

Report on

**Effects of Total Quality Management Practices on Supply Chain:**

**A case on Summit Communications Ltd.**

By

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A report submitted to the BRAC Institute of Governance and Development (BIGD) in partial fulfillment of the requirements for the degree of Masters in Procurement and Supply Management (MPSM).

BRAC Institute of Governance and Development (BIGD)

Brac University

July, 2022

## **Declaration**

It is hereby declared that

1. The report submitted is my/our original work while completing a 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 that 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.

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# **Letter of Transmittal**

**Mohammad Sirajul Islam**

Senior Academic Coordinator

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Subject: Practicum on the Effects of Total Quality Management Practices on Supply Chain: A case on Summit Communications Ltd.

Dear Sir,

As instructed and as part of our academic program under Masters in procurement and supply management (MPSM), I do hereby submit a practicum on “Effects of Total Quality Management Practices on Supply Chain: A case on Summit Communications Ltd.” for your kind review and necessary reference. The Paper has been prepared based on guidelines and instructions as given by you and the information and supporting documents as collected from different sources. I have engaged my intense efforts to bring out this master paper with the target of achieving perfection.

I will be highly obliged if you kindly accept my master’s paper

Sincerely yours,

---

Md. Irfanuzzaman

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BIGD, BRAC University

Date: 30 July 2022

## **Non-Disclosure Agreement**

This agreement is made and entered into by and between Summit communications Ltd and the undersigned student at BRAC Institute of Governance and Development, BRAC University. Summit Communications ltd. allowed me to prepare a report on Effects of Total Quality Management Practices on Supply Chain: A case on Summit Communications Ltd.in partial fulfillment of the requirements for the degree of Masters of Procurement and Supply Management. I have the opportunity to work closely with the officials of the organization and have access to official data and information. Based on my work experience and the data and information collected I will prepare a report. I will use all sorts of data and information for academic purposes and will not disclose to any party against the interests of Summit Communications Ltd.

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## **Acknowledgment**

I would like to express my gratitude to all the people that were involved both directly and indirectly in the preparation of this report. I apologize to the people whose names I haven't mentioned, and their contribution is highly appreciated by me.

First, I would like to thank Almighty Allah who made us able to finish this thesis at the perfect time.

I would like to thank my academic supervisor Mr. Mohammad Sirajul Islam, Coordinator (academic & training programs), BRAC University– for guiding me and for allowing me to initiate this report. My special thanks to my workplace supervisor Mr. Asifur Rahman for the proper guidance and instructions to complete the report. I am also grateful to those people without whom it was quite impossible to prepare the report. Also, more thanks to my colleague and senior SCM manager for helping to make this report.

Finally, my sincere gratitude goes to my family and friends for supporting me, sharing their thoughts, and giving me support during the preparation of this thesis.

## **Executive Summary**

The study found that the implementation of Total Quality Management (TQM) practices in Summit Communications Ltd. has significantly improved the supply chain management (SCM) of the company. The adoption of TQM practices has led to better communication and collaboration among different departments, resulting in enhanced efficiency and productivity. The study also revealed that the use of TQM practices has improved the quality of products and services offered by the company, which has resulted in increased customer satisfaction.

Despite the positive impact of TQM practices on SCM, there are still some areas where further improvement is needed. One such area is the need for better training and development programs for employees to enhance their skills and knowledge. The study also identified the need for more investment in technology to improve the accuracy and speed of SCM processes. Additionally, the study highlighted the importance of continuous monitoring and evaluation of SCM processes to identify areas for improvement and ensure that TQM practices are being implemented effectively. Overall, the study suggests that Summit Communications Ltd. can achieve even greater success by continuing to focus on the adoption of TQM practices in its SCM processes.

**Keywords:** SComm, telco, SCM, RIO, fiber, SFP, Geo-graphical challenge, telecom industry.

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## **List of Acronyms**

ICX- Interconnection Exchange

ISP- Internet Service Provider

IIG- International Internet Gateway

ITC- International Terrestrial Cable

MRF – Material Requisition Form

NIX- National Internet Exchange

NTTN – Nationwide Telecommunication Transmission Network

OBI- Open Box Inspection

RIO – Regional Implementation & Operations

SC – Sub-center

SComm – Summit Communications Ltd.

SFP – Small form factor pluggable

SCM- Supply Chain Management

TQM- Total Quality Management

# Chapter 1

## INTRODUCTION

### 1.2 Supply Chain Management (SCM)

The supply chain is a complex and dynamic management system that involves the seamless flow of information, products, and funds between different stages. These stages include not only manufacturers and suppliers but also transporters, warehouses, and retailers who are directly or indirectly related to meeting customer demands. The primary objective of any supply chain is to maximize the overall value generated by all stages.

Supply chain performance is evaluated based on both qualitative measures, such as customer satisfaction and product quality, and quantitative measures, such as order-to-delivery lead time, supply chain response time, flexibility, resource utilization, and delivery performance. The quantitative performance of a supply chain network is directly related to its effectiveness. An efficient supply chain network can reduce lead times and costs while improving product quality and responsiveness. However, creating such a network is a complex decision-making process that involves a set of inputs, including customer zones to serve, products to manufacture and distribute, demand projections for different customer zones, and future information.

Supply chain management is a network of mechanisms within organizations that are involved in the various processes and activities, both upstream and downstream, that create value in the form of products and services delivered to the ultimate consumer. Maintaining a well-structured supply chain network is crucial for the competitiveness of firms. Therefore, supply chain management (SCM) is a critical problem in the process industry. This practicum aims to examine the effects of total quality management practices on the performance of the SCM of Summit Communications Ltd.

## **1.2 Summit Communications Ltd (Scomm)**

Scomm is a leading end-to-end infrastructure service provider having nationwide telecommunication transmission network (NTTN) offering high-capacity transmission services, internet services, and international bandwidth services, through its fiber optic network with the latest available technologies. (Summit communications ltd, n.d.)

To cope with the growing rise in the internet revolution throughout the country and on the voyage of implementing the dream of “Digital Bangladesh”, Scomm has to maintain a robust SCM system. This organization has offices (commonly called Sub-centers) all through the country. Scomm closely works with the telco operators of Bangladesh and major ISPs.

Summit Communications Limited is one of the largest International Terrestrial Cable (ITC) service providers in Bangladesh providing one-third of the total industry bandwidth. By ensuring 99.99% uptime, Scomm has secured one of the top positions in the telecommunications sector by maintaining largest optical fiber infrastructure network in Bangladesh as today’s requirement of high speed broadband internet largely relies on optical fiber network. SComm NIX provides the facility to exchange domestic inter-operators’ data services and inter IPTSP domestic voice calls among the NIX users through Multi-Lateral Peering Agreement (MPLA) by keeping local traffic in Bangladesh without having to send those messages across multiple international hops to reach their destination while improving connectivity and services for customers. SComm has a fiber presence of more than 51,000 km all around Bangladesh (Summit communications ltd, n.d.). Its optical fiber network covers the developed urban areas to remote rural areas of Bangladesh. The group of clients ranges from Telco operators, ISP, and government bodies to all sectors of Bangladesh. The telecom infrastructure of this country is very much dependent upon the network of SComm. The company’s optical fibre network is depicted in Figure 1.

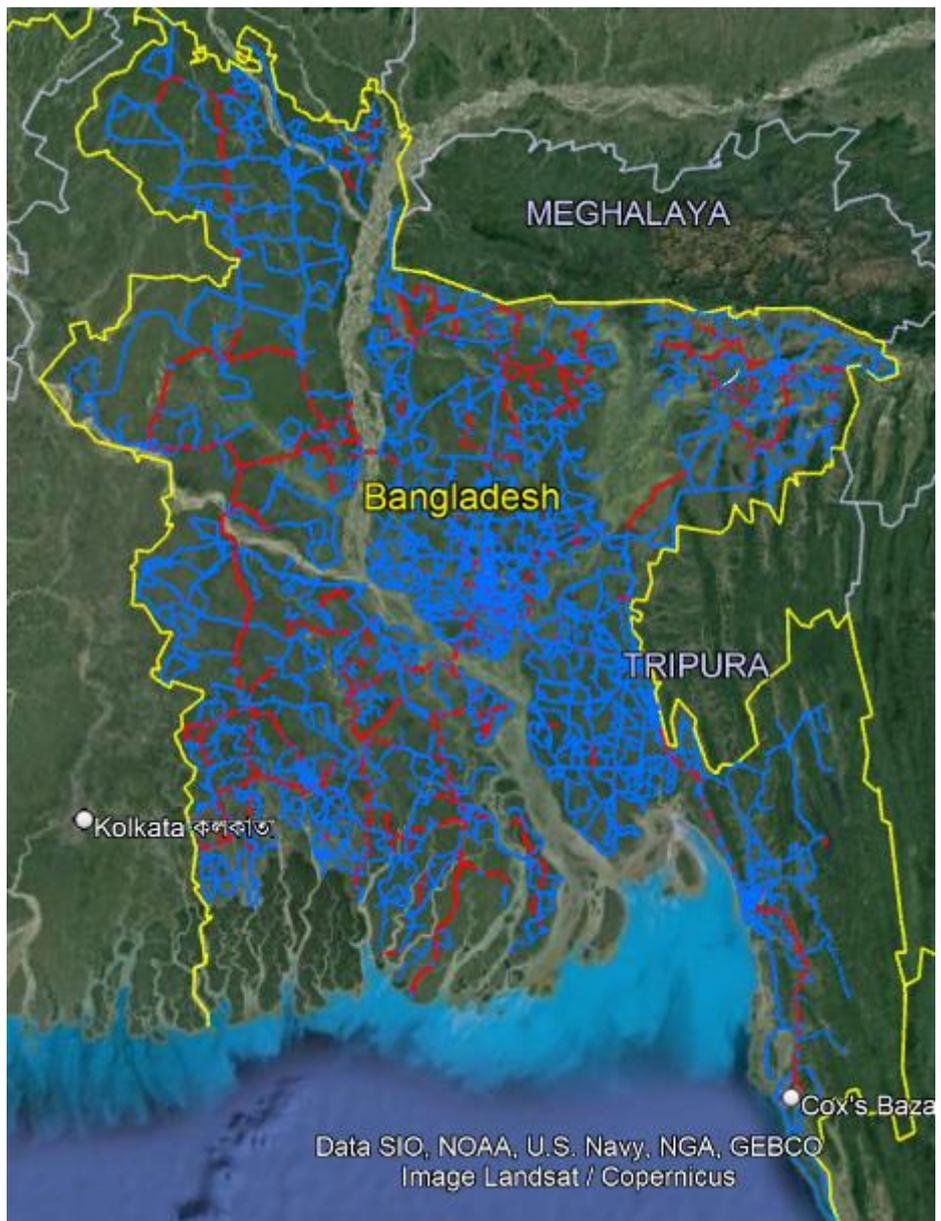


Figure 1: Optical fiber network of SComm

Source: <https://www.summitcommunications.net/>

## **Chapter 2**

### **Supply Chain Management of Summit Communications Ltd.**

#### **2.1 Introduction**

SComm maintains a robust supply chain management operation to maintain its multi-dimensional requirements. It procures from overseas and locally. As SComm has to constantly develop its service quality and maintain its integrity as well as it also needs to keep up the pace with the world, they have to deploy the best working technology no matter the cost associated with it. So, the supply chain has to be very qualified, careful, time-sensitive and very fast in response.

The whole supply chain operation activity demands to be very dynamic and needs to work around the clock. SComm has a fiber presence of more than 50,000 km all around Bangladesh. Its optical fiber network covers the developed urban areas to remote rural areas of Bangladesh. The group of clients ranges from Telco operators, ISP, and government bodies to all sectors of Bangladesh. The telecom infrastructure of this country is very much dependent upon the network of SComm.

To cope up with this requirement, SComm has designed a very supportive SCM. This SCM is responsible for procurement, maintenance, proper warehousing, OBI (Open Box Inspection), sending materials to different SC (sub-center) all over Bangladesh, etc.

In the upcoming sections, we will focus on the procurement process, the different types of materials SComm SCM have to procure and manage, warehousing, product tagging or labeling, distribution centers, distribution locations, frequency, the process of receiving an order, response to a different type of item requisition, replenishment activity, etc.

## 2.2 Procurement process

SComm has to procure a wide variety of telecommunication devices and associated items. This is a continuous process. As the requirement is continuous, SComm has to continue the process of procurement all through the year. The whole procurement process can be divided into two broad groups-

1. Replenishment of regular products
2. Market research and procurement of new advanced products

### 2.2.1 Replenishment of regular products

SComm has to regularly and promptly maintain the replenishment of the regular products. As the time between the customer requirement placed and delivery is generally very short and there has to be a very thin margin of error, the organization needs to constantly monitor the stock. Constant and adequate stock management is a very challenging task. Table 1 shows a list of materials and their replenishment frequency.

*Table 1: SComm used materials replenishment frequency*

| Item name                                 | Used quantity<br>(Q1 2022) | Replenishment Frequency<br>(months) |
|---|----------------------------|-------------------------------------|
| Network Router                            | 350 nos.                   | 2                                   |
| Small Form-factor Pluggable (SFP)         | 1500 nos.                  | 3                                   |
| Optical fiber cable                       | 4000 km                    | 1                                   |
| Line card for routers/ WDM                | 50 nos.                    | 6                                   |
| Power equipment (battery, inverter, etc.) | 300 nos.                   | 2                                   |

Source: <https://www.summitcommunications.net/>

### 2.2.2 Market research and procurement of new advanced products

Regular market research and procurement process continuation are very important to keep up with the available technologies. As serving the nation with the best possible technology and satisfying customer needs is a priority to SComm, this process of research and deployment of new products is always running. In every quarter, new advanced routers, router cards, WDM MUX, SFP, etc. All these products are generally procured from overseas. After a proper deal is completed with foreign companies, it generally takes 3-4 months to reach the product in Bangladesh. Generally, the products are shipped by sea. After it is received in ports and transported to the warehouse of SComm, an OBI (open box inspection) is carried out in the presence of SComm concern and product company concern. After these formalities, devices are ready to roll out and be deployed across the country according to planning.

### 2.3 Distribution center and locations

SComm has a large warehouse facility in the vicinity of Dhaka city, Birulia, Savar. SComm has divided the whole Bangladesh into four different operational zones. These zones are called RIO (Regional Implementation & Operation). In these four zones, there are thirty-four sub-centers. Regularly, different types of material are sent to these sub-centers. Table 2 presents a distribution of SC and an average number of requests generated each day.

*Table 2: Sub-center distribution*

| RIO   | Division           | Count of Sub Center (SC) | Average no. of requests generated to send materials (per day) |
|-------|--------------------|--------------------------|---|
| RIO-1 | Dhaka              | 10                       | 25  |
| RIO-2 | Chittagong, Sylhet | 8                        | 20  |

|              |                               |           |           |
|--------------|-------------------------------|-----------|-----------|
| RIO-3        | Khulna                        | 8         | 18        |
| RIO-4        | Rajshahi, Rangpur, Mymensingh | 8         | 20        |
| <b>Total</b> |                               | <b>34</b> | <b>83</b> |

Source: <https://www.summitcommunications.net/>

## **2.4 Distribution method**

There are two types of categories to generate a material requisition request- emergency and general. If the request is normal, generally material is sent over courier. Inside Dhaka metro and periphery, materials are sent using SComm's own vehicle regardless of being emergency or general. If the request is urgent and the location is outside Dhaka metro and periphery, the material is sent in a rented vehicle. Sometimes very sophisticated or expensive material are also sent with extra precaution.

## **2.5 Replenishment activity**

As the operational activity is very frequent, SComm always has to keep an eye on the replenishment activity. SComm has to respond to very urgent requirements at a regular basis. To maintain the largest telecommunication infrastructure network of Bangladesh, frequent replenishment activity is a must. SComm generally orders materials from overseas in quarterly basis based on the forecast. A few materials are sourced from locally available vendors. But most of materials used by SComm are sourced from China and U.S.A. So, replenishment activity is a regular process and has to be maintained effectively.

## **Chapter 3**

### **TQM in SComm – Findings and Observations**

#### **3.1 TQM Models and Current Practice Trends in SComm**

Total quality management (TQM) is a management philosophy that emphasizes continuous improvement of products, services, and processes. TQM is based on the belief that customer satisfaction is the highest priority, and that all employees should be involved in improving the quality of the organization's work. The practice of TQM at SComm is presented below.

#### **The Deming Prize**

The Deming Prize was created in Japan in 1950 by the Union of Japanese Scientists and Engineers (JUSE) to acknowledge companies and individuals from around the world for their successful efforts at implementing TQM. To be considered for the prestigious Deming Prize, organizations must demonstrate excellence in six key areas: leadership, strategic planning, customer focus, measurement, analysis, and knowledge management, workforce focus, process management, and business results. The study conducted on Summit Communications Ltd. found that the implementation of Total Quality Management (TQM) practices has significantly improved the company's supply chain management (SCM). The adoption of TQM practices has led to better communication and collaboration among different departments, resulting in enhanced efficiency and productivity. The study also revealed that the use of TQM practices has improved the quality of products and services offered by the company, which has resulted in increased customer satisfaction. However, the study also identified areas where further improvement is needed, such as better training and development programs for employees, more investment in technology, and continuous monitoring and evaluation of SCM processes. Overall, the study suggests that Summit Communications Ltd. can achieve even greater success

by continuing to focus on the adoption of TQM practices in its SCM processes and demonstrating excellence in all six areas required for the Deming Prize.

### **The International Organization for Standards (ISO 9000)**

The International Organization for Standards (ISO) is an international non-governmental organization that sets standards for products, services, and systems. ISO 9000 is a set of standards that specifies requirements for a quality management system.

As of current practice, SComm is using or trying to follow the guidelines set by ISO. Throughout the different portions of the organization, this standard is observed. In order to conduct this study, it was tried to experiment with the methods of the Malcolm Baldrige model (MBNQA). This model has more similarities with the working principle of SComm.

Discussing on the effect and results, primarily MBNQA model signifies on leadership. In SComm, leadership role has to be more precise and distinctive. In instant or proactive decision-making scenarios, SComm need to exercise leadership in every step. It should not rely only on the higher management.

Secondly, the strategic planning needs to be more customer focused. Being a telecommunication company, the planning has to be very prompt and scalability is very significant. Scenario and requirement change very abruptly in this sector. So, rigid planning would not serve the purpose.

Thirdly, the focus of the workforce and its management should be centered on exact measurement, perfect and visionary analysis along with sufficient knowledge management. All these pieces should fall right in place and work in synchronous harmony to ensure the desired business result.

Even though SComm relies on the ISO more than other models, it was found that MBNQA model will help SComm more in pursuing their future goal. Therefore, it is suggested that

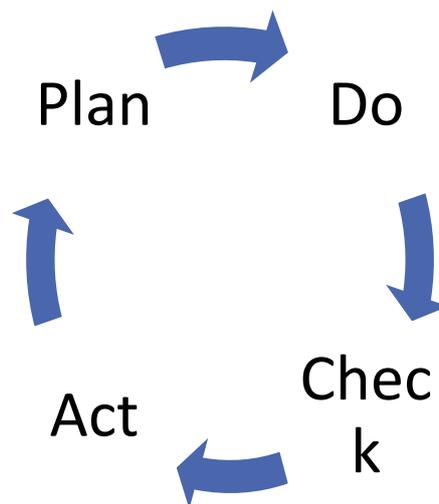
SComm will formulate a hybrid model combining both the ISO and MBQNA model as discussed above.

### 3.2 Methods of implementing the hybrid model for SComm

Plan-Do-Check-Act (PDCA), also known as the Deming cycle, is a cyclical method for continuous improvement. It was first developed by Walter Shewhart in the 1920s and popularized by W. Edwards Deming in the 1950s. The four steps of PDCA are:

- i. Plan: Identify a problem or opportunity for improvement
- ii. Do: Implement a change to address the problem or opportunity.
- iii. Check: Evaluate the results of the change.
- iv. Act: Make necessary changes to the change or implement a new change.

PDCA is a powerful tool that can be used to improve the quality, efficiency, and effectiveness of any organization (Figure 3). It is a simple, yet effective, process that can be used to continuously improve processes and products.



*Figure 3: PDCA cycle*

The explanation of the cycle and methods of implementation for SComm is as below-

**Plan:** The planning phase is the most important part of any project at Summit Communications. This is where management and associates work together to identify problems and determine their root causes. By understanding the root causes of problems, management can develop solutions that are effective and sustainable. One way that associates identify problems is by doing research or high-level tracking. This can help them to identify trends and patterns that may not be visible to management. Once a problem has been identified, associates work with management to develop a solution. Solutions may include changes to processes, procedures, or technology.

**Do:** The doing phase at Summit Communications is where employees implement the solutions that were developed in the planning phase. If a solution doesn't appear to work, employees go back to the drawing board to develop a new solution. In contrast to Six Sigma, the focus is less on measuring gains and more on whether the employees judge the solution to be working. During the doing phase, employees will:

- i. Implement solutions that were developed in the planning phase. This could involve changing processes, using new technology, or providing training.
- ii. Monitor the results of the solutions to see if they are working. If a solution is not working, employees will go back to the drawing board to develop a new solution.
- iii. Get feedback from customers and employees to see if the solutions are working. This feedback will be used to improve the solutions. By implementing solutions and getting feedback, employees can ensure that projects are successful.
- iv. The doing phase at Summit Communications is not as time-bound as Six Sigma. Six Sigma has strict timelines for completing projects, while the doing phase at Summit Communications is not as time-bound.

**Check:** This phase remains both in the before and after. In every implementation step, a parallel evaluation process is run.

**Act:** The acting phase at Summit Communications is where the results of the project are presented to everyone. This is an opportunity to let everyone know how the project was implemented, what the results were, and what the new way of doing things is. This is also an opportunity to get feedback from everyone on how the project went and how it can be improved in the future.

Here are some of the things that might happen during the acting phase:

- Present the results: The results of the project will be presented to everyone. This could be done in a meeting, a presentation, or a newsletter or monthly technology TM of SComm.
- Get feedback: Everyone will be given an opportunity to provide feedback on the project. This feedback will be used to improve the project in the future.
- Document the results: The results of the project will be documented. This documentation will be used to track progress and to share with others.
- The acting phase is essential for any project at Summit Communications. By presenting the results and getting feedback, everyone can learn from the project and make sure that future projects are even more successful.

## Chapter 4

# Improvement scopes of the SCM of SComm with the Application of TQM

### 4.1 Current trend of the telecom industry and challenges ahead for SComm

With the advent of Covid-19, since 2020 it has been a tumultuous time, the telecom industry is becoming increasingly competitive, as new players enter the market and existing players expand their offerings. This is putting pressure on telecom companies to keep prices low and offer innovative services. Disruptive technologies, such as 5G and artificial intelligence, are changing the way people communicate and consume media. Telecom companies need to invest in these technologies to stay ahead of the curve. Consumers are increasingly demanding more personalized and engaging experiences. Telecom companies need to find new ways to connect with consumers and deliver the experiences they want.

Here are some specific opportunities that SComm can capitalize on:

- 1. Significant support needed for network upgrades:** SComm has made significant investments in network optimization and upgrades during COVID-19, just like telecommunications infrastructure companies around the world. This effort involves a lot of coordination, planning, and work, as well as a variety of resources, such as wires, chips, and actual building materials for additional towers. Additionally, as more workers relocated to home offices as a result of COVID-19, network improvements in residential areas became more necessary, necessitating more time and money to upgrade networks. For SComm to receive a return on their investments, they require robust, effective supply networks.

- 2. Connecting geographically challenged areas:** With the current advancement in telecommunication infrastructure and rapid growth in internet usage, more and more requirements are being received by SComm on regular basis to spread connectivity in rural areas. This requires very strong and multidimensional planning, proper execution, and in-time response. This depends on the robustness of the supply chain. If the supply chain is properly responsive and accommodating, SComm will be able to expand its network beyond the limits with very strong footprint.
- 3. New Opportunities Arise with 5G:** As the largest telecommunication infrastructure company of Bangladesh, SComm has set foot towards the implementation of 5G. It is indeed a major challenge. In order to launch 5G & give the users proper experience of it, SComm will have to deploy state of the earth technology and maintain it with zero tolerance of fault or error. Perfect application of 5G will open new doors to the people of Bangladesh. People will be empowered and they will finally full-fill the dream of “Digital Bangladesh”.
- 4. The current status of the economy in Bangladesh poses a threat:** The economy of Bangladesh is currently passing a very crucial state at this moment. As the time of paying off the foreign debts taken under different mega projects and the aftermath of the financial crisis of covid-19 is still casting its shadow all over the world, Bangladesh is facing some serious challenges too. The government is trying its best to optimize the expenditure by cutting exports, less spending, and focusing only on the major needs. They are trying their best to save the foreign reserve. SComm is at its best-growing trend now. They have heavily invested and are looking forward to investing more than ever before. As challenges arise, SComm management needs to think twice before investing. The need for optimization is the highest now. This is a major challenge for SComm.

The communication landscape's potential future is impossible to predict with certainty. It might be expected that the environment is evolving and becoming more sophisticated every day. This implies that companies need the correct plan if they want to stay ahead of the curve and produce the results that their consumers and shareholders expect. Simply adopting the newest trends as soon as they appear is insufficient.

Business leaders must evaluate the communication strategy's present gaps and difficulties and explore for solutions. SComm needs a strategy for tracking the effectiveness of their products and making sure that they are ready to take advantage of opportunities presented by the new environment, such as 5G and AI.

#### **4.2 Steps to Implement a TQM System for SComm**

Customer happiness directly affects SComm's bottom line, according to analysis of the company's organizational structure. SComm must establish a setting that fosters a quality culture and necessitates a planned, methodical procedure. The steps for implementing a quality management system that will assist in completing the process are listed below. The following generic strategy model has been prepared for the implementation of TQM systems-

- 1. Clarifying SComm's mission, vision, and values:** As the development and advancement largely depend on the employee, SComm employees need to know how and what their objective is on the basis of organizational strategy which should be readied by top management. Employees should be aware of the direction the company is taking (its vision), the goals it is trying to achieve (its purpose), and the guiding principles (its values) that will guide its priorities and decision-making. As a first step, management must create a procedure for educating staff members during new hire orientation and communicating the goal, vision, and values. constructing the largest, most robust, and most reliable network in the most affordable price range is the

mission and vision of SComm. Employees should always keep this in mind. This will automatically create the values.

2. **Identification of Critical Success Factors (CSF):** Critical success factors help an organization focus on those things that help it meet objectives and move a little closer to achieving its mission. These performance-based measures provide a gauge for determining how well the organization is meeting objectives.

Some CSF for SComm is as follows-

- a) Maintaining proper up-time for fiber network
- b) Provide customers latency free transmission
- c) Proper communication with customers (Telco & ISP) for project delivery
- d) Ensuring robustness of service to satisfy various customer demands
- e) In-time response of the supply chain

3. **Develop Measures and Metrics to Track CSF Data:** There must be measurements put in place to track progress as the aforementioned important success elements are established. This can be accomplished by using a reporting procedure, which is intended to gather particular data and communicate information to senior officials.

For example, in rural areas such as in Chittagong Hill Tracts maintaining proper up-time and SLA (service level agreement) is a very hard task. If any fiber cut incident occurs, it takes significant amount of time for the team to reach the place. So, in order to maintain a proper SLA with the client, they must take proactive measures to prevent such fiber cuts.

4. **Identifying key customer groups:** Every organization has customers. Those that understand who the key customer groups are can create products and services based on customer requirements. The mistake a lot of organizations make is not acknowledging employees as a key customer group.

Examples of key customer groups

- i) Employees
- ii) Customers
- iii) Suppliers
- iv) Vendors

As SComm has to heavily rely on the above customer groups, managing them is also a crucial factor for implementing TQM.

5. **Develop an Improvement Plan:** Improvement plan should be based on consumer feedback from each category once the baseline has been determined. SMART goals should be used to write improvement plans, and particular staff members should be assigned to carry them out.

Some examples of goals include the following:

- i) Process improvement initiatives: such as- SLA time improvement, site and service delivery time improvement.
- ii) Leadership Development: Implementation of Walk-the-Talk. The managerial body needs to be more proactive and involved in setting the trend. The tasks seemingly impossible by employees can be initiated by the team leaders and set an example.
- iii) Management Training/Development: How to manage employees in a quality environment. This is also a crucial goal. In order to reach the TQM goals or to set the standards, management training is also needed.
- iv) Staff Training/Development: As per the CSF data and survey feedbacks, employee training is also needed
- v) Performance Management: Setting expectations, creating job descriptions that support the vision, and holding staff accountable. For example- if a team fails

to manage the customer expectations, or fails to reach the goal they should be hold accountable and their actions must be examined not missing any details. Aside to that, those team performing exceptionally, their methods should also be shared with other teams/ individuals.

#### **4.3 Establishing and implementing a Quality Management System (QMS) for SComm**

Organizations can operate more efficiently by establishing a quality management system. To ensure that customer satisfaction is consistently hitting the objective, SComm must identify and manage numerous interrelated, multi-functional activities before developing a quality management system. When creating a QMS for SComm, there are numerous factors to consider. Making sure the decision is strategic and impacted by the many aims, needs, and products and services offered is crucial. This framework, which is mostly based on the Plan-Do-Check-Act (PDCA) cycle, enables ongoing improvement of the QMS as well as the product.

The basic steps to implementing a quality management system are-

**Design and Build-** The design and build phases serve to create a QMS's framework, processes, and implementation strategies. This quota must be managed by senior management at SComm to guarantee that the organization's and its clients' needs are at the forefront of the development of the systems.

**Deploy Deployment-** By segmenting each process into smaller steps and educating workers about documentation, education, training resources, and KPIs, deployment is best serviced in a granular manner. Utilizing SComm intranets can help with the rollout of quality management systems.

**Control& Measure-** Control and measurement are two aspects of creating a QMS that are principally carried out through regular, systematic audits of the quality management system. SComm must decide considering the scale, potential risk, and environmental impact.

**Review and improvement-** It discusses in detail how audit results are handled. The objectives are to assess the efficiency and effectiveness of each process in relation to its goals, to share these conclusions with the staff, and to create new best practices and processes based on the information gathered during the audit.

Every element of SComm's performance will change if a quality management system is implemented. The creation and use of well-documented quality management systems has two main advantages, namely Meeting customer needs fosters employee confidence, which in turn attracts additional consumers, increases happiness among current ISP and Telco client bases, and increases recurring business. Within these overarching benefits are advantages like assisting in communicating readiness to produce consistent results, preventing mistakes, reducing costs, ensuring that processes are defined and controlled, and continuously enhancing SComm's offering.

## **Chapter 6**

### **Conclusion**

In this study, the positive impact of Total Quality Management (TQM) practices on the supply chain management (SCM) of Summit Communications Ltd. was examined. The results showed that the adoption of TQM practices has significantly improved communication and collaboration among departments, resulting in increased efficiency and productivity. This improvement has been attributed to the implementation of quality control measures, continuous improvement initiatives, and a focus on customer satisfaction.

Furthermore, TQM practices have led to improved product and service quality, resulting in higher customer satisfaction. This has been achieved through the adoption of quality control measures, continuous improvement initiatives, and a focus on customer feedback. As a result, Summit Communications Ltd. has been able to establish a strong reputation for quality products and services in the market.

Despite these positive outcomes, there is still room for improvement in areas such as employee training and development, technology investment, and continuous monitoring and evaluation of SCM processes. The study suggests that these areas should be given more attention to ensure that the benefits of TQM practices are fully realized.

By continuing to focus on the adoption of TQM practices, Summit Communications Ltd. can achieve even greater success in its SCM processes and overall business operations. This will require a commitment to continuous improvement and a willingness to invest in employee training, technology, and process evaluation. Overall, the study highlights the importance of TQM practices in improving SCM processes and achieving business success.

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