

**“A STUDY ON CUSTOMER SATISFICATION TOWARDS VARIOUS
SOFTWARE PRODUCTS OFFERED BY JEMI CLUSTER WITH SPECIAL
REFERENCE TO CHENNAI”**

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ABSTRACT

This study On Study on Customer Satisfaction Level towards Various Products Offered by Jemi Cluster, Chennai” aims at the understanding customer satisfaction of the product and Jemi Cluster services and analyzes the customer coverage area of that product. Primary data were collected with the help of the structured questionnaire from the existing customers of this concern. The sample size considered for the study was 100 where Jemi Cluster.

The tools for the analysis include Frequency analysis, Data reduction analysis, Cross tabulation, Chi-square test, weighted average analysis. And dependent on reasonable price and product advantage and after sales services is concern price.

Introduction:

Software product lines refer to engineering techniques for creating a portfolio of similar software systems from a shared set of software assets using a common means of production. Manufacturers have long used analogous engineering techniques to create a product line of similar products using a common factory that assembles and configures parts designed to be reused across the varying products in the product line. For example, automotive manufacturers can now create tens of thousands of unique variations of one car model using a single pool of carefully architected parts and one factory specifically designed to configure and assemble those parts.

The idea of manufacturing software from reusable parts has been around for decades, but success has been elusive. Recent advances in the software product line field have demonstrated that narrow and strategic application of these concepts can yield order of

magnitude improvements in time-to-market, quality, portfolio scalability and software engineering cost. The result is often a discontinuous jump in competitive business advantage, similar to that seen when manufacturers adopt mass production and mass customization paradigms.

REVIEW OF LITERATURE:

- This feasibility study commissioned by the National Institute for Advanced Industrial Science and Technology in Japan (AIST) and supported by the Sustainable Consumption Unit (UNEP) provided an overview of approaches used in different disciplines for evaluating consumer behavior. The study analyzed the applicability of existing research concepts, theories, and tools for evaluating consumer satisfaction with product-service systems (PSS). It included discussion over their strengths/weaknesses. This paper presents a short overview of the study.

BACKGROUND

- It has been recognized that eco-efficiency improvements at production and product design level can be significantly reduced or totally negated by rebound effect from increased consumption levels. In line with this problem factor 10 to 20 material and energy efficiency improvements have been suggested (**Factor 10 Club 1994; Schmidt-Bleak 1996; Bolund, Johansson et al. 1998; Ryan 1998**). The improvements, however, if not carefully done, may still lead to rebound effects through changes in resource prices.
- Addressed already at the product and service design stage. Special focus should be given
- On the use phase by providing alternative system solutions to owning products. A number of examples in B2B area exist that confirm the potential of PSS for reducing life cycle environmental impact. It is, however, increasingly evident that business examples are difficult to directly apply to the private consumer market. Private consumers, contrary to businesses, prefer product ownership to service substitutes (**Schrader 1996; Littig 1998**). Even if accepted, the environmental impacts of “services products” offers depend to a large extent on consumer behaviour. To address this problem; either behavioral or service system design changes are needed. Changing human behavior and existing lifestyles contributes to

the vision of sustainable development, but at the same it is extremely difficult and time-consuming process.

- Increasing customer satisfaction has been shown to directly affect companies' market share, which leads to improved profits, positive recommendation, lower marketing expenditures (Reichheld, 1996; Heskett et al., 1997), and greatly impact the corporate image and survival (Pizam and Ellis, 1999).

OBJECTIVES

PRIMARY OBJECTIVES:

To find out Customer Satisfaction level towards the various products offered by JEMI CLUSTER in Chennai City

SECONDARY OBJECTIVES:

- *To identify the demographic of the Customers profile..*
- To identify the customer opinion towards after sales service offered to them.
- To identify the competitive advantage of JEMI CLUSTER' over its competitors.
- To identify the satisfaction level among the customers towards various customer Service offered to them.

SCOPE OF THE STUDY:

- To solve the common problem faced by the customer during the usage of the software products.
- To eradicate the problems and to improve the performance and sales method of the Jemi Cluster product.
- To help the organization to understand the customer perception about their product.

NEED OF THE STUDY

- To identify the satisfaction level of JEMI CLUSTER'S customers.
- To solve the problem faced by the customers during the usage of the software products.
- To identify the satisfaction level of the customer by using demographic factor.

RESEARCH METHODOLOGY:**MEANING:**

Research also starts with question or problem .its purpose is to find answer to question through the applicants of scientific method it pursuit of the track with the help of the study and observation.

RESEARCH DESIGN:

A frame work or blueprint for conducting for the marketing research project it details of the procedures necessary for attaining the information needed to structure and/or solving Marketing research problem.

DESCRIPTIVE RESEARCH:

Descriptive research a type of conclusive research that has as its major objective. The description of something usually mart characteristics or function.

METHOD OF DALLECTION:**PRIMARY DATA:**

Primary data is newly collecting the data for our purpose.

SECONDARY DATA:

Secondary data is already exits but make some interpretation of the exit data for our purpose.

SAMPLING SIZE:

Sample size number of the elements to be included of the study .determining the sample size is complex and involves several qualitative and quantitative considerations.

STATISTICAL TOOLS USED:

- Chi-square test
- ANOVAs test
- Karl Pearson Correlation

ANALYSIS USING KARL PEARSON'S CORRELATION:

Correlation analysis is the statistical tool used to measure the degree to which two variables are linearly related to each other. Correlation measures the degree of association

between two variables. The Pearson product-moment correlation coefficient is a measure of the strength and direction of association that exists between two variables measured on at least an interval scale. It is denoted by the symbol r .

$$r = \frac{N\sum XY - \sum X \sum Y}{\sqrt{N\sum X^2 - (\sum X)^2} \sqrt{N\sum Y^2 - (\sum Y)^2}}$$

ANALYSIS USING KRUSKAL-WALLIS TEST:

It is also called as H-Test. This test depends on the ranks of the sample observation. So it is also called as RANK-SUM TEST. Kruskal wallis test employed more than two populations. It is denoted by the symbol Z .

$$Z = \frac{12}{n(n+1)} \left[\frac{R_1^2}{N_1} + \frac{R_2^2}{N_2} + \frac{R_3^2}{N_3} + \frac{R_4^2}{N_4} \right] - 3(N+1)$$

WEIGHTED AVERAGE METHOD

In case of data involving ranking or different options, the weighted ranking method has been used. Using this method the net score for attribute calculated and analysis can be done on basis of net score is percentage method.

Weighted average for each factor is:

Weighted average for each score

Sum of total weights

PERCENTAGES

Percentages refer to a special kind of ratio. Percentages are used in making comparison between two or more series of data. Percentages are used to describe relationships; it is expressed as.

Percentage = (no of employees/total no of employees) 100

DATA ANALYSIS**TABLE: 1 Table shown as company Service provider to any major industry:**

Service provider to any major industry	Frequency	Percent
Providing	52	74.0
Not providing	18	26.0
Total	70	100.0

Inference:

From above the table it is inferred that 74% of people accepted this, 26% does not accept so these statements giving information for most of the industries service provider for any major industries.

TABLE: 2 Table shown as company computerized/automated your org:

Organization automated	Frequency	Percent
Yes	64	91.0
no	6	9.0
Total	70	100.0

Inference:

From above the table it is inferred that 91% of people all the process using only automated system but only, 9% of people does not using automated only using manual process.

TABLE: 3 Table shown as methods do you use to maintain your data:

S.NO	PARTICULARS	NO OF RESPONDENTS	PERCENTAGE
1	Book entry	20	28
2	Fully automated	40	57
3	Semi-automated	10	15
	TOTAL	70	100

INTERPRETATION:

From the above table it is interpreted that 57% of the respondents used fully automated system to maintain the data.

TABLE: 4 Table shown as enhanced your business processes year on year:

S.NO	PARTICULARS	NO OF RESPONDENTS	PERCENTAGE
1	Agree	13	19
2	Neutral	37	53
3	disagree	20	28
	TOTAL	70	100

Inference:

From above the table it is inferred that 55% of the respondents stays neutral about business processes year on year

ANALYSIS USING KARL PEARSON'S CORRELATION

Correlation analysis is the statistical tool used to measure the degree to which two variables are linearly related to each other. Correlation measures the degree of association between two variables.

Null hypothesis (Ho):

There is positive relationship between satisfaction with the offers provided by the company and after sale service of the company.

Alternate hypothesis (H1):

There is negative relationship between satisfaction with the offers provided by the company and after sale service of the company.

Correlations

	Satisfied with Offers	after sale Service
Satisfied with Offers	1	.446**
Pearson Correlation		
Sig. (2-tailed)		.000
N	70	70
after sale Service	.446**	1
Pearson Correlation		
Sig. (2-tailed)	.000	
N	70	70

**. Correlation is significant at the 0.01 level (2-tailed).

$$r = \frac{N\sum XY - \sum X \sum Y}{\sqrt{N\sum X^2 - (\sum X)^2} \sqrt{N\sum Y^2 - (\sum Y)^2}}$$

$$r = 0.446$$

INFERENCE:

Since r is positive, there is positive relationship between satisfaction with the offers provided by the company and after sale service of the company.

CHI- SQUARE TEST I – (ψ^2)

Chi-square is the sum of the squared difference between observed (o) and the expected (e) data (or the deviation, d), divided by the expected data in all possible categories.

Null hypothesis (Ho):

There is no significant difference between automation of business process and enhancement of automation process.

Alternate hypothesis (H1):

There is significant difference between automation of business process and enhancement of automation process.

Expected frequency = Row Total * Column Total

Grand Total

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
automated your organization data * enhanced your business processes	70	100.0%	0	.0%	70	100.0%

INFERENCE:

Since the calculated value is greater than the tabulated value, we reject the null hypothesis and hence there is significant difference between automation of business process and enhancement of automation process.

ONE-WAY ANOVA CLASSIFICATION

Null hypothesis (Ho):

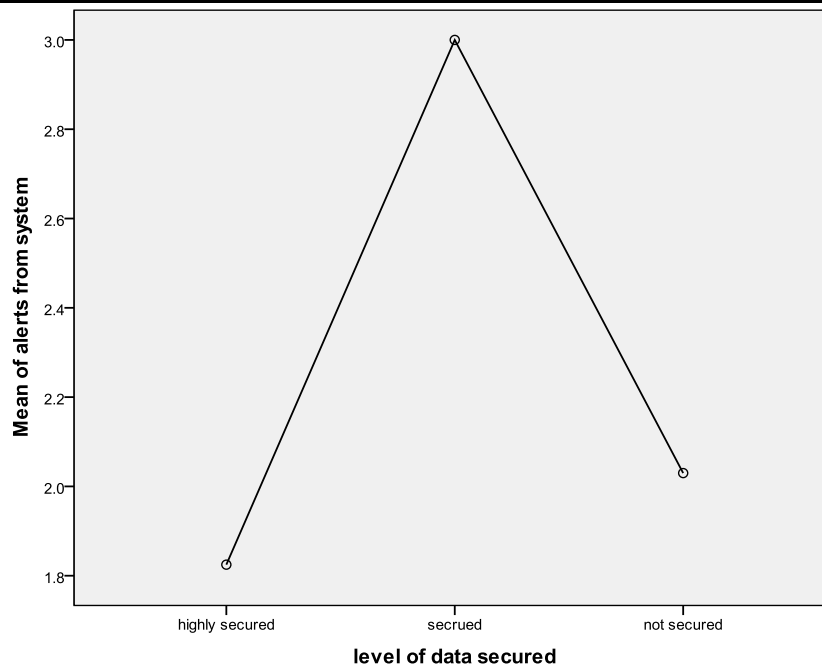
There is a significance difference between alert from the system and level of secured.

Alternate hypothesis (H1):

There is no significance difference between alert from the system and level of secured.

ANOVA

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	36.834	2	18.417	37.809	.000
Within Groups	95.961	67	.487		
Total	132.795	69			

**INFERENCE:**

The calculated value of F is less than the tabulated value. Hence, we accept the null hypothesis and conclude that there significance difference between alert from the system and level of secured.

FINDINGS:

1. 61% of people accepted, 39% does not accept so these statement giving information for most of the industries service provider for any major industries.

2. 97% of people all the process using only automated system but only, 3% of people does not using automated only using manual process.
3. 50% of the respondents used fully automated system to maintain the data.
4. 55% of the respondents stay neutral about business processes year on year.
5. 40% respondents says their productivity us high.
6. 60% of the respondents feel their front office is fully automated.
7. 10% of people wants online MIS, 90% does not wants online MIS.
8. 60% of people got regularly alert from the system.
9. 50% of the respondents say that their data is regularly secured.
10. 40% of people accepted that the work force is reduced after automation.
11. 60 % of people accepted that they spent 2L -3L as their budget.
12. 40% of the respondents said that they will recommend this system to their friends.
13. 60% of people feel that the pricing strategy of the product is affordable.
14. 60% of the respondents feel that information from the sales people is sufficient.
15. 54.1% of people strongly agree response, 38.8% company people agree, 4.1% people response is nature, 3.1% of people response is disagreeing.
16. 18% of people strongly agree response, 42 % company people agree, 34% people response is nature, 6% of people response is disagreeing.
17. 33.7% of people strongly agree response, 37.8% company people agree, 23.5% people response is nature, 5.1% of people response is disagree response.
18. 38% of people strongly agree response, 32% company people agree, 25% people response is nature, 4% of people response is disagree and 1% response strongly disagree.

SUGGESTIONS:

1. Providing customer care service 24/7 to make the customers clarify their doubts in the products.
2. Company can update more technologies (Automation) in order to retain their customers.
3. Sales peoples are very important to the organization; company can select more efficient sales people in order to get in to the market place.
4. Organization can make their whole system into automated.
5. Companies can make effective pricing strategy for their product.
6. Feedbacks of the customers are important to the organization.

CONCLUSION:

A highlights of the study on customer satisfaction towards the JEMI CLUSTER product 76% people like our product mostly the Jemi Cluster product provide small scale industries, 80% people accepted our product but some people provide more better sales and services. Inferred that 37.8% of people strongly agree response, 37.4% company people agree, 20.7% people response to satisfy after sales and services. Find out analyzing table mostly 62% the Jemi Cluster product provide small scale Industries 17% Company have a problem of Jemi Cluster product.

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