

STUDY OF MARKETING MIX ON CONSUMER BUYING DECISION OF DAIRY PRODUCTS

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ABSTRACT

The objective of the study was to evaluate the influence of brand image and promotional mix on consumer buying decision. The Descriptive survey of research design was adopted as the study guide. The Judgmental and purposive sampling techniques were used in research instrument were administered to dairy product consumers in Rajasthan. The questionnaire were filled and returned. Pearson Product Moment correlation was used to analyze the data generated from the respondents. The findings revealed that brand image, advertising, sales promotion and personal selling have significant influence on consumer buying decision. The study concluded that the way a product is promoted coupled with the brand integrity of such product encourages consumers to purchase it and make repeat purchase of it, and as well enhances the referral of such product to other prospects. The study therefore recommended to the organizations, especially those that engage in the marketing of the fast-moving consumer goods, dairy products to focus on distinct promotional mix, as the study empirically proved that perception of brand image is capable of influencing consumer buying decision on sustainable basis. It is also recommended that each marketing company should adopt a combination of marketing mix, promotional mix that can bring about distinct outcomes in terms of turnover, improved market share, customer retention, profitability, and productivity among others.

KEYWORDS: Advertising, Brand Image, Consumer Buying Decision, Personal Selling, Marketing Mix.

Introduction

The dairy industry is one of the most important components of the world food system, and is undergoing dramatic change at the current time. Currently processes of change are being driven by a wide range of forces including shifts to the regulatory environment for dairy production and trade, technological changes to the production of milk and milk-products, rapidly shifting consumption trends, and the restructuring of transnational corporate strategies with regard to this sector. It is highly probable that within ten years, the global dairy industry will be scarcely recognizable from its current form in many respects the dairy industry occupies a special position among the other sectors of agriculture. Milk is produced every day and gives a regular income to the numerous small producers. Milk production is highly labor-intensive and provides a lot of employment. The dairy industry is the sector with the highest degree of protection due to the economically vulnerable position of small milk producers.

Milk also known as white gold - can be used to make an enormous variety of high quality products. The high cost of milk as a raw material has necessitated a high-tech processing industry. The special nature of milk (perishable and bulky) leads to the necessity of strict and comprehensive quality regulation and to high transport costs. The large dependence of milk producers on the dairy processing industry has resulted in a strong position held by the co-operatives in milk marketing and in the processing industry. The Milk is regarded as the most important source of nutrient, vitamin and mineral provider for people across the world. It is regarded as a sea of calcium which helps people develop stronger bones and muscles. The universal significance of milk has never been under estimated and efforts have continuously been made to augment the production of pure milk for consumption in various forms. Milk contains most of the essential nutrients for the maintenance of the physical wellbeing.

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Composition of Cow and Buffalo Milk

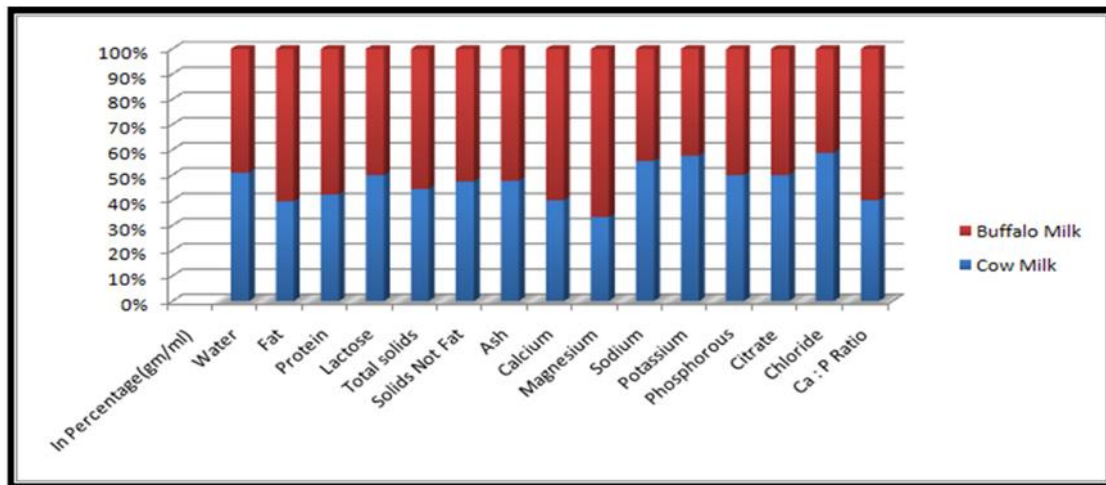
Milk is composed of water, carbohydrate (lactose), fat, protein, minerals and vitamins. While each component can be discussed separately, it is important to remember that milk is secreted as a complex mixture of these components. The properties and importance of milk are greater and more complex than the sum of its individual component parts. Significant variations from the average values can be observed and these are influenced by the breed and species of the milk animals, feeding, maintenance, lactation period as well as health and age of the animals. Milk is one of the most complete single foods available in nature for health and promotion of growth. Chemically milk is an emulsion of fat in a watery solution of sugar and mineral salts with protein has a colloidal suspension. Its constituents are water, fat, protein sugar, ash etc.

Table 1: Compositions of Cow and Buffalo Milk

Constituent	Cow Milk	Buffalo Milk
Water	86.50	83.18
Fat	4.39	6.71
Protein	3.30	4.52
Lactose	4.44	4.45
Total solids	13.50	16.82
Solids Not Fat	9.11	10.11
Ash	0.73	0.80
Calcium	0.12	0.18
Magnesium	0.01	0.02
Sodium	0.05	0.04
Potassium	0.15	0.11
Phosphorous	0.10	0.10
Citrate	0.18	0.18
Chloride	0.10	0.07
Ca : P Ratio	1.20	1.80

Source: Dairy India 2017 (In Percentage (gm/ml))

Graph 1.1 Compositions of Cow and Buffalo Milk



From the above graph 1.1 shows that the composition of cow and buffalo milk. The composition of milk contains maximum level of water, fat, protein, mineral and vitamins. In water level cow milk is better than Buffalo milk which constitutes 86.50 and 83.18 respectively. The other factors like fat, protein, lactose, ash, calcium the buffalo milk is better than cow milk. Due to high peroxidase activity, buffalo milk can be preserved naturally for a longer period. Buffalo milk contains more calcium, better calcium: phosphorous ratio and less sodium and potassium than in cow milk which makes it a better nutritional supplement for infants.

Importance of Milk as Food

The Milk is a dietary item. It is a complete balanced food. The high biological value of milk protein is an advantage not only for infants but also for adults. Milk from domestic animals and milk produced by human are an excellent food for human beings. The energy value of both humans and animal milk is similar. But it varies in its mineral and vitamin contents. It is not only an excellent food but also complements all other diets. It is valuable for growing children, convalescing adults, pregnant and lactating women and for older people. It can be used for making several milk products.

Dairy Industries in Rajasthan

In 2017, the milk production in Rajasthan reached a volume of 20 Billion Litres, growing at a CAGR of 20% during 2012-2017. The state currently represents the sixth largest dairy market in India. The milk production in Rajasthan mainly consists of cow and buffalo milk. The report's analysis concludes that buffalo milk dominates the total milk production, accounting for around 60% of the total share. According to the report, the Rajasthan dairy market is further expected to grow at a CAGR of 20% during 2018-2023, reaching a volume of 20 Billion Litres in 2023. Figures will become available once the report is purchased. For each of the product segments, the report provides a thorough analysis of the current and historical value and volume trends, market share of key players and market forecast. Currently, liquid milk represents the biggest product segment in Rajasthan, accounting for more than 53% of the total market share. Some of the fastest growing segments include frozen/flavored yogurt, cheese, UHT milk, flavored milk and butter milk. The competitive landscape of Rajasthan's dairy market has also been examined in this report. Some of the major players covered in the report include:

- Saras
- Amul
- Lotus
- Paayas

Rajasthan has strongly secured the 2nd position in giving out the best dairy milk for its state people significantly as they generate the total milk annually is over about 13.94 million tons. They are solely responsible for being the second highest milk producing state in India significantly to a large extent. It is estimated that the state significantly generates about 90,000 litres each day in order to fulfill the demand of the consumers widely.

Marketing Mix

The term "marketing mix" became popularized after Neil H. Borden published his 1964 article, The Concept of the Marketing Mix. Borden began using the term in his teaching in the late 1940's after James Culliton had described the marketing manager as a "mixer of ingredients". The ingredients in Borden's marketing mix included product planning, pricing, branding, distribution channels, personal selling, advertising, promotions, packaging, display, servicing, physical handling, and fact finding and analysis. E. Jerome McCarthy later grouped these ingredients into the four categories that today are known as the 4 P's of marketing. The marketing mix is a model of creating and implementing marketing strategies. It stresses the blending of various factors in such a way that both organizational and consumer objectives are attained. The elements are the marketing tactics, also known as the 'four Ps', the marketing mix elements are price, place, product, and promotion.

The model was developed by Neil Borden (Borden, N. 1964) who first started using the phrase in 1949. When blending the mix elements, marketers must consider their target market. They must understand the wants and needs of the market customer then use these mix elements in constructing and formulating appropriate marketing strategies and plans that will satisfy these wants. These four P's are the parameters that the marketing manager can control, subject to the internal and external constraints of the marketing environment. The goal is to make decisions that center the four P's on the customers in the target market in order to create perceived value and generate a positive response. As Pedhazur and Schmelkin (2011, p. 164) have noted, "Even for people who speak the same language, words have different meanings, depending on, among other things, who speaks, to whom, in what context, at what time, and with what purpose. The point is that the different terms reflect different outlooks, values, attitudes, and the like."

Product Decisions

The term "product" refers to tangible, physical products as well as services. Although this typically refers to a physical product, it has been expanded to include services offered by a service

organization. The specification of the product is one of the variables that a marketer has at his/her control. For example, the product can include certain colors, certain scents, and certain features. Lastly, in the broadest sense when a consumer purchases a product it also includes the post-sales relationship with the company. The post-sales relationship can include customer service and any warranty.

Price Decisions

The price is the amount paid for a product. In some cases, especially in business to business marketing this can also include the total cost of ownership (TCO). Total cost of ownership may include costs such as installation and other products required to deliver a complete functional solution.

Place (Distribution) Decisions

Place represents the location where a product can be purchased. It is often referred to as the distribution channel. It can include any physical store as well as virtual stores on the Internet. Distribution is about getting the products to the customer.

Promotion Decisions

In the context of the marketing mix, promotion represents the various aspects of marketing communication, that is, the communication of information about the product with the goal of generating a positive customer response. Promotion represents all of the communications that a marketer may insert into the marketplace. This can include TV, radio, and print advertising, as well as coupons, direct mail, billboards, and online advertising. One of the less well-defined areas in promotion is the role of a human sales force. On the other hand, consumers may rather purchase the product only when sold through the support of a known salesperson. In this case, the service, perceived or real can be defined as a feature of the product.

Statement of the Problem

Human life is centered on food, cloth and shelter. Among food products, milk plays an important role and also has its own heritage. We use milk in every walk of our life in different forms. Milk is almost an ideal food. It has high nutritive value. It supplies body building proteins, bone-forming minerals and health-giving vitamins and furnishes energy-giving lactose and milk fat. Besides, supplying certain essential fatty acids, it contains the above nutrients in an easily digestible and assailable form. All these properties make milk an important food for pregnant mothers, growing children, adolescents, adults, invalids, convalescents and patients alike. Pasteurization is designed to render milk safe for human consumption and to improve the keeping quality of the milk by destruction of almost all spoilage organism (85 to 99 per cent). The pasteurized and cooled milk is promptly bottled packaged.

Review of Literature

In this section, an attempt is made to review the existing studies concerning the present research.

Vyas (2017) in his study observed that the milk utilization pattern of the world is different than India. About 51 per cent of the world milk production is utilized as liquid milk, 27 per cent goes into cheese making, five per cent is used for milk powders and only four per cent is utilized as butter whereas in India 45 per cent is consumed as liquid milk 35 per cent goes into ghee, seven per cent as paneer and only four per cent as milk powders. Indian dairy exports are sporadic and in bulk quantities, and there is a need to change the paradigm and to start, brand building exercise. "Made in India" tag should be popularised.

Rakesh Saxena (2017) observed that demand for milk and milk products in India has been growing as the income of people has been increasing and the relative prices of milk slightly declining. With the average per capita milk consumption in the country still very low, there is a huge potential demand for these products in middle and low income segments of the domestic market the projected demand for milk in India in 2020 ranges from 147.5 to 160 million tones.

Objectives of the Study

The following are the objectives of the study:

- To study history, evolution and recent trends in dairy industry and theoretical foundation of marketing mix.
- To examine the socio-economic profile of the study area and respondent customers.
- To assess the product and price practices of Jaipur dairy milk products.
- To explore the place and promotion practices of Jaipur dairy milk products.

- To offer suitable suggestions for further improvement of marketing mix practices of Jaipur dairy milk products.

Hypotheses

Based on the objectives of the following hypothesis are formulated;

- **Hypothesis-I**
 - **Null Hypothesis:** Occupation of the respondents has no influence on their opinion on hygienic quality of milk and milk products.
 - **Alternative Hypothesis:** Occupation of the respondents has a influence on their opinion on hygienic quality of milk and milk products.
- **Hypothesis-II**
 - **Null Hypothesis:** Type of family have no significant difference towards their opinion on price satisfaction of milk and milk products.
 - **Alternative Hypothesis:** Type of family have a significant difference towards their opinion on price satisfaction of milk and milk products.
- **Hypothesis-III**
 - **Null Hypothesis:** Educational qualification of the respondents has no significant difference on the promotional free gift factor of packet milk.
 - **Alternative Hypothesis:** Educational qualification of the respondents has a significant difference on the promotional free gift factor of packet milk.
- **Hypothesis-IV**
 - **Null Hypothesis:** Monthly income of the respondents has no significant difference on the satisfaction of home delivery service of packet milk.
 - **Alternative Hypothesis:** Monthly income of the respondents has a significant difference on the satisfaction of home delivery service of packet milk.

Sources of Data

• **Primary Data**

An interview schedule was prepared including the relevant questions related to the topic in consultation with the packet milk retailers. Questions were segregated in six broad categories. Part I dealing with general profile of the respondents including personal and demographic data, part II dealing with the buyer's level of satisfaction on product features, part III dealing with the price influence and satisfaction level of the buyer's, part IV dealing with the evaluation of the level of influence of various promotional factors of packet milk.

• **Secondary Data**

The researcher collected information from various books, journals and published articles, besides, gathering data from the internet. Further the researcher also had discussions with the local retailers of various brands of packet milk; Jaipur JDA (Zone) Data had also been gathered from the department of statistics, Jaipur.

Determination of Level of Study

The household in the peri-urban area of each block has been made a stratum there by resulting in four levels.

Table 1: Stratification of the Universe

Jaipur JDA (Zone)	Total Number of Households in the Urban /Semi Area
East Zone	4413
West Zone	2613
North Zone	4926
South Zone	1523
Total	13,475

Source: Primary data

Determination of the Size of the Sample

Sampling technique plays an important part in determining the size of the sample. The universe may be either homogeneous or heterogeneous in nature. If the items of the universe are homogenous, a small sample can serve the purpose. The study group the packet milk users are homogeneous in nature. To make the findings of the study credible and authentic 450 households have been taken as the size of the sample.

Determination of the Proportional Allocation of the Sample

Kothari, suggests a formula for deciding the proportional allocation under which the size of the samples from the different strata are kept proportional to the sizes of the strata. That is, if P_i represents the proportion of population included in stratum i , and n represents the total sample size, the number of elements selected from stratum i is $n \cdot P_i$. Samples are selected by using stratified sampling with proportional allocation. Using proportional allocation method, the size of the sample for each stratum has been decided as explained in Table 2.2

Table 2: Strata Proportion of Sample

Jaipur JDA (Zone)	Total Number of Households in Area	450 Households Selected
East Zone	4413	147
West Zone	2613	87
North Zone	4926	164
South Zone	1523	52
Total	13,475	450

Source: Primary data

Random Sampling

The information about the total number of households and addresses were collected from Jaipur JDA (Zone). Using Tippet's random number the required number of respondents has been randomly selected from each stratum.

Data Analysis

A data base was created using Statistical Packages for Social Sciences (SPSS) Data Editor with appropriate coding and statistical analysis was carried out. The following tools were applied to analyze the study.

- Box-plot Analysis
- Factor Analysis
- Mann-Whitney Test (or U Test)
- Kruskal-Wallis Test (or H test)
- Kendall's Coefficient of Concordance

Conclusions and Suggestions

This research confirms views of available products such as dairy products and consumer behavior. In addition, demographic variables and an adjustment age and gender and education also entered on this relation. Accordingly, manufacturers of dairy products in design of mix marketing and distribution of their dairy products should considered availability of dairy products in stores. Because consumers behave and react according to their age and their gender will be different. Dairy producers in the marketing mix design and product mix consider to packaging of dairy products because dairy products consumer behavior and react will be different according to their age and gender.

According to research is conducted on the low durability and low involvement products (dairy products), reached different conclusions with the results listed. Based on the behaviour and reactions of consumers according to their gender in relation to television advertising will be different ,while age and education of consumers on their reaction behavior toward television advertising is ineffective. The present study confirms the relationship between price and consumer behavior and based on other factors that dairy producers should consider in designing their products to the marketing mix is the price of dairy products.

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