

**TO STUDY AND ANALYSE CUSTOMER SATISFACTION  
OF PRODUCT GAS CIRCUIT BREAKER (GCB) IN  
DIFFERENT ELECTRICAL COMPANIES IN NASHIK,  
MAHARASHTRA**

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**ABSTRACT: -**

AFETR BEING in the doldrums towards the end of the 1990s, the Indian electrical equipment industry is seeing a revival in the last couple of years with the growth rate averaging 7 per cent per annum. The next two year should see a double digit growth rate, says Ramesh Chandak, President of the Indian Electrical and Electronics Manufacturers Association (IEEMA). We need energy in various forms like heat, light, sound etc. The development new technology made it possible to convert electrical energy into any form of energy. This gives electrical energy an important position in the world. The running of the modern industrial structure depends on the low cost and the uninterrupted supply of electricity. In short we can say that a country is developed if the per capita consumption of electrical energy is much higher. Electrical energy is considered to be superior over other energy forms the following facts gives the proof for it.

**Key Words: -** Electrical, Electronics Manufacturing, Electrical Energy, Consumption etc.

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**INTRODUCTION:-**

There is no doubt that a major cause of this upsurge is the reforms that have led to unbundling of monolithic, state-owned power utilities and the corporatization of the transmission and distribution sectors. The pressure on these new enterprises to be commercially viable has led to the implementation of practices for reducing power losses (technical as well as due to theft) in the pipeline and effect better recovery of dues. This, in turn has led to investments in new equipment and systems, which have boosted the fortunes of the equipment manufacturing industry. The Indian power sector is witnessing several changes in the business and regulatory environment. The legal and policy framework has changes substantially with the enactment of the Electricity Act 2003. In the foreseeable future, India faces formidable challenges in meeting its energy needs. Recently, a draft integrated energy policy has been issued, which addresses all aspects including energy security, access, availability, affordability, pricing, efficiency, environment and after sales services. To meet the twin objectives of ensuring availability of electricity to consumers at competitive rates, as well as attract large private investment in the sector, a new Tariff policy has also been issued. The power sector thus offers a mixed bag of challenges and opportunities to players and NTPC would continue to review its business strategy and portfolio in light of these changes. As we have seen the electrical energy and electrical component (GCB) is very important in electrical companies. Due to (GCB) component, it generates and save more electrical energy which can be very useful for industrial as well as society's growth, even almost 80% to 90% work in industry requires an electrical energy and also for domestic purpose it plays very important role. It's just like one of our basic need.

Due to this research which is based on Gas Circuit Breaker (GCB) in electrical companies the effectiveness of companies can be easily determined which can be turned in to huge growth of Industrial area and development of societies. Because of analysis of Gas Circuit Breaker (GCB) of various electrical companies, we can easily find out strengths and weaknesses of each and every company regarding product Gas Circuit Breaker (GCB), so that they can easily make out strategy to convert weakness in to strength and also contribute towards Corporate Social Responsibility.

**OBJECTIVES:-**

- 1) To study and analyze quality of product Gas Circuit Breaker (GCB).
- 2) To study and analyze technical parameters of product Gas Circuit Breaker (GCB).
- 3) To know the customer complaints regarding product Gas Circuit Breaker (GCB).
- 4) To analyze the effective sales services to customers regarding product Gas Circuit Breaker (GCB).

**AREA & SCOPE OF STUDY:-**

Nashik region can be selected as Research Area including five Districts in Nashik region Dhule, Jalgaon, Nandurbar, Ahmednagar, and Nashik. It also includes 12 Talukas of Nashik District. There is a huge scope of research in Electrical industries in Nashik region. Most of the Companies are Multinational companies produced product Gas Circuit Breaker (GCB) can also be Export in National & International Areas of Market like For Indian subcontinent, Bangladesh, Sri Lanka and Myanmar. For Middle East, Malaysia, Thailand, South Korea, Australia. For South America, Brazil, Argentina etc. So there is a Huge Scope of Electrical Industries in future also.

**RESEARCH METHODOLOGY:-**

**Research Method:** - Descriptive Research Method

**Sample Size:** - 60 Customers in Nashik

**Sampling Technique:** - Sequential Sampling

**Data Type:** - Primary and Secondary Data

**Tool for Data Collection:** - Questionnaire for 60 customers

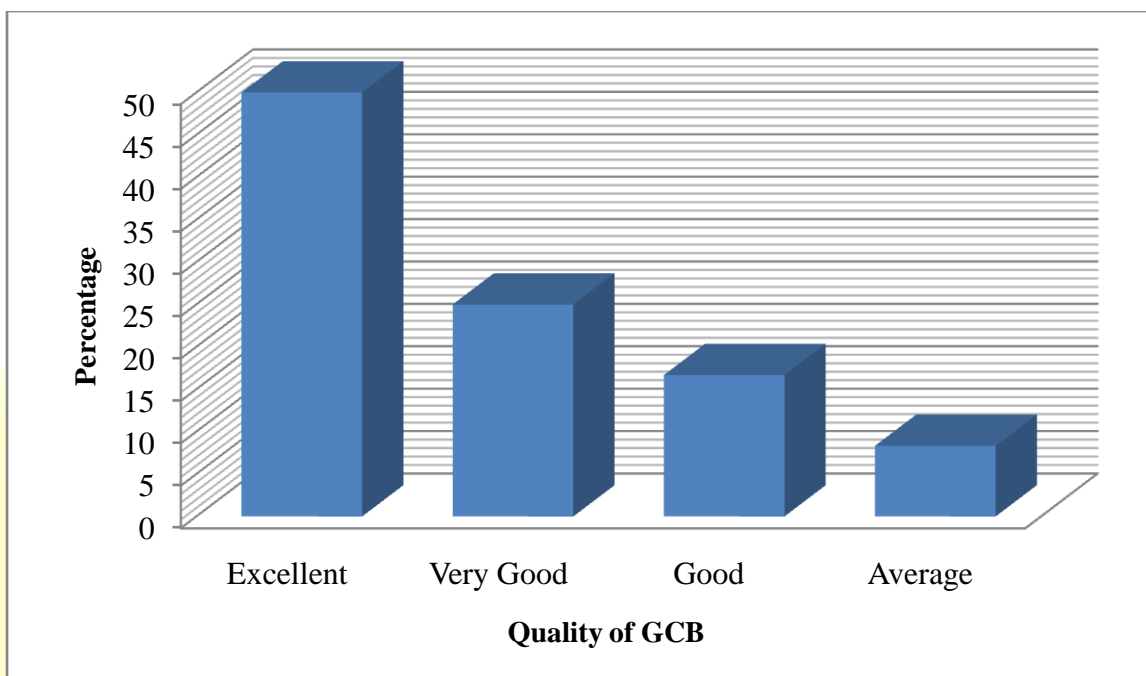
**REVIEW OF LITERATURE:-**

In (1982) EPRI concluded a two and a half year study on potential GCB replacements. Interestingly, the reasons for looking for a replacement at that time were not the concern of Global Warming – but the high cost of SF6, its relatively high boiling point and its sensitivity to surface imperfections and particles. The goal is to use molecular modeling tools to investigate potential alternatives to SF6. The project is scheduled to run from October (2000) to September (2003). The present funding mechanisms for the project limit what results can be shared publicly. EPRI will track further developments and report on what findings are made available. . In the manufacturing sector, the scope of comparative analysis of SF6 GCB is perhaps best illustrated by Croom, Romano and Giannakis (2000), who identify different factors of research literature that have converged on the topic--including Technical parameters, Features, Market share, Sales growth rate, and Customer retention. Alexander, Cross and Hill (2002) highlight some major weaknesses of the existing literature and propose that conceptual comparative analysis in Electrical industries models be developed based on a context-practices-performance framework. Cigolini, Cozzi and Perona (2004) propose a new conceptual framework for comparative analysis in Electrical industries strategies and introduce a set of corresponding management techniques and tools.

**DATA ANALYSIS & INTERPRETATION:-**

**Table No:-1**  
**Quality of Product**

Sr.No.	Quality of GCB	Frequency of Respondents	Percentage (%)
1)	Excellent	30	50
2)	Very Good	15	25
3)	Good	10	16.67
4)	Average	5	8.33
<b>TOTAL</b>		<b>60</b>	<b>100</b>

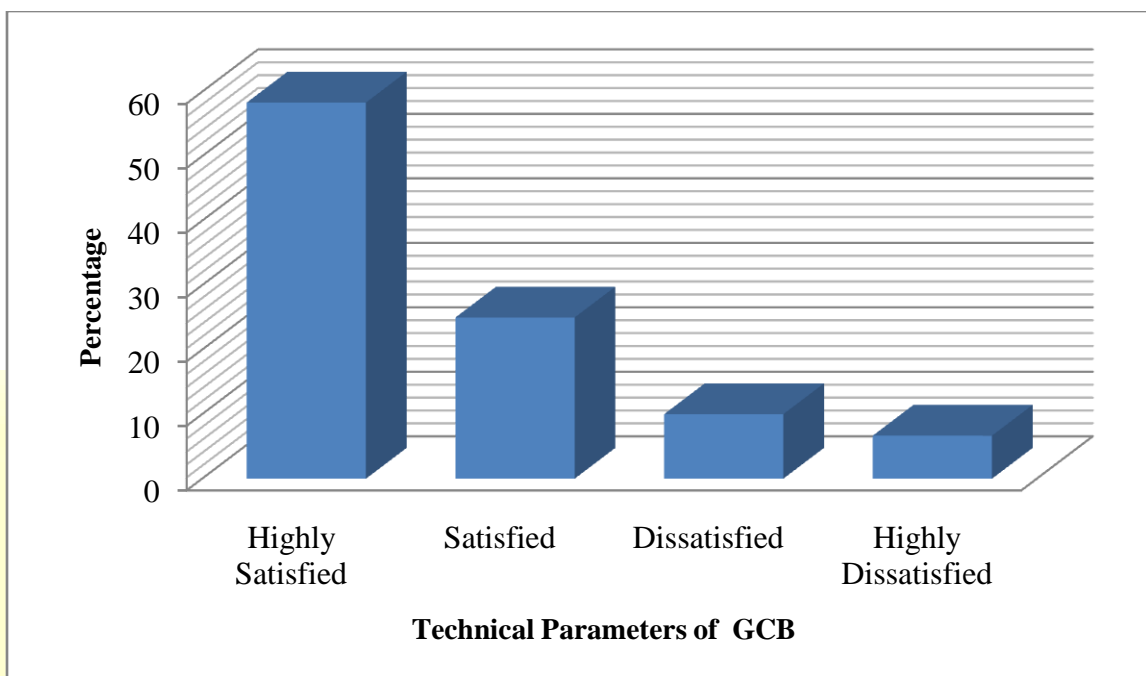


**INTERPRETATION:** - Fig., shows that, maximum 50% customers said that quality of product are excellent and minimum 8.33% customers said that quality of product is average.

**Table No:-2**

**Technical Parameters of Product (GCB)**

Sr.No.	Technical Parameters of GCB	Frequency of Respondents	Percentage (%)
1)	Highly Satisfied	35	58.33
2)	Satisfied	15	25
3)	Dissatisfied	6	10
4)	Highly Dissatisfied	4	6.67
<b>TOTAL</b>		<b>60</b>	<b>100</b>

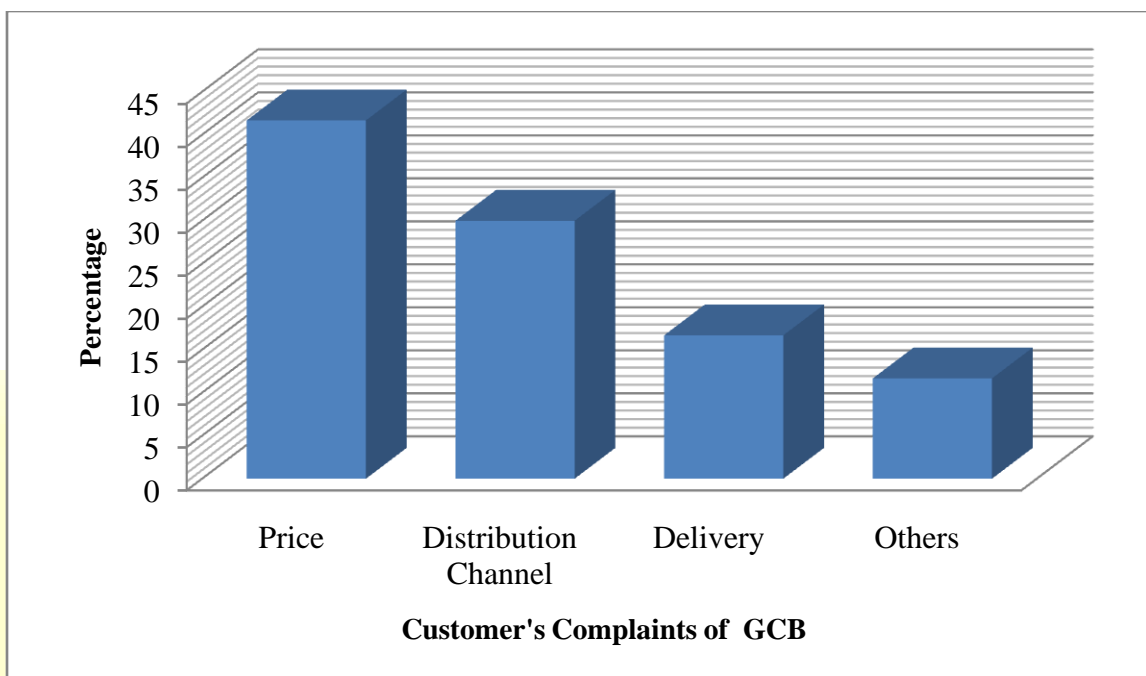


**INTERPRETATION:** - Fig., shows that, maximum 58.33% customers said that, they are highly satisfied regarding technical parameters of GCB and minimum 6.67% customers said that, they are highly dissatisfied regarding technical parameters of GCB.

**Table No:-3**

**Customer's Complaints regarding Product (GCB)**

Sr.No.	Customer's Complaints of GCB	Frequency of Respondents	Percentage (%)
1)	Price	25	41.67
2)	Distribution Channel	18	30
3)	Delivery	10	16.67
4)	Others	7	11.66
<b>TOTAL</b>		<b>60</b>	<b>100</b>

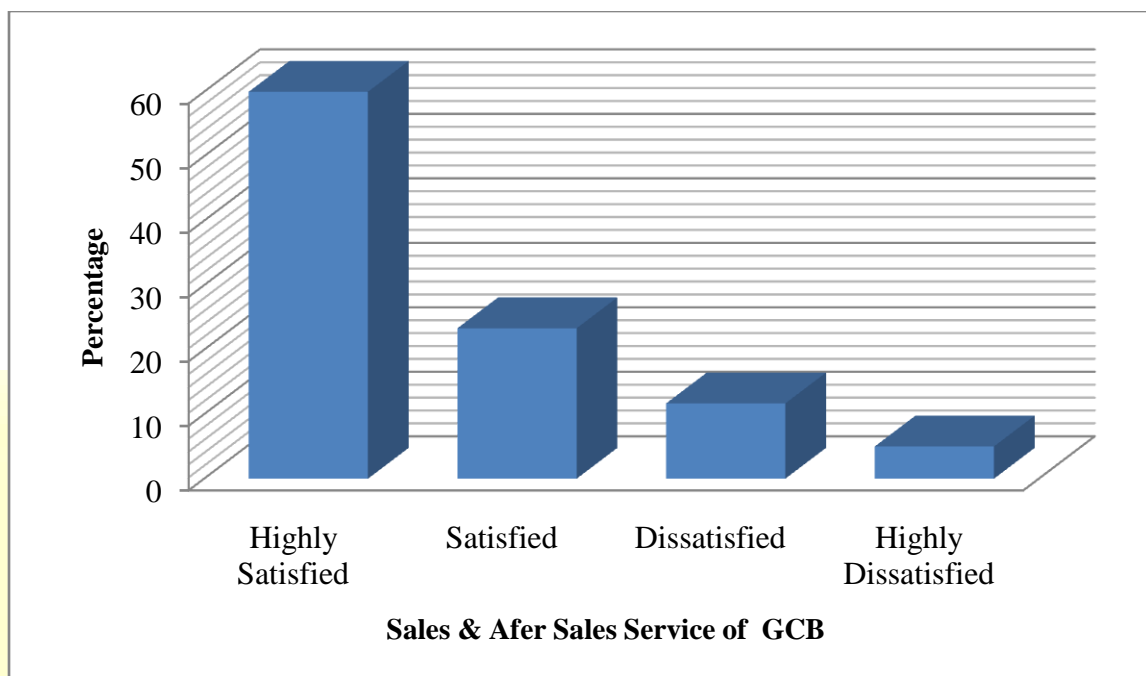


**INTERPRETATION:** - Fig. shows that, maximum 41.67% customers having complaints regarding prices of GCB, 30% customers having complaints regarding distribution network channel of GCB, 16.67% customers having complaints regarding delivery of GCB and 11.66% customers having complaints regarding others reasons.

**Table No:-4**

**Sales and after Sales service of Product (GCB)**

Sr.No.	Sales & After Sales Service of GCB	Frequency of Respondents	Percentage (%)
1)	Highly Satisfied	36	60
2)	Satisfied	14	23.33
3)	Dissatisfied	7	11.67
4)	Highly Dissatisfied	3	5
<b>TOTAL</b>		<b>60</b>	<b>100</b>



**INTERPRETATION:** - Fig., shows that, maximum 60% customers said that, they are highly satisfied regarding sales service and after sales service of GCB and minimum 5% customers said that, they are highly dissatisfied regarding sales service and after sales service of GCB.

#### **FINDINGS & OBSERVATIONS:-**

- 1) Quality of Product GCB is very good in all electrical companies in Nashik.
- 2) Technical Parameters of Product GCB are very good and majority customers are satisfied with technical parameters of GCB
- 3) Maximum customers having complaints regarding Prices of GCB and Distribution Network Channel of GCB
- 4) Sales Service and After Sales Service of all electrical companies are good and maximum customers are satisfied regarding sales service of GCB



**SUGGESTIONS:-**

- 1) All Electrical companies should increase sales force in sales departments.
- 2) Design Engineers should design GCB in such a way that their price should be low and their quality should be high
- 3) Delivery of Product GCB should be on time, there should be no delay in delivery of product GCB.

**CONCLUSION:-**

After studying Quality, Prices, Technical Parameters, Distribution Network Channel, Delivery, Sales Service & After Sales Service of GCB, Customers are Fully Satisfied with respect to all those parameters regarding product GCB. After successfully implementing and utilizing this product GCB most of the customers are delighted also.

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