

## **"A Study on Improving The Market Share of Milma Milk - With Special Reference to Customer Satisfaction and Dealer Satisfaction, Kerala"**

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**ABSTRACT:** *Customer satisfaction and trust are two important factors which influence any market. In this modern age it is very difficult to find a customer who is loyal to a single brand. But still there exist some cooperative companies which can create undivided demand in the market creating a natural monopoly. It is mainly because of the trust the customers put into it. The main objective of this project is to study the performance of MILMA in terms of its market share, satisfaction level of customers and dealers, customer loyalty, awareness of customers about the homogenisation technique and to determine the factors affecting the market share of MILMA. Research methodology employed is Statistical Research and Qualitative Research. Data's were collected from both primary and secondary sources. Questionnaire Method is used to collect data's from customers as well as dealers. Analysing the data collected, it is understood that MILMA have developed a fairly good demand, but being the only cooperative society in Kerala it should have been in a better position than it is in now. The main reasons for this situation are found to be unawareness among people about the homogenisation process to make fat content same, low commission rate for the dealers, and the problem of leakage. If proper measures are taken to ensure proper packaging without leakage and proper commission for the dealers, more dealers could be attracted. Customers should be educated about the homogenisation technique.*

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### **I. INTRODUCTION**

The brand MILMA stands for milk and a whole variety of milk products which enjoys the confidence of every Keralite for their unmatched quality and taste. The name also signifies the vast organization Kerala Co-operative Milk Marketing Federation (KCMMF) whose units are spread across the villages and towns of the Kerala. MILMA Provides job opportunities and prosperity to a large number of small farmers, which includes women and the landless. KCMMF was established in 1980 with its headquarters located in Thiruvananthapuram. It was initially set-up for the successful implementation of the dairy program 'Operation Flood' under the direction of NDDB (National Dairy Development Board). Over the years, KCMMF has developed a long term health perspective for the people of the state, people who suffer from lifestyle diseases such as diabetes and obesity. So MILMA products are ensured balanced nutrition as well as reduced cost of healthcare. Apart from Milk, they also launched a variety of other beverages. Founded on the basis of the great democratic principle 'Of the People, By the People and For the People'. The primary concern of MILMA is to provide true and hassle free service to society without incurring losses.

### **IMPORTANCE OF THE STUDY**

The customers and dealers play an important role in any market. In this particular case MILMA struggles to attain undivided demand in the milk market, even after being a cooperative brand. Customer satisfaction and awareness could be a key element which can ultimately decide the market share. The aim of this study is to understand the relationship between trust, satisfaction level and loyalty and how they affect the overall market share. Another aspect studied here is how the satisfaction level of dealers (retail stores) can influence the level of entry of other milk brands in the market. This satisfaction level is studied in terms of commission received and some other major issues faced. The ultimate aim of the study is to find the perception of both the customers as well as the retail store owners in the dairy industry.

### **STATEMENT OF THE PROBLEM**

Even after being a government organization, MILMA is still struggling to find undivided demand in the milk market. Almost 30 other players have entered the market in the last 2 decades and are given a rough time for MILMA's supply. This can be either because of the low commission policy provided to the dealers or the absence of a proper promotion channel. Another reason that can be hindering MILMA's total market share would be customer dissatisfaction. Also unawareness of homogenization technique and its benefits could also be another reason why customers might prefer other brands. Hence divided market share and customer loyalty are the major problems that the company is facing right now.

### **RESEARCH QUESTIONS**

1. Why are other milk brands able to enter the market even when MILMA is a government organization?
2. How can we improve the overall satisfaction level of both the customers as well as the dealers in the market?

### **OBJECTIVES OF THE STUDY**

1. To determine the awareness of homogenization process of milk among the customers.
  2. To analyse the consumers satisfaction level on MILMA milk.
  3. To find out customer loyalty towards MILMA and the factors affecting customer loyalty.
  4. To understand the satisfaction/dissatisfaction level of dealers.
  5. To identify the major issues that are affecting MILMA's market share.
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### **SCOPE OF THE STUDY**

This study helps to identify the factors that affect the market share of a dairy product. The aim is to find suitable relationships between trust, loyalty and satisfaction level of both the customers as well as the dealers and to draw a conclusion on how these variable might affect the performance of the product in the market. This study aims to develop and establish a theoretical basis for evaluating the divided demand in the dairy market. The present study is an attempt to demonstrate the interdependence of these variables and their importance in gaining better demand and in turn better market share.

### **RESEARCH DESIGN**

The type of research design employed here is descriptive research, also known as statistical research. This type of research is used extensively for studying human behaviour and habits. Qualitative research is often used to generate possible leads and ideas which can be used to formulate a realistic and testable hypothesis. These are normally linked with interviews, survey design techniques or case studies as a way to analyse and evaluate findings over a broader scale. Qualitative techniques are extremely useful when a subject is too complex to be answered by a simple yes or no hypothesis. These are much easier to plan and carry out. The only drawback is that mathematical analysis is not possible in the same comprehensive way as in quantitative analysis. But the study we are currently conducting is more focused on customer buying behaviours as well as their loyalty factor. Hence qualitative analysis is the best fit in such a situation.

### **COLLECTION OF DATA**

The data is collected from both primary as well as secondary data sources. The primary data collected is from the customers as well as the dealers of MILMA ERMCPU unit in Kochi and Alappuzha, by means of questionnaires. The secondary data source includes reference books and internet sources. Out of the total population, 50 customers and 25 dealers from Kochi and another 50 customers and 25 dealers from Alappuzha were taken as the sample population for the study

### **SAMPLING METHOD**

Since the entire population of customers and dealers of MILMA are very large, non-probabilistic convenient/accidental sampling technique is employed. When the population is too big it is impossible to include every individual hence according to the convenience of the researcher, a small sample size out of the total population is chosen to do the study. In this case a total of 100 customers and 50 dealers are taken as our sample size for study. Many researchers prefer convenience sampling technique as it is easy fast and inexpensive and is the most convenient type of sampling available. The disadvantages are the risk that the sample might not represent the population as a whole, and volunteers might bias it.

### **RESEARCH INSTRUMENT**

Survey method is used to collect data. The survey conducted for the research is of Questionnaire method. The questionnaire is of administered type where the audiences give their responses by selecting the most suitable option from the options given. The questions used in the survey are structured and close-ended where the respondents are allowed to choose from the options that were given.

### **STATISTICAL TOOLS**

Frequency distribution is used to find out the count of various choices of the respondents and their most preferred choices. Graphs like pie charts and bar graphs are used to simplify the frequency distribution table. In addition to this one way Anova analysis is used to compare group means and Chi square is used to find relationships between various nominal and ordinal variables.

## **II. REVIEW OF LITERATURE**

According to Hansemark and Albinsson (2004), "customer satisfaction is an overall attitude of a customer towards a service provider, or an emotional reaction to the difference between what customers anticipate and what they receive regarding the fulfilment of some need, goal or desire".

From the Study on Retailer Role in Selected Dairy Industries by Dr. Trilochan Nayak following conclusions were made The milk should be made available in the morning and evening through the agents as it is convenient to many customers in the urban areas where the use of packed milk sales is very high. In such cases consumers expects the availability of milk throughout the day so that they can pick it up as per their convenience. Generally the distribution of milk is carried out in the forms of sachet. Forming, filling and sealing (FFS system) would be taking place simultaneously. Even though the forming and sealing system is automated; there is possibility of leakages which makes the milk unhygienic. Therefore proper packaging of the product is highly essential to bring about improved customer satisfaction. As the milk agents are the people who ultimately interact with the consumer, hence their behaviour with the consumer plays vital part in retaining the consumer. Suggestion given by the consumer needs to be forwarded for necessary modification as & when required ultimately leads to greater value addition to the consumer. Thereby bringing about total satisfaction & increasing brand loyalty.

According to Diller (2000), Customer satisfaction and loyalty are related. Customers are loyal to the company only if they are satisfied with the product and service. Customer loyalty and brand royalty are interrelated, implying the strength for a particular product in service.

Dr Dash Ganesh (2013) in his study done to determine consumer buying behaviour of dairy product users in Jaipur city, has mentioned the importance of cooperatives in the dairy industry. Cooperatives have existed as dominant forms of

organization in the dairy industry around the world. Sometimes, they have played the role of developing infant industry while at other times they have been used to strengthen weak production bases in an environment where market failures tend to be higher for marginal producers. The Gujarat Cooperative Milk Marketing Federation (GCMMF) or AMUL and Rajasthan Cooperative Dairy Federation (RCDF) or SARAS in India, are the examples of how to develop a network of firms in order to overcome the complexities of a large yet fragmented market like those in emerging economies by creating value for suppliers as well as the customers.

According to Fornell (1992), "Customer satisfaction can be defined as the overall evaluation of the purchase and consumption experience, which focuses on perceived product or service performance compared with the pre-purchase expectation."

According to Alireza Shirania, Habibollah Danaeib and Anahita Shirvanic, (2014), there were positive and meaningful relationship between price, quality, distribution, trust and expectations on one side and producers' satisfaction from suppliers. Also price, quality, distribution, trust, expectations and conflict had meaningful impact on customer satisfaction. The effects of the first five variables were positive and that of conflict was negative on customer satisfaction.

According to Dr R S Bharathi and K Balaji, (2014), Dealer's satisfaction is very important because the sales can be done only by the dealers and bridge the company and the customers. The dealers possess better knowledge about the local demand and can easily find out the requirements of the consumers. If the dealers are dissatisfied with the company can't reach product to the end consumer or customers.

From the study conducted by Lech Niezurawski he realised the fact that the recognition of customers' needs will make it possible to provide them with a product which will fully meet their expectations. The main thing that the client focuses is on the product's attributes. A satisfied purchaser becomes a loyal client and will tell his friends about his positive experience with the product and will recommend others to purchase the product.

Iir Kapaj and Dr. Ana Mane Kapaj on their research on Household Consumption of Dairy Products in the State of Albania i.e. they studied the behaviour of consumers in Albania. The idea that motivated this research is that before any course of action supporting the domestic milk production industry can be undertaken, it was of utmost importance to know what consumers want. The consumers' demand for milk must be satisfied by the milk producers in order to remain competitive.

According to Emrah Cengiz customer satisfaction plays a vital role in every organization among business life. It can be said that if a company wants to survive in this competitive environment customer satisfaction should be given due importance. Organizations which want to meet customers' expectations should use this marketing tool properly. This paper has aimed to illustrate the importance of customer satisfaction and customer satisfaction measurement.

According to Baldinger and Rubinson (1996), Loyalty can be ensured only when a customer both purchases or uses continuously the same product and recommends it to others as well.

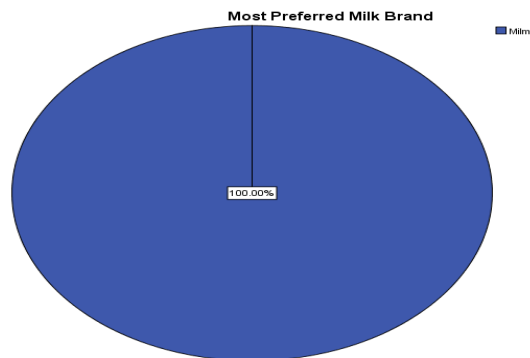
Samadhan. K. Khamkar in his article, The Consumption Pattern of Dairy Products by Indian Consumers Since 2000, has described the performance of the Indian Dairy sector over the last three decades which has been extremely impressive. This can be attributed to successful implementation of the Operation Flood programme and other dairy development programmes implemented by the State and Central Governments. Before Operation Flood came into being, India was a net importer of dairy products, mainly milk powder. However, milk production has increased substantially and in 2006-07 it almost doubled from the 1991 levels to touch 100 million tons. During this period, the per capita availability of milk also increased by almost 38 percent. This phenomenal growth in milk production has been due to demand-side development and supply-side promotions – increased demand for value-added products by consumers and extensive dairy development programmes.

### III. DATA ANALYSIS AND INTERPRETATION

#### 1. Retail Store Survey Analysis

**Table 1.1 Most Preferred Milk Brand**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid MILMA	50	100.0	100.0	100.0

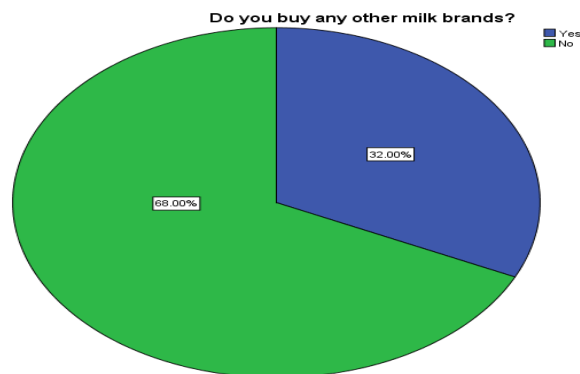


**Fig 1.1**

**INTERPRETATION:** From the survey it was found that MILMA milk is the most preferred brand by the retailers.

**TABLE 1.2 Do you buy any other milk brands?**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Yes	16	32.0	32.0	32.0
Valid No	34	68.0	68.0	100.0
Total	50	100.0	100.0	

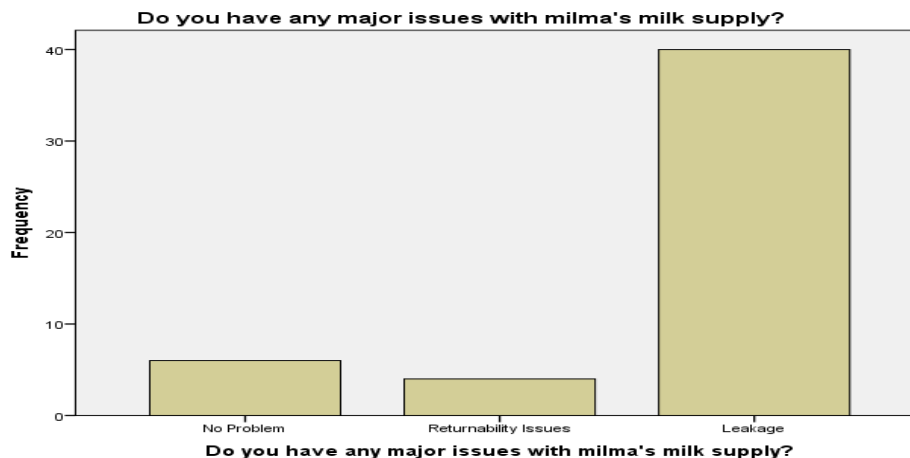


**Fig 1.2**

**INTERPRETATION:** 68 percent retailers buy only MILMA milk whereas 32 percent buy others brands also. This shows that there is demand for other milk brands in the market.

**Table 1.3 Do you have any major issues with MILMA's milk supply?**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid No Problem	6	12.0	12.0	12.0
Valid Returnability Issues	4	8.0	8.0	20.0
Valid Leakage	40	80.0	80.0	100.0
Total	50	100.0	100.0	

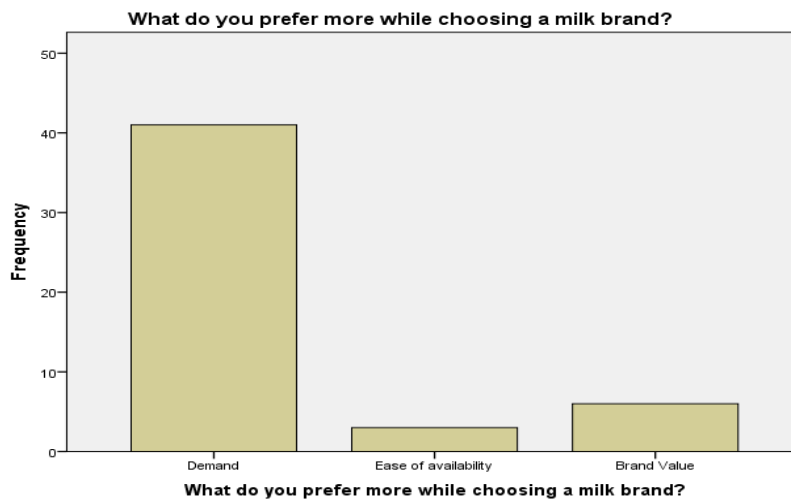


**Fig 1.3**

**INTERPRETATION:** Only 10 percent of retailers are satisfied with the MILMA's milk supply. Problem faced by the majority of the retailers is leakage. 80 percent has mentioned about this and 10 percent retailers have mentioned return ability issues as a major problem. The leakage issue can be the major reason why some dealers prefer taking other milk brands as well.

**Table 1.4 What do you prefer more while choosing a milk brand?**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Demand	41	82.0	82.0	82.0
Ease of availability	3	6.0	6.0	88.0
Brand Value	6	12.0	12.0	100.0
Total	50	100.0	100.0	

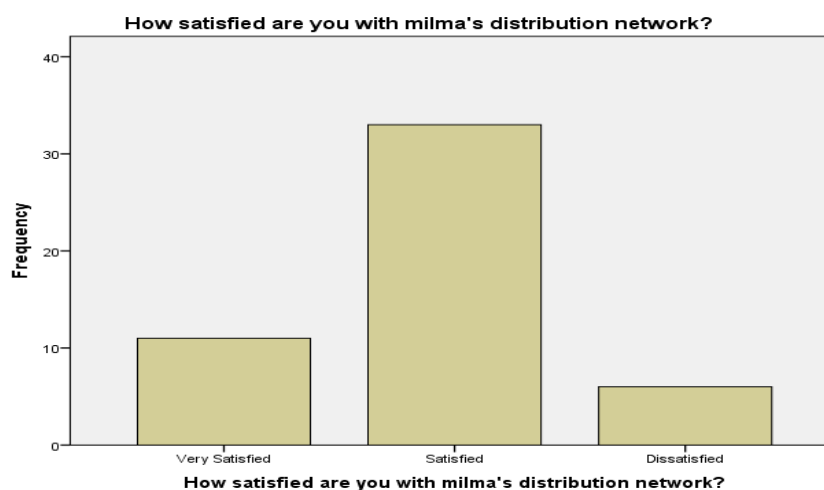


**Fig 1.4**

**INTERPRETATION:** 82 percent retailers choose a milk brand on the basis of the demand generated. 6 percent choose a milk brand which is easily available and remaining 12 percent goes for brand value. This means that dealers are preferring MILMA brand primarily on demand basis alone.

**Table 1.5 How satisfied are you with MILMA's distribution network?**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Very Satisfied	11	22.0	22.0	22.0
Satisfied	33	66.0	66.0	88.0
Dissatisfied	6	12.0	12.0	100.0
Total	50	100.0	100.0	

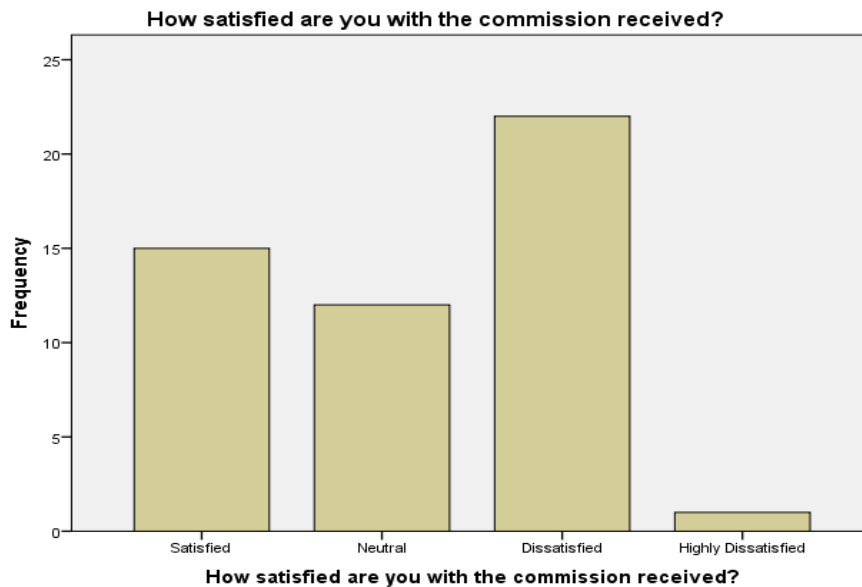


**Fig 1.5**

**INTERPRETATION:** 88 percent of retailers are satisfied with the MILMA's distribution network among which 22 percent are highly satisfied. 12 percent of the retailers are not satisfied with the distribution network. So distribution channel is perfect and hence the problem of divided demand comes from other factors.

**Table 1.6: How satisfied are you with the commission received?**

	Frequency	Percent	Valid Percent	Cumulative Percent
Satisfied	15	30.0	30.0	30.0
Neutral	12	24.0	24.0	54.0
Valid Dissatisfied	22	44.0	44.0	98.0
Highly Dissatisfied	1	2.0	2.0	100.0
Total	50	100.0	100.0	

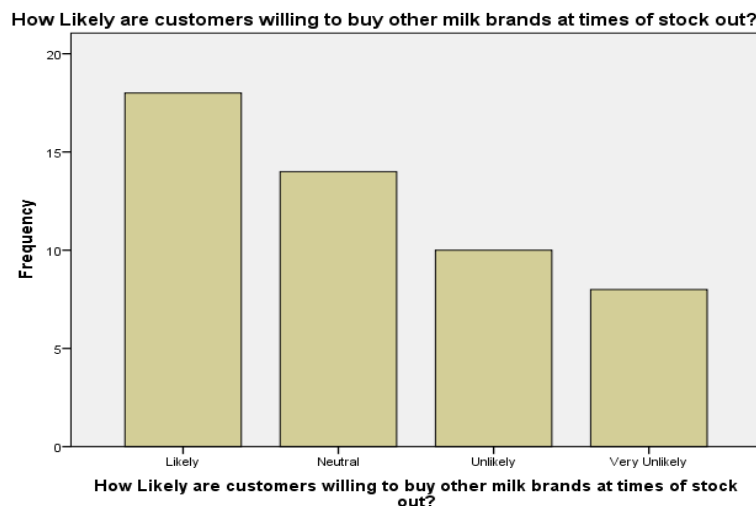


**Fig 1.6**

**INTERPRETATION:** 46 percent of the retailers are dissatisfied with the commission received from the milk among which 2 percent are highly dissatisfied. 30 percent of the retailers are satisfied with the commission received. The low commission policy of MILMA can be one of the primary factors that motivates dealers into stocking up other milk brands.

**Table 1.7 How Likely are customers willing to buy other milk brands at times of stock out?**

	Frequency	Percent	Valid Percent	Cumulative Percent
Likely	18	36.0	36.0	36.0
Neutral	14	28.0	28.0	64.0
Valid Unlikely	10	20.0	20.0	84.0
Very Unlikely	8	16.0	16.0	100.0
Total	50	100.0	100.0	

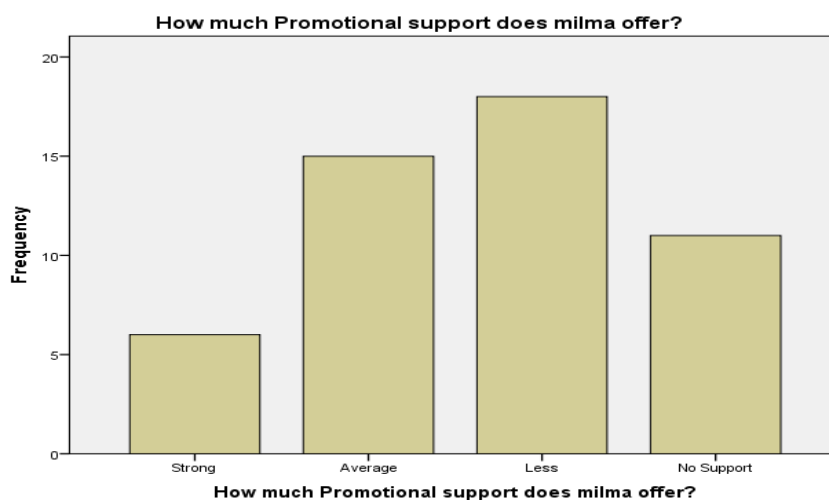


**Fig 1.7**

**INTERPRETATION:** 36 percent of the customers do not buy other milk brands when MILMA milk is not available while 36 percent of the customers will buy other brands at the time of stock out. 28 percent of the customers may or may not buy MILMA milk at the times of stock out. A significant figure of customers doesn't have problem in buying other milk brands. MILMA has to do something to motivate the customers to make them more loyal and less likely to switch brands.

**Table 4.1.8 How much Promotional support does MILMA offer?**

	Frequency	Percent	Valid Percent	Cumulative Percent
Strong	6	12.0	12.0	12.0
Average	15	30.0	30.0	42.0
Valid Less	18	36.0	36.0	78.0
No Support	11	22.0	22.0	100.0
Total	50	100.0	100.0	



**Fig 1.8**

**INTERPRETATION:** Only 12 percent of retailers feel that MILMA provides strong promotional support whereas 22 percent believes MILMA does not provide any promotional support. 30 percent of the them feel they get average support and 36 percent believe the support they get is less. MILMA needs to engage a little more on promotional activities to gain the confidence of retail store dealers.

**Table 1.9 How likely does the stock out of MILMA milk happens?**

	Frequency	Percent	Valid Percent	Cumulative Percent
Very Likely	1	2.0	2.0	2.0
Likely	4	8.0	8.0	10.0
Valid Neutral	7	14.0	14.0	24.0
Unileky	22	44.0	44.0	68.0
Highly Unlikely	16	32.0	32.0	100.0
Total	50	100.0	100.0	

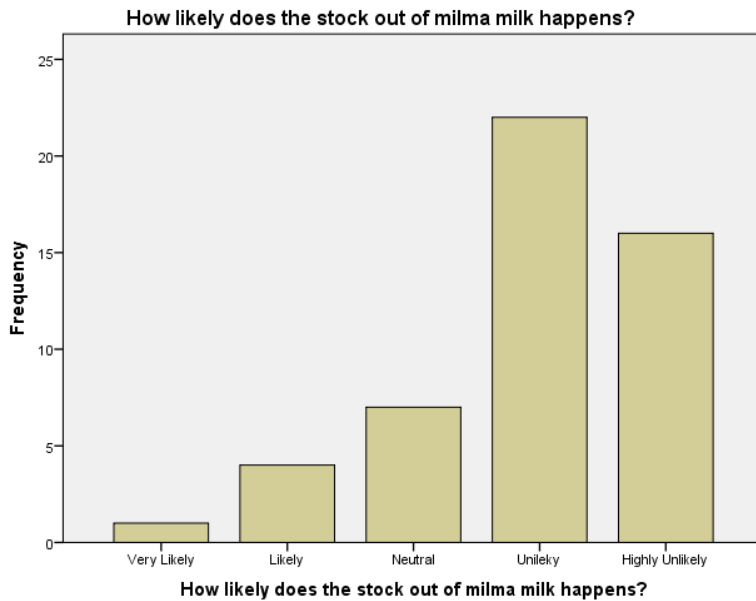


Fig 1.9

**INTERPRETATION:** Chances of MILMA milk getting stock out is very less. 76 percent believe chances of MILMA milk to be out of stock is unlikely among which 32 percent believe it to be highly unlikely. 2 percent believes chances of stock out is very likely and 8 percent believes chances of stock out to be likely. This adds up to show how well the distribution network is and stands to be a strong aspect of MILMA over its competitors

Table 1.10 How long have you been a dealer of MILMA milk?

	Frequency	Percent	Valid Percent	Cumulative Percent
0 – 2	2	4.0	4.0	4.0
3 – 5	6	12.0	12.0	16.0
6 – 8	15	30.0	30.0	46.0
9 – 11	14	28.0	28.0	74.0
More than 11	13	26.0	26.0	100.0
Total	50	100.0	100.0	

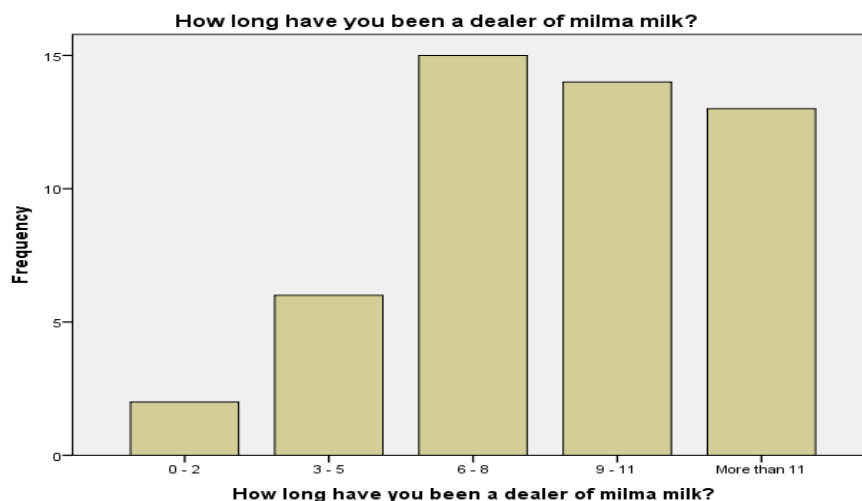


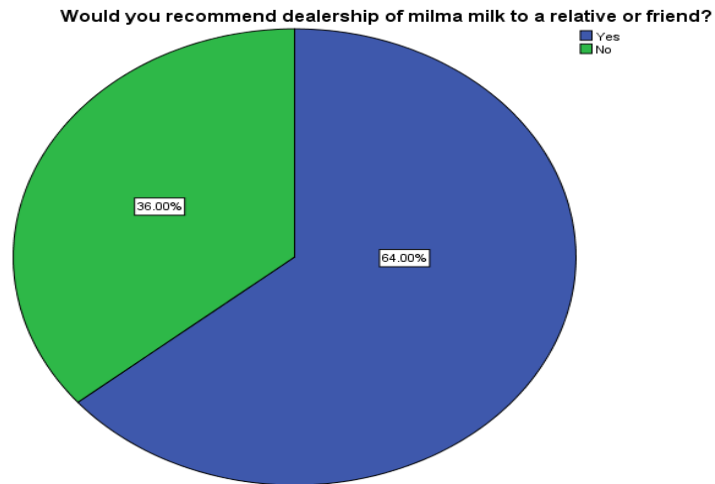
Fig 1.10

**INTERPRETATION:** 54 percent of the retailers have been dealers of MILMA milk for more than 9 years which shows the loyalty of dealers towards MILMA milk. 30 percent have been dealing with MILMA milk for 6-8 years, 12 percent have been dealers for 3-5 years and 4 percent are new dealers. This shows that despite of the commission and leakage issues MILMA still manages to gain loyal dealers



**Table 1.11 Would you recommend dealership of MILMA milk to a relative or friend?**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	32	64.0	64.0
	No	18	36.0	100.0
	Total	50	100.0	100.0

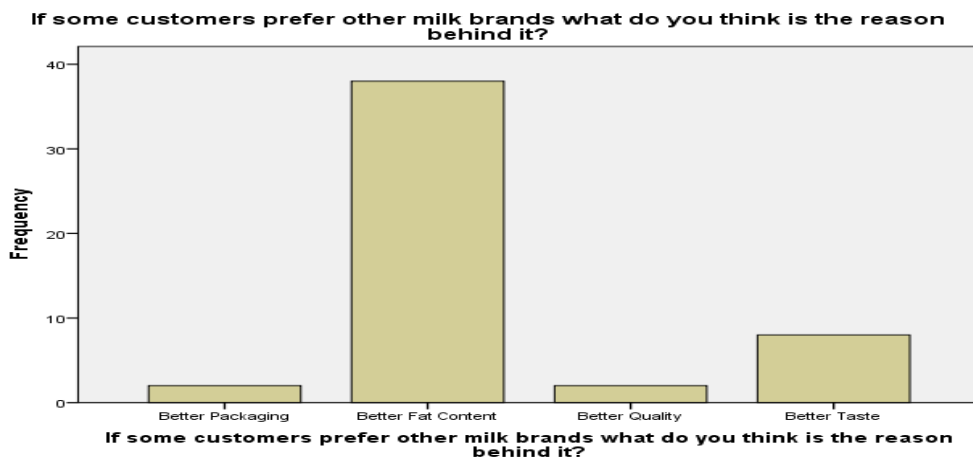


**Fig 1.11**

**INTERPRETATION:** 64 percent will recommend dealership of MILMA to others while 36 percent will not recommend dealership of MILMA to others. This shows that majority of the sample population is satisfied with the dealership but still the figures can be better. MILMA has to concentrate more on satisfying these dealers to improve the above figures.

**Table 1.12 If some customers prefer other milk brands what do you think is the reason behind it?**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Better Packaging	2	4.0	4.0
	Better Fat Content	38	76.0	80.0
	Better Quality	2	4.0	84.0
	Better Taste	8	16.0	100.0
	Total	50	100.0	100.0

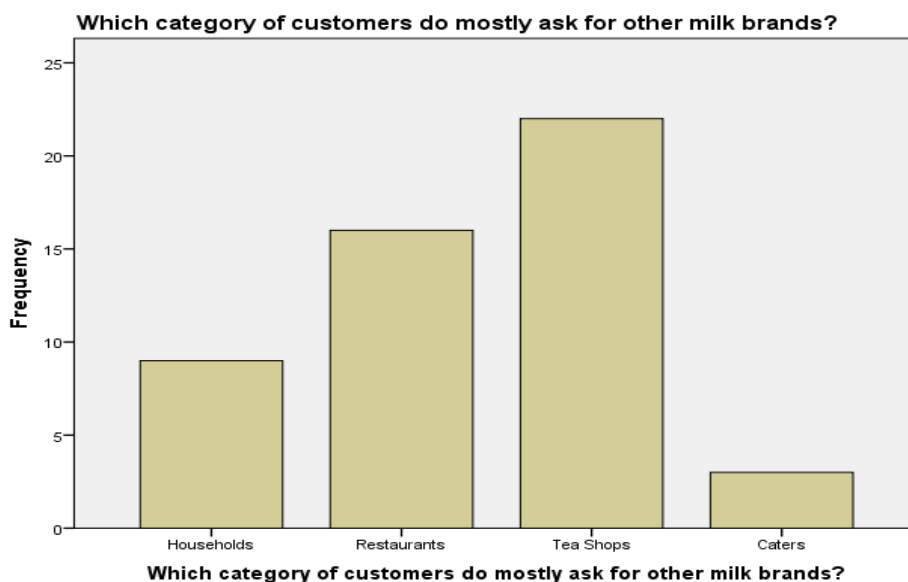


**Fig 1.12**

**INTERPRETATION:** 76 percent of retailers believe better fat content is the major reason why customers prefer other milk brands. 16 percent feels other brands taste better than MILMA. 4 percent believe other brands have better quality than MILMA and the remaining 4 percent believes other brands have better packaging. This goes to show that there are other milk brands in the market which can serve better fat milk.

**Table 1.13 Which category of customers do mostly ask for other milk brands?**

	Frequency	Percent	Valid Percent	Cumulative Percent
Households	9	18.0	18.0	18.0
Restaurants	16	32.0	32.0	50.0
Valid Tea Shops	22	44.0	44.0	94.0
Caters	3	6.0	6.0	100.0
Total	50	100.0	100.0	



**Fig 1.13**

**INTERPRETATION:** 44 percent of customers who ask for other milk brands are tea shops. 32 percent of customers are restaurants. Households account for only 18 percent and remaining 6 percent are caterers. This is primarily because tea shops and restaurants normally look for high fat content milk. This could be one area where MILMA could be losing its customers.

**ONEWAY ANOVA:** In order to test if there is a significant difference between dealers of two different region regarding perception of promotional support provided to them we use one way ANOVA test.

**Hypothesis of perception of dealers of different region with respect to promotional support provided to them**

H<sub>0</sub>: There is no significant difference between the perceptions of dealers from different region with respect to promotional support provided to them.

H<sub>1</sub>: There is a significant difference between the perceptions of dealers from different region with respect to promotional support provided to them.

**Table 1.14 Descriptives**

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
					Kochi	25		
Alleppey	25	3.64	.995	.199	3.23	4.05	2	5
Total	50	3.68	.957	.135	3.41	3.95	2	5

**Table 1.15 ANOVA**

How much Promotional support does MILMA offer?					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.080	1	.080	.086	.771
Within Groups	44.800	48	.933		
Total	44.880	49			

**INTERPRETATION:** Here since  $p = 0.771$  which is greater than our 0.5 level of significance we accept the null hypothesis and rejects the alternative hypothesis. This means that both the Alleppey and Kochi region have similar opinions on the fact that promotional support provided by MILMA is quite low.

**ONEWAY ANOVA**

In order to test if there is a significant difference between dealers of two different region regarding how long they have been dealers of the company

**Hypothesis of perception of dealers of different region with respect to loyalty factor.**

$H_0$ : There is no significant difference between the dealers from different regions with respect to length of dealership.

$H_1$ : There is a significant difference between the dealers from different regions with respect to length of dealership.

**Table 1.16 Descriptives**

How long have you been a dealer of MILMA milk?								
	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
Kochi	25	3.80	1.190	.238	3.31	4.29	1	5
Alleppey	25	3.40	1.041	.208	2.97	3.83	1	5
Total	50	3.60	1.125	.159	3.28	3.92	1	5

**Table 1.17 ANOVA**

How long have you been a dealer of MILMA milk?					
	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	2.000	1	2.000	1.600	.212
Within Groups	60.000	48	1.250		
Total	62.000	49			

**INTERPRETATION:** From the Anova table since the value of  $p = 0.212$  which is statistically insignificant since the value is greater than 0.5, we accept the null hypothesis and rejects the alternative hypothesis. But from the descriptive table it is clear that dealers in Kochi has been dealing slightly longer than those in Alleppey region.

### ONEWAY ANOVA

In order to test if there is a significant difference between dealers of two different region regarding how long they have been dealers of the company

#### Hypothesis of perception of dealers of different region with respect to loyalty factor

H<sub>0</sub>: There is no significant difference between the dealers from different regions with respect to length of dealership.

H<sub>1</sub>: There is a significant difference between the dealers from different regions with respect to length of dealership.

**Table 1.18 Descriptives**

How likely does the stock out of MILMA milk happens?								
	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
Kochi	25	3.80	1.000	.200	3.39	4.21	1	5
Alleppey	25	4.12	.971	.194	3.72	4.52	2	5
Total	50	3.96	.989	.140	3.68	4.24	1	5

**Table 1.19 Anova**

How likely does the stock out of MILMA milk happens?					
	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	1.280	1	1.280	1.317	.257
Within Groups	46.640	48	.972		
Total	47.920	49			

**INTERPRETATION:** From the Anova table since  $p = 0.257$ , which is statistically insignificant because it is greater than 0.05, we accept the null hypothesis and rejects the alternative hypothesis. It means that there is no significant difference between regions when it comes to frequency of stock out. From the descriptive table we can see that stock out happens slightly more in Kochi when compared to Alleppey.

### ONEWAY ANOVA

In order to test if there is a significant difference between dealers satisfaction level of distribution network between two regions

#### Hypothesis of satisfaction levels of distribution channel between dealers of two different regions

H<sub>0</sub>: There is no significant difference between the satisfaction levels of distribution channel between dealers of two different regions.

H<sub>1</sub>: There is a significant difference between the satisfaction levels of distribution channel between dealers of two different regions.

**Table 1.20 Descriptives**

How satisfied are you with MILMA's distribution network?								
	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
Kochi	25	2.16	.746	.149	1.85	2.47	1	4
Alleppey	25	1.88	.927	.185	1.50	2.26	1	4
Total	50	2.02	.845	.119	1.78	2.26	1	4

**Table 1.21 Anova**

How satisfied are you with MILMA's distribution network?					
	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	.980	1	.980	1.384	.245
Within Groups	34.000	48	.708		
Total	34.980	49			

**INTERPRETATION:** From the anova table since the value of  $p = 0.245$  is statistically insignificant since it is greater than our alpha value 0.05. Hence we accept the null hypothesis and rejects the alternative hypothesis. From the descriptive table we can see that dealers at Alleppey tends to be slightly more satisfied when compared to Kochi.

**CHI SQUARE TEST**

In order to see if there is any relationship between the satisfaction level of dealers and whether or not they are willing to recommend the dealership to others, we use chi square test by taking the following hypothesis

$H_0$ : There is no significant relationship between satisfaction level of dealers and their willingness to recommend the dealership to others

$H_1$ : There is a significant relationship between satisfaction level of customers and their willingness to recommend the dealership to others

**Table 1.22**

**Would you recommend dealership of MILMA milk to a relative or friend? \* How satisfied are you with the commission received? Crosstabulation**

		How satisfied are you with the commission received?				Total
		Satisfied	Neutral	Dissatisfied	Highly Dissatisfied	
Would you recommend dealership of MILMA milk to a relative or friend?	Yes	Count 14	9	9	0	32
		Expected Count 9.6	7.7	14.1	.6	32.0
	No	Count 1	3	13	1	18
		Expected Count 5.4	4.3	7.9	.4	18.0
Total	Count	15	12	22	1	50
	Expected Count	15.0	12.0	22.0	1.0	50.0

**Table 1.23 Chi-Square Tests**

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	13.101 <sup>a</sup>	3	.004
Likelihood Ratio	14.731	3	.002
Linear-by-Linear Association	12.505	1	.000
N of Valid Cases	50		

a. 3 cells (37.5%) have expected count less than 5. The minimum expected count is .36.

**INTERPRETATION:** From the chi square table we see that the asymptotic significance value is 0.002 which is less than 0.05. Hence it is statistically significant and therefore we accept the alternative hypothesis and rejects the null hypothesis. This means that dealers who are more satisfied were willing to recommend dealership to others and vice versa.

**CHI SQUARE TEST**

In order to see if there is any relationship between locality and dealers satisfaction level of distribution network, we use chi square test by taking the following hypothesis

$H_0$ : There is no significant relationship between locality and dealers satisfaction level of distribution network

$H_1$ : There is a significant relationship between locality and dealers satisfaction level of distribution network

**Table 1.24 How satisfied are you with MILMA's distribution network? \* Locality Crosstabulation**

		Locality		Total	
		Kochi	Alleppey		
How satisfied are you with MILMA's distribution network?	Very Satisfied	Count	2	9	11
		Expected Count	5.5	5.5	11.0
	Satisfied	Count	20	13	33
		Expected Count	16.5	16.5	33.0
	Dissatisfied	Count	3	3	6
		Expected Count	3.0	3.0	6.0
Total	Count	25	25	50	
	Expected Count	25.0	25.0	50.0	

**Table 1.25 Chi-Square Tests**

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	5.939 <sup>a</sup>	2	.051
Likelihood Ratio	6.314	2	.043
Linear-by-Linear Association	1.373	1	.241
N of Valid Cases	50		

a. 2 cells (33.3%) have expected count less than 5. The minimum expected count is 3.00.

**INTERPRETATION:** From the chi square table since the asymptotic significance is 0.043 which is lesser than 0.05, we accept the alternative hypothesis and rejects the null hypothesis. This means that with respect to locality the satisfaction level of dealers in terms of distribution network varies.

**CHI SQUARE TEST**

In order to see if there is any relationship between locality and dealers perception of the customers willingness to buy other milk brands during stock out, we use chi square test by taking the following hypothesis

H<sub>0</sub>: There is no significant relationship between locality and dealers perception of the customers willingness to buy other milk brands during stock out.

H<sub>1</sub>: There is a significant relationship between locality dealers perception of the customers willingness to buy other milk brands during stock out.

**Table 1.26**

**How Likely are customers willing to buy other milk brands at times of stock out? \* Locality Crosstabulation**

		Locality		Total	
		Kochi	Alleppey		
How Likely are customers willing to buy other milk brands at times of stock out?	Likely	Count	9	9	18
		Expected Count	9.0	9.0	18.0
	Neutral	Count	5	9	14
		Expected Count	7.0	7.0	14.0
	Unlikely	Count	7	3	10
		Expected Count	5.0	5.0	10.0
	Very Unlikely	Count	4	4	8
		Expected Count	4.0	4.0	8.0
	Total	Count	25	25	50
		Expected Count	25.0	25.0	50.0

**Table 1.27 Chi-Square Tests**

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	2.743 <sup>a</sup>	3	.433
Likelihood Ratio	2.805	3	.423
Linear-by-Linear Association	.267	1	.605
N of Valid Cases	50		

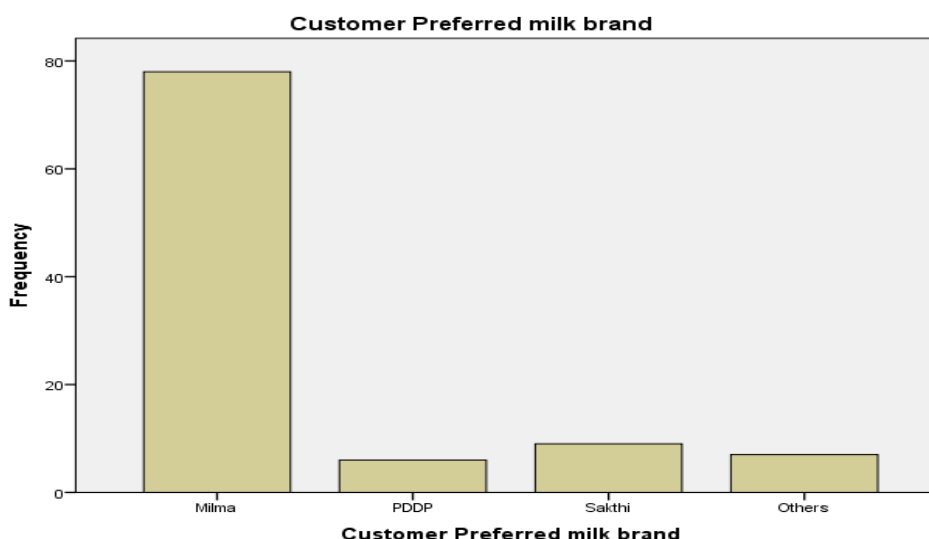
a. 2 cells (25.0%) have expected count less than 5. The minimum expected count is 4.00.

**INTERPRETATION:** From the chi square table we can see that the asymptotic significance is 0.423 which is greater than 0.05. Hence in this case we have to accept the null hypothesis and reject the alternative hypothesis. In other words, there is no significant relationship between locality and dealers perception of the customers willingness to buy other milk brands during times of stock out.

**2. Customer Survey Analysis**

**Table 2.1 Customer Preferred milk brand**

	Frequency	Percent	Valid Percent	Cumulative Percent
MILMA	78	78.0	78.0	78.0
PDDP	6	6.0	6.0	84.0
Valid Sakthi	9	9.0	9.0	93.0
Others	7	7.0	7.0	100.0
Total	100	100.0	100.0	

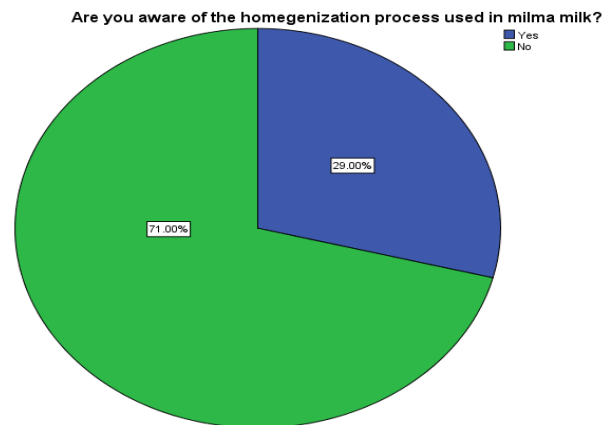


**Fig 2.1**

**INTERPRETATION:** 78 percent of the customers prefer MILMA milk, 9 percent prefer shakthi milk, 6 percent prefer PDDP and the remaining 7 percent prefer other brands. This shows that MILMA has very huge demand in the market.

**Table 2.2 Are you aware of the homegenization process used in MILMA milk?**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	29	29.0	29.0	29.0
	No	71	71.0	71.0	100.0
	Total	100	100.0	100.0	



**Fig 4.2.2**

**INTERPRETATION:** 71 percent of the people are not aware of the homogenisation process of the MILMA. Only 21 percent is aware of the homogenisation. Unawareness about the homogenisation process can be a reason for reduced market share of the MILMA.

**Table 2.3 How satisfied are you with the amount of fat content specified in MILMA milk?**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Satisfied	6	6.0	6.0	6.0
	Satisfied	45	45.0	45.0	51.0
	Neutral	40	40.0	40.0	91.0
	Dissatisfied	6	6.0	6.0	97.0
	Very Dissatisfied	3	3.0	3.0	100.0
	Total	100	100.0	100.0	



**Fig 2.3**



**INTERPRETATION:** 51 percent of customers are satisfied of with the fat content specified in the MILMA milk among which 6 percent are highly satisfied. 9 percent of the population are dissatisfied with the fat content and 40 percent have taken a neutral stance. Unawareness of homogenization process could be the major reason why people are not completely satisfied with the fat content specified.

**Table 2.4 How satisfied are you with the quality and service of MILMA milk?**

	Frequency	Percent	Valid Percent	Cumulative Percent
Very Satisfied	6	6.0	6.0	6.0
Satisfied	65	65.0	65.0	71.0
Neutral	23	23.0	23.0	94.0
Dissatisfied	5	5.0	5.0	99.0
Very Dissatisfied	1	1.0	1.0	100.0
Total	100	100.0	100.0	



**Fig 2.4**

**INTERPRETATION:** 71 percent are satisfied with the quality of the MILMA milk among which 6 percent is highly satisfied. 6 percent are dissatisfied with the quality, 23 percent of the customers are neither satisfied nor dissatisfied. This could be one major aspect which creates good demand for MILMA milk in the market

**Table 2.5 How likely are you willing to buy other milk brands at times of stock out?**

	Frequency	Percent	Valid Percent	Cumulative Percent
Very Likely	10	10.0	10.0	10.0
Likely	30	30.0	30.0	40.0
Neutral	23	23.0	23.0	63.0
Unlikely	26	26.0	26.0	89.0
Highly Unlikely	11	11.0	11.0	100.0
Total	100	100.0	100.0	

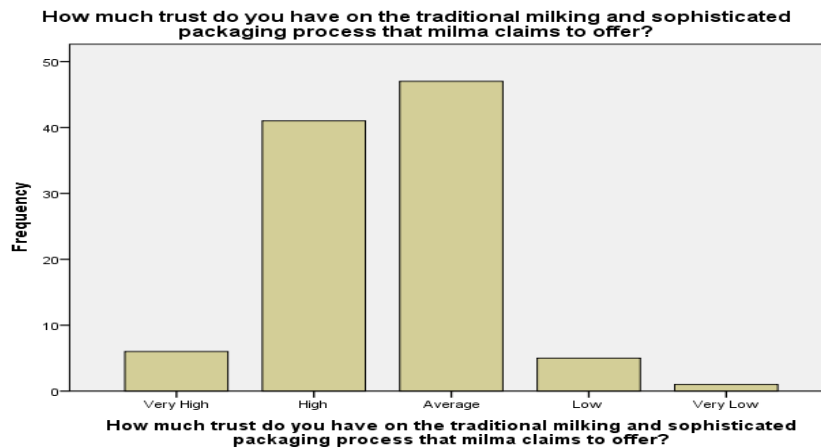


**FIG 2.5**

**INTERPRETATION:** 37 percent will not buy other milk brand at the times of stock out of MILMA milk among which 11 percent are highly unlikely to buy another brand. 40 percent will buy other brands at the time of stock out among which 10 percent are highly likely to buy other brand. 23 percent said they may or may not buy other brand which depends only on the circumstances. More people are willing to switch during stock out and this can hurt MILMA badly unless their distribution channel is intact.

**Table 2.6 How much trust do you have on the traditional milking and sophisticated packaging process that MILMA claims to offer?**

	Frequency	Percent	Valid Percent	Cumulative Percent
Very High	6	6.0	6.0	6.0
High	41	41.0	41.0	47.0
Average	47	47.0	47.0	94.0
Low	5	5.0	5.0	99.0
Very Low	1	1.0	1.0	100.0
Total	100	100.0	100.0	

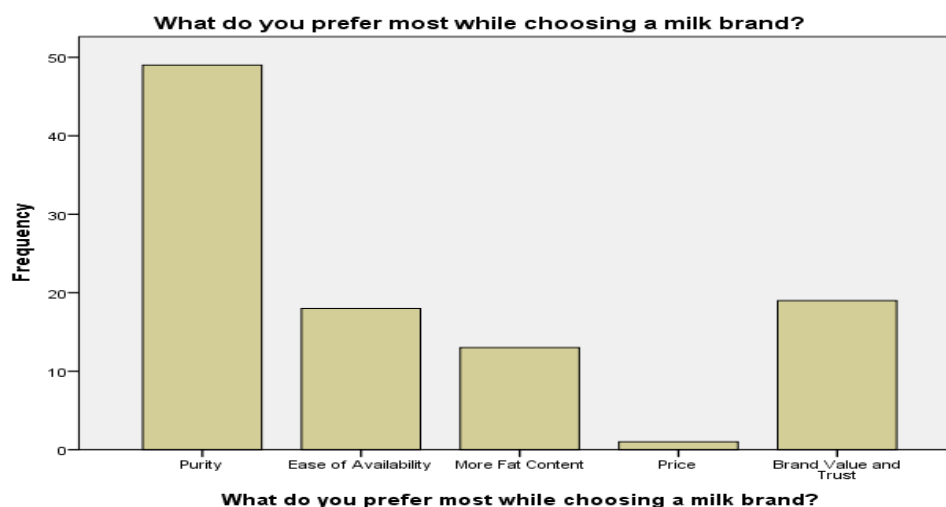


**Fig 2.6**

**INTERPRETATION:** 41 percent have high and 6 percent have very high trust in the traditional milking and packing processes. Only 6 percent does not have trust in the traditional milking processes. The rest 47 percent have voted average, which may be because they are not completely satisfied nor totally dissatisfied in the process. MILMA should focus more on engaging in events and activities to motivate customers and to gain their trust.

**Table 2.7 What do you prefer most while choosing a milk brand?**

	Frequency	Percent	Valid Percent	Cumulative Percent
Purity	49	49.0	49.0	49.0
Ease of Availability	18	18.0	18.0	67.0
More Fat Content	13	13.0	13.0	80.0
Price	1	1.0	1.0	81.0
Brand Value and Trust	19	19.0	19.0	100.0
Total	100	100.0	100.0	



**Fig 2.7**

**INTERPRETATION:** Majority of the customers prefer purity over other factors while choosing a milk brand. 49 percent of the sample population have voted for purity. 18 percent looks into ease of availability, 13 percent into the fat content and 19 percent goes along with brand value and trust. Which means that MILMA should focus on the purity factor and try to improve on that aspect.

**Table 2.8 How long have you been a customer of millma milk?**

	Frequency	Percent	Valid Percent	Cumulative Percent
0 to 2 years	17	17.0	17.0	17.0
3 to 5 years	11	11.0	11.0	28.0
6 to 8 years	21	21.0	21.0	49.0
9 to 11 years	12	12.0	12.0	61.0
More than 11 years	39	39.0	39.0	100.0
Total	100	100.0	100.0	

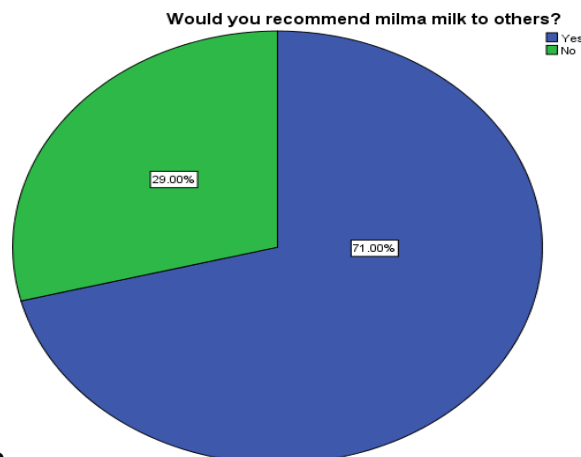


**Fig 2.8**

**INTERPRETATION:** 39 percent have been the customers of MILMA milk for more than 11 years, 12 percent have been customers for 9-11 years, 21 percent for 6-8 years, 11 percent 3-5 years and 17 percent for 0-2 years. It is seen that majority of customers have been using MILMA for years and this shows their satisfaction level.

**Table 2.9 Would you recommend MILMA milk to others?**

	Frequency	Percent	Valid Percent	Cumulative Percent
Yes	71	71.0	71.0	71.0
No	29	29.0	29.0	100.0
Total	100	100.0	100.0	

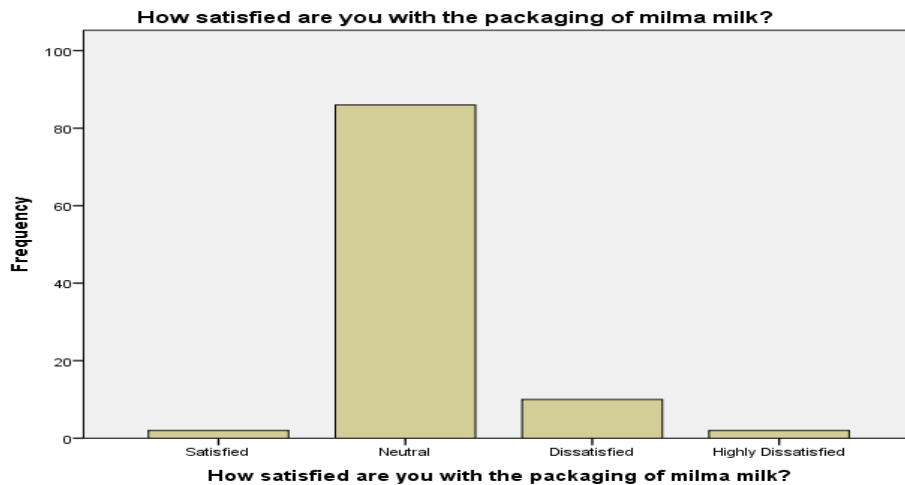


**Fig 2.9**

**INTERPRETATION:** 71 percent would suggest MILMA milk to others while 29 percent does not want to recommend to others. We can draw a conclusion that majority of the people are satisfied which is why they are willing to recommend to others. But on the other hand if more customers can be satisfied this could bring in more demand for MILMA in the market.

**Table 2.10 How satisfied are you with the packaging of MILMA milk?**

	Frequency	Percent	Valid Percent	Cumulative Percent
Satisfied	2	2.0	2.0	2.0
Neutral	86	86.0	86.0	88.0
Valid Dissatisfied	10	10.0	10.0	98.0
Highly Dissatisfied	2	2.0	2.0	100.0
Total	100	100.0	100.0	

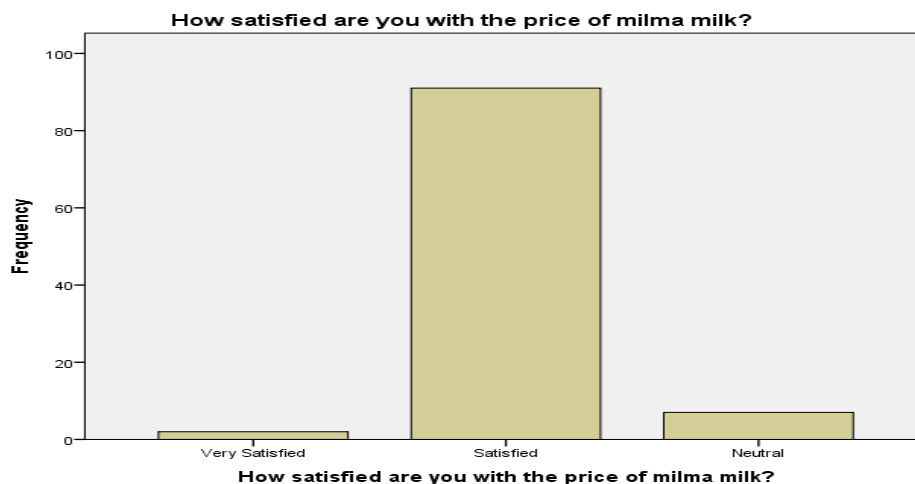


**Fig 2.10**

**INTERPRETATION:** Majority of the population (86%) have taken a neutral stand on this question. This may be either because they are biased or may be because they do not give importance to the packaging of the milk. 12 percent are dissatisfied with the packaging of the milk and 2 percent are satisfied with the packaging of milk

**Table 2.11 How satisfied are you with the price of MILMA milk?**

	Frequency	Percent	Valid Percent	Cumulative Percent
Very Satisfied	2	2.0	2.0	2.0
Satisfied	91	91.0	91.0	93.0
Valid Neutral	7	7.0	7.0	100.0
Total	100	100.0	100.0	

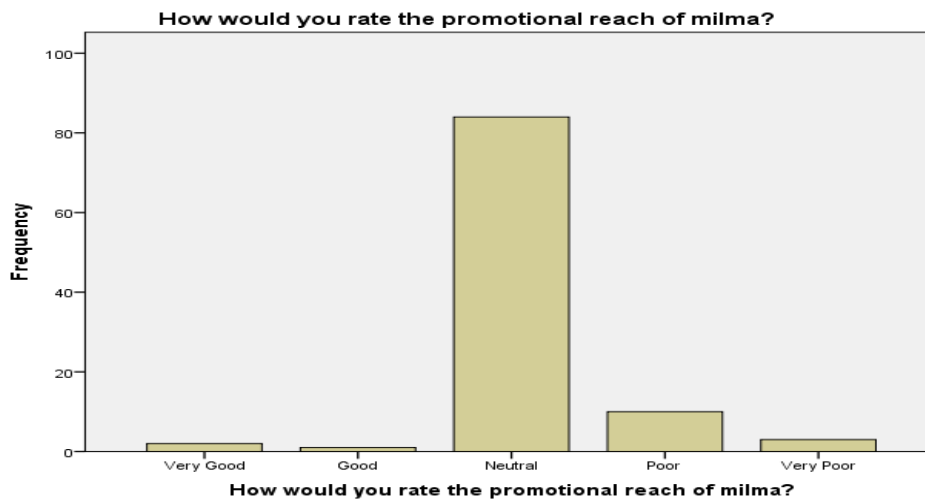


**Fig 2.11**

**INTERPRETATION:** 91 percent are satisfied with the price of MILMA milk. 2 percent are highly satisfied. This can mean that compared to its competitors MILMA milk is providing better price or better value for its price

**Table 2.12 How would you rate the promotional reach of MILMA?**

	Frequency	Percent	Valid Percent	Cumulative Percent
Very Good	2	2.0	2.0	2.0
Good	1	1.0	1.0	3.0
Average	84	84.0	84.0	87.0
Poor	10	10.0	10.0	97.0
Very Poor	3	3.0	3.0	100.0
Total	100	100.0	100.0	



**Fig 2.12**

**INTERPRETATION:** 84 percent rated the promotional reach as neutral, 3 percent have rated it good and 13 percent have rated it bad. The majority who have voted as neutral may be biasing in this case as they may not want to criticise the brand in this particular aspect since it is doing pretty well in the market otherwise.

**Table 2.13 How would you rate the purity of MILMA milk?**

	Frequency	Percent	Valid Percent	Cumulative Percent
Very Good	26	26.0	26.0	26.0
Good	52	52.0	52.0	78.0
Neutral	15	15.0	15.0	93.0
Poor	6	6.0	6.0	99.0
Very Poor	1	1.0	1.0	100.0
Total	100	100.0	100.0	

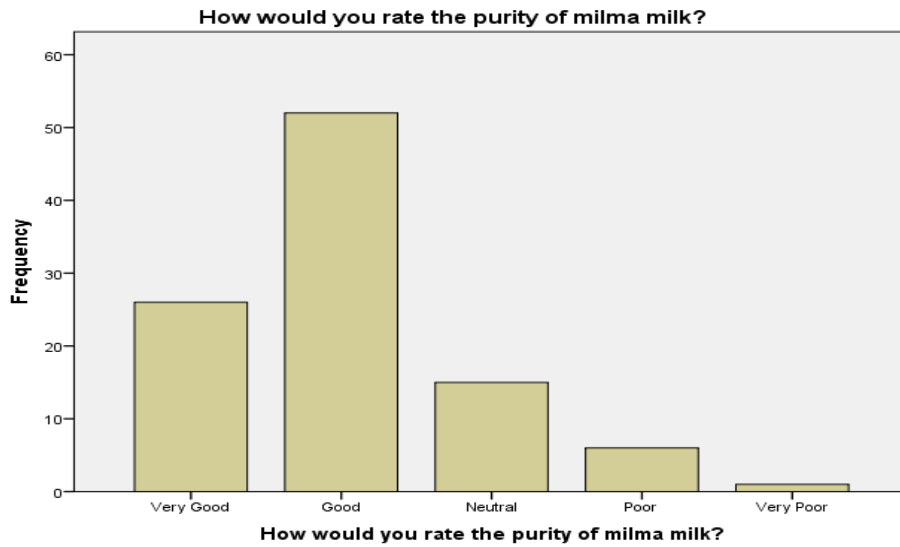


Fig 2.13

**INTERPRETATION:** 78 percent rate MILMA milk as high purity while 7 percent feels milk has low purity. Since purity is a major factor that customers look into and majority feel that MILMA milk has high purity, we can conclude that this is one of the success factors of MILMA milk in the market.

Table 2.14 How would you rate the availability of MILMA milk in your locality?

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Good	74	74.0	74.0
	Good	24	24.0	98.0
	Neutral	2	2.0	100.0
	Total	100	100.0	100.0

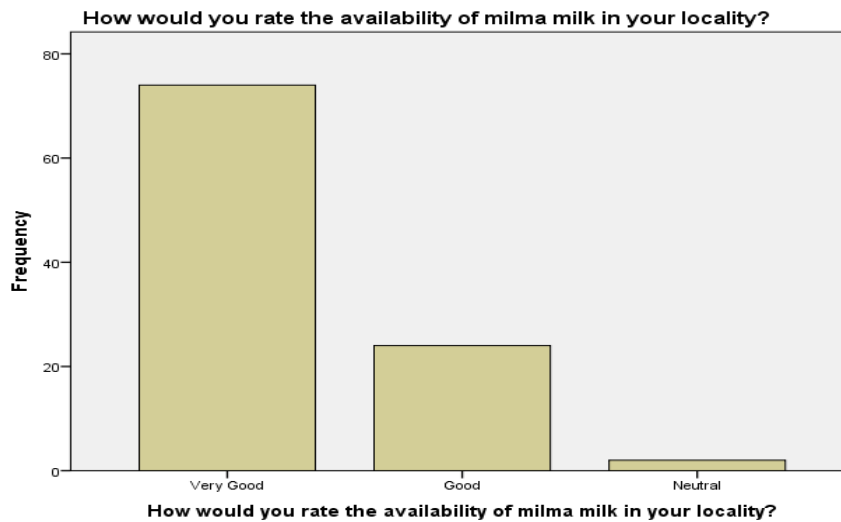


Fig 2.14

**INTERPRETATION:** 98 percent says milk is easily available in their locality and 2 percent says milk may or may not be available. Again another distribution factor which adds to the success of MILMA milk.

**Table 2.15 How satisfied are you with the pasteurization process of MILMA?**

	Frequency	Percent	Valid Percent	Cumulative Percent
Very Satisfied	4	4.0	4.0	4.0
Satisfied	53	53.0	53.0	57.0
Neutral	33	33.0	33.0	90.0
Dissatisfied	7	7.0	7.0	97.0
Very Dissatisfied	3	3.0	3.0	100.0
Total	100	100.0	100.0	

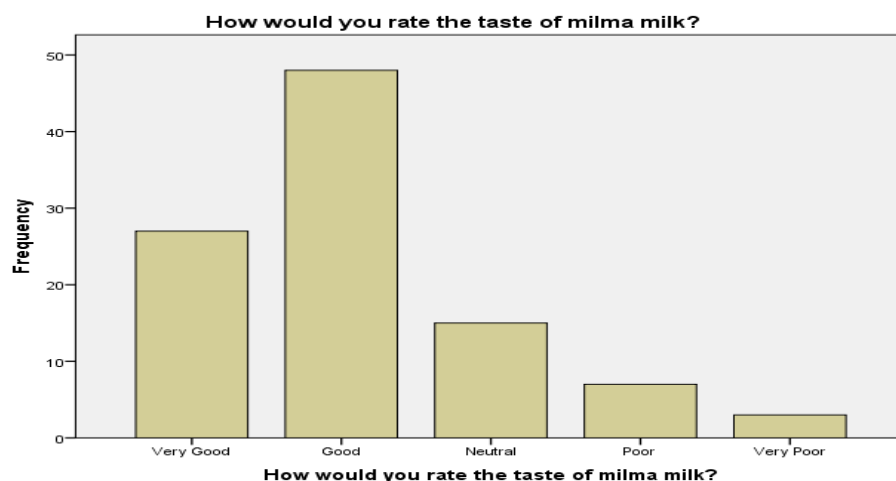


**Fig 2.15**

**INTERPRETATION:** 57 percent is satisfied with the pasteurization process of MILMA. 10 percent are dissatisfied with the pasteurization process. The rest 33 percent have voted neutral. Since there are other milk brands in the market which provides double pasteurized milks, this can turn out to be a major problem for MILMA.

**Table 2.16 How would you rate the taste of MILMA milk?**

	Frequency	Percent	Valid Percent	Cumulative Percent
Very Good	27	27.0	27.0	27.0
Good	48	48.0	48.0	75.0
Neutral	15	15.0	15.0	90.0
Poor	7	7.0	7.0	97.0
Very Poor	3	3.0	3.0	100.0
Total	100	100.0	100.0	



**Fig 2.16**

**INTERPRETATION:** 75 percent likes the taste of the MILMA milk and has rated good among which 27 percent feels it very good. 10 percent does not like the taste of milk and has rated poor. The rest 15 percent could not draw a conclusion regarding the taste. So the taste factor also adds to the success of MILMA and is an area where they excel.

### CHI SQUARE

In order to see if there is any relationship between the satisfaction level of customers in terms of specified fat content and awareness of homogenization process, we use chi square test by taking the following hypothesis

H<sub>0</sub>: There is no significant relationship between satisfaction level of customers in terms of specified fat content and their awareness of homogenization process.

H<sub>1</sub>: There is a significant relationship between satisfaction level of customers in terms of specified fat content and their awareness of homogenization process.

**Table 2.17 How satisfied are you with the amount of fat content specified in MILMA milk? \* Are you aware of the homogenization process used in MILMA milk?**

Cross tabulation					
			Are you aware of the homogenization process used in MILMA milk?		Total
			Yes	No	
How satisfied are you with the amount of fat content specified in MILMA milk?	Very Satisfied	Count	6	0	6
		Expected Count	1.7	4.3	6.0
	Satisfied	Count	20	25	45
		Expected Count	13.1	32.0	45.0
	Neutral	Count	2	38	40
		Expected Count	11.6	28.4	40.0
	Dissatisfied	Count	1	5	6
		Expected Count	1.7	4.3	6.0
	Very Dissatisfied	Count	0	3	3
		Expected Count	.9	2.1	3.0
	Total	Count	29	71	100
		Expected Count	29.0	71.0	100.0

**Table 2.18 Chi-Square Tests**

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	32.761 <sup>a</sup>	4	.000
Likelihood Ratio	37.316	4	.000
Linear-by-Linear Association	23.209	1	.000
N of Valid Cases	100		

a. 6 cells (60.0%) have expected count less than 5. The minimum expected count is .87.

**INTERPRETATION:** From the above chi square table we can see that the asymptotic significance value is 0.000 which is less than our alpha level of significance 0.05. Hence we reject the null hypothesis and accepts the alternative hypothesis. This means that people who are aware of the homogenization process were more likely to be satisfied with the level of fat content specified than people who were unaware of the process.



### CHI SQUARE

In order to see if there is any relationship between how long people have been a customer of MILMA milk and their willingness to recommend to others, we use chi square test by taking the following hypothesis.

H<sub>0</sub>: There is no significant relationship between how long people have been a customer of MILMA milk and their willingness to recommend it to others.

H<sub>1</sub>: There is a significant relationship between how long people have been a customer of MILMA milk and their willingness to recommend it to others.

**Table 2.19**

**Would you recommend MILMA milk to others? \* How long have you been a customer of millma milk? Crosstabulation**

		How long have you been a customer of millma milk?					Total	
		0 to 2 years	2 to 5 years	5 to 7 years	7 to 10 years	> 10 years		
Would you recommend MILMA milk to others?	Yes	Count	2	6	16	10	37	71
		Expected Count	12.1	7.8	14.9	8.5	27.7	71.0
	No	Count	15	5	5	2	2	29
		Expected Count	4.9	3.2	6.1	3.5	11.3	29.0
Total		Count	17	11	21	12	39	100
		Expected Count	17.0	11.0	21.0	12.0	39.0	100.0

**Table 2.20 Chi-Square Tests**

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	42.372 <sup>a</sup>	4	.000
Likelihood Ratio	43.313	4	.000
Linear-by-Linear Association	37.494	1	.000
N of Valid Cases	100		

a. 3 cells (30.0%) have expected count less than 5. The minimum expected count is 3.19.

Since the asymptotic significance value is 0.000 which is less than 0.05, we can accept the alternative hypothesis and reject the null hypothesis. In other words, people who have been using the milk far too long were willing to recommend to others more than people who were new customers. This test more significance in proving that the test was undergone properly and has less chance of respondents biasing it.

### CHI SQUARE

In order to see if there is any relationship between how long people have been a customer of MILMA milk and their satisfaction level on quality and service, we use chi square test by taking the following hypothesis

H<sub>0</sub>: There is no significant relationship between how long people have been a customer of MILMA milk and their level of satisfaction on quality and service provided.

H<sub>1</sub>: There is a significant relationship between how long people have been a customer of MILMA milk and their level of satisfaction on quality and service provided.

**Table 4.2.21**

**How satisfied are you with the quality and service of MILMA milk? \* How long have you been a customer of millma milk? Crosstabulation**

		How long have you been a customer of millma milk?					Total	
		0 to 2 years	2 to 5 years	5 to 7 years	7 to 10 years	> 10 years		
How satisfied are you with the quality and service of MILMA milk?	Very Satisfied	Count	0	1	1	1	3	6
		Expected Count	1.0	.7	1.3	.7	2.3	6.0
	Satisfied	Count	4	6	13	10	32	65
		Expected Count	11.1	7.2	13.7	7.8	25.4	65.0
	Neutral	Count	9	3	6	1	4	23
		Expected Count	3.9	2.5	4.8	2.8	9.0	23.0
	Dissatisfied	Count	3	1	1	0	0	5
		Expected Count	.9	.6	1.1	.6	2.0	5.0
	Very Dissatisfied	Count	1	0	0	0	0	1
		Expected Count	.2	.1	.2	.1	.4	1.0
	Total	Count	17	11	21	12	39	100
		Expected Count	17.0	11.0	21.0	12.0	39.0	100.0

**Table 2.22 Chi-Square Tests**

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	32.737 <sup>a</sup>	16	.008
Likelihood Ratio	33.242	16	.007
Linear-by-Linear Association	23.632	1	.000
N of Valid Cases	100		

a. 19 cells (76.0%) have expected count less than 5. The minimum expected count is .11.

Since the asymptotic significance value is 0.007 which is less than 0.05, we can accept the null hypothesis and reject the alternative hypothesis. This means that people who are satisfied with quality and service tends to be more loyal

### CHI SQUARE

In order to see if there is any relationship between how long people have been a customer of MILMA milk and their perception of purity of MILMA milk, we use chi square test by taking the following hypothesis

H<sub>0</sub>: There is no significant relationship between how long people have been a customer of MILMA milk and their perception of purity of MILMA milk.

H<sub>1</sub>: There is a significant relationship between how long people have been a customer of MILMA milk and their perception of purity of MILMA milk.

**Table 4.2.23**

**How would you rate the purity of MILMA milk? \* How long have you been a customer of milma milk? Crosstabulation**

			How long have you been a customer of milma milk?					Total
			0 to 2 years	2 to 5 years	5 to 7 years	7 to 10 years	> 10 years	
How would you rate the purity of MILMA milk?	Very Good	Count	1	3	8	5	9	26
		Expected Count	4.4	2.9	5.5	3.1	10.1	26.0
	Good	Count	4	6	9	5	28	52
		Expected Count	8.8	5.7	10.9	6.2	20.3	52.0
	Neutral	Count	9	1	3	2	0	15
		Expected Count	2.6	1.7	3.2	1.8	5.9	15.0
	Poor	Count	3	1	1	0	1	6
		Expected Count	1.0	.7	1.3	.7	2.3	6.0
	Very Poor	Count	0	0	0	0	1	1
		Expected Count	.2	.1	.2	.1	.4	1.0
	Total	Count	17	11	21	12	39	100
		Expected Count	17.0	11.0	21.0	12.0	39.0	100.0

**Table 4.2.24 Chi-Square Tests**

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	40.856 <sup>a</sup>	16	.001
Likelihood Ratio	41.445	16	.000
Linear-by-Linear Association	9.843	1	.002
N of Valid Cases	100		

a. 17 cells (68.0%) have expected count less than 5. The minimum expected count is .11.

Since the asymptotic significance value is 0.000 which is less than 0.05. This means that we can accept the alternative hypothesis and reject the null hypothesis. In other words people who are more loyal tends to believe that MILMA milk is more pure.

**ANOVA ONEWAY**

In order to test if there is a significant difference between availability of MILMA milk between two regions, we use the following anova test.

**Hypothesis of satisfaction levels of distribution channel between dealers of two different regions**

H<sub>0</sub>: There is no significant difference between the availability of MILMA milk among the two different regions.

H<sub>1</sub>: There is a significant difference between the availability of MILMA milk among the two different regions.

**Table 2.25 Descriptives**

How would you rate the availability of MILMA milk in your locality?

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
Kochi	50	1.18	.388	.055	1.07	1.29	1	2
Alleppey	50	1.38	.567	.080	1.22	1.54	1	3
Total	100	1.28	.494	.049	1.18	1.38	1	3

**Table 2.26 ANOVA**  
How would you rate the availability of MILMA milk in your locality?

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1.000	1	1.000	4.231	.042
Within Groups	23.160	98	.236		
Total	24.160	99			

From the above anova table,  $p = 0.042$  which is less than 0.05. Hence we accept the alternative hypothesis and rejects the null hypothesis. In other words, there is difference in the availability of MILMA milk with respect to the two regions. From table 4.52 we can see that availability tends to be a little better in Kochi when compared to Alleppey region.

**ANOVA ONEWAY**

In order to test if there is a significant difference between loyalties of customers calculated in terms of time period between two regions

**Hypothesis of loyalty of customers between two different regions**

$H_0$ : There is no significant difference between the loyalties of customers in two different regions.

$H_1$ : There is a significant difference between the loyalties of customers in two different regions.

**Table 2.27 Descriptives**

How long have you been a customer of millma milk?

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
Kochi	50	3.84	1.346	.190	3.46	4.22	1	5
Alleppey	50	3.06	1.583	.224	2.61	3.51	1	5
Total	100	3.45	1.513	.151	3.15	3.75	1	5

**Table 2.28 ANOVA**

How long have you been a customer of millma milk?

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	15.210	1	15.210	7.046	.009
Within Groups	211.540	98	2.159		
Total	226.750	99			

From the anova table since  $p = 0.009$ , which is less than 0.05, we reject the null hypothesis and accept the alternative hypothesis. This means that customer loyalty differs with each region. In other words from table 4.54 we can conclude that people in Kochi region are significantly more loyal than people at Alleppey region.

**ANOVA ONEWAY**

In order to test if there is a significant difference between how likely customers are willing to buy other milk brands during stock out of MILMA milk we use the following anova test.

**Hypothesis of how likely customers are willing to buy other milk brands during stock out between two different regions**

$H_0$ : There is no significant difference between how likely the customers are willing to buy other milk brands during stock out in two different regions.

$H_1$ : There is a significant difference between how likely the customers are willing to buy other milk brands during stock out in two different regions.

**Table 2.29 Descriptives**

How likely are you willing to buy other milk brands at times of stock out?

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
Kochi	50	2.94	1.168	.165	2.61	3.27	1	5
Alleppey	50	3.02	1.220	.173	2.67	3.37	1	5
Total	100	2.98	1.189	.119	2.74	3.22	1	5

**Table 2.30 ANOVA**

How likely are you willing to buy other milk brands at times of stock out?

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.160	1	.160	.112	.738
Within Groups	139.800	98	1.427		
Total	139.960	99			

From the above anova table since the value of  $p = 0.738$  which is higher than 0.05, we reject the alternative hypothesis and accept the null hypothesis. Hence there is no significant difference between whether or not customers buy other milk brands during times of stock out of MILMA.

#### **IV. FINDINGS**

##### **FROM RETAIL STORE SURVEY**

1. 100% of the stores prefer MILMA over other milk brands because of the high demand it has among the customers in the region
2. 32% of the retail store owners buys other milk brands as well, this is because some of the customers prefer other brands. Also the issues faced by the owners such as low commission, leakage issues etc are the other reasons for this matter.
3. 80% of the retail owners suffer from leakage issues and around 46% of the people are not satisfied with the commission received from MILMA, yet retail stores are sticking to the brand only because of the demand in the market.
4. From the retail owners point of view the number of people who are willing to buy other milk brands and people who are not willing are almost the same margin
5. 88% of the retail owners are either satisfied or very satisfied with the distribution network. So the supply and delivery speed are quite good and consistent
6. Only 12% of the total respondents feel that MILMA is providing adequate promotional support. The rest feel it is either average or too low.
7. 76% of the total respondents feel that stock out of MILMA happens very rarely.
8. 84% of the population have been dealers of MILMA milk for more than 6 years. It shows that loyalty is very high
9. Around 36% of the total dealers are not willing to recommend dealership of MILMA to others.
10. Majority of the customers (76%) who prefer other milk brands go for the ones with high fat content.
11. Satisfied dealers were also willing to recommend dealership of MILMA milk to others.
12. The dealers in Alleppey tends to be a little more satisfied than the ones in Kochi.

##### **FROM CUSTOMER SURVEY**

1. More number of people (78%) prefer MILMA over other milk brands. It shows that even without much promotional support MILMA has been able to generate a natural demand in the market
2. Majority of the respondents (71%) are unaware of the homogenization process used to prevent formation of fat molecules on the top layer of the milk. This could be the reason why people are dissatisfied with the fat content specified in the packet.
3. Around 71% of the people are either satisfied or very satisfied with the quality and service of MILMA milk. This is a significantly good figure but can still be improved to earn more loyal customers
4. Majority of the people (47%) have only average trust on the milking and packaging process of MILMA and around 41% have high and 6% have very high trust.
5. 40% of the people are more willing to buy other milk brands during the stock out of MILMA and 23% have voted neutral. The number of people who are not willing to switch are just 37%.
6. People prefer purity over price, fat content, ease of availability and brand value when it comes to choosing a milk brand. So it is more likely that customers think MILMA milk is more pure than other brands in the market.
7. Around 72% of the people have been sticking with MILMA for more than 6 years. This shows that MILMA has a very positive customer loyalty and the customer switching is quite low.
8. 29% of the total population are not willing to recommend MILMA milk to others. This means that they are not at all satisfied.
9. The Majority of the sample population (86%) have voted neutral for packaging but yet they are satisfied with the quality and service and other aspects. This can mean that the customers don't give much preference to the packaging factor.
10. 91% of the customers are satisfied with the price of MILMA milk. Hence MILMA has an upper hand in terms of price when compared to its competitors.
11. Even the customers feel that the promotional reach of MILMA is only average, which is why 84% have voted for average reach.
12. When it comes to purity 78% of the customers think that MILMA milk is high on purity. This is a significantly good figure for any milk brand.
13. A huge population of 98 percent feel that MILMA milk is easily available.

14. Only 57% of the customers are completely satisfied with the pasteurization process of MILMA. This can give an advantage to some other brands which provides better pasteurized milk.
15. Most of the customers (75%) are satisfied with the taste of MILMA milk.
16. People who are aware of the homogenization process are more likely to be satisfied by the level of fat content specified than the others.
17. People who have been sticking with MILMA for too long tends to be willing to recommend MILMA milk to others more.
18. People who are satisfied with the quality and service of MILMA tends to be more loyal in terms of longer relationship with MILMA.
19. People who are more satisfied with purity of MILMA milk tends to be more loyal to the brand.
20. On comparison MILMA milk is slightly more easily available in Kochi region than Alleppey region.
21. People in Kochi were found to be more loyal customers than those in Alleppey region.

## V. SUGGESTIONS

1. MILMA should focus more on making people aware of the homogenization process they use to compress the fat molecules into smaller units to prevent fat layer formation. When people don't see fat forming on the top layer they falsely believe it is because the milk contains low amount of fat than what is specified in the packet
2. People lack trust over the milking process, so conducting events and activities involving both the rural and urban customers together explaining to them the traditional milking process that MILMA use and trying to develop their trust could reflect a better customer loyalty
3. Since the percent of people willing to buy other milk brands during stock outs are quite high, MILMA should focus on making its distribution network more responsive and make sure stocks are always on time. This can help to slightly improve the sales volume
4. Since majority of the people prefer purity of milk followed by brand value, fat content etc. , MILMA should also focus on the same and should make purity their distinctive competence
5. Since being a cooperative organization it is difficult to increase the commission provided, MILMA should address the leakage issues, try to find out why the leakage rates are very high and resolve it as soon as possible. This can significantly improve their market share and push the other competitors out.
6. MILMA should focus a little more on providing promotional support to the retail stores. Fluxes, brochures and hanging boards are a good option to start with as the store owners feel the promotional support is quite low. Still since there is a natural demand in the market there is no need for large investments in promotion.
7. Regional wise MILMA needs to concentrate a little more on Alleppey in terms of ease of availability as well as gaining loyal customers.
8. Pasteurization is another area where MILMA needs to focus more on. Since there are other brands available in the market which provides double pasteurized milk this can turn out to be a problem for MILMA.
9. Since most of the customers who prefer other brands look for high fat milk, MILMA should focus on creating a new product specifically suiting these customers. This would definitely help them to gain better market share as high trust and satisfaction level are already met by the company
10. Satisfying the dealers are as important as satisfying the customers as they play a key role in bringing other brands into the market.

## VI. CONCLUSION

The study helped to identify why irrespective of being a cooperative organization MILMA still hasn't been able to get 100 percent market share. The leakage issues and the low commission provided are the two major issues the retail owners face. These are the reasons why other players are entering in the market in the first place. Also customer not being aware of the homogenization and believing MILMA milk contains less fat than what is claimed is another reason why the market has been divided. Another reason is the fact that customers like tea shops and restaurants prefer high fat milk which MILMA does not offer. These are all the potential fail points of MILMA as a milk company.

The study also helped in successfully identifying the level of satisfaction of both customers as well as the retail store owners. Irrespective of all these MILMA still have a good percent of loyal customers.

Also from the study it has been identified that most of the customers prefer purity of milk more than brand value and fat content. By looking into all these we can easily draw a conclusion on how and where to focus on to improve the overall market share of MILMA milk.

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## APPENDIX

### QUESTIONNAIRE FOR LOCAL DEALERS

NAME OF THE STORE –  
PLACE –

1. Which milk brand do you prefer the most?  
a) MILMA    b) Arogya    c) Shakti    d) PDDP    e) Others
2. What do you prefer more while choosing a milk brand?  
a) Demand    b) profit    c) ease of availability    d) brand value  
e) Less defects
3. Do you face any major issues with MILMA's milk supply?  
a) Late distribution    b) Leakage    c) Returnability issue    d) Stock out  
e) No problem
4. How satisfied are you with the distributor network of MILMA?  
a) Very satisfied    b)satisfied    c)neutral    d) dissatisfied  
e) Highly dissatisfied
5. How satisfied are you with the commission received from selling MILMA milk?  
a) Very satisfied    b)satisfied    c)neutral    d) dissatisfied  
e) Highly dissatisfied
6. How likely are the customers willing to buy other milk brands at times of stock out of MILMA?  
a) Very likely    b) likely    c) Neutral    d) unlikely  
e) highly unlikely
7. How much promotional support does MILMA offer?  
a) Very strong    b) strong    c) average    d) very less  
e) no support
8. Do you buy any other milk brands other than MILMA?  
a) Yes    b) No
9. How likely does the stock out of MILMA milk happens?  
a) Very Likely    b) Likely    c) neutral    d) Unlikely  
e) Highly unlikely
10. How long have you been a dealer of MILMA milk?  
a) 0 – 2 years    b) 3 – 5 years    c) 6 - 8 years    d) 9 – 11 years  
e) More than 11 years
11. Would you recommend dealership of MILMA milk to your relative or friend?  
a) Yes    b) No
12. If some customers prefer other milk brands what do you think is the reason for that?  
a) Better packing    b) Better fat content    c) Better Price  
d) Better Quality    e) Better Taste
13. Which category of customers mostly ask for other milk brands?  
a) Household    Customers    b) Restaurants    c) Tea Shops  
d) Caters    e) Others: \_\_\_\_\_

**QUESTIONNAIRE FOR CUSTOMERS**

**NAME OF THE CUSTOMER –**  
**PLACE –**

1. Which milk brand do you prefer the most?  
a) MILMA b) Arogya c) Shakti d) PDDP e) Others
2. Are you aware of the homogenization process used in MILMA milk to avoid formation of fat molecules on the top layer?  
a) Yes b) No
3. What do you prefer more while choosing a milk brand?  
a) Purity b) price c) ease of availability  
d) Brand value and trust e) Homogeneity
4. How satisfied are you with the amount of fat content specified in MILMA milk?  
a) Very satisfied b) satisfied c) neutral d) dissatisfied  
e) Highly dissatisfied
5. How likely are you willing to buy other milk brands at times of stock out?  
a) Very likely b) likely c) Neutral d) unlikely  
e) Highly unlikely
6. How satisfied are you with the quality and service of MILMA milk?  
a) Very satisfied b) satisfied c) neutral d) dissatisfied  
e) Highly dissatisfied
7. How long have you been a customer of MILMA milk?  
e) 0 – 2 years b) 3 – 5 years c) 6 - 8 years  
d) 9 – 11 years e) More than 11 years
8. How much trust do you have on the traditional milking and process of MILMA?  
a) Very high b) High c) Neutral d) Low  
e) Very low
9. Would you recommend MILMA milk to others?  
a) Yes b) No
10. How satisfied are you with the packaging of MILMA milk?  
a) Very satisfied b) satisfied c) neutral d) dissatisfied  
e) Highly dissatisfied
11. How satisfied are you with the price of the MILMA milk?  
a) Very satisfied b) satisfied c) neutral d) dissatisfied  
e) Highly dissatisfied
12. How would you rate the promotional reach of MILMA?  
a) Very Good b) Good c) neutral d) Poor  
e) Very Poor
13. How would you rate the purity of MILMA milk?  
a) Very good b) Good c) Neutral d) Poor  
e) Very Poor
14. How would you rate the availability of MILMA milk in your locality?  
a) Very Good b) Good c) neutral d) Bad  
e) Very Bad
15. How satisfied are you with the pasteurisation process of MILMA?  
a) Very satisfied b) satisfied c) neutral d) dissatisfied  
e) Highly dissatisfied
16. How would you rate the taste of MILMA milk?  
a) Very satisfied b) satisfied c) neutral d) dissatisfied  
e) Highly dissatisfied