



CUSTOMER SATISFACTION ON QUALITY OF MILK OF SELECT DAIRIES IN AP-CRDA REGION

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Abstract

In recent years, consumer concern and awareness about milk quality have increased. Sustaining customers and enhancing customer base has become the primary concern in Dairy Industry. This study seeks to examine the Customer Satisfaction on quality of milk by concentrating on two aspects i.e factors influencing customer satisfaction and customer satisfaction towards quality of preferred milk by selecting three Dairies from AP-CRDA region of Andhra Pradesh. 30 customers are selected from each dairy by using Simple Random Sampling Technique. Questionnaire was designed to study the factors influencing customer satisfaction by identifying factors like Price, Availability, Advertisement, Packaging and Information on milk packet and Customer satisfaction on quality of preferred milk by identifying parameters like Colour, Odour, Taste, Freshness, Thickness and Hygiene. Multiple Correlation technique was used by the researcher for the purpose of analysis.

Introduction

Customer focus is an important quality management principle. Buzzel and Gale(1987) found strong evidence that quality pays in terms of profit, market share and productivity. Successful organizations give high priority in understanding and responding to current and future customer needs. Bossert(1990) opined that quality function deployment (QFD) helps focusing on customer requirements, team work and communication, thereby improving product quality. Cohen (1995) stated the ultimate benefits of QFD are to increase market share and profitability. Burchill and Shen(1995) and Shiba et.al(1993) stated that the goal of QFD is to move from the invisible feelings of the customers to clear, grounded customers requirements that serve real customer needs. Hauser and Clausing(1998) have found that customer satisfaction is fundamental to TQM and is an important requirement for long term organizational success. Rao and Raghunathan (1994) have presented a model on quality management practices. The model contends that quality management practices depicted by strategic quality planning, work culture, quality assurance and supplier relationship will have an effect on the outcome of variable, namely customer satisfaction. In a qualitative article, Takeuchi and Quelch (1983) discussed the issues of quality, customer values, after sales service and customer service programme. Burt (1989) has brought out the clarity on product quality, competitive quality, and focus on customer values as important factors. Chatterjee (1993) illustrated the need to invest in customer satisfaction vis-à-vis TQM taking into consideration quality, TQM, quality excellence and productivity improvement. Conduit and Mavondo (2001) study found evidence for achieving effective market orientation. They stressed that only through satisfying the requirements of employees can superior value be provided at each stage of the value chain, and the end user receive optimal service.

Review of Literature

Anand Kumar A and Babu. S (2014), made an attempt to find the factors influencing consumer buying behavior. They concluded that brand preference is influenced by the variables including packaging, cost, availability, ingredients, product popularity, product quality and taste.

Bytyqi Hysen et.al (2008), in their research paper on “Analysis of Consumer behavior in regard to dairy products in KOSOVO” examined the impact of socio-economic variables on consumer purchase of dairy products. They concluded that the most important Socio-Economic variables explaining individual differences in consumer behavior regarding the purchase of dairy products are trust, gender of consumer, quality, origin and price of product.

Lokanathan (2008) conducted a study on customer satisfaction towards Mothers Dairy products. The objective of the study was to know the customer ideas, opinion and the satisfaction levels towards mother dairy products. The study found that Mothers Dairy is big milk processing unit and the market leader in dairy products and has maximum market in milk. The study also found that customers are mostly satisfied with the overall quality of Mothers Dairy products.

Denford Chimboz and Edward Mutndw(2007), conducted a study on measuring the determinants of brand preference in a dairy product market. The objective of this study was to assess the level of brand awareness and factors underlying brand preference of dairy brand in Chitungwiza and Harare urban markets in Zimbabwe by collecting data from 90 individual and institutional consumers using judgmental and simple random sampling techniques. Consumer Product Awareness indices, cluster analysis and factor analysis were the main tools used in their analysis. They identified four key determinants for dairy product choice namely promotion, price and availability of product, attractive packaging and product quality.



Statement of the Problem

In the present competitive environment, survival of the organizations depends on their ability to continuously improve as per the expectations of the customers. Customer expectations for quality products and services have prompted organizations to adopt the principles of Total Quality Management. Successful organizations give high priority in understanding and responding to current and future customer needs. This study aims to understand the factors influencing the Customer Satisfaction and the Customer Satisfaction levels towards quality of preferred milk in AP-CRDA region. In order to examine the Customer Satisfaction on quality of milk the researcher aims to concentrate on two main aspects:

1. Focused to study the factors influencing Customer Satisfaction by selecting factors like Price, Availability, Advertisement, Packaging and Information on milk packet.
2. Concentrated to know the Customer Satisfaction on quality of preferred milk by selecting variables like Colour, Odour, Taste, Freshness, Thickness and Hygiene.

The above two aspects were considered, through which the Customer Satisfaction on quality of milk of select dairies is examined. A questionnaire is designed based on the above mentioned aspects.

Objectives of the Study

1. To analyze the factors influencing customer satisfaction of preferred milk of select dairies.
2. To assess the customer satisfaction levels on quality of preferred milk of select dairies.

Hypothesis of the Study

Null Hypothesis (H_{01}): Factors are not equally influencing the customer satisfaction.

Null Hypothesis (H_{02}): There is no significant difference between various parameters of preferred milk.

Research Design

Sample and Sampling Technique

The study was conducted by collecting data from the customers of three different dairies located in Krishna and Guntur Districts of Andhra Pradesh. The data was collected by selecting 30 customers from each dairy. In order to collect data from respondents Simple Random Sampling was used by the researcher.

Data Collection

The data was collected through primary and secondary sources. Primary data was collected by using questionnaire consisting of various questions related to factors influencing customer satisfaction based on Price, Availability, Advertisement and Packaging and Information on milk packet. Questions on customer satisfaction on quality of preferred milk is framed by identifying six parameters for Quality of milk namely: Colour, Odour, Taste, Freshness, Thickness and Hygiene. Secondary data was collected through Journals, Magazines and from the Website of National Dairy Development Board.

Statistical Tool

To analyze customer satisfaction on quality of milk, Multiple Correlation Technique is used by the researcher. Theoretically correlation is a measure of the relation between two or more variables. Correlation coefficients can range from -1.00 to +1.00. The value -1.00 represents a perfect negative correlation while a value +1.00 represents a perfect positive correlation. A positive correlation between two variables means that if one variable increases the other one also increases. On the other hand a negative correlation means if one variable increases the other one decrease. A value of 0.00 represents a lack of correlation.

Scope And Limitations of The Study

1. The study was confined to three Dairies in Krishna and Guntur Districts of AP-CRDA region.
2. The data was collected by selecting 30 customers from each Dairy.
3. The study focuses on factors influencing customer satisfaction and customer satisfaction levels on quality of preferred milk by selecting different parameters.

Analysis And Discussion

Table 1.1: Multiple Correlation Analysis on factors influencing customer satisfaction for Producers Dairy

	Price	Availability	Advertisement	Packaging & information on milk packet
Price	1.0			
Availability	0.7	1.0		
Advertisement	0.9	0.4	1.0	
Packaging & information on milk packet	0.9	0.8	0.8	1.0



Table 1.2: Multiple Correlation on factors influencing customer satisfaction for Cooperative Dairy

	Price	Availability	Advertisement	Packaging & information on milk packet
Price	1.0			
Availability	1.0	1.0		
Advertisement	0.0	-0.1	1.0	
Packaging & information on milk packet	1.0	0.9	0.0	1.0

Table 1.3: Multiple Correlation on factors influencing customer satisfaction for Private Dairy

	Price	Availability	Advertisement	Packaging & information on milk packet
Price	1			
Availability	0.933217	1		
Advertisement	0.215055	0.006176	1	
Packaging & Information on milk packet	0.995848	0.956059	0.132543	1

Table 2.1: Customer Satisfaction on Quality of preferred milk for Producers Dairy

	Colour	Odour	Taste	Freshness	Thickness	Hygiene
Colour	1.0					
Odour	0.7	1.0				
Taste	1.0	0.6	1.0			
Freshness	1.0	0.5	1.0	1.0		
Thickness	1.0	0.8	0.9	0.9	1.0	
Hygiene	0.9	1.0	0.8	0.7	1.0	1.0

Table 2.2: Customer Satisfaction on Quality of preferred milk for Cooperative Dairy

	Colour	Odour	Taste	Freshness	Thickness	Hygiene
Colour	1.0					
Odour	0.7	1.0				
Taste	0.9	0.4	1.0			
Freshness	1.0	0.7	0.9	1.0		
Thickness	0.9	0.3	1.0	0.9	1.0	
Hygiene	0.8	1.0	0.5	0.8	0.4	1.0

Table 2.3: Customer Satisfaction on Quality of preferred milk for Private Dairy

	Colour	Odour	Taste	Freshness	Thickness	Hygiene
Colour	1.0					
Odour	0.952343	1.0				
Taste	0.81896	0.842374	1.0			
Freshness	0.799099	0.82682	0.999045	1.0		
Thickness	0.970567	0.977296	0.919397	0.906548	1.0	
Hygiene	0.991297	0.947322	0.758049	0.733688	0.945325	1.0



Discussion

Correlation matrix on factors influencing customer satisfaction for Producers Dairy indicates that all factors are positively correlated. Price is highly correlated with advertising($r=0.9$) and packaging and information on milk packet($r=0.9$), it means that these three factors are highly influencing customer satisfaction. Availability is highly correlated with packaging and information on milk packet($r=0.8$) and weakly correlated with advertisement($r=0.4$). Positive correlation is observed between advertising and packaging and information on milk packet($r=0.8$).

Correlation matrix on factors influencing customer satisfaction for Cooperative Dairy shows that price is having perfect positive correlation with availability($r=1.0$) and packaging and information on milk packet($r=1.0$), it means that these factors are highly influencing customer satisfaction. Availability is positively correlated with packaging and information on milk packet($r=0.9$). Correlation value between price and advertisement($r=0.0$) and advertising and packaging and information on milk packet($r=0.0$), it indicates that these factors are not influencing customer satisfaction. Correlation between advertising and availability is negative($r=-0.1$), it indicates that these two factors are negatively influencing the customer satisfaction.

Correlation matrix on factors influencing customer satisfaction for Private Dairy reveals positive correlation between all factors. Highest positive correlation is observed between price and packaging and information on milk packet($r=0.99$), it shows that both the factors are highly influencing customer satisfaction. Lowest correlation is observed between availability and advertising($r=0.006$), it indicates that these factors are not highly influencing customer satisfaction.

Correlation matrix on customer satisfaction on quality of preferred milk for Producers Company shows that all parameters are positively correlated. colour is perfectly positively correlated with taste($r=1.0$), freshness($r=1.0$), thickness($r=1.0$), Odour is perfectly positively correlated with hygiene($r=1.0$), taste is perfectly positively correlated with freshness($r=1.0$), and thickness is perfectly positively correlated with hygiene($r=1.0$), then it is identified that customer satisfaction levels towards quality of milk is high for the specified parameters. Lowest correlation is observed between odour and freshness($r=0.5$), this result indicates that customer satisfaction towards quality of milk is low in between these two parameters.

Correlation matrix on customer satisfaction on quality of preferred milk of cooperative dairy shows positive correlation between all parameters. Colour is perfectly positively correlated with freshness($r=1.0$), odour is perfectly positively correlated with hygiene($r=1.0$), and taste is perfectly positively correlated with thickness($r=1.0$), it indicates that customer satisfaction towards quality of milk is high for the mentioned parameters. Lowest correlation is observed between odour and thickness($r=0.3$), it indicates that customer satisfaction towards quality of milk is low in between these two parameters.

Correlation matrix on customer satisfaction on quality of preferred milk of Private Dairy revealed positive correlation between all parameters. Highest correlation is observed between freshness and taste($r=0.999$), it indicates that customer satisfaction towards quality is high among these two parameters. Lowest correlation is observed between freshness and hygiene($r=0.33$), it shows that customer satisfaction towards quality is low in between these two parameters.

Conclusion

Multiple Correlation Analysis on factors influencing customer satisfaction levels shows that, the customers of Producers Dairy are influenced by the factors like: price, advertising and packaging and information on milk packet, the customers of Cooperative Dairy are influenced by the factors like: price, availability, packaging and information on milk packet and the customers of Private Dairy are influenced by the factors like: price and packaging and information on milk packet. Therefore the null hypothesis defined for the study is accepted because some factors are highly influencing the customer satisfaction levels and some factors are not highly influencing the customer satisfaction levels.

Multiple correlation analysis on customer satisfaction towards quality of milk identified that, the customers of Producers Company and Cooperative Dairy are giving importance for all the parameters (colour, odour, taste, freshness, thickness and hygiene) considered for the study, where as the customers of Private Dairy are giving importance for two parameters like freshness and taste. Therefore the null hypothesis defined for the study is rejected because there is a significant difference between the parameters considered for the study.

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