

Incorporates Six Sigma Tactics To Enhance Customer Satisfaction Enabling the Foreseeable Future of Top-Notch Projects In Larsen And Toubro Limited, Chennai

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Abstract: Due to the current market environment, the requirement for products to be built first according to specifications is becoming a reality. This is accomplished by utilizing the six-sigma tool. This study is being conducted in a firm that makes auto components with the goal of analysing the Key Performance Indicator (KPI) Customer Satisfaction (CS) during the design and development stages of the product to ensure that the best possible outcome is obtained 100% of the time. The major purpose of the study was to investigate the aspiration of L&T Construction is to be a world-class infrastructure construction company devoted to sustainable development and delivering quality projects that exceed customer expectations. A delighted consumer is more likely to return later to make another transaction. That type of commitment is the bedrock of any successful firm. It is also significantly less expensive to retain a loyal customer than it is to acquire a new one. Market findings were produced for a range of values within six sigma with suitable control limitations. The company was able to pinpoint where the recurrence of problems occurs thanks to this investigation. Knowing the root cause of a problem allows for process modifications or enhancements. Six Sigma is an operational tool that drives quality and organizational excellence and can be shared to the benefit of customers, employees, suppliers, and stakeholders. It is also known as a customer-focused methodology, and it strives to improve the organization's financial performance by increasing quality, reducing waste, and reducing costs.

Keywords: Six Sigma, L&T, Customer Satisfaction, Sustainability, World class manufacturing

1. INTRODUCTION

Six Sigma aims to reduce process variance and eliminate efforts that result in product faults. Lean focuses on reducing waste and developing processes that prioritise end-user experience. In both cases, the goal is to create more efficient, effective procedures that increase customer value while lowering business expenses. CMS Wire recommends two tools for businesses to utilise to improve customer experience, however many more, such as fishbone diagrams to tackle operational difficulties, may also be useful. Loyal consumers also provide a priceless service to a business by recommending its products and services to

others. The aforementioned kind of word-of-mouth marketing is extremely effective and greatly sought after by marketing specialists. Lean Six Sigma may enhance CX efforts at every stage of the customer journey. These include the most essential "touch points" in the customer journey, such as product performance and customer service. The Six Sigma technique begins with DMAIC (Define, Measure, Analyse, Improve, Control).

2. Materials And Methods

The sample for this study will consist of companies that have implemented Six Sigma. The sample size will be determined using a sample size calculator. The

sample will be selected using a convenience sampling technique. Companies that have implemented Six Sigma will be identified using secondary data sources, such as business directories and industry associations. A process used in statistical analysis in which a pre-defined number of observations will be taken from a larger population(300). The methodology used to sample from a large population will depend on type of analysis being performed. The sampling technique used here is Simple Random sampling. The sample size of the project is 154.

$$\text{Chi-Square} = \sum (O-E)^2 / E$$

Where O is the observed frequency and E is the expected frequency

3. RESULTS

Chi – Square Test

Null Hypothesis: There is no significant association between Six Sigma has improved the quality of products or services that your organization.

Alternative Hypothesis: There is a significant association between Six Sigma has improved the quality of products or services that your organization.

4. Discussion

Six Sigma has improved the quality of products Services at L&T

Parameters	Frequency	Percentage
Strongly Agree	34	22.1
Agree	39	25.3
Neutral	72	46.8
Disagree	1	42.2
Strongly disagree	8	27.9
Total	154	100

Table1. Six Sigma has improved the quality of products Services at L&T

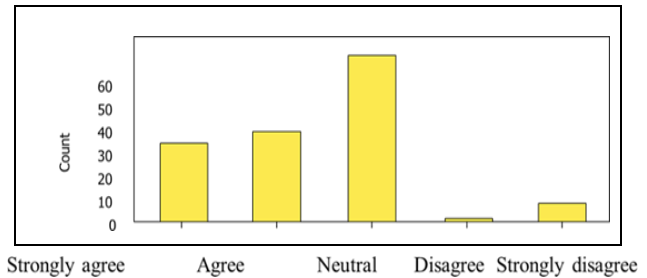


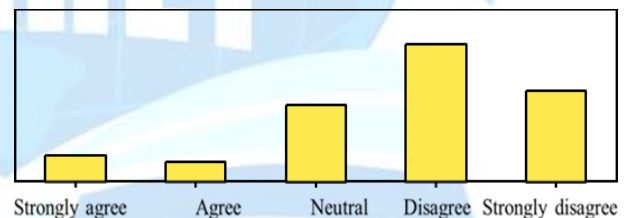
Figure1. Six Sigma has improved the quality of products Services at L&T

From Table 1, 22.1% strongly agreed, 25.3% people agreed, 46.8% stayed neutral, 0.6% disagreed and 5.2% strongly disagreed that Six Sigma has improved the quality of products Services at L&T.

Six Sigma has improved the customer satisfaction levels of your organization.

Parameters	Frequency	Percentage
Strongly Agree	5	3.2
Agree	2	1.3
Neutral	37	24
Disagree	65	42.2
Strongly disagree	43	27.9
Total	154	100

Table2.Six Sigma has improved the customer satisfaction levels of your organization.



Inference: From the table 2, 3.2% strongly agreed, 1.3% people agreed, 24.0% stayed neutral, 42.2% disagreed 27.9% strongly disagree that the program was well structured and the Six Sigma has improved the customer satisfaction levels of your organization.

Improvements in efficiency since the organization started streamlining its processes.

Parameters	Frequency	Percentage
Strongly Agree	43	27.9
Agree	58	37.7
Neutral	46	29.9
Disagree	5	3.2
Strongly disagree	2	1.3
Total	154	100

Table 3, Improvements in efficiency since the organization started streamlining its processes.

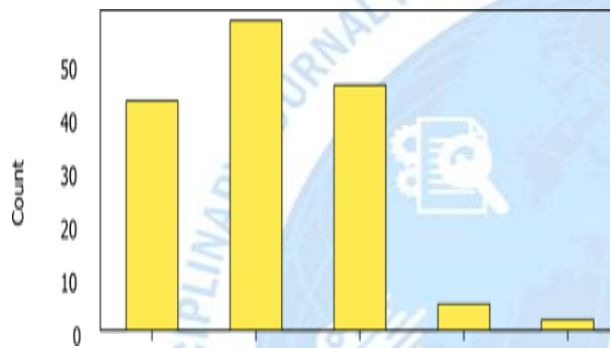


Figure 3, Improvements in efficiency since the organization started streamlining its processes

Inference: From the table 3, It is clear that 33.75% strongly agreed, 46.875% people agreed, 15.625% stayed neutral, 3.75% disagreed 1.3 strongly disagreed with the Improvements in efficiency streamlining its processes.

Chi – Square Test

Observed frequency of variable 1

Parameters	Observed	Expected	Residual
Strongly Agree	39	38.50	.50
Agree	63	38.50	24.50
Neutral	45	38.50	6.50
Disagree	7	38.50	-31.50
Total	154		

Table 4, Observed frequency of variable 1

Observed frequency of variable 2

Parameters	Observed	Expected	Residual
Strongly Agree	34	30.80	3.20
Agree	52	30.80	21.20
Neutral	46	30.80	15.20
Disagree	19	30.80	-11.80
Strongly disagree	3	30.80	-27.80
Total	154		

Table 5, Observed frequency of variable 2

Variable	Chi-square	df	Asymp. Sig.
Six Sigma has improved the quality of products or services in the organisation	42.47	3	.000
Six Sigma has improved the customer satisfaction levels of your organization	52.04	4	.000

Table 6, Chi – Square test

Inference: Since the above table shows that the significant value is less than 0.05. So, it reveals that there is significant association between Six Sigma has improved the quality of products or services that your organization.

CONCLUSION

The customer experience has a substantial effect on the bottom line. A satisfied customer is more likely to return for another transaction. That kind of dedication is the foundation of any successful business. It is also far less expensive to keep a loyal customer than to attract a new one. By referring a company's products and services to others, loyal customers give a priceless service to the company. Customer service that has been trained has better records and considerably

boosts client satisfaction and loyalty to determine the quality via the client's perspective.

References

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