# Quality Performance and Capacity Improvement Model for the Service Sector Industries

**Dilip Kumar Gayen**
Research Scholar, School of Management, GD Goenka University, Sohna, India
Management Expert, East West Infosolutions, New Delhi, India
dilipsensei121@gmail.com

**Selected Conference Paper of ICMR-2022**
[Submitted on: 12.4.22; Revised on: 30.10.23]
**DoI**: 10.23862/kiit-parikalpana/2023/v19/i2/223478

**Abstract**:

Service sector industries are becoming the most prominent economic contributors almost in all countries for its' increasing share in the GDP with major impact in employment generation. Service industries are advancing in developed & developing countries with high mass consumptions and owing to enrichment in standard of living with modern life styles. Industry revolutions and extensive application of Cyber Physical System in the services with indispensability of digital interventions in our daily life booming service sectors since last two decades. Exponential growth with technological transformation, robust changes in the process of communication and useful & inevitable use of apps in everyday life leverage the service sectors. Online communication and impact of covid19 in the working methods, services in both developed and developing countries created a remarkable opportunity in various dimensions in all economies. New prospects of business in service industries are producing employment, wide spreads the volume of business and created higher money velocity with GDP.

The objective of this research study is defined with outcomes are, develop a service improvement framework with applicable quality techniques, service improvement structure with parameters through a model, factors of operational efficiency measurement & improvement, and detailed control and improvement points for the service organization enhancement with service efficiency. This study results will assist to service owners, management and stakeholders to comprehend and recognize the gaps in their various services domains, required initiatives for outspreading business, profit, manage quality, generate internal efficiency, customer's delight, planning for execution, improvement benchmark and organized method for attending critical areas of business & services.

**Keywords**: Customer Satisfaction, Total Quality Management, First Time Right, Overall Service Efficiency (OSE), Gross Domestic production (GDP).

## 1. INTRODUCTION

Service sector incessantly value-adding in all aspects of people's life through the digitalization and technical & business innovations. The magnitudes and process engineering are enormous in-service industries and it is expanding with times and technology. **In definition,** Service Sector (SS) might be defined as an economic segment that performs certain tangible and intangible activities that fulfils certain needs with value creation. Companies within this industry performs actions that are useful to their customers.

Service industries covers many sectors like banking, communications, wholesale and retail trade, all professional services such as engineering, computer software development, medicine & health care, non-profit economic activity, education, all consumer services, and all government services including defence sector and administration of justice etc.

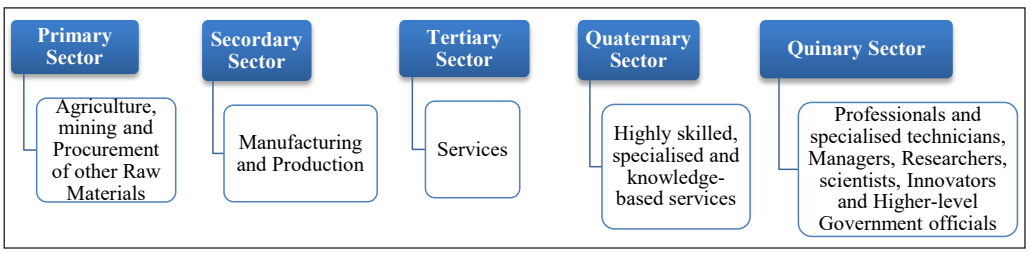


*Figure 1: Various sectors with Services*

There is a gap in the service industries, in terms of organized method of advancement through a model to control & monitor the growth for the management and stakeholders to comprehend the broad and essential mechanism of various initiatives in this sector. Various technical & operational features are essential to design the service criteria such as service quality, value stream, service time, processes & reengineering, service planning, customer communication, methodology with principles of good service, management and control of efficiency with performance.

## 2. STUDY OBJECTIVES

Service companies moving forward with various internal and external challenges, that affects the progress, and these requires to resolves with planning and prioritizing the customer's expectation for getting new business with service extensions. The purpose of design a model is to contribute the service industries for achieving more efficacy in operation, best services to customers, generate efficiency for service preparation and effectiveness in business promotion with technical advancement.

Services sectors persisting with Post covid impact and world-wise shadow of recession. So, there are various service-related problems identified in this study, which are to find a model-based development applied in service industries, what are the quality improvement tools and parameters, to comprehend the operational efficiency measurement and improvement methodologies and what will the elements of control & improvement the services, and enhancement of service volume with zero failures.

Based on the above identified problems, the research objectives are designed as, develop a service sector improvement framework with applicable quality techniques; Structure the service industry improvement structure and parameters of the model; Develop the factors of operational efficiency improvement; and Detailed control and improvement points for the service organization enhancement and service perfection.

## 3. STUDY METHODOLOGIES

This study process followed Descriptive Research with attempts to systematically analyze the state of operations, problems & constraints, phenomenon, analysis-based information about the present circumstances of a service organization with primary issues. It is an Exploratory Research method which are combined with the study objectives for exploring the realm that relatively not as much of is explored to analysis the possibilities to undertake that particular research study. This methodology is a retrospective -prospective studies converging the past trends in a phenomenon of the organization and forthcoming sate study with planning. Process of the data collection is reflective with documented from the current data & on progress before the interruption and next from the population study followed to govern the effect of the engrossment & connection is analysed, established with results.

Applied sampling method are, define sample size of average 15 to 16 nos. service units from industries and various levels of an organization with developed matrix or table. Sampling methods also includes the targeted sampling where the samples are selected and collected from industry / cluster as per confirmation from units & convenience to the study with it, and whenever a person or expert with the availability & appropriate types are observed, that person is asked to share the impressions for this study. Expert sampling, where experts and respondents must be known the respective areas and interested to respond for value-addition to this study.

## 4. LITERATURE REVIEW ON PREVIOUS MODEL AND STUDIES

Various important models of improvement are developed for casting aside the business problems into excellence by like Baldridge and Deming, Masaki Emai - TQM, EFQM (European Foundation for Quality Management), country's BE models and many research scholars. Organizational efficiency which is applicable to SS by using a number of quantitative figures such as service / production costs and service production times etc., are also

enumerated by various Gurus. These are Six Criteria of Scott Sink and Thomas Tuttle describes the organization's future on, Effectiveness, Efficiency, Quality - Internal Quality & External Quality, Timeliness: Cycle Time, Waiting Time and, completed Time, Finance and Workplace Environment. These are in respect to manufacturing, but service providers could develop these calculations as per the process and operations applicable for service industries.

Service quality is defined as 'a global judgment or attitude, relating to the overall superiority of the service' (by Parasuraman, Zeithaml and Berry, 1988). The SERVQUAL concept proposes a gap-based conceptualization of service quality, where the gap indicates the extent to which the service obtained conform to expectations.

SERVQUAL is based on a set of five magnitudes which have been consistently ranked by customers to be most important for service quality, regardless of service industry. These dimensions defined by the SERVQUAL measurement instrument are as follows: **Tangibles**: appearance of physical facilities, equipment, personnel, and communicated materials. **Reliability**: ability to perform the promised, service dependably and accurately. **Responsiveness**: willingness to help customers and provide prompt service. **Assurance**: knowledge and courtesy of employees and their ability to convey trust and confidence. **Empathy**: the caring, individualized attention the firm provides its customers. Access of service: related to service accessibility by customers. Financial aspect: financial transactions with customers. Employee competences: individual skills, abilities and competency of employee required for service.

Customer Satisfaction (CSAT) is calculated by dividing all the positive responses by the total number of responses and multiplying by 100. A CSAT score of 80% is a good indicator of success, although it will vary as per industry. Another concept is DSAT score, it is nothing but the converse of CSAT, in DSAT the customer is judged on the scale of dissatisfaction with the service received. Net Promoter Score is a customer loyalty metric developed by Fred Reichheld, Bain & Company and Sat-Metrix. Following points are important for reducing the DSAT in service with applying the dimensions of quality.

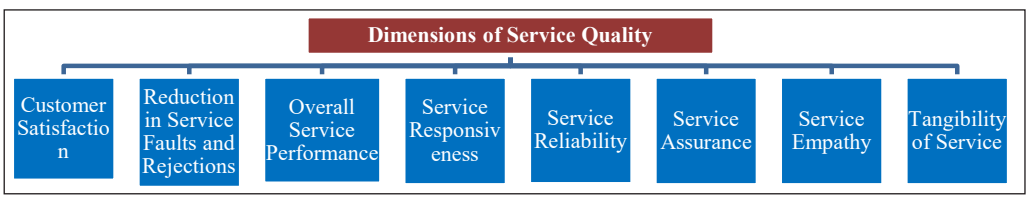


*Figure 2: Various Dimensions of Service Quality*

Nine Technical Service Quality Approaches for measuring and improving service quality, developed by experts. SERVQUAL, the most common method for measuring the subjective elements of service quality. Mystery Shopping: This is a prevalent technique generally applied in retail stores, hotels, and restaurants, but applies for any other services as well. Post Service Rating: In this practice, the process is applied by requesting customers to assess the service delivered to them after it has been completed. Follow-Up Survey: Through this method company or service providers ask customers to assess the service quality through an email survey or any other procedure like Google Forms etc. In-App Survey: As various apps are commonly available and by using an in-app survey method, the queries are asked while the visitor is on the website or in the app, instead of after the service or via email. Customer Effort Score (CES): This measure proposed in Harvard Business Review article; which describes aiming to 'delight' the customer – to exceed service expectations, it's more likely for a customer to punish companies for bad service than reward companies for good service. Social Media Monitoring: In the present technological progress, this method is gaining momentum with the rise in the use of social media. Through this media people could release their problems and benefits which be unlash to perceive. Documentation Analysis: Through the collection of primary data and records for service process, times etc., by various online or offline method i.e., with qualitative approach enables companies for better and corrective planning. Objective service matrixes: Service matrix plays a vital role in showing which areas company requires to improve. This statistical data provides the objective, quantitative analysis of any service.

## 5. STUDY AND ANALYSIS

### 5.1 Developed Service Sector Improvement Model with Applicable Quality Techniques

After studies in service organization and industry case studies, major concern of quality in service industry is managing the quality, which is primarily linked with the training to grow capable peoples for best performance, develop standard operating & quality procedures for consistent & fault-free services. Another significant point in service industries is service quality assurance through progressive system generation, possible application of digitalization for capacity building & improvement, develop capabilities, system reliability, enhance human competency & motivate to front-line servicers and for proficient supply channels.

This study also reflects that effective customer services ensure customer expectations with cost effective services, develop businesses and ensures efficient system building. Structure and organized system are essential for good services and it is observed that expect some service industries with global presence, most have Gaps in technical aspects & experts for improvement & innovation. Existing good business not assures the

sustainable performance. Following are the outcomes in these areas.

### 5.1.1: Tools and Techniques to Improve Quality in Service Process

i) Develop System & Process Quality for efficiency and effectiveness services

ii) FTR / FTA; First Time right in the process for First-time acceptance by customers

iii) Poka yoke: Mistake Proofing techniques in the service preparation for conformities

iv) Quality at all places and self-reliance at each place instantly - Assurance & Reliability

v) Planning Quality online with Digital applications in the strategy as per market with next generation business strategies

vi) Apply 7QC Tools for Analysis and Action with Lean Six-sigma techniques as per applicability

vii) Develop Online and off-line checking, Layer-wise Quality Assurance

viii) Use PDCA Cycle for step-wise overall quality and journey of improvement

ix) Total Quality Management for organization quality culture through employees and management

x) Use quality control Tools and statistical process control with various control charts.

### 5.1.2: Quality in Culture to Control through implementation of the Quality Tools

i) **Study** and identify the problems of quality, productivity and efficiency

ii) Establish and generate the individual **commitment** to quality through responsibility

iii) Learning on essential **Training** on Quality techniques, data validation, Digitization, monitoring and control system

iv) Develop **check points** with sheets at various levels of operations, deviations in planning & execution, put the systems and process of checking in the service stations and its' process

v) Service **Readiness** with checking in practice for getting more perfection in services

vi) **Ensure** Quality at each process: FTR and FTA through on/ off line

vii) Implement **Process Excellence** Structure in the Service Excellence.

## 5.2 Improvement Model for Service Performance

This model describes as a macro view, which is significant for service sector industry's improvement through quality culture with tools and techniques. This developed model is reflective and refractive of the improvement, which could be proposed to include in strategy for applying in service organizations performance enhancement. Model is

based on business planning, customer delivery time, quality and service techniques. It will also assist the industry for better arrangement, sequencing and identifying internal improvement gaps & strategizing the inventiveness on customer services.

### 5.2.1 Implication of this Proposed Model

i) To perceive the required improvement dimensions at a glance during planning and strategy making

ii) Identify the Priorities and Focus areas in service efficiency and effectiveness

iii) Improve Service Capacity with optimum utilization of resources

iv) Application of Techniques for Improvement and efficiency

v) Application of Service 4.0 Techniques for exponential technological transformation

vi) Areas of Control and monitoring the performance and efficiency

vii) Capacity building with competency

viii) To reach the maximum level of efficiency with business development in the market

ix) For Capability with competitive and achieve the Goals & Targets

x) Customers oriented and driven decisions

xi) Identify the required Interventions of new Techniques and process

xii) Quality of services to customers for loyalty and reliability

xiii) Completion of the services on time and in Totality

xiv) Cost effective services

xv) Total Quality in a Service Industry.

This Model covers points of business development for reaching out to as many as customers, focusing on customers' expectations as per their purchasing and consumption behaviour, quality of services, and through creating organizational strength.

### 5.2.2 Essentials for Implementation of Service Improvement Model

It is essential to all entrepreneurs to be competitive with advantage for business expansion. Implementation of the techniques and methods of this model depends on the understanding, initiatives and involvement in following arenas by service providers;

i) **Management:** For decision-making, initiative for improvement, employee involvement and business promotion.

ii) **Employee:** Individual commitment on the improvement, connect all activities with customers and process improvement as a process owner.

iii) **Infrastructure:** Establish good customer service processes and stations, and market-oriented investment on infrastructure for customer's services and business expansion with Techniques and Technology.

iv) **Service Efficiency:** Make the service providers and efficient

system, this model is effective for efficiency and service competency, aimed at competitive advancement over the competitors.

The implementers of this model could apply the following extents in their organization by management; how to make the better services to retain the customers with maintaining good quality, apply the service improvement check points as per the developed service efficiency model, for service quality and application of TQM in service industry, awareness on prevention of mistakes with service poka yoke, process of generating new market through forecasting and market research, service measurement, reengineering of business and processes and service performance and efficiency.

### 5.0.3 Service Industry Improvement Structure and Parameters of the Model

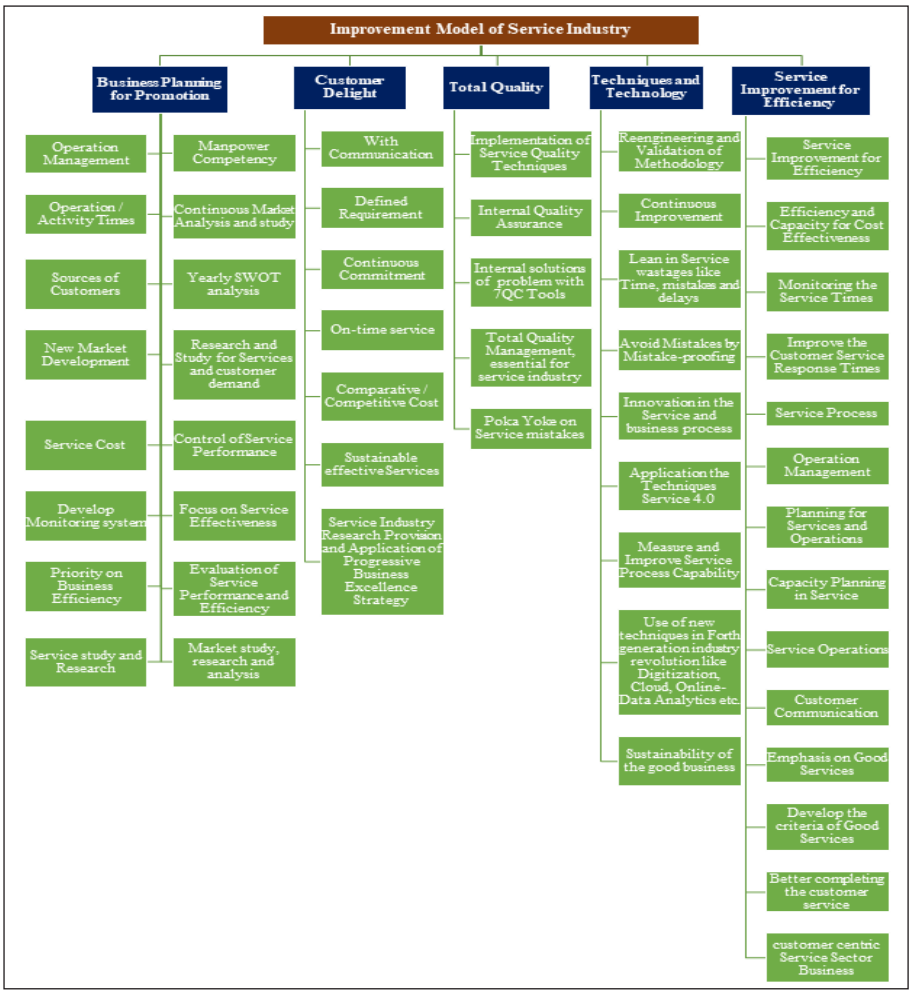


*Figure 3: Service Industry Improvement Model*

### 5.3 Process of Measurement and Calculations of Efficiency of service organization

The fundamental target in the service efficiency is optimization of utilization resources in existing system and technology. In the present evolution of Industry 4.0 & 5.0, the fourth & fifth Industrial Revolution entails the digitalization and automation. It changes the processes of service production, among service industries, that are developing on the target of effectiveness with the advancement of IT, cloud computing, Industrial Internet of Things (IIoT), data analytics, robotics, artificial intelligence, and machine learning, considering the factor of cost efficiency & market orientation.

#### 5.3.1 Factors of Operational Efficiency improvement

i) Define the Performance *Benchmark* as per the efficient company's best practices.

ii) *Identify* and *eliminate* wastages by targeting issues like bottlenecks and poor production planning.

iii) Monitor and *manage performance* by setting up dashboards/ control points, statistical analytics and implementing them in daily team meetings.

#### 5.3.2 Overall Service Efficiency (OSE)

It is a calculation used in the service production lines or total services with the parameters of availability, performance and quality of the services. The details of OSE measurement require to be defined to service provider and line managers.

#### 5.3.2.1 Process of Overall Organization Efficiency Measurement

| Efficiency Measurement Parameters | Weightage (1%) |
|---|---|
| **Quality**: FTA of Services and Zero return by the Customers | 100 |
| Optimum **Manpower utilization** | 100 |
| **Cost of output** (Including all Costs) = in Absolute Terms after adjusting/ considering Inflation/ money valuation of Output and Input Service Price. It could be considered as absolute/ total Value addition | As per Business Criticality and evolved Market Competition |
| Utilization of **Plant and Machineries** | 100 |
| Input **Utilization/ Yield Rate** | 100 |
| **New Business:** % of Old Business (as per the market and industry), this criterion may include in Performance Measurement. | As per Business Criticality and Market Trend |

*Table No. 1: Potential list of Efficiency Measurement Parameters*

### 5.3.3 Depending Factors of the Service Capacity

i) Service Process: Types and variations in services, Combination of Technology and Techniques – Online, Offline, Digitization of the processes

ii) Execution or completion times

iii) Employee competency or efficiency

iv) Total Organizational set up

v) Value addition through analysis/ engineering of operations

vi) Management expertise, competency and effectiveness

vii) Applied Process of Improvement: Training, Improvement Planning

viii) Performance and productivity Target & Achievement

ix) Developed Control and Monitoring mechanism of total services.

### 5.3.4 Process of Improvement of the Capacity and Efficiency

i) Balancing of all operations, activities or section / group services

ii) Data and fact-based decision making

iii) Application of various techniques

iv) Plan for service demand / requirement, fluctuation and variations

v) Technical Strategy for Slack and Pick Time services: for cost effective and reduction in service wastages

vi) Digitally manage the sequence of services with Time, Manpower, Operations, as per the new dimension I 4.0

vii) Measure the Capacity of each section and sub-operation or sub-services

viii) Employee Improvement planning: Training, Processes, Execution, Criticality and Significance from customer's side

ix) Customer and market-oriented process and service design.

*Table No. 2: Parameter Based Assessment of Services*

| Sr. No. | Parameters | Efficiency Level | Performance Target |
|---|---|---|---|
| 1 | Various Service Timings | | |
| 2 | Service Quality | | |
| 3 | Optimum Utilization of System/ Organization structure, Technology and other Resources | | |
| 4 | Improvement Planning through Technology and Techniques | | |
| 5 | Amount of Business Generation | | |
| 6 | Number of Customer Attained in a certain Time and period | | |

| | | | |
|---|---|---|---|
| 7 | Customer Service Improvement | | |
| 8 | Service Expansion / Diversification / strategy and Business Development | | |
| 9 | Planning, Sustainability and Result | | |
| 10 | Business and Process Reengineering | | |
| 11 | Improvement of Manpower and Process Competency | | |
| 12 | Prevention of Faults | | |

### 5.4 Detailed control and improvement points for the service organization enhancement and service perfection

These are collective points of Total Service sector's required improvement inventiveness. The operational Head / CPO could review for strategy making and apply these points to control & upgrading their system, process and manpower for cost, customers turn in and commitment aiming to business success, efficiency in expansion. This check points are valuable and significant for service providers for verifying the effectiveness, efficiency and improvements. Total points consist of 12nos. Parameters with 136 sub-parameters / points to improve the Service efficiency. It could be used as an enabler for the Service Operators and managers also.

i) Key Performance Indicators (10 check points)

ii) Factors of the Service Capacity (9 check points)

iii) Capacity and Efficiency for Cost Effectiveness (9 check points)

iv) Service Time (9 check points)

v) Service Process (9 check points)

vi) Service Planning and Establish the Service structure (8 check points)

vii) Planning for Services and Operations (4 check points)

viii) Critical variables and factors for service capacity planning (8 check points)

ix) Prepare for the Services for communication (9 check points)

x) Activate the Types of Communications (5 check points)

xi) Methods of developing effective and good services Procedures (12 check points)

xii) Factors of Good Services (It consists of 10 sub-parameters and 43 check points).

*Table 3: Details of the 12nos. Parameters with 136 sub-parameters / points to improve the Service Efficiency with Perfection*

| Sr. No | Improvement | Initiative areas of the Criterion and Sub-Parameters |
|---|---|---|
| 1 | Key Performance Indicators | Production Volume: Track the quantities that are able to produce |
| 2 | | Production Downtime: Analyze and optimize the maintenance |
| 3 | | Production Costs: Monitor the costs implied in the production |
| 4 | | Defect Loss: Track the defects / damaged items right away |
| 5 | | Rate of Return: Measure how many items are sent back |
| 6 | | First Time Right: Understand the performance of your production process |
| 7 | | Asset Turnover: Acknowledge the assets in relation to the revenue |
| 8 | | Unit Costs: Track and optimize the unit's costs over the time |
| 9 | | Return on Assets: Observe how profitable the business is relatively to its assets |
| 10 | | Maintenance Costs: Evaluate the equipment costs in the long run |
| 11 | Factors of the Service Capacity | **Service Process***:* Types and variations in services, Combination of Technology and Techniques – Online, Offline, Digitization of the processes |
| 12 | | Execution or completion times |
| 13 | | Employee competency or efficiency |
| 14 | | Total Organization set up |
| 15 | | Value addition and analysis of values |
| 16 | | Managerial experience and competency |
| 17 | | Applied Process of Improvement: Training, Improvement Planning |
| 18 | | Performance and productivity Target |
| 19 | | Control and Monitoring of the total service. |
| 20 | Capacity and Efficiency for Cost Effectiveness | Balancing of all Operations, activities or Section / Group Services |
| 21 | | Data and fact-based decision making |
| 22 | | Application of various techniques |
| 23 | | Plan for Service Demand / requirement Fluctuation, Variations |
| 24 | | Technical Strategy for Slack and Pick Time services: For Cost effective and Reduction in Service Wastages |
| 25 | | Digitally manage the sequence of services with Time, Manpower, Operations, as per the new dimension I 4.0 |
| 26 | | Measure the Capacity of each section and sub-operation or sub- services |
| 27 | | Employee Improvement planning: Training, Processes, Execution, Criticality and Significance from customer's end |
| 28 | | Customer and market-oriented process and service design |

| Sr. No | Improvement | Initiative areas of the Criterion and Sub-Parameters |
|---|---|---|
| 29 | Service Time | Estimation of Services Time for internal planning |
| 30 | | Customer response and agreed Service Time |
| 31 | | Internal Service preparation |
| 32 | | Service Execution Time in workstations and individual operations |
| 33 | | Total Balancing of Supporting services |
| 34 | | Total service completion time |
| 35 | | Service quality, verification and correction Time |
| 36 | | Any support service completion and trail period |
| 37 | | Duration of accomplishment of total business, financial and commercial terms. |
| 38 | Service Process | Service planning and establish the Service structure |
| 39 | | Service Readiness |
| 40 | | Customer Communication |
| 41 | | Prepare the Services |
| 42 | | Delivery of the service |
| 43 | | Customer acceptance |
| 44 | | Collection of payment against bill |
| 45 | | Service completion |
| 46 | | Customer Feedback. |
| 47 | Service Planning and Establish the Service structure | Total activities and operations of service |
| 48 | | Total Time of each activity and operations |
| 49 | | Customer's Details and service requirements and specifications |
| 50 | | Assigned Manpower and group |
| 51 | | Internal Verifications points through developing Check-list or online digital checking |
| 52 | | Process of Identifications of Mistakes and Failure |
| 53 | | Techniques of Service Improvement |
| 54 | | Understanding and application of Quality Standards. |
| 55 | Planning for Services and Operations | Types of services may be tangible or intangible which should be offered or provided |
| 56 | | Process or method to provide these services |
| 57 | | Decision as per the location of the business and what will be the facilities |
| 58 | | Estimation and idea about the service requirements. |

| Sr. No | Improvement | Initiative areas of the Criterion and Sub-Parameters |
|---|---|---|
| 59 | Critical variables and factors for service capacity planning | Number of customers will one have to serve in certain duration |
| 60 | | Total Estimation of service times with priority services etc. and calculation of actual times, duration days of the week, which times of the day |
| 61 | | Total Estimation of service times with priority services etc. and calculation of actual times, duration days of the week, which times of the day or scheduling |
| 62 | | Planning for Managing the services |
| 63 | | Any Saturation or overload points or nos. of customers as per orders |
| 64 | | What are external and influencing factors, such as occasions, seasons, weather, holidays, affect the demand for services. |
| 65 | | Define internal Factors of Services which effects and affects the capacity |
| 66 | | Estimations of controlled and uncontrolled factors of customer services which could impact the capacity. |
| 67 | Prepare for the Services for communication | All main and supporting processes are defined, standardized and followed |
| 68 | | All Quality points and checked or verified |
| 69 | | Infrastructure for service are set up, verified and certified |
| 70 | | Service process completion time and single process times are defined |
| 71 | | Processes are distributed in individual and in group with responsibility |
| 72 | | Quality standards are made |
| 73 | | Manpower are Trained in Tools, Techniques and processes |
| 74 | | Supporting Functions are defined |
| 75 | | Total Process Flow are understood and Value Stream are prepared. |
| 76 | Activate the Types of Communications | Marketing or promotional communication |
| 77 | | Service communication |
| 78 | | Communication for receiving orders |
| 79 | | Service Feedback |
| 80 | | Verification communication etc. |

| Sr. No | Improvement | Initiative areas of the Criterion and Sub-Parameters |
|---|---|---|
| 81 | Methods of developing effective and good services Procedures | It must be analyzed and verified |
| 82 | | Follow the Standard operating system |
| 83 | | Make the Process Flow for bird's view for overall process observation |
| 84 | | Make Value Stream of the Process Flow |
| 85 | | Identification of Critical Processes |
| 86 | | Deployment of competent manpower in critical services |
| 87 | | Time to time Validated the service process and services |
| 88 | | Effort for reducing service times |
| 89 | | Improve quality of services |
| 90 | | Easy and understandable of the services |
| 91 | | Make these/ all improvements as a culture |
| 92 | | Apply the techniques to improve methods. |
| | FACTORS OF GOOD SERVICES | **Customers for Success** |
| 93 | | Define the customer choice of Services |
| 94 | | Service specifications |
| 95 | | Customer Feedback |
| 96 | | Corrective action. |
| | | **Communication in Services** |
| 97 | | Process of communications |
| 98 | | Effectiveness and Reliability of the communication |
| 99 | | Communication points or periods |
| 100 | | Establish the communication process |
| 101 | | Modern Technology and techniques of communication. |
| 102 | | Quality standards on communication are made and communicated to the employees |
| 103 | | Manpower are Trained in Tools, Techniques and processes of communications |
| | | **Service Times with Reduction** |
| 104 | | One Time completion of Services |
| 105 | | Overall Performance Level |
| 106 | | Overall Efficiency level. |
| | | **Service Quality** |
| 107 | | Define the Service Quality |
| 108 | | Quality Checking |
| 109 | | Customer Requirement conformance |
| 110 | | Quality Cost |
| 111 | | Quality Improvements. |

| Sr. No | Improvement | Initiative areas of the Criterion and Sub-Parameters |
|---|---|---|
| | FACTORS OF GOOD SERVICES | **Service Cost** |
| 112 | | Identify the cost centers |
| 113 | | Direct and Indirect Cost |
| 114 | | Cost Reduction process |
| 115 | | Cost controlling initiatives. |
| | | **Pricing on Services** |
| 116 | | Define the process of measuring the service charges – process cost, Market Price, competitors and customer's requirement etc. |
| | | **Service Technology** |
| 117 | | IT Techniques |
| 118 | | Exponential Technological Transformation for Service Preparation |
| 119 | | Digital Technologies for Effective Service Communication with Interaction |
| | | **Applied Techniques for service improvement** |
| 120 | | It is primary involved in cost, quality and organizational excellences |
| 121 | | Quality Tools |
| 122 | | Lean Tools |
| 123 | | TQM |
| 124 | | DFSS |
| | | **Service Process Reengineering** |
| 125 | | Service Modernization |
| 126 | | Market Trend and analysis-based process design |
| 127 | | Strategic planning |
| 128 | | Organization Effectiveness in service design |
| 129 | | Proactive Leadership and Business penetration. |
| | | **Competent service process owners** |
| 130 | | Train and handholding the process owners |
| 131 | | Deployment of manpower as per service knowledge and competency |
| 132 | | Customer oriented services. |
| | | **Good Customer Services** |
| 133 | | Customer Oriented, user-cantered design (UCD) approach |
| 134 | | Cost Effective |
| 135 | | Quality Driven |
| 136 | | Organizational Commitment to business and customer. |

Internal Improvement Team and Functional heads and process owners would check the above stated Initiative areas of the criterion and sub-parameters with the online or offline documented with the status application/ applied, internal initiative and current status.

## 6. CONCLUSION

Advancement in technology and techniques, and elegance of the public life with the trend of more comfort, plays as a catalyst in service sector expansion. It is comparatively easy to start, operate, to convert the functions as per customer's requirements, but necessary to develop to control mechanism to grow with skills and competency of the employees. Most of the business in service sector depends on enterprising skills and proactive thinking.

Service industries should be thoughtful on service efficiency to create a customer-centric operation & business strategy with the expectations when they interact with employees. Not fulfilling the expectancy and failing to deliver what customer specified & expected will result an erratic experience. Organizations must find out the capability gaps and go about fixing these with a sincere effort to save customers with the results of lower operating costs for the business along with more satisfied and loyal customers.

Service organizations might apply the manufacturing techniques like Six Sigma - DFSS, forecasting techniques for business development, digital marketing, service research, reengineering for process competency and measurement for service performance for efficiency.

This study and experience based developed model might be improved further as per invention & introduction of new Techniques and Technologies, to assist all service owners, management and stakeholders to comprehend and recognize the gaps in several services areas. Initiatives are indispensable for outspreading business, profit, attain quality, internal efficiency, customer's service, planning and improvement based on organized method of feedback collection.

**Reference**:

A Parasuraman, V A Zeithaml and Malhotra A. (2005). A Multiple-Item Scale for Assessing Electronic Service Quality.

A Parasuraman, Zeithaml and Berry. (1988). Communication and Control Processes in the Delivery of Service Quality and Moe on Improving Service Quality Measurement.

Frei, FX (2006). Breaking the Trade-off Between Efficiency and Service, Harvard Business Review, vol. 84, 92-101.

Gayen D K. (2020). Book on Performance and Efficiency Improvement of the Service Sector Industries.

Lenka, Sanjita and Subudhi, Rabi, Work Life Balance, Job Satisfaction and Organizational Commitment: A Study on Bank Employees Bhubaneswar, Odisha (March 1, 2019). International Journal of Research and Analytical

Reviews (IJRAR) March 2019, Volume 6, Issue 1, Available at SSRN: https://ssrn.com/abstract=3352463

Mishra Y and Subudhi, RN (2019). Technical and higher educational institutions of Odisha: A study on impact of employer branding and organisation attractiveness on citizenship behavior International Journal of Civil Engineering and Technology (IJCIET) Volume 10, Issue 01, January 2019, pp. 1965 1977, http://iaeme.com/Home/issue/IJCIET?Volume=10&Issue=1

M. Kuenzel and Andreas Hartmann E. (February 2022). Digital Readiness Assessment, Methodology & Framework, Asian Productivity Organization.

Yan M-R. (February 2022). Transforming Manufacturing, Asian Productivity Organization.

N. Inamdar & Kaplan, R. S. (2002). Applying the Balanced Scorecard in Healthcare Provider Organisations. Journal of Healthcare Management, 47(3), 179-195.

Richard E Maurer & Sandra Cokeley P. (2001). Malcolm and Me: How to Use the Baldrige Process to Improve Your School.

Subudhi, R. (2022). Social Development Data and Societal Modelling: A Study in Indian Context. SSRN Electronic Journal. https://doi.org/10.2139/ssrn.4221493

Subudhi, R. N. (2019). Testing of Hypothesis: Concepts and Applications. Methodological Issues in Management Research: Advances, Challenges, and the Way Ahead, 127–143. https://doi.org/10.1108/978-1-78973-973-220191009

Xue, M & Harker, PT (2002). Customer efficiency: Concept and Its Impact on E-business Management, Journal of Service Research, vol. 4,256.