Chapter 1
Introduction

1.0 Introduction to Customer Satisfaction of Electricity Distribution:

Customer satisfaction has gained importance in the last few years. After liberalization, privatization and globalization, there is intense competition and the world has become a global village. All the business activities of an organization have now shifted their attention to the customer satisfaction than merely selling goods and services at a profit. “Take it or leave it attitude” which was the attitude in the past has now transformed into finding out the needs and wants of the customer and creating products and services that will satisfy the customer which in turn drive the company to profits. Products are viewed secondary to customer satisfaction. Also, the product quality now has major emphasis on customer satisfaction. In the electricity market vertically integrated utilities have been providing six different services such as: generation, transmission, distribution, power supply or trading, system support and reliability services as a package to the consumers. Generation involves production of electrical power. Transmission is transporting power to distant centers through a state/national wide grid of high voltage transmission lines. Distribution deals with bulk transfer of electricity from generation plants to consumer centers and is the retail business of reaching each and every consumer with phase and neutral wires to supply requirements. You also require system support and reliability service for proper functioning of electricity industry\(^3\). Customers are the most vital link of the above value-chain in electricity sector. The entire value-chain efficiency would depend on how the customer needs are met and the customers are satisfied. From the customer’s perspective, electricity is also one more basic need apart from food, clothing and shelter.

Elaborating this point further:

1. You need water but you cannot get water unless it is pumped.
2. You want to use electric equipments like fans, refrigerators, air-conditioners, water cooler, electric iron, and water heaters etc. for a comfortable living. All these appliances become redundant without electricity.
3. You want to stay in a high rise building, with elevators to reach you to your
dwellings unit but elevators cannot function without electricity or backup.
4. You have a mobile phone but charger cannot function without electricity.
5. You have a television set with hundreds of entertainment channels but you need electric power for it to work.
6. You have a laptop with internet connectivity but if there is no power, laptop cannot be used.
7. It is a matter of life and death during emergency in the intensive care units in the hospitals and most of the equipments are run on electricity and the situation becomes precarious without electricity and at times operations need to be carried out using batteries due to non-availability of power.
8. You need urgent money on a holiday and suddenly you find out that you cannot withdraw cash as ATM machines are not functioning due to power failure.

1. 1 Customer focused Distribution Company in India - Tata Power:

"I could spend a day just talking about the kind of work we are doing in New Delhi”, says Mr. Vandrewala, MD, who personally monitors customer satisfaction of Tata Power.

Tata Power is differentiated from other distribution companies in India on the basis of: reliability, trust and customer satisfaction. Tata Power introduced performance tracking indices like reliability index, average frequency of interruptions and duration of interruptions and benchmarked them against international standards. Nowhere is its consumer approach demonstrated better than in North-West Delhi where Tata Power distributes power to over eight lacs consumers. Thus consumers are plagued by load shedding, voltage fluctuations, faulty billing, heavy pilferage and non-existent standards. Tata Power introduced a 24x7 call center, a customer service portal, wireless reading meters, SMS alerts of impeding shutdowns, regular consumer forums and emergency vans. Superior regular consumer services are supplemented by technical advancements. In 2005, Rs 330 crores has been spent by Tata Power to improve reliability. During 2005,” the frequency of consumer interruptions is a mere 1 compared to 2.29 internationally and average duration of interruptions is only 29 minutes, way below international 93 minutes,” says Kukde, P, Executive Director (Technical) of Tata Power.12
1. 2 Customer satisfaction with reference to Maharashtra Electricity Distribution Companies Ltd’s (MSEDCL’s) domestic and industrial customers in Pune city:

The dependence on electricity for one’s day to day life is almost endless. Yet, this basic need of electricity has not been met by MSEDCL in major parts of Maharashtra including Pune city since 2005 due to:

1. With the urbanization and industrialization, there has been significant increase in demand of electricity.

2. In Maharashtra State there is no significant addition to power plant capacities since last 10 years. Electricity being capital intensive, needs huge allocation of funds and requires a political will. Deshmukh, V (2005), then Chief Minister of Maharashtra admitted that the state government is to blame for power crisis as it had failed to start any new power generation in last 10 years. While state’s demand was increasing by 300 to 400 MW every year-Maharashtra did have 4,000MW shortfall as in 2005- neither the state government nor the MSEB did any planning to take into account what was happening on the ground. All of us were too busy with Enron---because of which new plants were not set up and we didn’t add a single MW to the grid,” says Deshmukh.

3. MSEB had huge power losses, old inefficient plants and equipments and cash trapped MSEB was unable to allocate funds for modernization.

4. MSEDCL is formed as a process of restructuring and has been resorting to load shedding to bridge the gap between supply and demand. Several parts of the state witnessed load shedding to the tune of 8 to 10 hours. Load shedding results in disruption of life style, inconvenience to all customers and also loss of production to industrial customers.

5. From September 2006 till March2008, MSEDCL’s domestic and industrial customers in Pune city had not been affected by load shedding due to Pune model. Pune model is a concept in which 30 industries who were CII (Confederation of Indian Industry) members were allowed to generate about 80 MW and did not depend on MSEDCL power supply so that shortfall in Pune city could be met. However the demand for power went up further and the Pune model was discontinued in April, 2008. The problem of not meeting the demand and frequent
power interruptions persisted afterwards.

With the present power situation in Pune city, an attempt is made by the researcher to study this problem and find out scope for improvement for both domestic and industrial customer satisfaction levels.

1.3 Evolution of customer satisfaction concept:
The term customer satisfaction was invented by Theodore C. Levitt in a 1960 Harvard Business Review article entitled "Marketing Myopia" which later expanded into the book, The Marketing Imagination. Levitt explained in his book that “Industry is a customer satisfying process, not a goods producing process....... The sale merely consummates the courtship. Then the marriage begins". Eventually, consumer research was funded by the early management consultancies, and from consultancies came measures of customer satisfaction, customer loyalty and competitive benchmarking. During this era marketing was uninvolved with consumerism.

In 1982, two non-marketers and Mckinsey consultants, Tom Peters and Robert Waterman, published In Search of Excellence, a book that propelled the idea of caring for customers and customer satisfaction into a management religion. Up to this point most marketing ideas had been developed in connection with selling physical products and marketers were slow to grasp the growth of the rather more intangible consumerist concept. "Excellent companies are not only better on service, quality, reliability and finding a niche. They are also better listeners” wrote Peters and Waterman. The fact that these companies are so strong on quality, service and the rest comes in large measure from paying attention to what customers want. The customer is truly in partnership with the effective companies and vice-versa.

Direct marketers collected and analysed vast database in order to understand consumer behaviour. "The old mass-marketing methods do not work well enough in the new world", claimed Angus Jenkinson, a direct Marketing expert. Stan Rapp and Tom Collins in The New Maxi marketing proclaimed: " The erosion of advertised -brand loyalty in America is reaching new depths." They did not dismiss loyalty, however, claiming “The right customer-care and customer-reward programs help you to retain the loyalty of your present customers despite the best efforts of your competitors to steal them away”. In place of marketing tools, the consultants came
out with new theories and aims such as: "Zero customer defections" (Earl Sasser of Harvard Business School); "total customer service" (William Davidow and Bro Uttal); "customer-centered growth" (Richard Whitely); "customer - engineering" (David Frigstad), "customer - inspired - quality" (James Shaw); "customer-one-to-one" (Don Peppers and Martha Rogers); "customer value" (Bradley Gale); "the loyalty effect." (Fred Reichheld).  

1.4 Some Definitions of Customer Satisfaction:
1. Satisfaction is a person's feelings of pleasure or disappointment resulting from comparing a product's perceived performance (or outcome) in relation to his or her expectation," Kotler.  
2. Customer satisfaction is a collective outcome of perception, evaluation and psychological reactions to the consumption experience with a product/service, Yi.  
3. Satisfaction is a function of consumer's belief that he or she was treated fairly, Hunt.  
4. Customer satisfaction is the customer's fulfillment response to a consumption experience, or some part of it. Buttle, F.  
5. According to Wikipedia, the free encyclopedia, customer satisfaction is an ambiguous and abstract concept and the actual manifestation of the state of satisfaction will vary from person to person and product/service to product/service. The state of satisfaction depends on a number of both psychological and physical variables which co-relate with satisfaction behaviours such as return and recommend rate. The levels of satisfaction can also vary depending on other options the customer may have and other products against which the customer can compare the organisation's products.  

1.5 History of Measurement of Customer Satisfaction Research:
The first research involving the measurement of customer satisfaction occurred in the early 1980s. Works done by Oliver (1980), Churchill and Surpremant (1982), and Bearden and Teel (1983) tended to focus on the operationalizaton of customer satisfaction and its antecedents. By the mid-1980s, the focus of both applied and academic research had shifted to construct refinement and implementation of
strategies to optimize customer satisfaction, according to Zeithaml, Berry, and Parsuraman.(1996:31).

Rigorous scientific inquiry and development of a general service quality theory can be attributed to Parsuraman, Berry and Zeithaml(1985). Their discussion on customer satisfaction, service quality, and customer expectations represents one of the first attempts to operationalize satisfaction in a theoretical context. They proposed that the ratio of perceived performance to customer expectations was key to maintaining satisfied customers. In 1988, they published a second, related discussion that focused more specially on the psychometric aspects of service quality. Their multi-item SERVQUAL scale is considered as one of the first attempts to operationalize the customer satisfaction construct. The SERVQUAL scale focused on the performance component of the service quality in which quality was defined as the disparity between expectations and performance. The primary areas considered in the scale involved tangibles, reliability, responsiveness, assurance and empathy. For many years these dimensions were regarded as the basis for service quality measurement.1 Cronin and Taylor propose the "confirmation/ disconfirmation" theory of combining the "gap" described by Parasuraman, Zeithaml and Berry as two different measures (perception and expectation of performance) into a single measurement of performance according to expectation. According to Garband, customer satisfaction equals performance divided by expectation of performance.

Work done by Berry, Brodeur between 1990 and 1998 defined ten 'Quality Values' which influence satisfaction behaviour, further expanded by Berry in 2002 and known as ten domains of satisfaction. These ten domains of satisfaction include: Quality, Value, Timeliness, Efficiency, Ease of Access, Environment, Innovation, Front line service behaviours and Commitment to the Customer.

The usual measure of customer satisfaction involves a survey with a set of statements using Likert Technique or scale. The customer is asked to evaluate each statement in term of his/ her expectation of performance of the organization.6

1.6 Customer Satisfaction Linkage to Quality Standards:

Earlier, product quality was viewed as a main focal point in the market place and customer satisfaction was not given due importance. In 80’s, one CEO of a company which had excellent product quality used to say that, “I do not care for customer
satisfaction as my products themselves speak of quality.” This attitude of this company enabled another small company which, concentrated on customer focus, to gain larger market share. In early 2000, one time dominant player (the first company) in the market place was acquired by a small company. Due to intense competitive pressures all companies have now realised that the product quality needs to be backed by customer satisfaction. All over the world the main focus has now switched from product to customer satisfaction. This is evident from the following:

1. **Malcolm Baldrige National Quality Award for Excellent Performance** giving maximum 300 points out of 1,000 points to customer satisfaction while measuring excellence by analysing an organisation's performance in seven areas, mainly, Leadership (95 points), Information and Analysis (75 points), Strategic Quality Planning (60 points), Human Resource Development and Management (150 points), Management Process Quality (140 points), Quality and Operational Results (180 points) and finally Customer Focus and Satisfaction (300 points).

2. **Customer Satisfaction is a priority in New ISO 9001 STANDARD.**

Brief explanations of the above concepts of customer linkage to quality are given as:

**1.6.1 Malcolm Baldrige National Quality Award**

**Major Emphasis and Maximum Points for Customer Satisfaction:**

Brief Background of Malcolm Baldrige National Quality Award:

Curt Reimann, a chemist spent virtually his entire career in Gaithersburg, Maryland, USA at National Bureau of Standards and its successor, the National Institute of Standards and Technology. In mid 1980's, Reimann was chosen to head the bureau's Quality Council.

Reimann had to do everything without alienating thousands of advocates of "quality" who often defined the terms in hundreds of different, often contradictory ways.

In 1987, quality advocates divided into function supporting Gurus - W.Edwards Deming, J.M.Juran, Philip Crosby and others. Unfortunately, companies could achieve quality as any of Gurus defined it, yet fail to produce a product that would win and keep customers.

Reimann and his committee defined quality in a more complete way than anyone had done up to that time. They developed quality movement in stages. The details of quality stages are as given in Fig.1.1:
1.6.2 Customer Satisfaction is a priority in New ISO 9001 standard:
In the new ISO 9001 standard now coming into force (2000), the main focus has been switched from product to customer satisfaction. DNV Forum reports on the status of the first company in Sweden audited against new standard as under:
Implementation of new standard has given us a solid structure enabling focus on high-quality services for our customers, says Hans Ottosson, CEO of RADIUS Sweden AB. The company produces a wide range of digital radio communication equipment. Ottosson says that they have experienced better internal flow of work, fewer failures and greater customer satisfaction.
Revision of the old ISO 9001: 1994 standard recognises the need for new and more effective means of competing in deregulated international market. It provides proactive approach towards the customer and highlights the values of the process flow and continual improvement of business performance to ensure customer satisfaction.4

1.7 Customer Satisfaction Measurement Methods:
Consists of (i) The Kano Model (ii) SERVQUAL or Rater Service) and (iii) Customer Satisfaction Index.
(i) The Kano Model:
The Kano model is a theory of product development and customer satisfaction developed in the 1980's by Professor Noriaki Kano that classifies customer preferences into five categories: Attractiveness, One-Dimensional, Must-Be,
Indifferent, Reverse. The Kano model offers some insights into product attributes which are perceived to be important to customers. Kano also produced a methodology for mapping consumer responses to questionnaires on his model.5

(ii) Servqual or rater service:
SERVQUAL OR RATER is a service-quality framework that has been incorporated into customer-satisfaction surveys to indicate the gap between customer expectations and experience.

(iii) Customer Satisfaction Index:
The Customer Satisfaction Index represents the overall satisfaction level of that customer as a number, usually as a percentage. Plotting this Satisfaction Index against a time scale shows how well a company is accomplishing the task of customer satisfaction over a period of time.

1.8 Researcher’s contribution to the body of knowledge by developing Customer Focused Business Model for improvements in levels of Satisfaction of Domestic and Industrial customers of electricity distribution company:
The researcher has designed customer focused business model for improvements in levels of satisfaction of domestic and industrial customers of Electricity Distribution Company and is under copyright diary number 7610/2010 COL dated 02-07-2010.

1.9 Link between Customer Focused Business Model for improvements in Levels of Satisfaction of Domestic and Industrial customer and sustainable development:
Presently, electricity distribution is a monopoly business in India. During monopoly business it is observed that customer needs are not the focus of many organizations and these companies have short term goals of making profits without caring whether customers are satisfied or not. This attitude ultimately leads to customers switching over to competitors as and when the competition sets in future as competitors come out with customer focused strategies and build sustainable competitive advantage. Having lost market share to competitors it is a difficult task to gain lost customers as customers once lost are lost forever. Apart from losing these customers to competitors, the other danger to such companies who do not pay attention to
customers due to monopoly situation is that these dissatisfied customers spread negative word of mouth. Such negative feelings of existing customers will ultimately lead to inability to get new customers in a competitive environment. According to marketing Guru, Kotler, P, it costs five times more to attract a new customer than to retain an existing customer.\(^\text{10}\)

In future electricity distribution will be open to competition from existing and potential players in the field of power sector. The competition is going to be intense from competitors of generic products or substitute products. MSEDCL should change the present mindset to customer as a focus so that MSEDCL will be able to develop sustainable competitive advantage in competitive environment.

1.10 Conclusion:
With the globalization and privatization there is intense competition and the main focus of a business activity has shifted from products to customer satisfaction. Electricity distribution companies are now shifting from a monopoly to a competitive position through a Government regulation. Today most electricity distribution companies in various countries including India struggle to win customer confidence. Customers complain of high price and low service levels and companies face problems in making the customer understand the value of electricity supply services. It is therefore important for distribution companies to make changes for this development.

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