CHAPTER 9

RECOMMENDATIONS

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9.1 RECOMMENDATIONS

In this chapter an effort has been made to summarize all the preceding chapters in the form of recommendations. On the basis of findings; certain problems faced by elevator service users and providers have been identified. The researcher has made an endeavor to suggest measures in the form of recommendation to minimize gaps. The recommendations as follows:

9.1 Safety Norms:

i. Lots of ignorance by elevator staff and elevator users on safety resulted accidents during elevator installations, commissioning and while rendering after sales services so high time for elevator service provider and PWD to review people, equipment and passenger safety policy and to improve further.

ii. There shall be no selling of Manual collapsible gates, which is major safety hazards for children. Also there shall be government policy to replace existing installed collapsible gate elevators installation to swing doors type gates with specific time line.

iii. There must be policy on scrap of old elevators. Also there is need to introduce comprehensive policy in life to define life of elevators and should be incorporated in PWD lift rules and Municipal Corporation.

ELEVATOR SERVICE PROVIDERS —
There shall be Cross-functional efforts cutting horizontally across the whole organization to achieve service excellence. Top management or service department alone cannot achieve service excellence. The entire functional department has to be involved. Service delivery in elevator industry start with service executive deciding service specification with elevator service buyer and all commitments of AMC backed up by service engineers and supporting functions.

**Gender**

Hiring female in elevator service delivery process should not be restricted on the grounds of traveling; long working hours; rejection etc. As female can be effective in elevator care.

**Income:**

Considering specialty of elevator service job; elevator service provider organization should review compensation to brilliant elevator service engineers. Considering present Pune market; Elevator Companies or Agencies are compensating reasonable to their service personnel. As compare to other capital goods service company the compensation in elevator industry is less.

**Service:**

Effective actions or decisions are based on analysis of data and information. Management must not take ad-hoc decisions. There must be application of Quality Management knowledge. Agreement on learning from elevator service breakdown vs. improving efficiency /effectiveness of equipment is positive sign but further question is seriousness in taking actions to really improve situations

**Total preventive maintenance (TPM) Plan:**
TPM is key process and service provider must add ... (i) Check Points: to measure the progress of TPM improvement related activities. (ii) Check sheets: A simple data recording device; custom made by user; which allows TPM results to be readily interpreted and (iii) Check List: A tool to ensure that all important TPM related steps or action have been taken. There are positive signs on total preventive maintenance plan but quality of TPM has relation with nos. of elevator breakdown; customer complaints; cost to service provider etc.

Feedback

Company wide feedback system (CWFS) - A system of continuing interaction among all elements; including suppliers; responsible for continually improving elevator performance and after sales services that satisfies customer demand. The ultimate goal of service organization is to improve quality, reduce cost and improve scheduling (quantity and delivery). Here team efforts and continuous positive actions by cross-functional team is major factor of success.

Continual Improvements:

Deploy service system whereby customer requirements; known as "true quality characteristics" are translated in to elevator designing characteristics, and then deployed into sub-systems like components; part and production process to continually update products precisely as per the customer needs. Continual improvement is fundamental to last long in service business. Both incremental and breakthrough improvement are encourages by using improvement tools, techniques and learning with the organization and through external benchmarks. Education and training reinforce this role for everyone in the organization.

Price
Elevator service provider must justify "value for money" in terms of excellent services and make sure that formal or informal options offered to elevator service buyer are cost effective.

**Systematic enquiry on why customer not buying services:**

Elevator service provider should use voice of customer (VOC) methods like surveys, ideas meetings; service testing, formal observation and ghost shopping to have clear reasons for loss of elevator service business and workout service strategy based on the VOC inputs.

**Service Logistic:**

Introduce value stream mapping record and information: Creating a visual picture of the "current state" of how materials and information flows from organization to customers. Total lead-time, process cycle times and value added times are measured.

**Hot line:**

Visible management from service provider needs to spread availability of elevator hotline. The presentation on wide varieties of information to elevator buyers/users on Hotline to have optimum use and improve Effectiveness. Elevator Hotline concept is still in developing stage; there is a need to rework on hotline response process and actions after customer call.

**Unsatisfied Customers:**

Everyone talks of special treatment to unsatisfied customers, but very few really understand their customer needs/expectations. Recommendation is to build effective and efficient complaint handling system in elevator after sales service.
Service Communication:

Elevator users/buyers should be taken in to confidence when service is interrupted and communication should be very clear in terms of plan-do-check and ACT. (PDCA). Here organization can keep water spiders, who are experienced service engineers and capable to put elevator on move with shortest time. When elevator service users don't know when elevator will restart they may object the situation or can log in a major complaint on ignorance or discontinue the service agreement.

Extra Efforts:

Use flexible manning (FM) when things go wrong. FM is a way of managing person power on the service line such that when service demand decreases, service engineers can be re-deployed to areas where needed or when demand increases, they can be deployed to areas requiring additional support. Certain situations like people trapped inside elevator; sick person; old age people, disable people - in the building needs immediate service and extra effort in restoring elevator service faster gives extra lead to elevator service providers.

Service Reliability:

Elevator service provider engineers need to visit customer every time when they visit elevator building to improve service reliability. Also service engineer should remember that he/she is responsible for own learning and self-development. Customer comments on reliability of services are “valuable inputs and immediate corrections after listening to customer improves reliability of elevator service provider.

Internal Communication:

Service provider must appoint Director - customer defender to have effective customer feedback and can pass comments to appropriate
person or authority. Actively using customer feedback to correct situation need involvement of organization team members and superiors. Any gap in internal communication can impact adversely to service delivery process.

**Performance:**

Service provider must create environment of teamwork. As a service provider, succeed or fail, as a team and each member of team must be firm believer that he/she is responsible for own learning and self-development. Learning from others; using internal customers ideas and experience is very important for any individual who is in service delivery process; as this is the shortest route to improve individual efficiency and effectiveness in after sales service.

**Service Inventory:**

Service Provider must apply factual approach to inventory management. Inventory logistics, stocking should be based on analysis of data and information; and should not take adhoc decisions. Focus on service inventory is good part of elevator service industry, point here is systematic and scientific management of equipment and supplies to have zero complaints from elevator service users.

**Abnormal and Unexpected workload:**

Elevator service provider should implement flexible manning - A way of managing, meeting abnormal and unexpected workloads. Real test is meeting abnormal and unexpected workloads by elevator service users.

**Service Provider experience:**
Service provider must go for review meetings with service engineers weekly to collect experiences and work out plan -do-check-Act (PDCA) service cycle to have full confidence to cope up with known demands of future elevator after sales services. Major portion of elevator service provider have service data on demands but still there is gap on capabilities to cope with elevator users future workload and revised service specifications.

**Process:**

Service Provider must go for regular audits to have check on set service standards. Also customer service process must be reviewed regularly for improvements in line with audit gaps and customer feedbacks. Defining service standards and service processes is half the job but to make sure that what we defined and worked service processes must be experienced in "ditto" by elevator service users. Any "gap" in this aspect can cause dis-satisfaction.

**Critical to Quality (CTQ):**

Elevator service process should be aligned with critical to quality parameters and there should be regular review of CTQ with respect to elevator after sales services to users. To survive long in market "continuous improvements" is must to realize long term customer satisfaction; improved response in service, zero defects and in time delivery.

**Service Quality Planning:**

Service provider must start implementing ISO9001-2000; six sigma; kaizens etc. to have focus on service quality and resource allocation. To realize service excellence; service quality planning and resource allocation goes hand to hand. Any "gap" in planning component or resource allocation impacts bottom line of the organization.
Employees involvement in service quality:

One has to keep evaluating whether or not, an employee are fully involved in delivering quality of service to users.

Complains:

Elevator service provider must pay attention to details just because you got it right today, doesn't mean it's going to be right next week or next year - you have to keep paying attention to customer complaint and regular relentless root cause analysis (RRCA) with success stories.

Efficient complaint handling methods:

Elevator service provider must apply system approach to make complaint-handling method efficient. System approach means identifying; understanding and managing the inter-related elevator after sales service processes as a system, improves the organization's effectiveness and efficiency. Inefficiency of service complaint handling is "major gap" and it can badly impact service providers' reliability and bottom line.

Gap:

Here recommendation is to implement elevator promised services indicators concept - (EPSI) meaning recording promised vs. actual and continuously measure gaps and improve to customer needs. Believing "no gap" in services promised and service rendered must be crosschecked with actual elevator users. Service providers must pay attention to details. Just because you got it right today, doesn't mean it's going to be right next week or next year - keep paying attention to details.
Safety and Quality:

Think of safety as a state of mind. The safety of passengers should be at the forefront of all elevators. Maintenance service contracts and all benchmark standards. Look for a elevator service provider that includes safety among its core business philosophies. Don't settle for less when the safety of your elevator passengers is at stake. There should not be compromise on after sales service quality even at the expense of schedule and cost; any short cut can impact service provider in terms of rework; safety hazards, loss of customer etc.

Unemotionally capturing service users complaints:

Effective decisions are based on capturing unemotionally service complaint data, analysis of these data and information. Service provider must train all their staff members to have factual approach to decision making. To have unbiased actions and future planning service provider must capture unemotionally service customer complaint data and analyze.

Standardized method of solving service customer problem:

Service providers must learn from other service industries on how to standardize method of solving elevator service users problems / complaints. Service provider solves the users complaint as and when it comes, as there is no formal path to act systematically on elevator users complaints.

Lost Customer:

Basic root cause can be, customers unable to value importance of elevator maintenance. Here regular communication and education to users on elevator safety and quality is must from service providers.
Also service provider staff should have good relationship with key decision makers/influences of elevator building. Ad-hoc process of taking customer feedback and half hearted action gives feeling to service provider that they knows why customer went to competitor but actual case can be different.

**Service Schedule:**

Cost of poor quality is very high and service provider must implement total quality management in delivering elevator after sales services to users. Without proper root cause analysis one cannot assure efficient and effective elevator after sales services to users. Only focusing on timely service will give good feeling to elevator service buyers but not spending time on root cause analysis and corrective, preventive action will result in to higher numbers of breakdown.

**Major problems while rendering services:**

To cope up with client structure; elevator service provider must develop a good record keeping system and regular touch with elevator building committee on power supply front; elevator service provider can sell UPS or battery backup or recommend elevator buyers for Gen. Set in the building. Here controllable part is fixing precise time table in rendering services to make sure on availability of service users and equipment power supply.

**Service:**

Elevator service provider should focus more on service execution-visibility, effective breakdown services and continuously monitoring customer perception to have aggressive goals to improve elevator after sales service. The three goals of quality, cost and scheduling that are key to customer satisfaction. Customer require all three - high quality,
low cost and on time service. All three go to make up the customer's appraisal.

Legend:

Elevator service providers must start "Legend philosophy" to have positive impact on service business and internal customer satisfaction. "Legends" in customer service is very important aspect to keep team in high morale and focused on long-term service goal of organization.

Customer - always right:

To have long term service contract with elevator service users organization must continuously conduct elevator buyers/users survey and to prove point that customer is always right. Customer considered being always right but ad-hoc process of taking customer feedback is cause of concern from customer satisfaction point of view.

Customer Club:

Elevator service provider must start elevator club and explore all the avenues to have effective interaction and ultimately improvement in elevator after sales services. Voice of customer is very important to improve after sales services in elevator industry. As voice through customers club or users club can be timely input for the organization.

Customer Surveys:

Elevator service provider must go beyond traditional ways of customer satisfaction surveys. Here service provider can use concept of “Ghost Shopping” “Focus group interaction” etc. to have realistic outcomes. When customers are asked if they like a new offering, they may lie. They may not want to hurt anyone's feelings or they may just want to
avoid an argument. There is need to go beyond traditional way of customers satisfaction survey.

**Training:**

Elevator service provider must start elevator users basic training modules to have effective use of vertical transportation in the building. Big opportunity for elevator service providers to spread elevator training to users and raise service standard and bottom line

**Incentives:**

Opportunities for elevator service provider to start with service customer incentives schemes like long service contracts at lowers rates; free spares; 24 x 7 services; tall free nos.; club memberships; advertisement in elevator car etc. Opportunities for elevator services provider to chart out detail "promotion mix" to offer incentives to elevator service buyers and create "promotion mix" to offer incentives to elevator service buyers and create win-win-long service relationships.

**ELEVATOR SERVICE USERS.**

**Personal Profile**

There should be Service-positioning strategy for different segments.

**Elevator Services:**

One can't find person who don't have elevator travel experience in Pune city..." Service user must demand regular safety and technical audits in building for long-term interest to keep elevators at their full level of service irrespective of year of installation of elevator.
**Power back up:**

Elevator service users must be educated on pros and cons. Of Gen-set vs. battery back up; as 3 phase power back up is one of the major player to safe guard elevator users from entrapment risk.

**Price: Annual Maintenance**

To conclude on local maintenance agency vs. elevator company; elevator buyer must have regular meetings with service provider on status of elevator performance and should ask for written reports.

**Charges of Annual Maintenance Contract - AMC:**

Elevator service user should know what he/she wants in elevator service program. When negotiating a renewal or new AMC, be prepared to rank your top priorities in terms of response time, hours of maintenance, on site parts availability, full or partial coverage etc.

Scope for the elevator service users to raise the expectation from service provider and any time elevator service provider can plan road ahead to grab the opportunity of service excellence and customer delight. Find an elevator service provider who thinks like you and does business the way you want it done.

**Service Logistic:**

Information and documentation about service provider must be readily available to service users and service providers when needed. Elevator service users must have documentation system to safe guard their interest. And should keep complete records of the elevators in buildings with Written reports - follow-up in writing, tracking the performance of elevators.
**Service Communication:**

Elevator service user must establish simple and understandable communication system with elevator service providers when elevator service is interrupted or major breakdown. Streamline communication. Simple and Speedy communication behind the scene can enhance overall performance, making service calls hassle free.

**When commitment is made:**

There is need of more professionalism in elevator service industry with clear focus on what is committed vs. closing of committed action. One of the key challenges is building a strong service mindset and culture across the organization in high contract service industry. Here organization should invest in human resources, and that means being very selective about who you recruit and getting people who meet right profile in terms of attitudes as well as skills. Loyal employees result in loyal customers. Moreover service provider should note…

a) Get portable b) Prepared and c) Have a back-up plan.

**Process: Total maintenance (TPM) Plan:**

"What you measure that you get" - In elevator after sales services; elevator service users must demand TPM plan to realize value for money and simultaneously elevator service provider must utilize opportunity to educate elevator service users. a) Standardization of elevator health checks up report and distribution and presentation to the building council. (b) Regular monitoring of TPM work.

**Information and documentation about rendered services:**
There is need to have professional approach either from elevator service providers and elevator service users to have common information/documents on rendered services.

a) Work completion certificates by service provider and to be signed by building council members or their representatives.
b) Checklist for visible output such as car leveling with floors, indicators, fan noise, car movement noise, door closing be a part of work completion certificate.

Service Standards:

It is responsibility of all elevator service industry leader to propagate awareness on service standards; which should clearly state what elevator service buyer receive in terms of services. Can offer assistance to the customers to maintain all elevator papers in "lift file". As AMC papers; PWD rules, work done certificated; service plans etc. should be filed diligently in the "Lift file".

Users Satisfaction:

Need for elevator service providers to make maintenance and repair process of elevator more customers centric. Also should involve elevator service users in the process. Customized solutions for specific issues raised by customers through information about relevant features of service focusing on customer problems. Elevator user must demand for 99% up time to safe guard their interest.

Perception on elevator breakdowns:

Elevator service provider must chart out clear objective to reduce CPUA less than 2.0 to win over confidence of elevator service users.

a) Position safety and convenience as prime objectives of maintenance
b) Customer education on elevator maintenance for auto elevators
c) Customer education on accessories and new developments in technology.

**Asking Root cause:**

Elevator user must ask root cause of elevator break down or complaint they made to service provider. As careful analysis of the root cause of service complaint often reveals opportunities for failure proofing certain activities in order to improve uptime of elevators and eliminate the risk of errors.

**Avoiding on complaints:**

Elevator user should not avoid small complaint of elevator or should not wait to club with major breakdown.

**Service**

Ample scope to educate elevator service users to demand and experience better elevator services from elevator service providers.

a) Customer education programs to build awareness  
b) Teach customers on how to use a service to their own best advantage.  
c) Build preference through communication of special strengths and benefits.

**Experience:**

Need to have customer centric elevator service process with aim of service excellence. Maintaining level of excellent service is very important, and what could be a great example of service today could easily degenerate in to a bad one. Organization has to keep evaluating whether or not, an organization remains a good example. Elevator
buyer must demand benchmark standards from elevator service providers.

9.2 FUTURE DIRECTIONS

The present study findings can be used to get an idea of how elevator after sales services in Pune Area measure up on the service users, Service providers, and quality dimension especially from a consumer perspective. The study findings reflect consumer perceptions at a point in time. However, a continuous tracking of after sales service quality measures needs to be obtained. A service quality index can be computed for elevator service on a quarterly or yearly basis, which could serve as a benchmark for the elevator services companies.

Empirical research work needs to be undertaken on internal efforts of companies to deliver quality at the customer end. From the above it is clear that a sustained effort is required to ensure quality. It doesn't just happen. One has to have a plan.