<table>
<thead>
<tr>
<th>Section</th>
<th>Page No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.1 Introduction</td>
<td>89</td>
</tr>
<tr>
<td>3.2 Need of the study</td>
<td>89 - 90</td>
</tr>
<tr>
<td>3.3 Objectives of the Study</td>
<td>90 - 91</td>
</tr>
<tr>
<td>3.4 Hypothesis</td>
<td>91</td>
</tr>
<tr>
<td>3.5 Research Design</td>
<td>91 - 92</td>
</tr>
<tr>
<td>3.6 Research Instrument</td>
<td>92 - 93</td>
</tr>
<tr>
<td>3.7 Research Methodology</td>
<td>93 - 94</td>
</tr>
<tr>
<td>3.8 Sample</td>
<td>94</td>
</tr>
<tr>
<td>3.9 Sample Frame</td>
<td>94 - 95</td>
</tr>
<tr>
<td>3.10 Data Analysis Method.</td>
<td>95</td>
</tr>
<tr>
<td>3.11 Scope of the Study</td>
<td>95 - 96</td>
</tr>
<tr>
<td>3.12 Limitations and Strengths.</td>
<td>96 - 97</td>
</tr>
<tr>
<td>3.13 References</td>
<td>98</td>
</tr>
</tbody>
</table>
CHAPTER 3

RESEARCH METHODOLOGIES

3.1 Introduction

The present study was conceptualized to arrive at a status report on how Indian Elevator after sales service performs on customer satisfaction and service quality. Customer perceptions on Elevator services from various users categories were collected for the study. There has been no formal study of Elevator service sector, as was regulated by the Government. It was only in 1991 that the Indian Government began the process of liberalization, freeing Indian industry from the shackles of a licensing era. The Government dominated service sectors have also begun to feel the impact of liberalization.

Nothing short of a quality revolution can save Indian industry from becoming extinct. It is not only state-of-the-art technology that is required to produce, but also an understanding of customers, and what they need. The most invincible barrier to cross will be the attitude, which need to undergo change. Deeply ingrained in the Indian psyche is the attitude “Chalta Hai” (anything will do) which keeps us from becoming world class.

3.2 Need of the study

There has been tremendous change from the traditional service network, which existed in the countries till as late as a few years back and still does in certain small towns and areas. There have been drastic changes in the type, quality and quantum of service available these days. There have been several reasons for this. Unstructured market interviews of 30 authorized and non-authorized service providers have indicated that
• The service network is a major source of a sustainable competitive advantage with a definite defense potential. In addition Quality studies carried out by Otis Elevator co. for India show service coverage as an important differentiator.

• Service network is becoming a major factor in brand choice in India as product care and support is a part of the product purchase plan. MNCs are using this to establish an edge over its rivals by aggressive promotion of this capability.

• Customers are refraining from use of duplicate parts. Fabrication of such high quality duplicates is very difficult and time consuming.

• Increasing electronic content of microprocessors and chipsets increasingly being used in Elevators in India after 1997-98, that makes service by untrained and under-equipped service providers a difficult and harmful thing for the Elevators. It harms Elevator performance and customers refraining from it.

• Companies are moving from elevator maintenance to total Elevator care and other broad-based concepts. Making service available to every buyer easily is an important stress area for manufacturers.

• Average down time has been reduced to about 2-3 hours. This is in difference with a minimum down time of at least 6 to 8 hours for pre 2000 levels. This was for service and minor repair of Elevators not necessitating major overhauls.

• Higher degree of automation of service content.

• Average costs of service have risen and various service providers are using different service-cost configurations.

• Higher end product manufacturers are promoting packaged deals.

3.3 Objectives of the Study
The broad objectives include:

i) To understand the perceptions of different stakeholders of Elevator Industry towards the notion of ‘Elevator Users as a customer’.
ii) To identify the important determinants of Elevator after sales service process.
iii) To identify any perceptual gaps between Elevator Service Providers and Service Users about various aspects of satisfaction, and to identify the factors causing these perceptual gaps.

3.4 “Hypothesis”

The following thought provoking hypothesis with balance coverage of the Research Study has been framed to materialize the objectives of research study.

A. Gaps do exist between the promises and the motivations of the elevator service Providers and the Expectations and perceptions of the seekers of the services.

B. Complaint makers and their Recipients both need education and application of changes that bring them closer, rather than face to face.

3.5 Research Design

The research conducted was a mixture of two types.

(a) Monitoring Research
(b) Preliminary Research

With the help of above-mentioned researches, I was able to discover the problem, define the problem and understand the environment of the problem correctly. Monitoring research gave the information of the opportunities and the difficulties encountered by various Elevator
service providers. Preliminary Research included the sample of 20 respondents so as to correctly define the problem and also helped in getting and understanding of the environment.

SOURCES OF DATA

(A) Preliminary source:
Elevator Purchase Department, Maintenance Department,
Users, Engineers, Consultants, Seller Organization, R & D.
Department, Project Department.

(B) Secondary Source:
- Company Manuals
- Service Procedures
- Training Manuals
- Quality Manuals
- Product Parts Leaflets
- Product design and development department records.
- Web sites of various elevator companies.

3.6 Research Instrument

The research instrument uses was separate set of questionnaires for elevator service providers and elevator service users to realize the research objectives and another research instrument used was a structured questionnaire SERVQUAL to test hypothesis (Paraguayan, Zeithaml and Berry 5, 1986). It consists of 26 statements presented in two parts. One set of statements captures what the customer expects of a service and the other part captures what he/she perceives is getting on a 5 point scale from 1 to 5, 1 indicates strongly disagree and 5 indicates strongly agree.

The questionnaire is designed to elicit information of the gaps between what the customer perceives they receive and what they expect. SERVQUAL has another question to capture how a customer assigns
importance weights to five service dimensions: Tangibles, Reliability, Responsiveness, Assurance and Empathy. The expectations and perceptions statements on the 26 items of the questionnaire revolve around the five service dimensions.

The item in SERVQUAL corresponding to each service dimension is as follows:

<table>
<thead>
<tr>
<th>Service dimensions</th>
<th>Item No.</th>
<th>Questionnaire</th>
<th>SERVQUAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tangible</td>
<td>1, 6, 7, 19</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reliability</td>
<td>8, 11, 13, 18, 23</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Responsiveness</td>
<td>5, 9, 12, 24</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Assurance</td>
<td>2, 3, 15, 20, 21, 22, 26</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Empathy</td>
<td>4, 10, 14, 16, 17, 25</td>
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3.7 Research Methodology

The study was envisaged in two parts:
Literature review on after sales service quality and related areas.
Survey of elevator service users and Elevator service providers.

Literature review involved scanning journals, research reports and books for articles on after sales service and quality aspects. The process took almost a year because only material related to the research subject was included in the review.

Besides scanning management journals, literature pertaining to each service had to be obtained from trade journals, books and magazines that dealt with the services under study. These were difficult to obtain since Pune has only a few sector specific libraries. As far as possible the researcher tried to get access to survey results or studies undertaken recently. The researcher took great pains to identify survey results concerning elevator after sales service and service quality. These the researcher felt would prove useful to capital goods industry
with special reference to elevator sector. However, the researcher could not do justice on relating the findings since the variables in study were measured differently. The researcher used the survey results to draw some broad conclusions which elevator service providers will find informative and applicable in their respective contexts.

A survey of elevator after sales services in Pune city was conceptualized to get a feel of Gaps and service quality and what it meant to the elevator service providers. The survey attempts to understand what customers expects from elevator service providers, how they evaluate each of the services and what they perceive they are receiving from the services.

3.8 Sample

There were 380 respondents who were users and Providers of the Elevator Services covered in the sample (SERVQUAL) and also 232 respondents for further analysis. The sample for the study includes users of Residential buildings, Hospitals, Hotels, Industrial Company, Private Bungalow and Mall. The number of respondents for each segment varied. Also study includes service providers; Top Management, executive staff, service engineers, R & D staff, Installation and Commissioning staff Inventory & stores staff.

The respondents belonged to the income categories from less than Rs. 1,00,000.00 p.a. to more than Rs. 4,00,000.00 p.a. The age group of the respondents was from 18 years to greater than 55 years. The respondents were with education of graduation and above. Bulk of the respondents was male.

3.9 Sample Frame

Managers, executives, and office staff from the Elevator companies plus society members, managers, elevator users in Pune who had
experience of using the elevator services as consumers were contacted for the study. In addition, Elevator consultants were requested to participate in the study. They were all asked to answer the questionnaire from a consumer perspective. Respondents were briefed in groups about how they should complete the questionnaire. Each was asked to complete the questionnaire which they had an experience. Since the study was undertaken with no financial sponsorship a convenience sampling was used.

3.10 Data Analysis Methods

Chi-square test was applied to test the hypothesis and also charts were used to amylase data further on elevator after sales services.

3.11 Scope of the study

The present study has designed to gain an understanding of after sales service of Elevator industry, through a survey. A study of After Sales Service in India today is relevant because of the pace of change in the services sector brought about by policy changes of the government like Privatization, liberalization & Globalization.

The present study provides a macro and macro view on the status of the Elevator After Sales Service in Pune City. It gives a fair picture on how elevator service users perceive services and how service providers are doing on the quality of after sales service aspects. It thus serves to fill in the gap on information that exists about the services sector especially from a elevator users perspective.

The SERVQUAL an instrument designed by Parasuraman, Zeithaml and Berry 1, 1986 has been used to collect elevator service users. Expectations of the services and their perceptions of the services on five service dimensions namely Tangibles, Assurance, Reliability, Responsiveness and Empathy.
Several hypotheses were generated for testing. The test results and findings are presented in the Chapter 6

3.12 Limitations and Strengths

Limitations:

The study has its limitations stemming from the sample size, which could have been much larger if necessary financial support was given. The study is dependent on responses received on a structured questionnaire. Although space was provided for respondents to express their views on other aspects of elevator after sales services and few were expressed.

The study is too ambitious in trying to cover all dimensions of after sales services from elevator service provider and elevator service users point of view in Pune city. Also the findings are general in nature.

1. The present study attempted a wide coverage of Elevator after sales services aspects and therefore the results appear general.
2. Generalizations were made on the basis of sample survey of Pune city.
3. Service quality measures are dynamic; a one shot attempt may be inadequate to understand the issues in depth.
4. The study of the information technology aspects of after sales services is beyond the scope of present study.
5. The present study is confined to Pune city only.

Strengths

1. It is the first study on elevator after sales service, which have been researched exhaustively.
2. Several findings can find useful applications by managers who work in the elevator sector under study.
It is empirical and analytical in nature with a sizeable sample size of 380 plus 232 respondents.

A literature review includes coverage on the global and Indian environment affecting each of the services.

Results of the study are linked to other studies wherever possible. Further, managerial implications of the findings have been included.
3.13 References:


