Report On

Quality Management practices at SEBPO

By

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18264056

An internship report submitted to the Graduate School of Management in partial fulfillment of the requirements for the degree of
Masters of Business Administration (MBA)

Graduate School of Management
Brac University
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Declaration

It is hereby declared that

1. The internship report submitted is my/our own original work while completing degree at Brac University.
2. The report does not contain material previously published or written by a third party, except where this is appropriately cited through full and accurate referencing.
3. The report does not contain material which has been accepted, or submitted, for any other degree or diploma at a university or other institution.
4. I/We have acknowledged all main sources of help.

Student's Full Name & Signature:

_____

Md.Farhanul Islam Chowdhury
18264056

Supervisor's Full Name & Signature:

_____

SM Parvej Islam
Adjunct Lecturer , BBS
BRAC University

Letter of Transmittal

SM Parvej Islam
Adjunct Lecturer,
BBS
BRAC University
66 Mohakhali, Dhaka-1212

Subject: Submission of Intership Report

Dear Sir,

I have completed this report as a part of my internship program. This report has been compiled according to your requirements. It gives me immense pleasure to work on 'Quality Management Practices at SEBPO' which you have selected as part of my MBA program. This report has given me a wide range of experience in Digital Advertising Operation during my internship at ServicEngineBPO Ltd.(SEBPO), Corporate Office: 8 Abbas Garden Rd. Mohakhali, Dhaka-1212. I have tried my level best to accumulate all kinds of relevant information regarding digital advertising and to reflect all the necessary data on the report.

Thus, I am submitting the report with hope that it lives up to your satisfaction. However I would be glad if you kindly share me your valuable thoughts and views regarding the report.

Sincerely yours,

_____

Md.Farhanul Islam Chowdhury
18264056
BRAC Business School
BRAC University
Date: October 3, 2021

Non-Disclosure Agreement

[This page is for Non-Disclosure Agreement between the Company and The Student]

This agreement is made and entered into by and between ServicEngineBPO Ltd.(SEBPO) and the undersigned student at BRAC University Student Md. Farhanul Islam Chowdhury.

Acknowledgement

In the name of Almighty Allah, by whose grace and blessing I have been able to complete my internship report. After that, I would like to convey my heartiest gratitude to my supervisor Mr. SM Parvej Islam (Adjunct Lecturer, BBS, BRAC University) for giving me the opportunity to conduct my internship report and sincerely supervised my work by providing guidance, concepts and valuable suggestions throughout the internship period.

I am deeply indebted to Mr. Haniar Hossain, Team Leader and my direct supervisor at ServicEngineBPO for helping me out with all the necessary documents, information and resources to complete the report.

Finally, I would like to thank all my honorable course teachers throughout my MBA life for enlighten me to cope up with corporate culture, my parents, associates and friends for their co operation and continuous support throughout my life.

Executive Summary

SEBPO is a fastest growing company in BPO industry. SEBPO provides the service in the various BPO field to its clients mostly from the USA. This report I have generated as a part of my Internship program under Graduate School of Management, BRAC University.

I have worked as intern at SEBPO and this report will gives you a proper overview of the organization and its Quality management aspects related to business contexts. I have generated a hypothesis to related to total quality management principles and analyze its effectiveness in the SEBPO which helped to provide some recommendations.

Keywords: BPO, Business Process Outsourcing, Digital Ad Operation, Total Quality Management, TQM.

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List of Acronyms

BPO	Business Process Outsourcing
TQM	Total Quality Management

Glossary

Thesis	An extended research paper that is part of the final exam process for a graduate degree. The document may also be classified as a project or collection of extended essays.
Glossary	An alphabetical list of key terms This is an optional page and can be removed if not used. Use one table row for each item to allow sorting using Word's table tools. Apply the style **1_Para_NoSpace** to table rows as shown here.

Chapter 1

Overview of Internship

1.1 Student Information

Name: Md. Farhanul Islam Chowdhury

ID: 18264056

Program: Graduate School of Management

Major: Operation Management

1.2 Internship Information

1.2.1 Basic Info:

Internship Period: May – August, 2021

Organization Name: ServicEngineBPO Ltd.(SEBPO)

Department: Digital Ad operation

Address: Corporate Office: 8 Abbas Garden Rd. Mohakhali, Dhaka-1212

1.2.2 Internship Company Supervisor's Information:

Name: Mr. Haniar Hossain

Designation: Team Leader of Dgital Ad operation

1.2.3 Job Scope – Job Description:

SEBPO is looking for full-time Traffickers, Digital Ad Operations to join the Ad Ops Team. This role works cross-functionally to ensure digital campaigns are set up correctly in

production systems, delivery objectives are met, and that clients and partners are appropriately billed.

Position: Executive (Trafficker), Digital Ad Operation

Responsibilities:

- Traffic and QA display and video campaigns/creatives across desktop, mobile, and tablet.
- Troubleshoot ad delivery and creative issues.
- Pull reporting from various third-party platforms/ad servers to monitor campaign delivery and can account for third party discrepancies.
- Manage workflow and communication with cross-functional partners in Account and Project Management to ensure deadlines are met and the digital campaign has successful outcomes.

1.3 Internship Outcomes

1.3.1 Student Contribution in the Organization:

During the internship period, I have worked on Team Dotdash of Digital Ad Operation Department. Dotdash is an American media company which publishes articles and videos about various categories such as health, food, finance, tech, beauty, lifestyle, travel and education. It operates various website brands like Verywell, Investopedia, The Balance, Byrdie, The Spruce, Tripsavvy, Lifeware, Simply Receipes etc. The company generates its revenue by publishing different category ads and videos across the articles. Throughout my internship period I have worked on publishing, trafficking, quality assuring, tracking & reporting and billing of the advertisements across the all websites brands of Dotdash. To publish advertisements, I have worked on Google Ad manager for specific task such as PIO

and Insertion order review, Creative QA, Line item QA, Trafficking, Campaign Pre launch QA, Sponsorship QA, Tracking and Reporting to complete the entire Advertising operation under one single campaign. Generally I have worked on more than hundred campaigns from multiple clients and advertisers.

1.3.2 Benefits of the Student:

Finding a job for a fresh graduate is quite difficult in present situation. An Internship can offer a fresh graduate to gain competitive knowledge on corporate culture, valuable work experience, develop and test one's skill set and to explore the career path. By engaging in Internship one can getting edge in the job market, grow his/her confidence, create professional network and lastly can work on developing skills which will be an competitive advantage throughout a student's career. By engaging myself in internship program at SEBPO, I have acquired the basics of Digital Ad Operation process, developed my communication skill, capability of managing clients. Besides, Internship in SEBPO gives me the opportunity to experience as working as a group/team thus it teaches me to complete my task within deadline to finish the entire task within due time.

1.3.2 Difficulties:

During the internship period, several difficulties I have faced. Some limitations are following during the internship and report making:

- In this pandemic situation, I have worked from home as a results I couldn't manage several data regarding financial and Human Resources as proper communication is very difficult to other departments from home.
- Due to confidentiality clauses within the organization, it was not possible to gather some more information that could make the report much greater from all aspects.

- As maximum clients are from USA, we have to work on both Day and night shifts, I have got a very minimum time to complete the study, because I need to take so much Pressure of office work.
- As we are working from in this pandemic situation and confidentially, I couldn't manage any financial data to reflect on this report.

1.3.3 Recommendations:

If anyone interested to develop career in Digital Advertising Operation, I am recommending SEBPO will be the best possible destination for internship program. Management of SEBPO is very helpful toward intern and provides very friendly working environments to the newcomers. Most importantly, the line managers are very helpful toward the employee with their proper guidance and instruction thus one can grow his/her knowledge and skills of digital ad operation from the basic.

Chapter 2

Organization Part: Overview, Operations and a Strategic Audit

2.1 Introduction:

SEBPO, formerly known as ServicEngineBPO is a leading outsourcing company partnered with many largest advertising, media and technology companies all over the world. Currently it is working with many different advertising agencies of USA, UK, Canada and Australia. The company specializes in ad operations, creative services, data solutions, media planning, and quality assurance. SEBPO offers industry expertise and process governance so organizations can scale, innovate, and control costs.

SEBPO has a simple vision & mission to help their clients exceed their own goals by leveraging the best technology talent in the world. With offices in the United States, Bangladesh, and El Salvador, their teams add quantifiable and sustainable value to the clients. They do things differently than other development shops, and that is helping to grow consistently every year. SEBPO believe excellence in process governance – proper planning, technology, communication, management is the key to success. Healthy process governance provides the necessary foundation for sustainable partnerships that optimize accuracy, achieve business goals, and minimize team attrition along the way.

Vision	Mision	Value
• To set a benchmarck on BPO industry by providing Quality services and be a vital organization in BPO in local and global market.	• Building a sustainable partnership with the clients with excellent service and accuracy to grow constantly in the market.	• Intigrity • Quality • Reliability • Trust • Teamwork

2.2 Overview of the Company:

SEBPO is a trusted Business Process Outsourcing (BPO) partner specializing in Digital Advertising Operations, Application Development, Quality Assurance services, Data solutions and Media planning. It's expert service teams complement and improve the day-to-day operations of clients' such as Dotdash, BBC, Oath (AOL), AdTheorent, ScrollMotion, and Simpli.fi as well as numerous other advertising tech, digital publishing, and technology companies and agencies. It is the first business process outsourcing company in Bangladesh, which is in joint venture with a US firm. It provides solutions in the areas of Interactive

Marketing, Quality Assurance, Software Web Development, Accounting, Back Office Processing, Digital Advertising Operations, Risk Compliance Services, Mortgage Operations and Servicing.

In 2007, 21 May ASM Mohiuddin Monem started this organization with Matt Kochan. It is a joint venture company. Matt Kochan is the Co-founder of this company and Mr. ASM Mohiuddin Monem working as the chairman of this organization. The organization started with a very minimum amount of employees. But now there are 500 employees working in this organization in various teams with a very minimum amount of employees. But now there are more than 500 employees working in this organization in various departments.

In 2021, SEBPO is celebrating its 15years of success in the business process outsourcing industry. In April 2021, SEBPO listed for The 2021 Global Outsourcing 100 list by International Association of Outsourcing Professionals. It's the seventh time that SEBPO has been listed among the world's top outsourcing companies by IAOP. Besides, in August 2021, SEBPO was listed in Inc. 5000 List of the Nation's Fastest-Growing Private Companies for 2021.

2.2.1 Services:

Currently SEBPO offer several services to its client. SEBPO designs a customized solution that assigns one or more remote teams of highly qualified industry experts to complete time consuming and behind-the-scenes operational tasks.

2.2.2 Digital Ad Operation:

Digital ad operation mainly deals to bring the experience, strategic guidance, campaign management, quality assurance and rapid response that the client need. The teams take time to understand the client's goal and always try to become the strategic partner to help their chart an effective approach based on the best practices and industry savvy. Some of the main core services of digital ad operation team are as follows:

- End-to-End Campaign Management and Optimization
- Implementation of targeting, Pacing and optimization
- Inventory Management
- Data Analytics
- Quality Assurance: Ongoing Technical and Quality Assessments of different advertising campaigns
- Ad Trafficking

2.2.3 Creative Services:

SEBPO's team of digital advertising industry veterans provide high-quality, flexibility, and rapidly scalable solutions that allow businesses like yours to stay focused on servicing the clients. Using the creative assets, SEBPO builds digital display and video advertising campaigns using many of the industry's most popular ad creation platforms, such as:

- Adobe Creative Cloud
- One by AOL
- Celtra
- DoubleClick Studio
- Google Web Designer
- Sizmek
- Spongecell

2.2.4 Data Solutions:

SEBPO helps clients minimize the risks associated with a wide range of business transactions in various industries. Our highly skilled and deeply experienced teams quickly and accurately aggregate and analyze data ensuring alignment with your clients' specific requirements. Some services of Data solution department are as follows:

- Capturing risk relevant data
- Comprehensive summaries
- Data aggregation
- Data Analysis
- Data quality assurance

- Enhanced due diligence
- Platform migrations
- Specialized reporting
- Other data and analytics tasks as required

2.2.4 Quality Assurance and Media Planning:

Detailed Quality Assurance requires significant time and attention. And while quality control is vital to the successful execution of key business processes, it also absorbs valuable time that could otherwise be spent on revenue-generating core competencies.

A SEBPO Quality Assurance Team offers a complete solution to manage QA tasks such as:

- Automation
- Billing and invoice reconciliation
- Call quality
- Error checking
- Information integrity
- Software development QA
- Test case creation
- Validations for ads
- Website testing
- And other Quality Assurance, testing tasks and business processes as required.

2.2.5 Media Planning:

Determining where, when, and how often to use advertising placements requires specialized skills and expertise. Partnering with SEBPO gives your advertising campaigns a strategic edge with access to industry experts and a thorough understanding of the media planning

landscape. Consistently achieve the highest ROI by creating campaigns based on data and insights from the start. Some of the performed task are as follows of the department.

- Provide Audience insights
- Organize Ad specifications
- Media pricing
- Build custom planning.

2.3 Management Practice:

Proper planning, communication and management is key to success. SEBPO emphasizes on importance of process of governance to maintain the sustainability. As SEBPO operates on shore and off shore offices, strong governance is the foundation of successful partnership between on shore and off shore part. This allows us to meet your needs, and tailor a partnership with expectations that are both aspirational and achievable. SEBPO process governance includes:

- Implementation Planning
- Details Documentation
- Repeatable Training process
- Weekly/Monthly/Quarterly/Yearly Governance call
- Business reviews.

2.3.1 SEBPO Client Success Team/On Shore Team:

The SEBPO Client Success Team manages day-to-day interactions with SEBPO's clients. In addition to being the first line of contact for questions and concerns, this team keeps clients connected to the entire SEBPO organization. Weekly meetings are conducted to keep

everyone on task and ensure all communications channels are flowing. Besides, on shore operation includes in search of potential clients/projects in business context.

2.3.2 SEBPO Execution Team/Off Shore Team:

Off shore team divided into various departments and team to deliver the projects and tasks smoothly to the clients on due time. Off shore teams use different platforms, project management tools, Email communication, slack channels to communicate to clients to run the day to day operation.

2.3.3 Organization Structure of SEBPO offshore office:

SEBPO Bangladesh office follows the following operational structure:

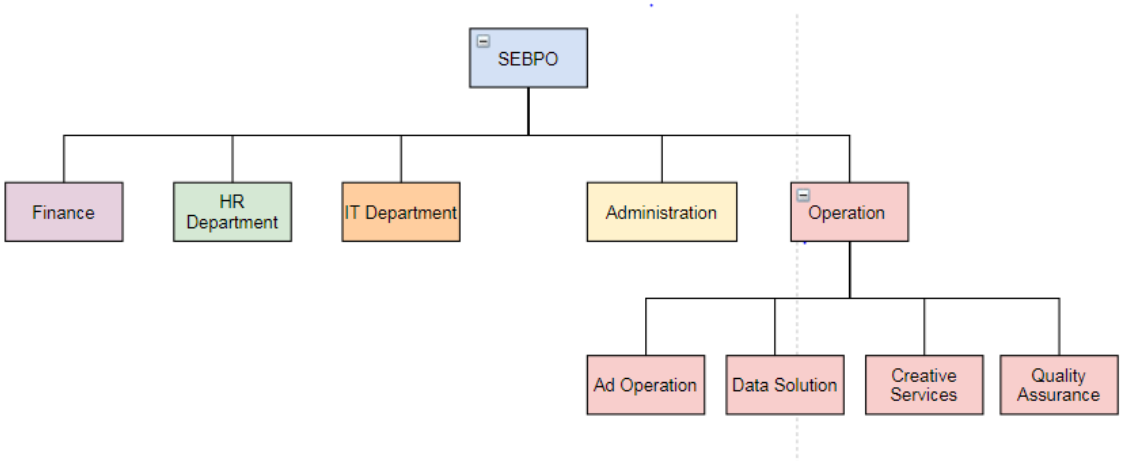


Figure 2.1: Organizational Structure of SEBPO

Each operation department taken care by individual Operation manager. Operation managers have different team to monitor each team's performance by assigning project manager, Assistant project manager and Team leader.

2.4 Marketing Practices:

As offshore team is responsible for the execution part, SEBPO's on shore team are generally responsible for the marketing approach. An onshore Client Success team member is assigned

to each client to act as a liaison to our delivery centers in Bangladesh. Client success team maintains necessary communication with existing clients and off shore teams to assure the quality of work and to retain the existing clients. Besides they work on finding potential clients, new projects related to business context. For on boarding new projects for new clients several discussions are take place regarding clients plan, requirements. Some feasible analysis is take place to identify whether the project is doable or not. After all the necessary steps and negotiation is done several training session are conduct in off shore office and on board a new project.

2.5 Operation Management and Information Systems:

2.5.1 Operation Management:

SEBPO off shore office has several departments of several category of task. Each department has different teams based on the task type and client. I have worked on Team D of Digital Ad operation department which is a American publisher company. There are more than 15 teams are currently running of Ad operation department.

The basic structure of all teams is quite similar. General team structure of are shown by below fig.

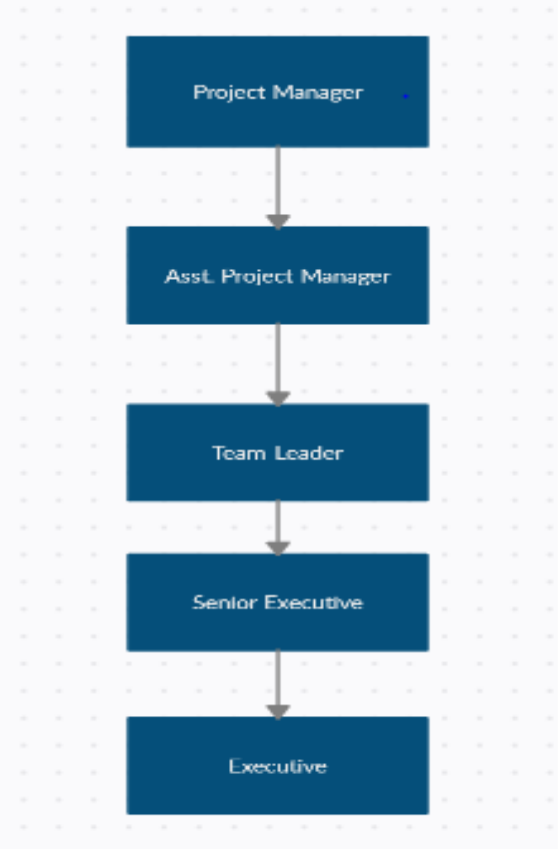


Figure 2.2**:** Hierarchy of Individual Team

During the internship period, I have worked on Executive level of Team D under supervision of the Team Leader.

2.5.2 Operation Process of Team D:

Generally we receive our task via Email. But there are some tools and communication channel such as Slack, Zendesk, Asana etc by which clients have assign their task to us. As we are working for a publisher end, our main task to manage active campaign, trafficking, Quality assuring, troubleshooting and reporting task via Google ad publishing platform Google Ad Manager. We need to do some other task to complete the full campaign management for an individual campaign. Our total task list are given below:

- Custom & Native QA
- Creative QA
- P.IO & Line Item QA
- PD & Trafficking
- Reporting
- Screenshots

If one advertiser wants to advertise on Team D's platform for a time period, we can consider one campaign. We have work on hundreds of campaigns from different advertisers and manage their campaign regularly. To publish the ad on our designated websites (on Clients request) we have to go through several processes to complete the entire campaign.

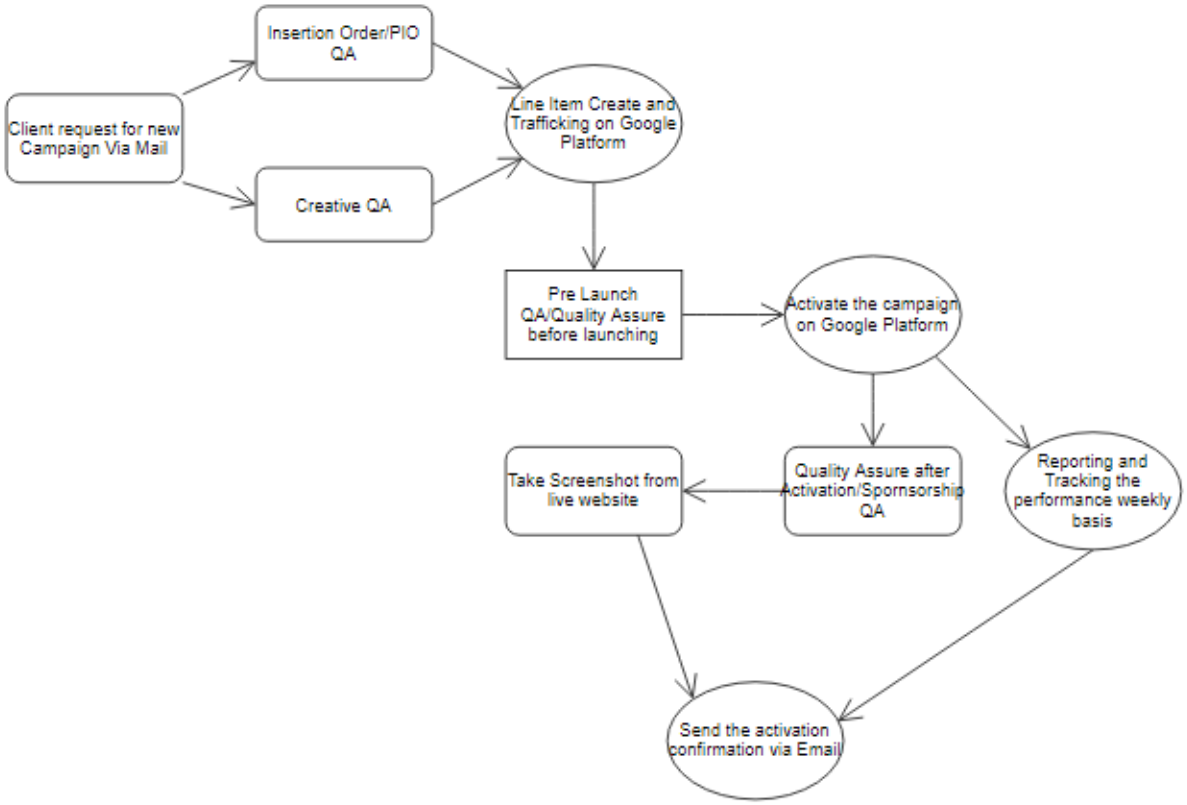


Figure 2.3: Work Process diagram of Team D.

We have to follow the same process for every new campaign according to the insertion order request. All these individual task has its own standard time of completion and we have to maintain the time schedule to perform and have to assure the quality of all the task to maintain the standard level of client satisfaction.

Our team consists of 6 members and on the billing part, we have a contract of weekly 240hours, 48 hours daily with our client and we maintain 100% utilization of our all 6 resources.

2.5.3 Information System and IT support Team:

As all the department heavily dependent of high configured network and computer system SEBPO has its own IT department to monitor all the necessary thing related to IT. Every employee has his/her own cloud to store necessary information related to the client. As all the information provided by clients are sensitive and highly confidential, it is necessary to maintain SEBPO's own information management system monitored by IT department. These are following assigned key task to IT department to keep an eye all the time:

- Monitoring the SEBPO cloud services(for internal use purpose)
- Monitor the Network and resolve if any issues arises.
- Database management
- Procurement of all necessary IT products.

2.6 Industry and Competitive Analysis:

Business process outsourcing is vast field and it is one of the fastest growing markets in current world. Countries like India, China, Malaysia, Philippines, Brazil and Mexico are way ahead from our country in this sector. SEBPO is the first BPO Company in our country and its clients are mostly based on USA and Canada. Though SEBPO has listed in top 100 BPO

companies in 2021, but they can spread its wings in to other countries and locally. By implementing proper strategic planning and collaboration of on shore & off shore partners SEBO can hunt for its potential clients in European market.

It is clear that SEBPO is doing much in BPO industry but they can much more in the BPO industry. A SWOT analysis will provide overview of SEBPO's strength, weaknesses, Opportunity and future threats.

Strength:

- Strong brand value in the BPO industry in USA market.
- 15 years of experiences in BPO market.
- Providing continuous quality work within optimize cost of the client.
- Have vast experience manpower.

Weaknesses:

- Offshore office is dependent on On shore office about decision making.
- No particular activities on the local market.
- Employee retention rate is pretty low.
- Salary structure of the company is not well structured.

Opportunities:

- Opportunities to entire local market
- Chances of explore the western market.

Threats:

- It is an open market, any new companies from India, China, Philippines can easily enter if negotiations break down.
- Global crisis like Covid – 19 created lot of disruption in the market. Already SEBPO lost several clients.
- Disruption of smooth internet connection can create a huge threat to client service.

2.7 Summary and Conclusion:

SEBPO is one of the fastest growing BPO companies in our country and its reputation growing higher day by day by providing excellence in the BPO industry. SEBPO provides excellent and flexible work environment to its employees to ensure the best performance out of them. SEBPO's commitment to process governance provides the foundation necessary for our clients to quickly adapt to those challenges, preparing us to help them tackle the most challenging requests.

2.8 Recommendations:

Working as an intern and from the above discussions I have constructed some recommendations which can enhance SEBPO's overall performance.

- Analysis of current and develop a new strategic planning to grow and sustain more on the fastest growing BPO industry.
- SEBPO should focus on finding new clients across the global and local market.
- Diversification of work and process development can enhance the work rate of the employees.
- Should work on the revised wage structure can increase the employee retention rate.

Chapter 3

Total Quality Management Process at SEBPO

3.1 Introduction:

Quality management refers to overseeing all the activities throughout organization to ensure the quality service, production and at the end customer satisfaction. Operation managers are concerned with the quality of the operation process which is related to reliability of product and service, on time delivery, waste minimization and customer satisfaction. High standard quality can be achieved through maintaining following three strategies.

- Quality Control
- Quality Assurance
- Total Quality Management

3.1.1 Objective:

The primary objective of the research is to find how total quality management is influencing the operation of SEBPO. Secondary objectives are to research and find analysis of Customer satisfaction, Employee involvement and Continuous improvement are effecting the service operation of SEBPO.

3.2 Literature Review:

Total quality management focuses on to increase the productivity and quality by analyzing different aspects of quality management to attain the highest standard of service. There are several elements are included in the total quality management process.

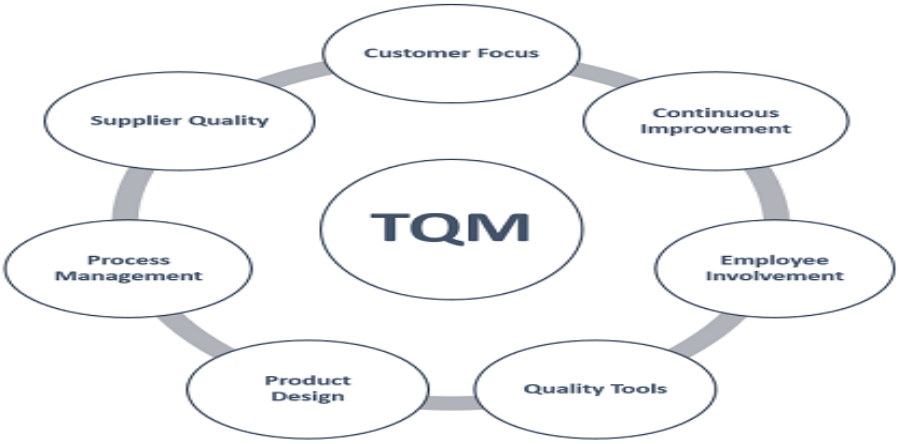


Figure 3.1: Elements of TQM

In the business context of SEBPO, Customer satisfaction, Continuous improvements, Employee involvement, Quality tools and Process management plays very important part of success of the organization.

Customer Focus/Satisfaction: Customers are ultimately determines the level of the quality. As SEBPO, served its different level of customers and different customer requires different types of service. SEBPO set its operation process, training and other requirements to meet the highest level of service quality.

Employee Involvement: All employees are working together to achieve the one goal. Employee involvement refers to empowerment of employee to generate new ideas, methodologies by creative thinking to upgrade the operation process. As Initial and mid level employees are responsible for the quality service at SEBPO, It is very important to engage all the employees in process development in the operation.

Continuous Improvements: Continuous improvements drive any organization to find the flows in operation process and to make solutions in different scenarios which lead to become more competitive in market and bring more effectiveness of meeting customer and stakeholder's expectations.

In following research I have worked on to find and analyze the flows of SEBPO operation process and to recommend my thoughts which can increase the quality management of SEBPO.

3.3 Research Methodology:

3.3.1 Research Approach: Deductive (Qualitative)

3.3.2 Type of Research: Explanatory

3.3.3: Contact Method: Questionnaire Survey over digital media platform.

3.3.4 Data Sources:

Primary Sources: The primary data has been collected from field survey through the questionnaires structure. This questionnaire structure has been solved over mail communication or direct communication via phone with the selected sample.

3.3.5 Population and Sampling Method:

Population: The existing employees & Customer of SEBPO.

Sample Frame: The sample frame of this study consists of approximately 100.

Sample Size: 50

Sampling Procedure: Simple Random Sampling.

3.4 Hypothesis Test: Z Test

3.4.1 Analysis:

Univariate analysis has been conducted for descriptive statistics and testing hypotheses. However, this is important to have the validated conclusion and practical implication of the empirical data. Using Z test hypotheses have been tested. This is because the sample size is more 30. The formula used for Z test is as below:

$$Z\ test = \frac{\bar{X} - \mu}{\frac{s}{\sqrt{n}}}$$

Here,

μ = Mean value

n = Sample size

s = Standard Deviation

$\bar{X}$ = Average

3.4.2 Hypothesis Scale:

The weighted method has been used to measure the response from the respondents. This is popularly known as Likert scale. I have used 5-point Likert scale where 5 stands for strongly agree, 4 for agree, 3 for neutral, 2 for disagree and 1 for strongly disagree. The scale is shown in the table below:

Respondents Opinion	Weight
Strongly Agree (S. A)	5
Agree (A)	4
Neutral (N)	3

Disagree (D)	2
Strongly Disagree (S. D)	1

Table 3. 1: Respondents Opinion and Associated Weight

3.4.3 Hypothesis Development:

For further analysis, hypothesis has been developed and tested through Z test. As dichotomous variable has been used with weight, there were variables ranging from 1 to 7 in the data set. There are 7 hypotheses based on the primary data collected through the questionnaire. They were selected through self-judgment perceiving the weights of affecting decision about total quality management.

No.	Hypothesis	Data Source
H1	**HO:** SEBPO does not encourage customer to provide feedback after service delivery that decrease the effect of TQM **HA:** SEBPO encourage customer to provide feedback after service delivery that increase the effect of TQM	Question No. 1
H2	**HO:** SEBPO is not proficient to evaluating client's feedback which decrease the effect of TQM. **HA:** SEBPO is proficient to evaluating client's feedback which enhance the effect of TQM.	Question No. 2
H3	**HO:** SEBPO does not deliver quality service to customer that decrease the effect of TQM **HA:** SEBPO deliver quality service to customer that increase the effect of TQM	Question No. 3
H4	**HO:** Employee motivation does not efficiently comply by SEBPO to enrich employee involvement which decrease the effect of TQM **HA:** Employee motivation efficiently comply by SEBPO to enrich employee involvement which increase the effect of TQM	Question No. 4

H5	**HO:** SEBPO does not focus on the employee empowerment for employee involvement that decrease the effect of TQM **HA:** SEBPO focus on the employee empowerment for employee involvement that increase the effect of TQM	Question No. 5
H6	**HO:** SEBPO does not apply performance appraisal process to increase employee involvement which decrease the effect of TQM **HA:** SEBPO apply performance appraisal process to increase employee involvement which increase the effect of TQM	Question No. 6
H7	**HO:** Continuous improvement on work process does not visible at SEPBO which decrease the TQM **HA:** Continuous improvement on work process visible at SEPBO which increase the TQM	Question No. 7

Table 3. 2**:** Hypotheses Development

For this, data from question no. 1 to 7 has been taken into consideration. To validate the overall context of the study, a score has been developed using the overall data set. This has been titled as the 'Overall CS Index'.

3.4.4 Hypothesis Result (Using Z Test):

For verified result, eight hypotheses have been developed in this study.

	Score	H1	H2	H3	H4	H5	H6	H7
Strongly Agree (S. A)	**5**	13	7	15	5	5	13	13
Agree (A)	**4**	12	9	12	12	10	15	11
Neutral (N)	**3**	11	15	8	15	15	9	13
Disagree (D)	**2**	7	13	6	12	10	7	7
Strongly Disagree (S. D)	**1**	7	6	9	6	10	6	6
Sample size (n)		**50**	**50**	**50**	**50**	**50**	**50**	**50**

Total Score		167	148	168	148	140	172	168
Average (X)		3.34	2.96	3.36	2.96	2.8	3.44	3.36
Standard Deviation (σ)		2.83	3.87	3.54	4.30	3.54	3.87	3.32
Table value (@ 5% significance level)		1.645	1.645	1.645	1.645	1.645	1.645	1.645
Mean value (μ)		2.5	2.5	2.5	2.5	2.5	2.5	2.5
Z-test value		**2.100**	**0.840**	**1.720**	**0.756**	**0.600**	**1.716**	**1.834**
Null Hypothesis Statement (A= Accepted; R= Rejected)		**R**	**A**	**R**	**A**	**A**	**R**	**R**

Table 3. 3**:** Result of Hypotheses Test (using Z test)

3.4.6 Mathematical and Graphical Representation:

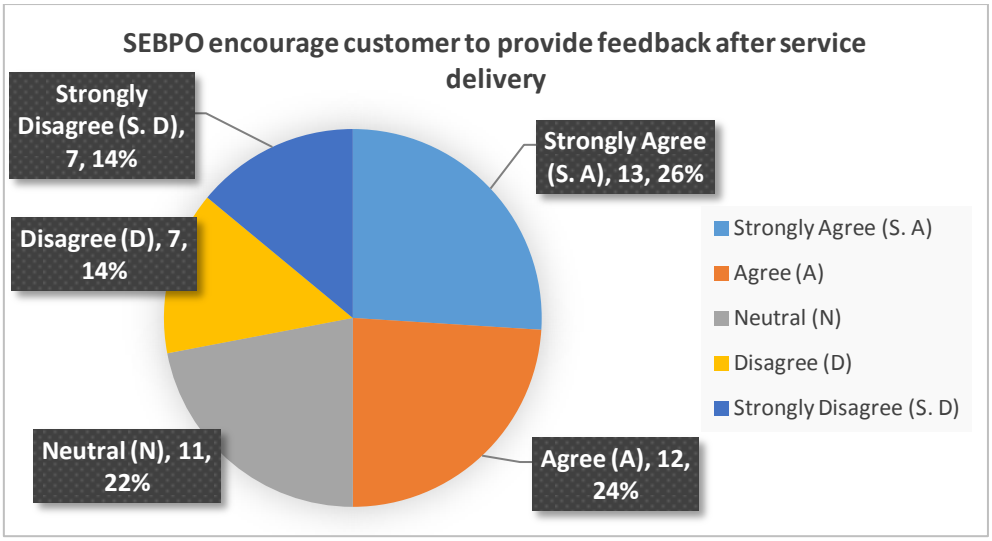
Z test has used to test the hypotheses, developed before. The rationale for using Z test is that, the number of observations is more than 30. As binary variables have been used in this study, the mean value above (5/2) or 2.5 is considered to be satisfactory as a group.

Hypothesis 1:

In the questionnaire, the respondents were first asked about "SEBPO encourage customer to provide feedback after service delivery".

HO: SEBPO does not encourage customer to provide feedback after service delivery that decrease the effect of TQM

HA: SEBPO encourage customer to provide feedback after service delivery that increase the effect of TQM



Graph 1: SEBPO encourage customer to provide feedback after service delivery

H0: $\mu = 2.5$

H1: $\mu > 2.5$

n = 50

$\sigma = 2.83$

Using Z-test, the following result was derived –

$Z_{calculated}$ (2.100) > Z_{table} (1.645).

This is a one tail test. So, from Z table value at 95% confidence level, the value derived, is 1.645. On the other hand, $Z_{calculated}$ value is 2.100 which is greater than the Z_{table} value 1.645. Hence, null hypothesis has been rejected. So, the result shows that SEBPO encourage customer to provide feedback after service delivery.

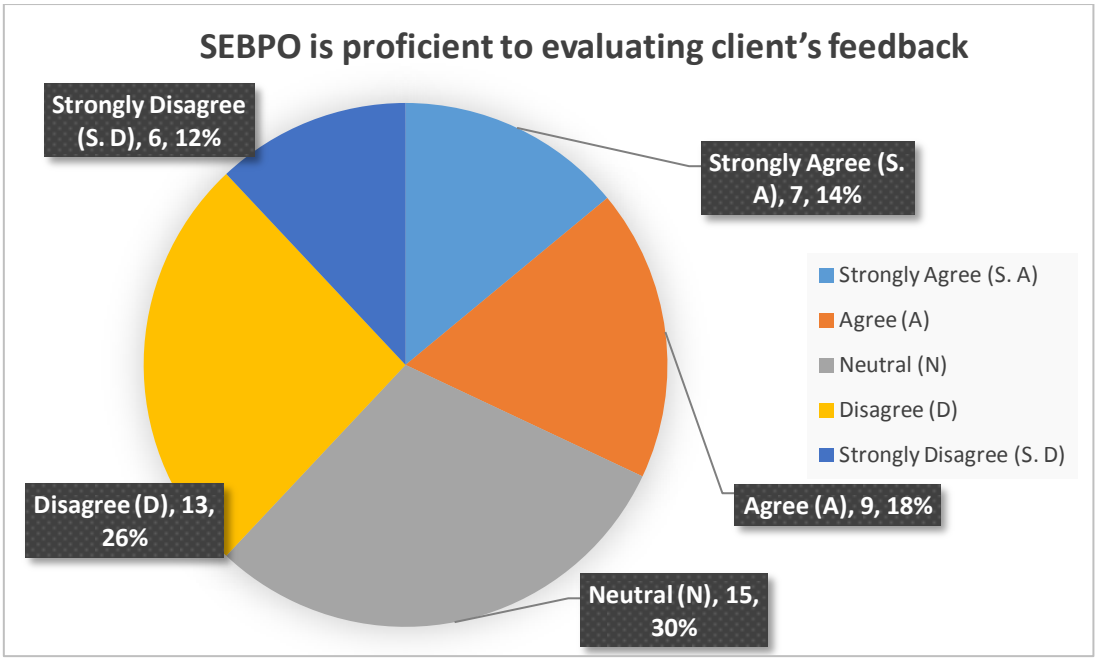
Hypothesis 2:

In the questionnaire, the respondents were asked about " SEBPO is proficient to evaluating client's feedback ".

HO: SEBPO is not proficient to evaluating client's feedback which decrease the effect of

TQM

HA: SEBPO is proficient to evaluating client's feedback which enhance the effect of TQM



Graph 2: SEBPO is proficient to evaluating client's feedback

H0: $\mu = 2.5$

H1: $\mu > 2.5$

n = 50

$\sigma = 3.87$

Using Z-test, the following result was derived –

$Z_{calculated}$ (0.840) < Z_{table} (1.645).

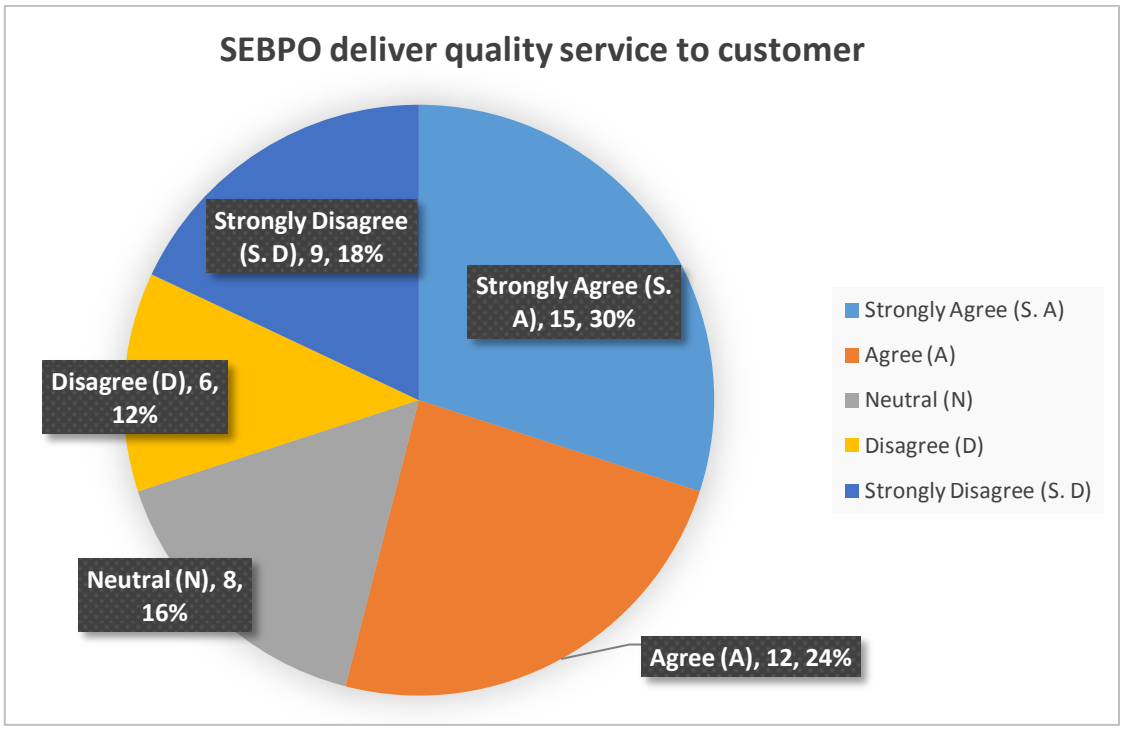
This is a one tail test. So, from Z table value at 95% confidence level, the value derived, is 1.645. On the other hand, $Z_{calculated}$ value is 0.840 which is less than the Z_{table} value 1.645. Hence, null hypothesis has been Accepted. So, the result shows that SEBPO is not proficient to evaluating client's feedback.

Hypothesis 3:

In the questionnaire, the respondents were first asked about "SEBPO deliver quality service to customer". For this purpose, responses on the "SEBPO deliver quality service to customer" were taken into consideration.

HO: SEBPO does not deliver quality service to customer that decrease the effect of TQM

HA: SEBPO deliver quality service to customer that increase the effect of TQM.



Graph 3: SEBPO deliver quality service to customer

H0: $\mu = 2.5$

H1: $\mu > 2.5$

n = 50

$\sigma = 3.54$

Using Z-test, the following result was derived –

$Z_{calculated}$ (1.720) > Z_{table} (1.645).

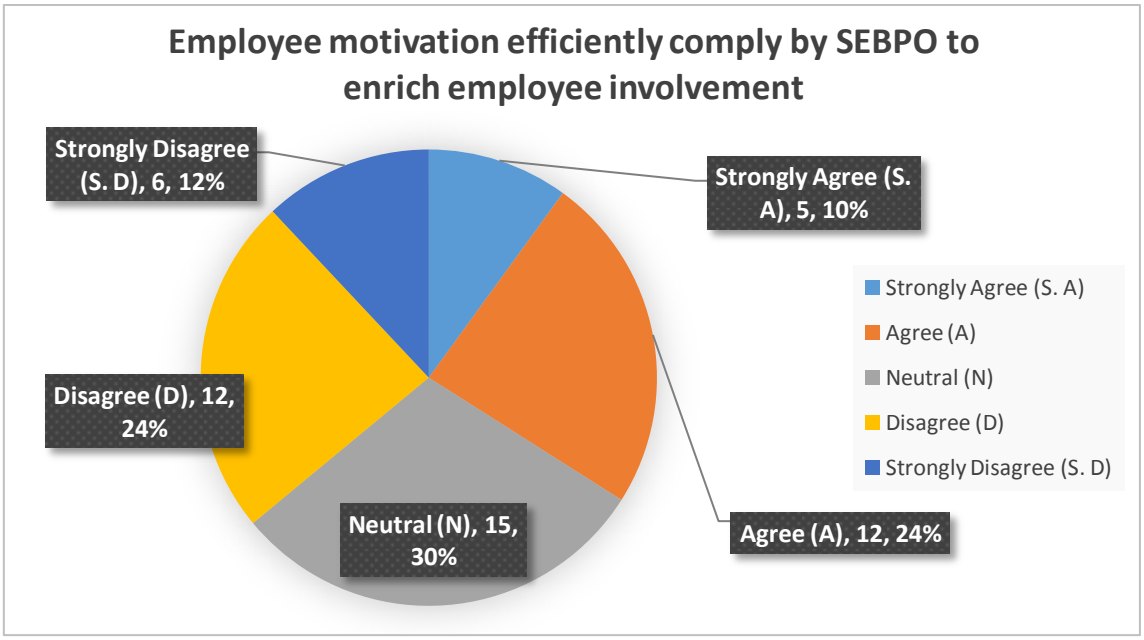
This is a one tail test. So, from Z table value at 95% confidence level, the value derived, is 1.645. On the other hand, $Z_{calculated}$ value is 1.720 which is greater than the table value. Hence, null hypothesis has been rejected. So, the result shows that SEBPO deliver quality service to customer.

Hypothesis 4:

In the questionnaire, the respondents were asked about "Employee motivation efficiently complies by SEBPO to enrich employee involvement ".

HO: Employee motivation does not efficiently comply by SEBPO to enrich employee involvement which decreases the effect of TQM.

HA: Employee motivation efficiently complies by SEBPO to enrich employee involvement which increases the effect of TQM.



Graph 4: Employee motivation efficiently comply by SEBPO to enrich employee involvement

H0: $\mu = 2.5$

H1: $\mu > 2.5$

n = 50

$\sigma = 4.30$

Using Z-test, the following result was derived –

$Z_{calculated}$ (0.756) < Z_{table} (1.645).

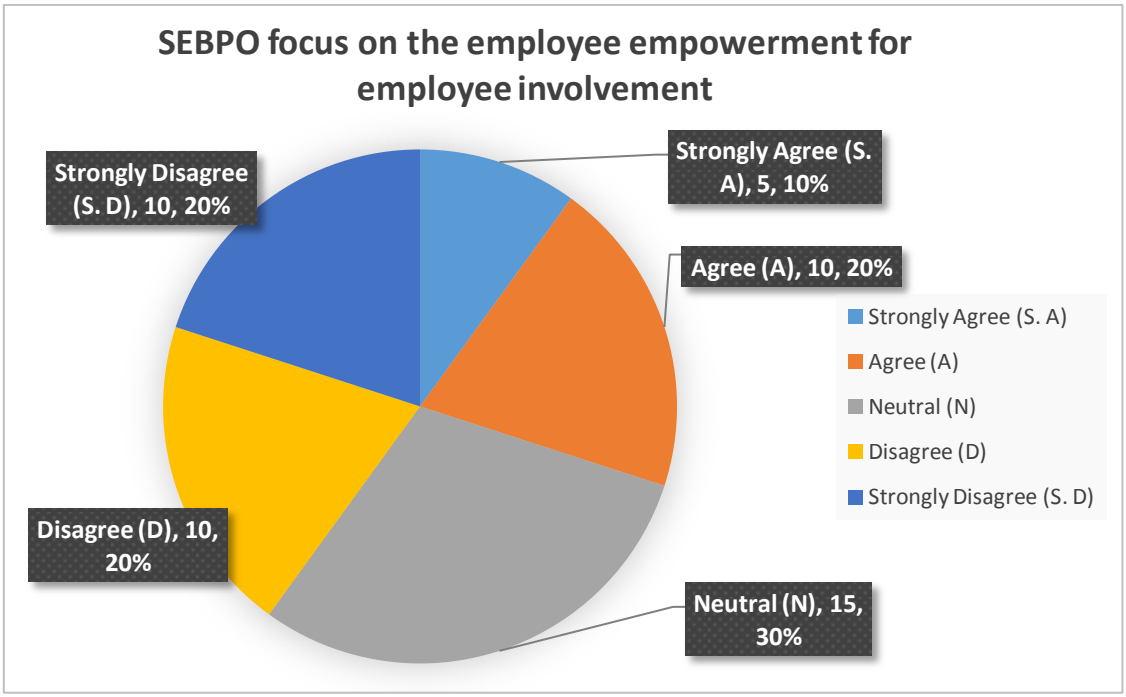
This is a one tail test. So, from Z table value at 95% confidence level, the value derived, is 1.645. On the other hand, $Z_{calculated}$ value is 0.756 which is less than the Z_{table} value 1.645. Hence, null hypothesis has been accepted. So, the result shows that Employee motivation does not efficiently comply by SEBPO to enrich employee involvement.

Hypothesis 5:

In the questionnaire, the respondents were asked about " SEBPO focus on the employee empowerment for employee involvement ".

HO: SEBPO does not focus on the employee empowerment for employee involvement that decrease the effect of TQM

HA: SEBPO focus on the employee empowerment for employee involvement that increase the effect of TQM



Graph 5: SEBPO focus on the employee empowerment for employee involvement

H0: $\mu = 2.5$

H1: $\mu > 2.5$

n = 50

$\sigma = 3.54$

Using Z-test, the following result was derived –

$Z_{calculated}$ (0.600) < Z_{table} (1.645).

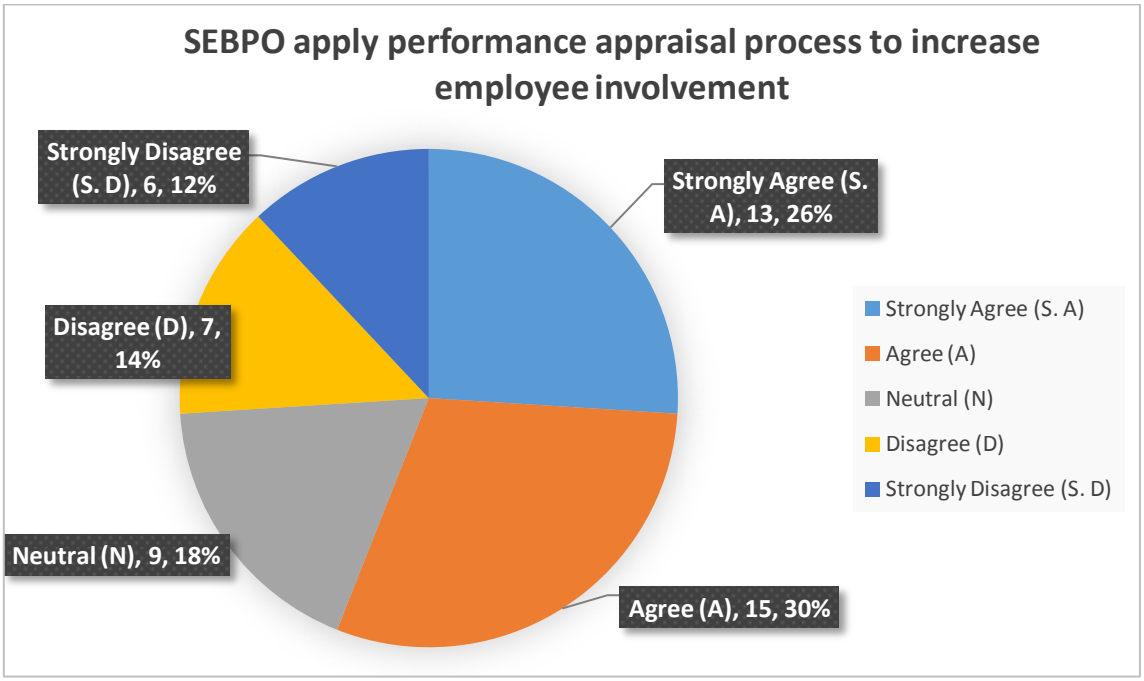
This is a one tail test. So, from Z table value at 95% confidence level, the value derived, is 1.645. On the other hand, $Z_{calculated}$ value is 0.600 which is less than the Z_{table} value 1.645. Hence, null hypothesis has been Accepted. So, the result shows that SEBPO does not focus on the employee empowerment for employee involvement.

Hypothesis 6:

In the questionnaire, the respondents were asked about "SEBPO apply performance appraisal process to increase employee involvement ".

HO: SEBPO does not apply performance appraisal process to increase employee involvement which decreases the effect of TQM.

HA: SEBPO apply performance appraisal process to increase employee involvement which increase the effect of TQM.



Graph 6: SEBPO apply performance appraisal process to increase employee involvement

H0: $\mu = 2.5$

H1: $\mu > 2.5$

n = 50

$\sigma = 3.87$

Using Z-test, the following result was derived –

$Z_{calculated}$ (1.716) > Z_{table} (1.645).

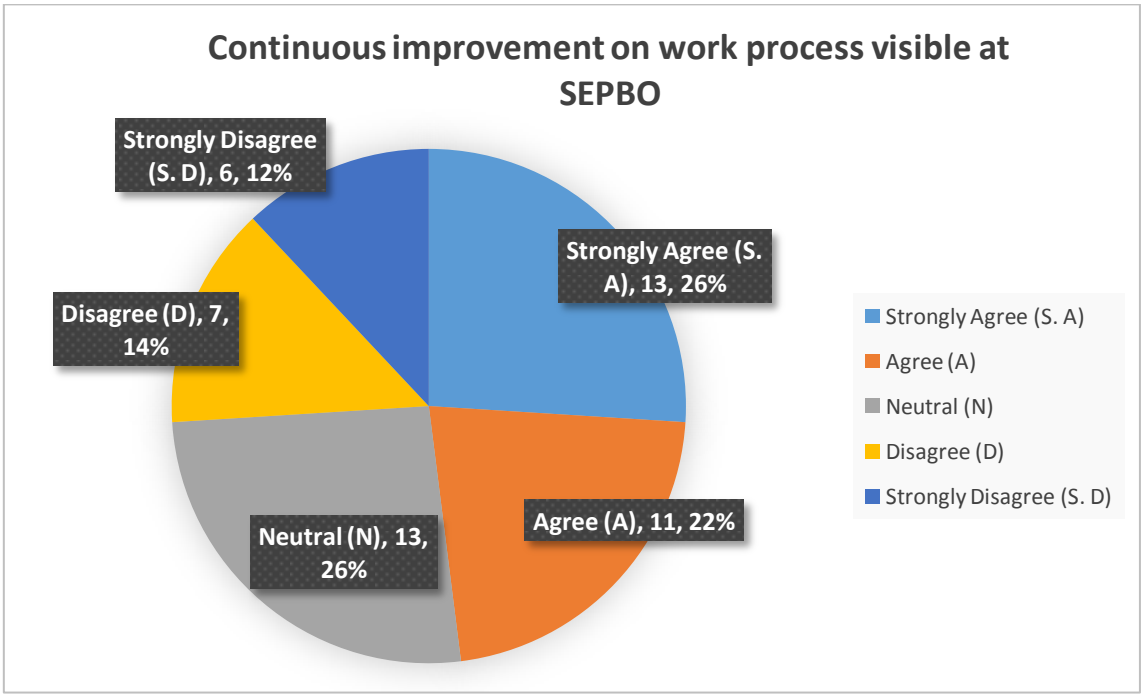
This is a one tail test. So, from Z table value at 95% confidence level, the value derived, is 1.645. On the other hand, $Z_{calculated}$ value is 1.716 which is greater than the Z_{table} value 1.645. Hence, null hypothesis has been rejected. So, the result shows that SEBPO apply performance appraisal process to increase employee involvement.

Hypothesis 7:

In the questionnaire, the respondents were first asked about "Continuous improvement on work process visible at SEPBO".

HO: SEBPO does not apply performance appraisal process to increase employee involvement which decrease the effect of TQM.

HA: SEBPO apply performance appraisal process to increase employee involvement which increase the effect of TQM.



Graph 7: Continuous improvement on work process visible at SEPBO

H0: $\mu = 2.5$

H1: $\mu > 2.5$

n = 50

$\sigma = 3.32$

Using Z-test, the following result was derived –

$Z_{calculated}$ (1.834) > Z_{table} (1.645).

This is a one tail test. So, from Z table value at 95% confidence level, the value derived, is 1.645. On the other hand, $Z_{calculated}$ value is 1.834 which is greater than the Z_{table} value 1.645. Hence, null hypothesis has been rejected. So, the result shows that Continuous improvement on work process visible at SEPBO.

3.5 Findings:

From the descriptive statistics and hypothesis testing, several findings can be depicted related to the Total Quality Management of SEBPO. These can be summarized as following:

- From the hypothesis result 1 and 3, SEBPO delivers the quality service to its clients and encourage the clients to provide feedback after delivery service.
- Hypothesis 2 shows, SEBPO is not proficient in evaluation of feedback of the client properly.
- SEBPO doesn't focus properly to lift up the motivation of the employee and in some context not proper employee engagement is happen in the process.
- SEBPO focuses on continuous improvement of the quality aspects.

3.6 Recommendations:

Evaluating the above hypothesis and my observation during the Internship period, I have constructed following recommendations that can improve the quality aspects of SEBPO:

- Through SEBPO encourage clients to give feedback of the delivered service, sometimes repeated feedbacks are coming from the clients which cost several revenue

of the clients. SEBPO should work on the process of feedback evaluation and change the work design to provide more quality service.

- SEBPO should focus more on employee engagement while taking decisions, changing work process and structure which can be beneficial for employees which can lead to quality service provided by employee.
- SEBPO should work on enhancing employee motivation by revising the company salary structure, implementing recognition and reward schemes etc.
- SEBPO need to focus on to increase employee retention rate to meet the quality delivery service continuously.

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Appendix A: Questionnaire

1. SEBPO encourage customer to provide feedback after service delivery. (Question to both customer & employee)
a. Strongly Agree
b. Agree
c. Neutral
d. Disagree
e. Strongly Disagree

2. SEBPO is proficient to evaluating client's feedback. (Question to both customer & employee)
a. Strongly Agree
b. Agree
c. Neutral
d. Disagree
e. Strongly Disagree

3. SEBPO deliver quality service to customer. (Question to both customer & employee)
a. Strongly Agree
b. Agree
c. Neutral
d. Disagree
e. Strongly Disagree

4. Employee motivation efficiently comply by SEBPO to enrich employee involvement. (Question to employee)
a. Strongly Agree
b. Agree
c. Neutral
d. Disagree
e. Strongly Disagree

5. SEBPO focus on the employee empowerment for employee involvement. (Question to employee)
a. Strongly Agree
b. Agree
c. Neutral
d. Disagree
e. Strongly Disagree

6. SEBPO apply performance appraisal process to increase employee involvement. (Question to employee)
a. Strongly Agree
b. Agree
c. Neutral
d. Disagree
e. Strongly Disagree

7. Continuous improvement on work process visible at SEPBO. (Question to employee)
a. Strongly Agree
b. Agree
c. Neutral
d. Disagree
e. Strongly Disagree