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A Basic Methodology for the Generation of the of the Enhanced Research Results for the Stemmm (Science – Technology – Engineering –Mathematics—Management-Medical)

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Abstract: This work aimed to conduct software-oriented, user-defined research with an exploratory analysis to enhance service quality in automobile service centers to the Six Sigma level. The approach involved meta-analysis, research synthesis, and the use of online tools and software.
The findings generated essential principles, policies, practices, and administrative implications for service centers. In the future, this research could lead to an end-user tool for practical results and potential automation in service centers.
The ultimate goal is to develop software named SOURYA for this research approach. The study compared keywords from meta-analysis and online surveys using the Servqual Questionnaire, noting conclusions based on commonalities.

Keywords: Meta-Analysis, On-Line Surveys, Research Questions, Research Statements, Exploratory Analysis.

1. INTRODUCTION

The primary goal of this research was to develop a comprehensive model that addresses the key challenges present in today's dynamic market environment. As customers become increasingly well-informed, they possess the ability to thoroughly evaluate products and services. This shift compels businesses to not only keep pace but also to proactively deliver customized, high-quality offerings that meet stringent standards for zero defects.
In this context, the study seeks to bridge existing gaps in both the tangible and intangible definitions of quality, recognizing that effective quality management extends beyond mere

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product specifications to include customer perceptions and experiences. By establishing a robust framework, the research is designed to tackle structured, semi-structured, and unstructured problems that organizations frequently encounter.

The proposed model provides practical solutions that facilitate continuous improvement and drive superior outcomes. It emphasizes the importance of understanding customer needs and leveraging data-driven insights to enhance decision-making processes. Furthermore, the framework is adaptable, allowing organizations to tailor their strategies to specific market conditions and customer expectations.

By focusing on both qualitative and quantitative aspects of quality, this research aims to empower organizations to navigate complexities in the marketplace effectively. Ultimately, it serves as a guide for businesses striving to innovate and excel in delivering exceptional value, fostering customer loyalty, and achieving sustainable growth. Through this comprehensive approach, the study aspires to contribute significantly to the field of quality management and organizational performance.

2. RELATED WORK

The review of the literature had been conducted to explain the relevances of the below mentioned

Keywords of the earlier research papers (Table-2):

1. The Questionnaire Design and the Development. [12],[13],[19]
   (The already drafted questionnaire was downloaded from the internet and which was based
   On the comprehensive review of the existing literature).
2. The Problems associated with the Questionnaire Development .[12],[13],[19]
3. The Validation of the Questionnaire selected .[3],[19]
4. The success stories of the application of the Six Sigma and the Servqual separately. [1],[2],[5],[8],
   [9], [10]
5. The reason(S) for the delay in the implementation of the Six Sigma strategies .[10],[20]
6. The criteria for selecting the Six Sigma Projects .[10],[20]
7. The usefulness and the applicability of the tools and techniques for the Six Sigma and the Service
   Quality. [10]
8. The Critical-Success-Factors for the Six Sigma and the Service Industries .[10]
9. The Critical-to-Quality-Factors for the Six Sigma and the Service Industries .[10]
10. The Critical-to-Cost-Factors for the Six Sigma and the Service Industries .[10]
11. The advantages and the Disadvantages found for the Indian Industries and the Industries Abroad .[10]
12. The Benefits of the Six Sigma for the Six Sigma Industries and the Service Industries .[10]
13. The basic elements of the Six Sigma .[10]
14. The differences between the Service Industries and the Manufacturing Industries [11]
15. The factors for the Six Sigma Management .[10],[20]

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16. The Application(S) of the Six Sigma .[7],[9]
17. The Characteristic(S) of the Six Sigma .[7]
18. The Challenges for the Service Industries as well as for the Six Sigma Industries .[5]
19. The tools and the techniques required for the DMAIC process .[1]
20. The potential area where the Six Sigma could be employed .[1]
21. The reasons for the Six Sigma into the Service Organizations .[2]
22. The problems , outcomes and benefits of the six sigma in service organizations .[2]
23. The Service Quality Gaps .[4]
24. The contributions of the Six Sigma to the Quality .[5]

2.1 Relevance of Six Sigma (Table 3)
2.2 Relevance of Service Quality (Table 4)
2.3 Relevance of SERVQUAL (Table 5)
2.4 Relevance of Meta-Analysis (Table 6)
2.5 Relevance of Online Approach (Table 7)
2.6 Relevance of Questionnaire (Table 8)
2.7 Relevance of Automobile Service Centers (Table 9)
Berndt (2009) outlined five dimensions of SERVQUAL related to automobile service centers.
2.8 Relevance of Service Organizations for Sustainability (Table 10)
2.9 Success Stories of Six Sigma and Service Quality (Tables 11-16)

This section summarizes key insights into the relevance of various methodologies and frameworks for enhancing service quality in automobile service centers.

Justification for this Research

1. Hypotheses are not necessary for surveys, which are best conducted without them.
2. Surveys typically begin without a specific hypothesis.
3. The National Opinion Research Center (NORC) requires 6 weeks to 3 months for survey completion.
4. 2-3 weeks are needed for finalizing the completed set.
5. 1 week to 1 month is required for data tabulation and percentage computation.

Research Objectives

(i) The purpose is to develop an unique methodology for the betterment of the decision-making for the generalization of the research results obtained through the META-ANALYSIS and the ON-LINE approach for the making of the THEORY, POLICY, PRACTICES, PRINCIPLES and the ADMINISTRATIVE IMPLICATIONS.

3. RESEARCH METHODOLOGY

3.1 Stage-1: Studying the relevance of the keywords mentioned above.
Stage-2: Studying the success stories of the Six-Sigma and the Service Quality put together.
Stage -3: Following the Flow-chart as mentioned below (Table-17)

(i) Problem Formulation

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(ii) Parallel framing of the Research Questions and the Research Statements together with the Keywords in consideration.
(iii) Parallelly conducting the Meta-Analysis and the On-Line surveys for the end-research directions.
(iv) Noting down the resolutions and the results for the common results.
Stage-4: Filtering –out the commonalities and the un-commonalities and putting up in the tabular form.

Stage -5: Stepping-up for the conclusions and the implications for the end-results.
(The commonalities end up for the research and the uncommonalities provide the areas for the Future research)

Procedure:
(a) Calculate the Gap Scores between the Expectations and the Perceptions.
(b) Calculate the Average Gap Scores for the Dimensions.
(c) Calculate the UN - Weighted ServqualScores.
(d) Gather the Servqual Importance Weights totaling upto 100
(e) Calculate the Weighted Servqual Scores for the Dimensions
(f) Calculate the DV-Discriminating Value for the scores of the Expectations and the Perceptions.
(g) Calculate the Reliability Scores for the Dimensions as well as the Result - Summary
(h) Calculate the Importance Analysis for the results of the Summary.
(i) Calculate the Count of the Commonalities and Un-Commonalities for the purpose of the Decision-Making and put-up in the table mentioned below:
(j) If C>U, Stop and write down the conclusions and the implications; if C<U stop and continue to Step– (iii) .

3.2 The below drawn chart, fig-1, clearly indicates the procedural and the methodological steps concerned with the qualitative and the quantitative aspects of this research:

Analysis of the Data
(i) For the sample calculations , the questions / statements on the expectations were as mentioned below :
Q1(7),Q2(2),Q3(6),Q4(5),Q5(6),Q6(6),Q7(6),Q8(6),Q9(6),Q10(7),Q11(7),Q12(7),Q13(6),Q14(6),Q15(6),
Q16(7),Q17(5),Q18(7),Q19(7),Q20(6),Q21(6),Q22(6) .

(ii) For the sample calculations , the questions / statements on the perceptions were as mentioned below :
Q1(7),Q2(2),Q3(6),Q4(6),Q5(6),Q6(6),Q7(6),Q8(5),Q9(7),Q10(6),Q11(5),Q12(7),Q13(6),Q14(7),Q15(5),
Q16(7),Q17(5),Q18(6),Q19(5),Q20(7),Q21(6),Q22(7) .

For the sample calculations, the servqual importance weights were as mentioned below:

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IM1=30, IM2=20, IM3=20, IM4=20, IM5=10.
(iii)Gap scores
Tan1=0 , Tan2=(-1) ,Tan3=(-1) , Tan4=(-4) ; Rel1=0, Rel2=0, Rel3=0, Rel4=(+1), Rel=(-1) ;
Resp1=(+1) , Resp2=(+2) , Resp3=(0) , Resp4=(0) ;
Emp1=(+1), Emp2=(+2), Emp3=(-1), Emp4=0,Emp5=(-1) .
(iv)Average Gap Scores
TAN=(-3/4); REL=(0);RESP=(+3/4);ASS=(0);EMP=(1/5) .
(v) Therefore , the un-weighted servqual scores = (+0.4)
(vi)TAN1*IM1=(-22.5) ; REL1*IM2=0 ; RESP1*IM3=(+15) ; ASS1*IM4=0 ; EMP1*IM5=(+2) .
(vii) Therefore , the weighted servqual scores = (+1.1)
(viii) Here the un-weighted and the weighted servqual scores were found to be positive.
(ix)Calculations for the DV on the expectations statements :
LHS -[1,10,11,12,16,18,19] ; RHS-[14,15,20,21,22,4,7] ; Mid-[2,3,5,6,7,8,9,13] ; N_1= N_2=7 ; P_1= 7 ;
P_2=0; Q1=0; Q_2=5.
(x) Therefore the DV was calculated as (+3.5).
(xi)Calculations for the DV on the perception statements :
(xii) LHS -[1,2,3,9,12,14,16] ; RHS-[18,21,8,11,15,17,19] ; Mid-[20,22,4,5,6,7,10,13] ; N_1= N_2=7 ; P_1= 7 ;
P_2=0; Q1=0; Q_2=2.
(xiii) Therefore the DV was calculated as (+infinity)
(xiv) The reliability scores for the questions on the tangibles, reliability, responsiveness, assurance & empathy was found to lie between 0.7-0.9.
(xv) Importance Analysis
Questions on the Expectations:
Statements with the score as 7 – [1, 10, 11, 12, 16, 18, 19]
Statements with the score as 6 – [2,3,5,6,7,8,9,13,14,15,20,21,22]
Statements with the score as 5 – [4, 17]
Questions on the Perceptions:
Statements with the score as 7 – [1, 2, 3, 9, 12, 14, 16, 20, 22]
Statements with the score as 6 – [4, 5, 6, 7, 10, 13, 18, 21]
Statements with the score as 5 – [8, 11, 15, 17, 19]

4. RESULTS AND DISCUSSIONS

A. On-Line survey-results

Questions on the Expectations:
a) The Excellent Organizations have modern looking equipment .(Q1-Tan)
b) Employees of the excellent organizations will tell the customers exactly when the services will be performed. (Q10-Rel)
c) Employees of the excellent organizations will give prompt service to the customers. (Q11-Rel)

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d) Employees of the excellent organizations will always be willing to help the customers. (Q12-Rel)
e) Employees of the excellent organizations will be consistently courteous with the customers .(Q16-Ass)
f) Excellent organizations will give customers individual attention. (Q18-Ass)
g) Excellent organizations will have employees who give customers personal service. (Q19 Ass)

Questions on the Perceptions:
h) The organizations have the modern looking equipment .(Q1-Tan)
i) The organizations physical facilities are visually appealing. (Q2-Tan)
j) The organizations reception desk employees are neat in appearing .(Q3-Tan)
k) The organizations insist on the error free records .(Q9-Rel)
l) Employees in the organizations are willing to help you. (Q12-Resp)
m) The behavior of the employees in the organizations instills confidence in you. (Q14-Ass)
n) Employees in the organizations are consistently courteous with you.(Q16-Ass)
o) The organizations has employees who give you personal attention .(Q20-Emp)
p) The employees of the organization understand your specific needs. (Q22-Emp)

B. Importance Factors :
a. The appearance of the organizations physical facilities, equipment, personnel and communication materials.
b. The organizations ability to perform the promised service dependably and accurately.
c. The organizations willingness to help the customers and provide prompt service.
d. The knowledge and the courtesy of the organization employees and their ability to convey trust and the confidence.
e. The caring individual attention and the organization.

C. Meta-Analysis –resolutions
RQ1. Why six sigma with the service quality?
Res1.1 99 percent error free results still pose to be a threat for the insignificant results.
Res1.2 The ultimate goal is to discover the problems, take the appropriate actions to reduce the errors, Reworks, increase the quality, uncover the gaps, increase the profitability, productivity, overseas sales, attitudes employees morale and reduce the checking and the inspection.

RQ2. What are the tools and the techniques for the effective implementation of the six sigma in the Serviceorganizations?
Res2.1 the old technique / tools / methods include brainstorming, control charts, root cause analysis, affinity diagrams, run charts, pareto analysis, scatter plots, process capability analysis, histograms, Quality Function Deployment & Regression Analysis.
The new technique / tools / methods include Matrix Analysis, Normal Probability, Process Mapping, Analysis of the Variance, COPQ, FMEA, DOE, SIPOC & Taguchi method.
RQ3. How to extend the service quality to the six sigma level?

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Res3.1 the figure 1 indicates clearly the methodology that could be adopted / adapted for the Enhancement of the service quality to the six sigma level.
RQ4.What are the research methodologies and the techniques for extending the same?
Res4.1The research questions (RQ's) could be solved / resolved /dissolved using the meta-analysis approach .And the research statements (RS's) could be solved / resolved /dissolved using the on-line surveys approach.
RQ5. How to extend the work to the Automobile Service Centers?
Res5.1 the extensions could be done by improving the customer satisfaction, shareholdersvalue, reduction in the variations, use of the different theories, achieving the six sigma perfections, improving the productivity and the profitability dramatically.
Res5.2 by adopting the six sigma accuracy level patterns namely, Executive Leadership, Six Sigma Champions, Six Sigma Master Black Belts, Six Sigma Green Belts, Six Sigma Yellow Belts and Six Sigma White Belts .
Res5.3 BY adopting the six sigma designs namely, DMAIC, DMADV, DDMAIC, DDMOD, DMADO, DMEDI, DCCDI & DMAIDV.
Res 5.4 Methods could include the Historical Research Methods, Focus Groups, Interviews, Record of the Complaints, Testimonials, Customer Records, Active Customers, Surveys, Observations, Warranty Records, Lost Customers & Target Customers and Call Centers
Further Analysis was done on the explored data for finding out the results for the confirmatory research analysis.

5. CONCLUSIONS

Further, Advantages / Dis-Advantages of these kinds of the works include

a. Monitor Service Delivery: Regularly assess service channels for efficiency and effectiveness.
b. Motivate Employees: Implement incentive programs and foster a positive workplace culture.
c. Train Personnel: Provide comprehensive training for all employees to enhance skills.
d. Improve Processes: Continuously review and streamline internal and external processes.
e. Identify Improvements: Use SWOT analyses and employee input to find enhancement opportunities.
f. Revise Quality Objectives: Align mission and policies with customer expectations regularly.
g. Enhance Service Quality Systems: Standardize procedures for consistent service delivery.
h. Boost Customer Satisfaction: Gather and act on customer feedback at all touchpoints.
i. Adopt Quality Enhancement Approaches: Utilize Six Sigma and technology for continuous improvement.
j. Implement SOURYA: Develop software for data-driven analysis and exploratory research.

Strategy Development Framework

To guide strategy development, relevant questions are framed as follows:
Who?- How? How far?What? How much?

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MASTERS Framework
- M : Motivate (Mind)
- A : Acquire (Knowledge/Information)
- S : Search (Technology)
- T : Trigger (Mind-Generate/Retrieve)
- E : Establish (Learner Rapport)
- R : Review

MASTER : "The choices are the hinges of destiny."

HEARD Principles for Meta-Analysis
- H : Honest
- E : Explicit
- A : Authentic
- R : Respectful
- D : Direct

HEARD : "A conclusive research is like a medicine of knowledge."
MOVE Criteria
- M : Mathematical (Precision & Accuracy)
- O : Objectivity
- V : Verifiability
- I : Impartiality
- E : Expertness

This structured approach aids in comprehensive strategy development and emphasizes the importance of integrity and rigor in research.
As shown in the table-19, the below mentioned gaps were removed from qualitative aspects of this research:

Future-Work
The same work could be carried-out for the various designs mentioned below for the meta-analysis and the On-Line approach:
DMAIC, DMAD, DDMAIC, DMADO, DMEDI, DCCDI, DMAIDV

Table-1 Problems and Definitions

Sl No.	Name of the problem(S)	Definition (S)
1	Simple problems	Those problems where the components and their relationships are transparent.
2	Complex problems	Those problems in which several sub-systems interact.
3	Well-Defined problems	Those problems where the problem solver is sure where /what the problem is.
4	Ill-Defined problems	Those problems in which it is difficult to formulate a definition of the problem.
5	Tame problems	Those problems where the description of the problem

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		is definite.
6	Wicked problems	Those problems in which the description of the problem is not definite and the solution are difficult, inaccurate and inappropriate.

Table-2 Keywords for the Research

Sl No.	Keyword	Sl No.	Keyword
1	Six – Sigma	5	Service-Quality
2	Servqual	6	Meta-Anaysis
3	On-Line Approach	7	Questionnaires
4	Auto-Mobile Service Center	8	Sustainable Service Organisations

Table-3 Six Sigma

Definitions / work	Researchers-Years of Work
As a metric, six sigma is 3.4 defects per million opportunities which allows the organizations to implement a measurement based strategy that focuses on phases improvement and verification reduction. As a methodology, six sigma usually follows a well-defined problem solving the roadmap and the tools such as DMAIC . As a philosophy , six sigma aims at reducing the variation in the business processes based upon the customers critical quality and the data –driven decisions	Gerald Barber , et al

Table-4 Service Quality

Definitions / work	Researchers-Years of Work
The service quality has an impact on the customer satisfaction and customer loyalty .	Arasli et al , 2005. Zeithaml&Bitner ; Kondampally Heskett ; Kandampally , 2003
Service quality has an effect on the profitability and the costs.	Buttle ,1996
Service quality is the extent to which a service meets the customers needs and the expectations.	Lewis &Hitchell , 1990 ; Asubonteng et al , 1996 ; Wisniewski & Donnelly ,1998 1996

Table-5 Servqual

Definitions / work	Researchers-Years of Work
Some of the papers used servqual approach after its customization.	Zanudin et al
Servqual methodology is an effort to measure the service quality	Brooks et at , 1999 ; Chaston ,1994 ; Edvardson et at , 1997 ; Lings and Brooks , 1998 ; Reynoso& Moore , 1995 ; Young &Varble , 1997 ; Sahney et al , 2004

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The servqual model had been applied for over twelve years in the USA financial sectors	Parasuraman et al , 1985
Servqual is a useful starting point and not the final answer	Parasuraman et al , 1991

Table-6 Meta – Analysis

Definitions / work	**Researchers - Years of work**
Any procedure that allows the statistical averaging of the results from the independent studies of the same phenomenon and consisting of the studies on the same topic.	

Table-7 On-Line Approach

Definitions / work	**Researchers-Years of work**
This was concluded that the findings from the web based questionnaire research are comparable with the results obtained using the standard procedures	Buchanan & Smith 1999
When compared attitudes regarding the internet and concluded that if the sampling control and the validity assessment is provided, the internet is the most suitable alternative to the traditional paper based methods.	Riva et al 2003
It was found no significant differences in the response rates , the internet version had a response rates of sixty two percent as compared to fifty eight percent for the paper and the pencil based version	Pealer et al.

Table-8 Questionnaire

Definition s / work	**Researchers - Years of work**
Any procedure that allows the statistical averaging of the results from the independent studies of the same phenomenon and consisting of the studies on the same topic.	
It was contended that a questionnaire should be comprise of the three types of the questions – Administrative , Classification and Target questions	Cooper & Schindler (2006)
A questionnaire should satisfy two criteria – Relevancy and Accuracy	Zikmund , 2003
Adopting and Adapting the questions help to improve the validity of the questionnaire	Saunders et al , 2003
Some had adopted the seven point scales. It is however sensitive to adopt five point scales in any study. The Likert scale is popular for measuring the respondents attitudes and perceptions and is simple to administer and analyze . The seven point scale ranges from Absolutely Agree, Strongly Agree, Agree , uncertain , Disagree , Strongly Disagree & Absolutely Disagree .	Pariseau and McDaniel (1997) and Soutar and McNeil (1996)

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A traditional and widely accepted way to scientifically assess service quality is through the servqual assessment. Any service organization could be surveyed using the questionnaire.	Parasuraman ,Zeithaml et al , Bury (1985) .

Table-9 Automobile Service Centers

Reliability-Proposed Delivery	The dealerships are known to contact the customers promising that vehicle will be ready for the delivery at the specific time. It is most important dimension of the service quality.
Assurance –Confidence and Trust	The dealerships are known to contact the customers promising that vehicle will be ready for the delivery at the specific time. It is most important dimension of the service quality.
Tangibles – Physical Cues	At the dealerships, this dimension includes signage, parking and layout of the dealership itself.
Empathy – Importance	At the dealership, this is seen in the interactions between the organizations and the customer and the nature of the interaction.
Responsiveness – Willingness to serve	At dealership, this refers to the changes that have been observed in service hours and from just being weekdays to include weekends and night services due to the changes in the needs of the customers.

Table-10 Sustainable Service Organizations

Definition / work	**Researchers -Years of work**
Delivering the service quality is an essential strategy from the success and the survival of the service organizations.	Dawkins &Reichheld, 1990; Parasuraman et al, 1985
the service industry would always be a turbulent one and the service businesses are characterized by the unpredictable events that occur inpart outside the organization and are largely invisible	Antony , 2004

Table-11 Six Sigma and Service Quality

Company Name	**Tata Consultancy Services**
Project Back-ground	To provide a support for the research ,design , development and product software by reducing the turnaround times of the same
Methodology - Adopted	DMAIC
Results-Obtained	The complaints were reduced by 44 percent and the costs were saved by 50 Thousand USD.
Remarks-Noted	The complaints were reduced by 44 percent and the costs were saved by 50 Thousand USD.

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Table-12 Six Sigma and Service Quality

Company Name	**Tata Consultancy Services**
Project Back-ground	To provide the support towards the printing , dispatch ,delivery of the credit card statements and customers retention
Methodology - Adopted	DMAIC
Results-Obtained	The complaints were reduced by 44 percent and the costs were saved by 02 Lakh 25 Thousand and One Hundred Seven USD
Remarks-Noted	Identification , Prioritization and reduction of the costs were achieved

Table-13 Six Sigma and Service Quality

Company Name	**Tata Consultancy Services**
Project Back-ground	To provide a support for the Language Translations, wrong Language Translations and the other related problems.
Methodology - Adopted	DMAIC
Results-Obtained	The complaints were reduced by 35 percent and the costs were saved by 07 Lakh 60 Thousand USD
Remarks-Noted	Better measurement collecting systems with the standard repository and accountability were developed.

Table-14 Six Sigma and Service Quality

Company Name	**Infosys**
Project Back-ground	To provide a support for the online errors in the Transactions
Methodology - Adopted	DMAIC
Results-Obtained	The complaints were reduced by 06 percent and the costs were saved by 14 Million Pounds.
Remarks-Noted	Improvement in the Online applications with the increase in productivity

Table-15 Six Sigma and Service Quality

Company Name	**Motorola**
Project Back-ground	To provide a support Billing services and additional expenses
Methodology - Adopted	DMAIC
Results-Obtained	The costs were reduced by 20 percent and the costs were saved by 09 Billion Dollars.
Remarks-Noted	More internal efficiencies and intelligent systems were developed.

Table-16 Six Sigma and Service Quality

Company Name	**Motorola**
Project Back-ground	To provide a remedy for the project documentation costs
Methodology - Adopted	Lean Six Sigma
Results-Obtained	The complaints were reduced by 35 percent and the costs were saved by 10.57 USD.

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Remarks-Noted	There was a huge reduction in the hidden costs.

Table-17 Commonalities and Un-Commonalities

Commonalities		**Un-Commonalities**	
RQ's	RS's	RQ's	RS's
Count of the Commonalities (C):		Count of the Un-Commonalities (U):	

Table-18 Meta-Analysis versus On-Line Approach

Meta –Analysis Approach	**On-Line Approach**	
RQ: Is the Pythagoras theorem stated as mentioned below? In a right angled triangle, the sum of the square of the perpendicular distance and the square of the base distance always equals the square of the hypotenuse.	RS:Pythagoras theorem always states any-one of the following : (a) $P^2 + B^2 = H^2$ (b) $P^2 - B^2 = H^2$ (c) $P^2 * B^2 = H^2$ (d) $P^2 / B^2 = H^2$	Where P – perpendicular Distance B- Base Distance H – Hypotenuse

Table – 19

Type of the Gap	**Procedure for the Gap Removal**
Competencies include ergonomic product design, service center redesign, action research, service quality analysis, CRM, maintenance operations, Six Sigma integration, project management, business sustainability, descriptive studies, prioritization, and policy implications for service quality enhancement.	Focus areas include training and development, software design, travel and tourism, comparative studies of tools, brainstorming for benchmarking, digitization, SERVQUAL analysis, advanced methodologies, online surveys, and clean energy tools.

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