opportunities for research. Once management learns of the diverse nature of wants through market segmentation research, it also considers the current state of want satisfaction, reflecting its own and competitive responses, and its own abilities, in deciding whether or not to continue to support in same or altered form, to withdraw its offering, or design a new entry. Methods of taking account of the various considerations, possibly with the use of statistical decision theory, are needed.

FINDINGS

26 respondents out of 117 respondents prefer Kids-cream biscuits mainly due to the taste factor

24 respondents among 117 respondents like Digestive biscuits because of desired quality at the desired price

22 respondents purchase Good-Day biscuits as they are easily available and has attractive packaging, similarly 20 respondents buys Parle-G biscuits as it is easily available.

25 respondents in the income group of less than Rs 15000/ month said that they do not buy branded biscuits.

49 respondents out of 117 respondents admitted that they buy branded biscuits while 52 respondents said that they do not buy branded biscuits.

10 respondents each in age group 15-30 and 30-45 yrs prefer Oreo biscuits

42 respondents in all income groups prefers quality aspects in biscuits

18 respondents in all the income groups purchase biscuits due to attractive packaging

CONCLUSION

Although, much research is needed. It is however clear that the most important task is of segment identification. It is impossible for companies to design a marketing mix that would suit every consumers needs, i.e. the same product, with the same price, place and promotion technique that would appeal to every consumer. In some cases where the product is universally used and unbranded, mass marketing works. Companies therefore need to make choices and to identify what part of the market is best suitable for them and their product.

One of the main objectives of the study was to investigate the relationship between the Age of the consumer and the choice of the biscuits. The results shows that the consumer who were in the age group of 60 years and above preferred Digestive biscuits over taste aspects which the teenagers preferred. The other important parameter was to study the relationship between various brands and the factors influencing consumer behavior.

The results also highlight that there exists a positive and significant relationship between income level of the respondents and the choice of biscuits i.e. income does affect in the choice of biscuits. The results clearly reveal that majority of the respondents with income over fifteen thousand does prefer quality aspects while attractive packaging also plays a vital role in the selection of the brands of biscuits.

The relationship between market segmentation research and the managerial task is the final area where we discuss opportunities for research. Once management learns of the diverse nature of wants through market segmentation research, it also considers the current state of want/ satisfaction,

reflecting its own and competitive responses, and its own abilities, in deciding whether or not to continue to support in same or altered form, to withdraw its offering, or design a new entry.

Note: Tables attached as annexure-1

LIMITATIONS

1) This survey was conducted with very severe time constraint

2) The sample size was limited i.e. size was 117 only

3) Some respondents may have been biased while filling in the questionnaire hence they may not have given all answers truthfully

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BIOGRAPHY

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