

# **Total Quality Management and Business Sustainability among Cleaning Companies in Finland**

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## **DEGREE THESIS**

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### **ABSTRACT**

The importance of TQM in cleaning companies in Finland is investigated in this study. The theoretical framework, TQM concepts, principles, and the relationship between TQM implementation and customer satisfaction among cleaning companies in Finland were all examined. It was discovered that employee and communication management increases service quality and boosts organisational performance. The study also discovered that in cleaning organisations, organisational performance has a favourable and significant relationship with customer satisfaction, as well as a positive correlation between employee, communication management, and customer satisfaction.

Meanwhile, according to the results of a correlation analysis based on the Pearson correlation coefficient, the only factor limiting the implementation of Total Quality Management in Finnish cleaning organisations was resistance to change, as there were no preliminary signs of multicollinearity based on the two variables of the correlation coefficient criteria ( $r$  0.70).

Moreso, the study adopted hierarchical multiple regression analysis to analyze the relationship between Total Quality Management and Business Sustainability, and the results revealed that the two entities have a substantial association.

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**Language:** English

**Key Words:** Total Quality Management, Employee and Communication Management, Customer Satisfaction, Organisation's Performance, Correlation Analysis, and Hierarchical Multiple Regression Analysis

## **CHAPTER ONE**

### **1.0 INTRODUCTION**

An increase in global competitiveness has led to significant changes in the way businesses operate in today's world. Looking inwardly at the global economy, competition is one of the most important factors when running a business. Almost every product or service discharged has more than one organisation trying to make a sale. Therefore, ensuring customers' satisfaction is an incomprehensible fact that should not be taken with levity. Customer satisfaction entails ensuring products or services meet the taste or expectations of customers. This means that the service being rendered conforms to the terms of the contract. It could also mean that those services meet the expected standard and are delivered according to schedule.

Because trading barriers are changing every day in the economic world, the issue of satisfying the customer has taken centre stage, and organisations must seek ways to offer their respective customers better services. Most organisations that cannot offer better services become extinct over time.

Total Quality Management (TQM) has been viewed as strong strategic action of business management, which is always directed toward the harmonisation, and gradual improvement of all functional aspects of a business organisation with the sole intention of meeting the customer needs (Oakland, 2014). Moreso, one of the most significant management tools that support the achievement of any business excellence is TQM (Satis and Srinivasan, 2010).

The service sector has continuously developed, influencing global business practices and transforming them in terms of competitive dimensions, customer expectations, and technological innovations. Customer satisfaction and loyalty are considered as some of the key indicators of the

economic development of a cleaning company, which contributes to the sustainability of the company (Dewan et al., 2014).

The cleaning business is one of the labour-intensive industries in Finland. It has always required many employees willing to work and possess professional skills to give good service. This is one of the most ranked industries valued at €3.1bn and ranked 10th in entire Europe in 2022 out of 24 of the total EU countries. It was also reported that the industry rank has kept rising since 2017 (IBISWorld, 2022). Meanwhile, out of the entire industries that IBIS World tracks identified, the cleaning business in Finland is the 32nd largest industry in Finland in 2022 as reported by (IBISWorld, (2022). This shows the significance of the cleaning business in the Finnish economy. Therefore, maintaining customer satisfaction in the cleaning business becomes imperative to enhance the sustainability of the industries and facilitate a more significant contribution to the Finnish economy. It is from the implementation of TQM that top management can fully inspire workers of his organisation to be more productive, show serious concern to their daily routine work and engage in self-training to achieve not only a sustainable business but moreso to improved customer satisfaction. There should be need to understand more about the different characteristics of services in order to have a productive implementation of TQM in a service organisation. The principles of TQM in different service organisations thus include top management engagement, innovation, continuous improvement, employee management and supplier management (Talib et al., 2013). Nevertheless, this study is limited only to communication management and employee management, which were considered strong factors that could have a positive impact on the business sustainability of cleaning companies in Finland.

The Total Quality Management (TQM) strategy is usually implemented to achieve this kind of objective. TQM re-focus a business's behaviour, planning towards a culture that values integrity,

openness, problem-solving, employee motivation, fear-free and stakeholder-oriented. Since one of the significant components of the organisation's practices is to have a record of continuous improvement, eliminate functional barriers, devolve the decision-making process, and eradicate sources of error through teamwork, fact-based decisions and honesty (Ghobadian and Gallear, 1996). TQM has been one of the strategic efforts that could help direct towards the conformity and continuous improvement of functional aspects of an organisation with the sole aims of meeting customers' expectations and improving productivity.

Lakhal et al., (2006) reported that TQM is an action plan that is aimed at producing or delivering commodities and services, which are in accordance with customers satisfactions or as a form of requirements for better, cheaper, faster, safer, easier processing than the counterpart competitors with the contributions of all employees under the strategic management leadership. TQM is a management method that incorporates a variety of values, methods and tools to meet the needs of multiple stakeholders, according to (Bergman and Klefsjö 2003).

Therefore, the aim is at assessing the implementation of the selected TQM principles into the internal operation to ensure better organisational performance which will deliver a good service that would conform to customers' needs.

## **1.1 Justification for the Project**

As trading barriers are changing every day in the economic world, the issue of satisfying customers has taken centre stage, and organisations must seek ways to offer their respective customers better services. Most organisations that cannot offer better services become extinct over time.

It is also understood that any organisation that selects a management model aiming for customer satisfaction will naturally adopt a Total Quality Management strategy (Kok and Van der Wiele, 2001; McKenna and Brown, 2001). The aim is to deliver services that will conform to customers' wants. The process mainly includes the characteristics of repeatedly carried out activities over time. These activities create values for the customers and should be seen as a way for continuous development in a dynamic context (Donabedian, 1980).

Total Quality Management strategies are gradually being implemented, especially in the service industries. However, investigations into critical factors that can impede the success of cleaning companies in service deliveries to customers still need to be considered. Meanwhile, the success of cleaning companies is predicated on certain factors, which have significant effects on the service deliveries of the companies. However, most companies' owners do not pay much attention to the factors. As meeting customers' satisfaction becomes a primary objective, ensuring better management of employees, commitment to qualities, limiting barriers in the channel of communications, and imbibing the culture of change became some hidden issues capable of depriving cleaning companies of the opportunity to meet customers' needs. Facilitating the functionality of cleaning companies through scientific examination of these problems become imperative, as these could measure the level of an organisation's performance and how far a company would go in realising its primary objective. Therefore, this study is essential as it

investigates and reported the impact of these factors as a determinant of an organisation's performance towards customer satisfaction.

## **1.2 Statement of Problem**

As reported in (IBISWorld, 2022), the cleaning business in Finland has been growing over the years. More demands in reducing omissions, reducing the communication barriers, and employee management are all needed to adhere to TQM principles to satisfy customers. If cleaning companies target international employees for business sustainability concerning customer satisfaction, it will be a great effect to work on the communication barrier. In this regard, TQM is essential in order to achieve the desired organisational performance, continuous training of staff is essential so as to increase the efficiency of customer satisfaction.

There have been numerous studies that examine the relationship between TQM and business sustainability. In spite of the positive relationship detected by some studies (Matsuo, 2006), others (Balkin et al., 2000) showed a negative relationship while others didn't show any significant relationship between the two (Greve, 2003).

From other relevant journals reviewed, Saidu and Zainab (2021) in their study, were able to analyse the cost of applying the adequate TQM principles for the efficient delivery of good maintenance of the cleaning services in public hospitals in Nigeria. They found out that the major procedures that are needed for the excellent maintenance of cleaning operations in public hospitals are: the practices for cleaning should be employed to reduce waste, the hospital management should get to know more about the needs of both patients and the staff should have effective maintenance in cleaning operation. Moreover, the coordination of information should be more effective from the top management to the lower part of the hospital staff. Their study focuses only on the cleaning activities taking public hospitals in Nigeria as a case study.

According to Kumar and Shanmuganathan (2019) examined the structural relationship between TQM and organisational performance using an auto component manufacturing company as their case study. In their study, implementation of TQM practices has a significant influence on employee performance and quality performance. However, the organisational commitment toward the adoption of TQM does not significantly influence employee performance and quality performance. Their study did not mention the intention of implementing TQM in value creation and customer satisfaction.

Zahari and Zakuan (2016) investigated TQM's positive effects on employee performance. Over 350 questionnaires were distributed to 10 different manufacturers. Seven factors were selected as independent variables top management participation, human resource development, management policies and strategy, customer focus, employee empowerment, information analysis and education and training. In contrast, employee performance stands as the dependent variable, measured through employee satisfaction. Their findings showed that TQM implementation has a positive and significant relationship among employee performance variables but did not examine the impact of implementing TQM concerning innovative management.

The TQM philosophy is more frequently utilised in the manufacturing sector than in any other sector (Magd et al., 2021), so little attention has been made to its implementation and, more importantly, its impacts on the sustainability of business operations, particularly in labour-intensive industries.

It is possible that the cleaning service providers are not complying with TQM practices; an oversight that might have an implication for their survival as a business venture. It is also agreed that customer satisfaction is an essential objective of any organisation interested in achieving

business sustainability, and this is why TQM's focus is customer satisfaction. The level of quality and organisation of a company is determined by the customers. These principles can be instrumental in improving the quality of service delivery here in Finland. Thus, this study aims to determine the relationship between the implementation of TQM practices and customer satisfaction among cleaning companies in Finland, focusing on cleaning companies' operations. The study determines if TQM significantly impacts performance and assures business sustainability among cleaning companies. To this end, the following research questions and the answers to them gave insight into the impact of TQM practices on customer satisfaction among cleaning companies.

This study determines the relationship between the implementation of TQM principles and customer satisfaction among cleaning companies; does it have a significant impact on the organisation's performance and assures business sustainability of the cleaning companies in Finland.

### **1.3 Research Questions**

- i. How does an organisation's performance affect customer satisfaction?
- ii. Do employee and communication management influence an organisation's performance towards customers' satisfaction?
- iii. Which of the factor(s) could serve as a problem limiting the implementation of Total Quality Management in an organisation?

#### **1.4 Research Objectives**

- i. To determine the relationship between an organisation's performance and customer satisfaction.
- ii. To investigate the role of employees and communication management on an organisation's performance and how these influence customers' satisfaction.
- iii. To identify the factor(s) that may most significantly contribute to the implementation of Total Quality Management in an organisation towards customer satisfaction.

#### **1.5 Scope of the Study**

This research work will implement the philosophy of Total Quality Management (TQM) as a Business Sustainability concept to investigate enhancing customers' satisfaction in cleaning companies. The aspects of employees and communication were considered, and the relationship of these to an organisation's performance in enhancing customers' satisfaction was studied. A quantitative research approach was used to obtain the needed data. Correlation analysis software was used; Statistic Package for Social Sciences Software (SPSS) to establish relationships between the dependent and independent variables and justify the study's objectives.

## **CHAPTER TWO**

### **2.0 LITERATURE REVIEW**

This chapter reviews the current knowledge of the study. The chapter examines TQM and its underlying principles that lead to good service delivery, the conceptual framework depicting the proposed relationship between TQM constructs and business sustainability, and a summary of various findings and gaps in the existing literature were discussed.

#### **2.1 The Concept of Total Quality Management**

TQM is a method of continual improvement in all aspects of work life. It is a method that involves long-term planning. TQM is the skill of overseeing the entire process in order to attain excellence. It's a notion that encompasses all of the norms, guidelines, set rules, and concepts that contribute to the organisation's continual improvement. Every academic believes that it is a process of constant progress for an individual, groups, and the organisation as a whole. (Ramlawati and Putra, 2018) claim that TQM procedures are focused on enhancing the efficiency of the process and meeting customer expectations as part of achieving excellence targets in customer satisfaction. TQM is a set of concepts and practices that characterize the foundation of a continuously evolving organisation. Quantitative methods and human resources are used to improve every work process within an organisation and satisfy customers now and in the future. TQM causes a radical shift in the culture and work habits of an organisation. As a result of TQM, (Mosadeghrad, 2014) asserted that high-quality products and services can increase customer satisfaction and organisational performance by involving all stakeholders, encouraging teamwork, focusing on the customer, and continuously improving services and processes.

Total Quality Management consists of three concepts: Total, which refers to the whole makeup. Quality is a degree of excellence in products or services provided, while management is a process that carryout all faces of planning, organising, directing, controlling, and implementing.

## **2.2 Historical Evolution of Four (4) Stages of TQM**

Demand for quality is as old as human existence though the sense of quality could be relative depending on place and time. The historical evolution of TQM can be traced back to the 1920s when Ford Motor Company FMC rolled off the production line when the projected quality of their product was below expectation (Dahlgaard et al., 2008). After the event, FMC employed inspection teams to examine or test the product against the project standard. Every stage of the manufacturing process, including delivery, was inspected. The goal of the inspection was to segregate low-quality goods discovered by the inspectors from approved output, which would subsequently be scrapped, reworked, or sold as low-quality goods (Dahlgaard et al., 2008).

The first level of TQM implementation is quality inspection, which comprises a variety of actions to determine the quality of raw materials and completed goods. The goal of quality inspection is to measure, test, and inspect materials and components in order for them to be translated into processes and eventually into a finished product.

The second level of TQM advancement came as quality control which can be seen as additional industrial advancement. During quality control, the product' quality is controlled and improved by supervised skills, written specifications, measurements and standardization. It is a process that is maintained and improved, and manufacturing errors are reduced or eliminate totally.

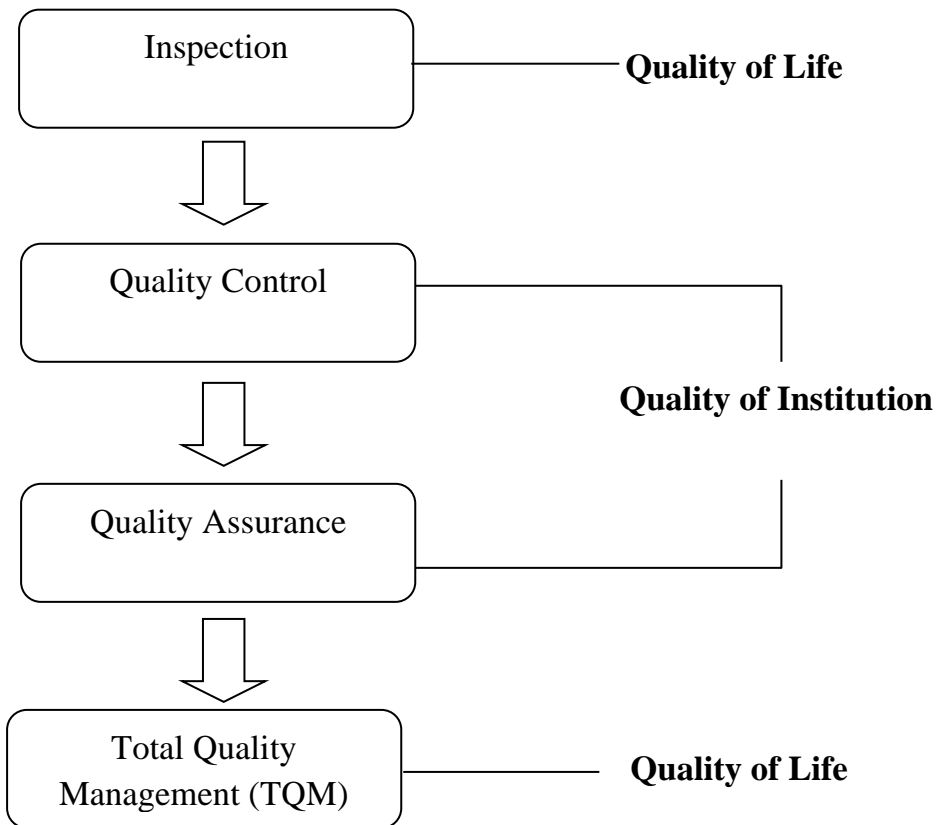
Part of the benefits of quality control is that it helps monitor the production process, reduces inspection costs, and provides a means of enhancing the capability of the manufacturing process in an industrial sector.

The third stage of this historical evolution of TQM is Quality Assurance. Quality Assurance is a stage that contains all the processes embedded in the previous steps to ascertain the aims and ideas behind each other stages. The idea is to provide a product or service that will satisfy the customers' needs.

Quality assurance is part of the management stage concerned with the planned and systematic steps needed to provide relevant confidence that a product, service, or output will satisfy given the requirements for quality deemed fit.

Total Quality Management (TQM) is the final step of TQM, and it entails understanding and implementing quality management principles and concepts in all aspects of corporate operations. It necessitates that every firm employs quality management principles at various levels, stages, and departments.

The above discussion is about the stages of TQM and how they begin; it just provides a brief historical overview of the various stages before its emergence. The study also discusses the concepts and goals based on each stage. According to Deming (1982), each organisation's problem lies within and outside the management process, and statistical methods can be adopted to trace the source of those problems. To assist the cleaning industry in improving the quality of their business output, this study examines the quality management system and how it can enhance business sustainability, which can lead to better customer satisfaction. Figure 2.1 explains the stages of TQM development.



**Figure 2.1:** Diagram Showing the Four Steps of TQM

### 2.3 The TQM Principles

TQM ideas are explained in a variety of research. Talib et al. (2011), for example, agreed that the finest TQM approaches are management commitment, employee engagement, teamwork, customer focus, resource management, organisational culture, continuous improvement, and training. TQM principles are divided into seven categories by Bon and Mustafa (2013): leadership, employee involvement and authorization, training, information, and analysis, customer focus, and progressive improvement. In this study, the selected TQM principles that have been adopted are employees' management and communication management because they were the most relevant principles in this study. Talib and Rahman (2015) and Moghaddam and Moballeghi (2008)

concluded that, besides the benefits of TQM, poor communication is one of the significant barriers that cause dissatisfaction among customers, and also basic difficulties for recording quality service delivery and organisation's performance among service industries.

### **2.3.1 Employees Management**

Employees management is another essential factor under the principles of TQM. Employee management is vital in achieving and sustaining high levels of business quality. It is enjoined that the management should make all the employees work to achieve common goals within an organisation. Employees must be encouraged and participated in the organisation's quality improvement efforts and development. Employee development and training are critical for reaching and maintaining high levels of quality. Employee participation in the entire TQM practice process is critical to the success of any TQM deployment.

In order to achieve quality improvement, employee management is important, according to Kathaara (2014), Fening et al. (2013), and Oduor (2015). Providing necessary training to the employees and ensuring that individual employees are counted in making quality decisions entails teamwork among the employees and the management. TQM, according to Mehta (2021), must be actively led and supported by senior management in order to be successful in an organisation.

Employees become active in TQM implementation after learning that senior management strongly supports it. Employee involvement, in particular, is critical to the success of any TQM program. Employees should feel involved in and accountable for client satisfaction. If they are not included in the development of top management's visions, strategies, and objectives, they will not feel engaged (Mehta, 2021).

Total Quality Management is primarily focused on improving an organisation's work and functional operations throughout time. The procedure necessitates long-term planning and is never-ending. TQM is a set of customer-centered activities that aim to improve quality and drive process improvement through time. TQM practices are guided by several theories at work. Herzberg's Two-Factor Theory, on the other hand, is an important theory for employee management.

The labour-intensive industries can be a key major player in the job satisfaction of their employees and help increase productivity by paying careful attention, putting in the energy, and spending time on it. If employees are happy with their duty, their performance output will be improved. Such employees will not like to leave such an organisation. In the end, there will be lower turnover results, which will reduce the recruiting costs, and this will have a significant impact on the organisation's performance (Rahman et al., 2018).

The Two-Factor Theory of Herzberg has become the most commonly used model for developing and recognising job satisfaction in an organisation. Frederick Herzberg was an American Psychologist. His theory is closely related to Maslow's Hierarchy of Needs and was expanded by Frederick Herzberg in 1959. He conducted the study in the Pittsburgh area, USA, where he provided a motivational content theory called the Two Factor Theory, which includes hygiene and motivational factors (DeCenzo and Robbins, 1988). He claims that job satisfaction and job dissatisfaction exist on two distinct levels, each with its own sets of factor theories. The theory contradicts the traditional view of job satisfaction, which holds that job satisfaction and dissatisfaction are mutually interdependent. Herzberg and his collaborators divide job satisfaction variables into two categories: hygienic and motivational. Motivation factors are a factor that increases job satisfaction, while the presence of hygiene factors is a factor that prevents job

dissatisfaction. Kotni and Karumuri (2018) and Rahman et al., (2018) agreed that the hygiene factors have more impact than motivational factors on job satisfaction. However, this study is not trying to re-examine the Dual-Factor Theory. Instead, it emphasises that employee motivation is an essential factor that can lead to job satisfaction, which can also affect customer satisfaction.

The organisation that wants to see smiles on their customers' faces should emphasise how the employees could be motivated. When employees feel valued at work, they are often happier and more productive. There is less probability that they will look for other employment elsewhere. Most cleaning companies today, while trying to maximise the amount and hours of tasks given to employees, ended up making the employees lose interest and focus on continuing working for an organisation. In the end, there will be turnover rates, which will make the customers have a taste of job dissatisfaction.

Utley et al., (1997) did research to see if there was a link between Herzberg's Two-Factor Theory and quality improvement implementation (Total Quality Management, reengineering, quality improvement, etc.). Their hypothesis was that companies that prioritize employee motivation are more likely to implement quality management successfully than companies that prioritize hygienic factors to increase job performance.

### **2.3.2 Communication Management**

Communication management is one of the first supportive dimensions that influence the success of a TQM. To implement successful TQM practices in an organisation, management executives must communicate effectively with their employees. According to Mehta (2021), communication plays a primary role in an organisation's service rendering among the employees and the employers to improve service quality. When cleaning companies target international employees for their business sustainability concerning customer satisfaction, executives must have to communicate effectively.

The need for communication between supervisors and employees should allow them to know how to accomplish the tasks given to them and, therefore, company goals (Cornelissen, 2014). Communication should not be limited to a specific language at the workplace if the employees do not understand the spoken language of the executive's manager. When employees become more diverse, effective communication becomes even more important (Supernak, 2021). Good communication management can improve a company's culture and sustainability, inspire employees, and improve service quality. Communication management is an essential aspect of business sustainability because what most business managers do is spend their time communicating and coordinating their efforts (Cho and Choi 2020). In communication, business organisations cannot be sustained without people, and relationships between the employees and customers in business organisations can only exist with effective communication.

One of the most important aspects of an organisation's operation is communication. The communication method will undoubtedly have a significant impact on the organisation's long-term

sustainability (Abdullah and Othman, 2019). A workplace can be maintained for business growth through communication and contact with management and other employees.

In Finland today, effective communication should be seen as an important element that can make an organisation productive and sustainable. Internal and external communication are two types of communication that should be considered in order to have efficient communication among cleaning company staff. Both are critical resources for an organisation's success. Internal communication, such as departmental cooperation, between departments, among employees, and between managers and employees are seen as one major communication type that can influence negatively or positively organisational performance. The basic commonalities between internal and external communication are that both influence the growth and sustainability of a business organisation. Another common feature is that both carefully required critical thinking and designing the message content that has to be transferred within and outside the business arena for both is the means of communication and both channels can be utilised for effective service delivery.

Effective communication serves as the best tool for achieving organisational goals and maintaining business sustainability. Communication aids workers in aligning themselves to work with prospective customers in order to reach the organisation's goal, which is customer satisfaction, which can be attained and increased. Nothing can be accomplished without excellent workplace communication. Effective communication among employees in the organisation is related to the mode of communication in developing and understanding strategies that foster quality communication, which will definitely affect any organisation's success.

Moreso, communication is one key element that has to be applied effectively throughout a business life cycle from the beginning until the saturation point is achieved. A modest employer

will tend to have a number of employees who need to know the progress of the company and any issues, which crop up during service delivery. Without a solid communication plan and strategy, it will be impossible to keep everyone up to date and informed.

With a clear understanding of the two selected TQM principles and their applicability to the cleaning service industry in Finland, this project has contributed to the TQM literature, providing valuable knowledge for business owners to adopt TQM practices and improve their service delivery performance. Part of the purpose of this study is to ascertain the impact of TQM application in cleaning companies in Finland. The focus is on the cleaning companies in Finland regarding (i) business sustainability, (ii) organisation performance, and (iii) customer satisfaction.

#### **2.4 Customer Satisfaction**

Customers choose cleaning firms from a variety of services based on the perceived value of the product. Customers are regarded as the company's lifeblood. A successful business enterprise must have a comprehensive grasp of its customers' needs and do all possible to accommodate those needs. Therefore, the focus of the quality management system is customer satisfaction.

Customer satisfaction is a marketing word that is commonly used. It is a measure of how well a company's products or services meet or exceed customer expectations. Both (Bartikowski and Llosa, 2007) defined customer satisfaction as the general customer evaluation of numerous product or service features. It is considered one of the most important markers of a company's success, competitiveness, and profitability (Fuchs and Weiermair, 2003; Chen, 2012).

In a nutshell, customer satisfaction reflects attitudes toward service providers, as well as dissatisfaction with the gap between what customers want and what they get. When clients' expectations are met, they will want to use the same service again and again, which is known as

loyalty. In the cleaning industry, strong service quality leads to customer satisfaction, which has a long-term impact on service product usage. Customer satisfaction and service quality have a positive relationship, meaning that when the cleaning sector service quality improves, customer satisfaction grows. TQM is a component that influences customer satisfaction and loyalty (Talib et al., 2013; Garrido, 2015; Rasheed and Tiruchirappalli, 2019).

Customer satisfaction is at the center of quality management implementation. The level to which a product meets the customer's expectations is determined by the customer. Customers judge whether a company's attempts to improve its quality are valuable or not. As a result, below are some of the advantages of exceeding customers' expectations:

- Customers are turned from first-time visitors to long-term customers.
- Increased sales help clients feel more at ease patronizing the company.
- Word-of-mouth referrals from delighted customers will produce more additional business production (WOM).

## **2.5 TQM and Customer Satisfaction**

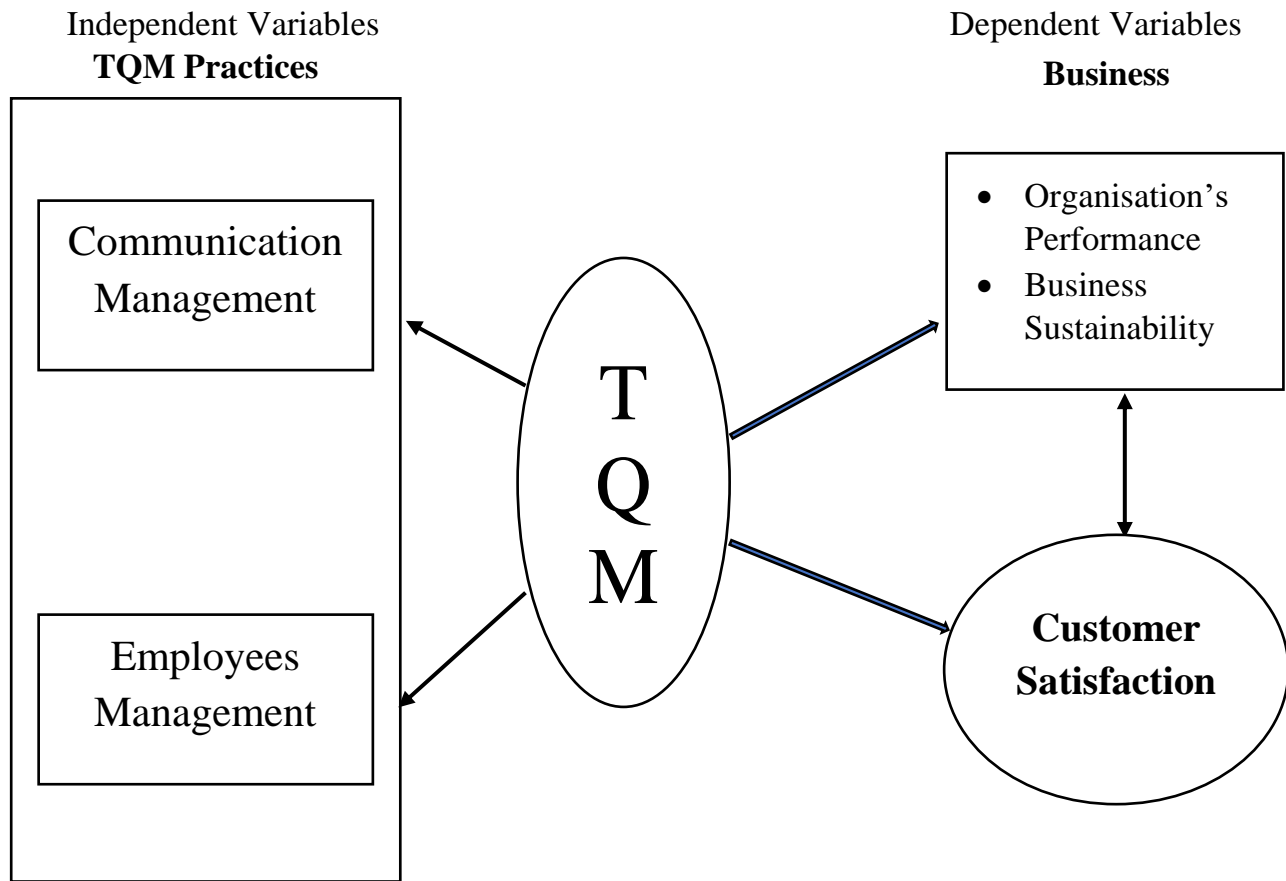
In the service industry, the aims of TQM are customer satisfaction through quality service delivery, organisation performance, and business sustainability (Nassar et al., 2015). Customers are the king of the market in every service industry, and the fundamental goal of businesses is to maximize profits through client happiness. Because Total Quality Management is focused on customer pleasure, one of the fundamental factors in the TQM principles is customer satisfaction. Customers, moreover, dictate the market in today's corporate climate, as well as the level of quality. According to (Ramlawati and Putra 2018), meeting customer satisfaction is one of the key focus of the TQM approach. Therefore, any organisation must focus more on the effectiveness and responsiveness in meeting the customer requirement in every decision-making process.

Whatever a company tries to accelerate quality improvement, the customer ultimately decides whether the efforts are worthwhile. As a result of this continuous development, the company is better able to meet customer expectations and reduce customer unhappiness.

Marketers frequently use the term "customer satisfaction." It is a result that demonstrates how an organisation's products and services meet or exceed customer expectations. Customer satisfaction is one of TQM's business sustainability goals, and it relates to the level of satisfaction supplied by an organisation's services as measured by various numbers of customers (Singh et al., 2018). Because contentment must be prioritized, smart business-owners must compare themselves to their competition. After all, its absence will reflect poorly on the organisation's performance (Topalovic, 2015).

Saravanan and Rao (2007), in their study, discovered a statistically significant link between TQM implementation, customer satisfaction, and long-term financial viability. Customer satisfaction has been proved to increase a company's profitability, market share, and return on investment (Stevens et al., 1995; Legoherel, 1998).

## 2.6 Conceptual Framework



**Figure 2.2: Conceptual Framework**

TQM Practices are seen to be favorably associated to an organisation's performance and business sustainability.

## 2.7 Review of Empirical Literature

In the past few years, the total quality management philosophy has been widely used, especially in manufacturing, to facilitate customer satisfaction through improved organisational performance. Meanwhile, little is known of its significance in the service industries (Magd et al., 2021). Hence, considering the disparity in services being rendered to the public by various sectors, it is difficult to compare the determinant of the success of one organisation to another in terms of meeting the

customers' needs. The TQM approach may not be generalised (Antony et al., 2002; Manville et al., 2012). To help determine the success of the service industry, it is critical to decide on the essential factors of the success of TQM within the service sector that can serve as a measure of performance towards results (Magd et al., 2021). Cleaning companies, being a subsidiary of the service industry, provide services related to facilities management. Meanwhile, the main objective of this industry is meeting the customers' needs to guarantee the sustainability of the business. However, studies to help identify issues necessary to impede the success or facilitate the performance of these industries are still very scarce. The majority of the previous study was carried out in other aspects of business sectors.

Anil and Satish (2019) investigated the link between TQM, firm performance, and customer satisfaction. Customer focus, supplier quality management, continuous improvement, staff empowerment, education and training, quality information analysis, quality assurance, and process and knowledge management were all mentioned as important factors. An empirical research of several manufacturing companies in India discovered a strong link between those TQM measures and customer satisfaction. The research used self-administered questionnaires based on TQM's ten components. The association between TQM factors and customer satisfaction was determined using a structural modeling technique.

Numerous studies have affirmed the positive relationship between total quality management and customer satisfaction in different contexts and settings, including health care industries (Nguyen and Nagase, 2019), manufacturing industries (Anil and Satish, 2019), and service industries (Ogbari and Borishade, 2015; Khan et al., 2020; Mahboob et al., 2015).

Through strategic imperatives of total quality management and customer satisfaction on organisational sustainability in the service industries, Ogbari and Borishade (2015) discovered that to achieve an organisational goal, especially in this current dispensation of globalisation and stiff competition, a company needs to incorporate certain business strategies and pay attention to policies that can influence the patronage of customers. Similarly, the contribution of total quality management to organisational performance was examined by Al-Qahtani, Alshehri, and Aziz (2015), using selected factors of TQM, which include quality control, quality assurance, and continuous improvement. They concluded that implementing TQM concepts in business could have two significant effects: either promoting the success of an organisation or contributing to its failure.

Furthermore, Mirza and Khushnood (2020) generated numerous hypotheses based on TQM implemented measures to assess the influence of TQM practice on the operational performance of the service sector (Hotel). A positive association between the TQM elements and the organisation's performance was established using regression analysis. Mahboob et al. (2015), on the other hand, did a Pareto study of important success elements of comprehensive quality management on service industry performance. According to the findings, an organisation's performance is an important determinant of customer happiness..

Kristianto Y. et al., (2012) employed TQM to improve customer satisfaction in a wheat flour milling sector in their study. According to their findings, customer satisfaction has consistently improved over the last three years as a result of the QFD strategy. TQM has been adopted by the majority of industrial companies, and its value has been recognized. To deal with all of the company's activities, the TQM strategy's effectiveness is critical. Their research combines data

from a variety of sources to provide quality assurance specialists with a single starting point and knowledge foundation.

Therefore, it is evident that a relationship exists between an organisation's performance and TQM, which could influence customer satisfaction.

## **2.8 How TQM Practices Improve Customer Satisfaction in Cleaning Companies**

In the global world today, every customer wants to maximise their satisfaction. The level of satisfied customers is the direct key to business success. TQM is one of the strong factors that directly correlate with the satisfaction of customers. Customer satisfaction is critical and requires a strategic decision that every business venture should be aware of to maximise and stay in the competitive business environment. In the investigation of the influence of TQM deployment on organisational performance, Singh et al., (2018) discovered that TQM improves both enterprises and customers. However, this is highly dependent on aspects of organisational leadership, resource management, and customer-related organisational performance. Sweis et al., (2019) also found that TQM deployment improves customer satisfaction and increases customer purchasing power. This means that the concerned organisation will earn more money, and every business is seeking ways to enhance sales and earnings

## **CHAPTER THREE**

### **3.0 METHODOLOGY**

This chapter explains the research design, its relevance, and feasibility study. This includes the area of study, the variables that are measured, the TQM concepts and the sustainability of the business concerning customer satisfaction, the population size and sampling techniques, and the data analysis technique used.

#### **3.1 Research Design**

Researchers can use quantitative, qualitative, or hybrid methodologies in their scientific investigations. Any data gathering tool (e.g. questionnaire) or procedure (e.g. graphs or statistics) that uses or produces numerical data is referred to as quantitative research methods (e.g. numbers). Qualitative methods, on the other hand, refer to non-numerical data collection techniques (such as interviews) or procedures (such as data categorization) (e.g. words). While some authors see these two tactics as separate and oppositional (Bryman, 2012; Creswell, 2003), others see them as complementing rather than antagonistic (Bryman & Bell, 2011), and a third group claims that distinguishing between them is pointless (Layder, 1993). Despite the academic debate about the relevance and significance of distinguishing between the aforementioned methodological viewpoints, the quantitative research method is appropriate for the study because it uses questionnaires to collect responses from samples.

#### **3.2 Location of the Study**

The research work was carried out in Vaasa city, which is in the Ostrobothnia region of Finland, populated by around 113 382 people. Worker proportions have been increasing by 61.3% within the (15 – 64) age group. Another interesting factor is that the Vaasa region is a city with 62 foreign nationalities and 59 different spoken languages by foreigners (Statistics Finland, 2022).

### **3.3 Measurement of Variables**

The research considered three variables: TQM practices, customer satisfaction, and business sustainability. The TQM practices are the independent variables, e.g. employee and communication management, while customer satisfaction and business sustainability are the dependent variables. The relationships between these variables were measured through a questionnaire administered to all cleaning workers in the service industry. Information derived through the self-administered questionnaire form the basis of the study.

### **3.4 Population, Sample Size and Sampling Techniques**

The population of the study is the employees of three major cleaning companies in Finland. This includes; RTK – Palvelu Oy, N – Clean Oy, and SOL – Palvelut Oy, and the selection criteria of participants include 1) below six months of working experience and 2) having direct involvement in cleaning projects. Simple random and stratified sampling techniques were used to select workers across the major three cleaning companies in Finland. Fifty (50) questionnaires were administered to the employees. These divisions include fifteen (15) questionnaires to employees in RTK – Palvelu, fifteen (15) questionnaires to employees in N – Clean Oy and twenty (20) questionnaires were administered to the SOL workers.

### **3.5 Method of Data Collection**

The method employed in data collection was in line with the research approach. Hence, the study explores an aspect of an organisation's performance toward customer satisfaction. Closed-ended questionnaires were used to collect data from respondents. There were four sections in the questionnaires (A: Demographic Information, B: The Impact of using TQM on Business Sustainability by Cleaning Companies in Finland C: TQM on customer satisfaction; Section D: Perception on Barriers to TQM.

### **3.6 Data Analysis Techniques**

Specifics or indicators of organisation performance identified for the study were based on a 5-point Likert scale to evaluate the level of importance of any of the factors based on the average score of relative questions taken concerning the management of the cleaning company. The factors were ranked based on their average score. Using SPSS (Statistic Package for Social Science), I conducted further correlation analysis to identify the precise relationship between the respondents and the success factors.

## **CHAPTER FOUR**

### **4.0 EMPIRICAL FINDINGS**

This chapter contains the empirical analysis necessary to meet the study's objectives. This chapter is divided into the sections below. The descriptive statistics of the data used are presented in Section 4.1. The correlation analysis is presented in Section 4.2. The regression result on the relationship between the organisation's performance and customer satisfaction is presented in Section 4.3. The results of the role of employee and communication management on organisational performance are presented in Section 4.3.1. The results of the factors that influence the adoption of Total Quality Management in an organisation's performance toward customer satisfaction are shown in Section 4.3.2.

#### **4.1 Descriptive Statistics**

The descriptive statistics of the sample is presented in Table 4.1. The descriptive statistics of the sample describe the main features of the sample and provide information about the sample. It also provides the first view of the sample. Table 4.1 indicates that the gender distribution of the sample is not equal. The male respondents are greater than the female counterpart. The male respondents constitute 65% of the respondents while the female respondents constitute 35%. This might suggest that we have more male employees in the cleaning organisation. Regarding the educational status of the respondents, 40% of the respondents studied vocational courses while 45% of the respondents possess bachelor's degrees. Table 4.1 also shows that few of the respondents possess postgraduate degrees as the respondents that have masters' degrees and PhD which constitute just 15% of the respondents. The possible reason might be that people that have higher certificates prefer more skillful employments rather than working in the cleaning companies. On the working experience of the respondents, 40% of the respondents have less than 6 months of working

experience while 32.5% of the respondents have between 1 and 2 years of working experience. Only 2.5% of the respondents have worked between 2 and 3 years, 5% of the respondents have worked between 3-4 years and 15% of the respondents have above 4 years of working experience. Table 4.1 also presents the job status of the respondents. For instance, 37.5% of the respondents are full-time workers while 60% of the respondents are part-time workers. One worker who constitutes 2.5% of the respondents failed to indicate job status. This statistic suggests that more than half of the respondents are part-time workers. This possible reason is that students are only allowed to work part-time (Migri, 2022). The information on the quality initiatives implemented in the company is also indicated in Table 4.1. As shown, 20% of the respondents confirmed that their cleaning company has adopted developing strategies for TQM while 7.5% of the respondents confirmed that employee management to improve quality strategy has been implemented in the cleaning company they belong to. 5% of the respondents indicated that a communication process improvement strategy has been implemented in their respective companies. In addition, 10% of the respondents confirmed that customer satisfaction initiatives have been initiated in their company. Concerning establishing measures of Quality progress strategy, only 5% of the respondents indicated that this strategy has been implemented in their company. It's also worth noting that 5% of the respondents failed to indicate any strategy. Finally, 32.5% of respondents claimed that their organisation has implemented Total Quality Management practices, while 55% indicated that their company has not. 10% of respondents are undecided about whether or not their company has implemented Total Quality Management.

**Table 4.1: Descriptive Characteristics**

<b>GENDER</b>		
	Frequency	Percentage
Male	26	65%
Female	14	35%
<b>EDUCATION STATUS</b>		
	Frequency	Percentage
Vocational course	16	40.0%
Bachelor degree	18	45.0%
Master's degree	3	7.5%
PhD	3	7.5%
<b>YEARS OF WORKING</b>		
	Frequency	Percentage
Below 6 months	18	45.0%
1 - 2 years	13	32.5%
2 - 3 years	1	2.5%
3 - 4 years	2	5.0%
above 4 years	6	15.0%
<b>JOB STATUS</b>		
	Frequency	Percentage
Full-Time worker	15	37.5%
Part-Time worker	24	60.0%
Invalid	1	2.5%
<b>QUALITY INITIATIVES IMPLEMENTED</b>		
	Frequency	Percentage
Developing Strategies for TQM	8	20.0%
Employee Management to Improve Quality	3	7.5%
Communication Process Improvement	2	5.0%
Customer Satisfaction Initiatives	4	10.0%
Establishing measures of Quality progress	2	5.0%
.00	2	5.0%

<b>Implemented Total Quality Management Practice</b>		
	Frequency	Percentage
Implemented	13	32.5%
Not Implemented	22	55.0%
Invalid	4	10.0%

**4.2 Correlation Analysis**

The correlations between the variables were investigated using correlation analysis. In this study, the Pearson correlation coefficient is utilised to measure and describe linear correlations. According to Pallant (2010), the most appropriate measure for examining the interval data at hand is Pearson correlation. The correlation coefficient (r) shows the degree and direction of the association between variables in a range of 0 to 1. However, because it is unlikely that all of the independent factors will have a positive relationship with the dependent variable, a two-tailed test was considered appropriate. Multiple regression analysis should have at least a moderate correlation ( $r > 0.30$ ) between the predictors and the response variable, according to Pallant (2010). However, a high relationship ( $r > 0.70$ ) between the independent variables may provide undesired multicollinearity in the final model. The correlation result is presented in Table 4.2.

The correlation results in Table 4.2 shows that some of the association between the variables are positive while some are negative. It also shows that some of the correlations are significant at  $p < 0.01$ , others are significant at  $p < 0.05$  while others are not significant. Specifically, communication and employee management are significantly correlated with customer satisfaction. However, competitiveness, efficiency and low turnover which are used to capture organisation performance are positively correlated with customer satisfaction but insignificant. Customer satisfaction and resistance to change have a negative relationship. There was no evidence of multicollinearity between the variables in the correlation using the correlation coefficient criteria ( $r < 0.70$ ).

**Table 4.2: Correlation Results (Pearson's r)**

	Customer Satisfaction	Communication Management	Employee Management	Competitiveness	Efficiency	Low turnover	Resistance
Customer Satisfaction	1						
Communication Management	0.331*	1					
Employee Management	0.343*	0.450**	1				
Competitiveness	0.180	0.467**	0.439**	1			
Efficiency	0.263	0.412**	0.549**	0.559**	1		
Low turnover	0.266	-0.090	0.156	-0.264	0.016	1	
Resistance	-0.374*	-0.447**	-0.037	-0.280	-0.101	0.207	1

Note: N=40, \*\*p< 0.01 and \*p< 0.05 (two-tailed)

### 4.3 Regression Results

To examine Total Quality Management and business sustainability among cleaning companies in Finland, this study employs hierarchical multiple regression analysis. A reason for choosing this dependence technique is that it describes and quantifies the strength of linear relationships between many independent variables (predictor variables) and one dependent variable (response variable) while also giving an assessment of the relative importance and predictive power of the independent variables (Hair et al., 2010).

#### 4.3.1 Relationship between Organisation Performance and Customer Satisfaction

The first research question of this study is to determine how an organisation's performance affects customer satisfaction. The organisation's performance is measured in terms of competitiveness, efficiency and turnover. This implies model 1 of this study has three independent variables. As a result of this, there is a need for assessing the assumptions behind multiple regression analysis. As a first step, the SPSS multicollinearity diagnostics were performed. No problematic correlations were observed among independent variables. As an example, both Tolerance and VIF values were within the critical limits (TOL > 0.10, VIF < 10). This suggests that all predictors are sufficiently

independent of each other. The results of the relationship between an organisation's performance and customer satisfaction are presented in Table 4.3. In Table 4.3, the value of the coefficient of determination ( $R^2$ ) is 0.514 while the value of adjusted  $R^2$  is 0.203. This implies that the value of  $R^2$  is greater than that of adjusted  $R^2$ . The significance of the F-test in the model (4.315;  $p < 0.05$ ) indicates that the measures of organisation performance have a very strong correlation with customer satisfaction.

Two of the three predictors significantly contribute to customer satisfaction. For instance, organisation performance in terms of competitiveness has a coefficient of 0.332 and is significant at  $p < 0.05$  while the coefficient of organisation's performance in terms of low turnover is 0.357 and significant at  $p < 0.05$ . However, the organisation's performance in terms of efficiency has a positive relationship with customer satisfaction but it is insignificant.

**Table 4.3: Relationship between Organisation Performance and Customer Satisfaction**

Variable	Std. Coefficient	t-Value	Significance
Competitiveness	0.332**	2.238	0.032
Efficiency	0.236	1.588	0.121
Low turnover	0.357**	2.487	0.018
F	4.315**		0.022
$R^2$	0.514		
$\Delta R^2$	0.264		
Adjusted $R^2$	0.203		

Note: \*\* $p < 0.05$

### **4.3.2 Role of Employees and Communication Management on the Customers' Satisfaction**

The second research question is to investigate the roles of Employees and Communication Management in Customer Satisfaction. The results of the roles of employees and communication management on customer satisfaction are presented in Table 4.4. The upper part of Table 4.4 presents the role of communication management on customer satisfaction while the lower part of the Table presents the role of employee management on customer satisfaction. Starting with the role of communication management, the value of  $R^2$  is 0.331 while the value of adjusted  $R^2$  is 0.086. The F-test is also statistically significant at  $p < 0.05$  and it suggests that communication management is highly correlated with customer satisfaction. The coefficient of communication management is significantly positive at  $P < 0.05$ . This implies that communication management enhances customer satisfaction. The free flow of information between the management and employees is vital to the customer's satisfaction as the employees can get information from the customers about the services of the organisation and relate the information to the management for better services.

On the results of the employee management on customer satisfaction, the value of  $R^2$  is 0.343 and the value of adjusted  $R^2$  is 0.094. The value of the  $R^2$  is greater than the adjusted  $R^2$ . The F-test (4.679) is also significant at  $p < 0.05$  which indicates that there is a strong relationship between employee management and customer satisfaction. The coefficient of employee management is 0.343 which is significant at  $p < 0.05$ . This suggests that employee management contributes to customer satisfaction.

**Table 4.4: The Role of Employee and Communication Management on Customer Satisfaction**

Variable	Std. Coefficient	t-Value	Significance
Communication Management	0.331**	2.163	0.037
F	4.679**		0.037
$R^2$	0.331		
$\Delta R^2$	0.110		
<i>Adjusted R</i> <sup>2</sup>	0.086		
Employee Management	0.343**	2.247	0.031
F	5.050**		0.031
$R^2$	0.343		
$\Delta R^2$	0.117		
<i>Adjusted R</i> <sup>2</sup>	0.094		

Note: \*\*p < 0.05

### 4.3.3 Factors Limiting the Adoption of Total Quality Management in Organisation

The third research question is to identify the barriers to the adoption of total quality management in cleaning organisations. The results of the factors limiting the adoption of total quality management in an organisation are presented in Table 4.5. The coefficient of determination ( $R^2$ ) is 0.457. The value of *Adjusted R*<sup>2</sup> is 0.115 is lower than  $R^2$  as expected. Like in earlier Tables, the F-test is statistically significant (2.238;  $p < 0.10$ ) and implies that independent variables are strongly related to the dependent variable. The coefficient (-0.451) of resistance to change is negative and statistically significant at  $p < 0.05$  which is an indication that resistance to change has a negative relationship with the adoption of total quality management in cleaning organisations. The coefficient (-0.161) of lack of understanding is negative but it is insignificant even at the lowest significance threshold of  $p < 0.10$ . Likewise, the coefficient of lack of top management commitment is positive but it is statistically insignificant. Lack of customer focus with the negative coefficient of -0.108 is not also statistically significant. These findings indicate that among the four factors, the resistance to change produces a significant relationship with the adoption of total quality management in the cleaning organisation. The other factors produce an

insignificant relationship with the adoption of total quality management in the cleaning organisation.

**Table 4.5: Factors Limiting the Adoption of Total Quality Management in Cleaning Organisation**

Variable	Std. Coefficient	t-Value	Significance
Resistance to Change	-0.451**	-2.325	0.026
Lack of understanding	-0.161	-0.907	0.371
Lack of top management commitment	0.341	1.352	0.185
Lack of customer focus	-0.108	-0.458	0.650
F	2.238*		0.085
$R^2$	0.457		
$\Delta R^2$	0.208		
<i>Adjusted R<sup>2</sup></i>	0.115		

Note: \*\*p< 0.05 and \*p< 0.10

## **CHAPTER FIVE**

### **5.0 DISCUSSION AND FINDINGS**

This chapter concentrates on the discussion and findings and their implications. Section 5.1 focuses on the empirical study's important findings. The study's implications are discussed in Section 5.2. Section 5.3 discusses the study's limitations, while Section 5.4 offers suggestions for future research and this study is concluded in Section 5.5.

#### **5.1 Key Findings**

The final result should always be linked to the research's starting point to close the loop and iteratively conclude the study. As a result, the primary findings of this study are compared to existing literature findings and research questions that were provided with the research problems.

##### **5.1.1 Organisation Performance and Customer Satisfaction**

In the cleaning industry, this study discovered that organisational performance has a positive and significant association with customer satisfaction. This is due to the company's competitiveness and minimal turnover, which improves customer satisfaction tremendously. This finding is in line with other research (e.g., Ambroz, 2008; van der Wiele, Paul, and Martijn, 2001; Zakari and Ibrahim, 2021), which revealed a link between organisational performance and customer satisfaction. Customer satisfaction is linked to market share growth, the ability to charge a higher price, and better customer loyalty, all of which lead to higher profitability and lower transaction costs. The attempt of the organisations to maximise their profits motivates them to satisfy their customers in every way. This finding suggests that staff and management of the organisation understand that being competitive as a service organisation necessitates being fully involved in

service delivery, having a clear vision of what service entails for customers, and being flexible in all service delivery situations.

### **5.1.2 Employees and Communication Management and Customers' Satisfaction**

Customer satisfaction and employee and communication management are favorably associated, according to this study. This finding is consistent with earlier research. Aburayya et al., (2020), Ammari et al., (2017), Obeidat et al., (2019), and Turkyilmaz et al., (2011), for example, found that employee management through communication led to increased organisational commitment, which was found to increase employee performance and loyalty. The positive connection between employees and communication management is possible because good communication improves employees which in turn improves customer satisfaction. Good communication and employee management promote employee loyalty and low staff turnover which will enhance the productivity and quality of services rendered to customers. In the dynamics of an organisation, communication and personnel management are critical. Communication within an organisation internally allows it to collaborate with different divisions with the same vision, work together in the same direction, and be more productive overall. Free flow of communication between the management and employee enables the employee to get information about the organisation's service from the customers. When the employee makes the information available to the management, it will enable both the management and employee to work together to improve the quality of service of the organisation. Communications management bridges the gap between the management and the employee and well between the organisation and the customer. The elimination of gaps can easily allow the organisation to know the needs and expectations of the customers and areas needing improvement which the organisation can easily target to satisfy the customers better. Good

employee management can propel a positive change in employee attitudes, which will lead to positive changes in customer satisfaction according to Kurdi, Alshurideh and Alnaser (2020).

### **5.1.3 Barriers to Total Quality Management Implementation in Cleaning Organisation**

This study looks into some of the obstacles that can prevent cleaning companies from implementing Total Quality Management. The only factor that significantly limited the implementation of Total Quality Management in cleaning organisations was resistance to change, according to this study. This finding is in line with Mosadegh Rad (2006), who discovered that a barrier to overall quality management is the organisation's inflexibility in the face of environmental and technological change. It is also in line with the findings of Soltani et al., (2003) and Wysocki (1990), as quoted in Dainty et al. (2002), who concluded that lack of management commitment is a barrier to the implementation of Total Quality Management.

Several other variables have been mentioned in the literature as barriers to Total Quality Management implementation. Somerville (2006), for example, cited a lack of coordination among employees as a hurdle to implementing Total Quality Management. A lack of knowledge and comprehension of quality management principles was recognized as a barrier to Total Quality Management by Temponi et al., (2006).

## **5.2 Implication of Findings**

The customer is the justification for any organisation's existence and profitability; therefore, the organisation must ensure that the satisfaction of the customers must be a priority. As a result, the positive relationship between organisational performance and customer satisfaction discovered in this study shows that customers must be often included in the service delivery process. When adopting any plan to achieve customers' pleasure, the firm must have a customer-oriented management approach and recognize customers as their first priority.

Employee and communication management improves service quality since it guarantees that all employees understand the company's operations. As a result of the positive connection found between employee and communication management and customer satisfaction, the organisational goal must be conveyed and understood by employees. The management should, therefore, meet with all employees to discuss and clarify the organisation's objectives. To facilitate this communication, it is better to use face-to-face meetings and adoption of English language than other forms of communication and discussion and criticism should be encouraged among the employees. This is crucial because, without well-functioning feedback systems, employees will not obtain the information they need to make appropriate changes to their performances and please customers.

Since this study found that employee resistance to change is a barrier to the implementation of Total Quality Management in the cleaning industry, this study recommends that employees must receive sufficient training to overcome their reluctance to change. Basic training should be offered to teach quality ideas as well as training in quality tools, procedures, teamwork, and problem-solving should be supplied. Also, individual training should be provided to guarantee that each employee develops the necessary technical skills. As a result, management must provide sufficient training for staff for them to make informed decisions. This could involve instruction on how to use analytical tools like fundamental quality control tools and the management and planning tools.

### **5.3 Limitations of the Study**

Part of the challenges faced in the process of carrying out this study is the unwillingness of the respondents to provide important information which was classified as confidential. However, this challenge was properly managed by the researcher by assuring the responders that the information offered would be treated with the utmost confidentiality and used for academic purposes only. The second limitation of this study is based on time and financial resources which is not limited to this study alone. Also, the distribution of questionnaires was difficult and an identical method could not be used for all companies. Fifty (50) questionnaires were administered but only Forty (40) cleaning workers responded to the questions. The questionnaire was refused by some departments, while others accepted it, then volunteered to distribute it to the targeted employees; and other departments allowed the researcher to distribute them personally. Due to time constrain, this study could not consider a large sample size. Larger sample sizes have the advantage of being able to generalize the findings since the population is better represented.

### **5.4 Suggestions for Future Research**

The application of TQM and business sustainability in cleaning companies in Finland has been presented in this study. It is believed that the results of the study will enhance organisational performance towards attaining the customers' satisfaction. However, more research is needed to focus on other TQM principles such as customer focus, continuous improvement, and process management. This will boost product design and process improvement capabilities, which will help the business as well. Furthermore, more studies should be done to validate the current research model in a different business context, such as manufacturing firms in Finland.

## **5.5 Conclusion**

This research study emphasizes the benefits of adopting a comprehensive TQM practice. The study covered the theoretical framework, concepts of TQM, its principles, and the relationship between the implementation of TQM and customer satisfaction among cleaning companies in Finland. It is affirmed that employee and communication management improves service quality, which also has a positive impact on the organisations' performance, and assures business sustainability among cleaning companies in Finland.

This study found that organisation performance has a positive and significant relationship with customer satisfaction in the cleaning organisation. In addition, the employee and communication management and customer satisfaction are positively related. The research work investigates some factors that can limit the adoption of Total Quality Management in cleaning organisations. Out of the four factors considered, this study found resistance to change as the only factor that significantly limited the implementation of Total Quality Management in cleaning organisations. It can also be concluded that any cleaning company that wants to adopt TQM effectively must have patience, given that it takes some time for TQM to be implemented in order to have any positive results. This study will help the cleaning business owners to have a better knowledge of TQM and service quality concept, and their adoption in their respective organisations by considering the employees and communication management as the most important factors in service organisations.

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**APPENDIX I**  
**RESEARCH QUESTIONNAIRES**  
**QUESTIONNAIRES USED FOR CLEANING WORKERS**

**SURVEY ON TOTAL QUALITY MANAGEMENT AND BUSINESS  
SUSTAINABILITY AMONG CLEANING COMPANIES IN FINLAND**

**INTRODUCTION**

I am a postgraduate student at Novia University of Applied Sciences, Vaasa. I am working on my thesis programme. The research topic is Total Quality Management and Business Sustainability among Cleaning Companies in Finland. The aspects of employee and communication management will be taken into consideration and the relation of these, to an organisation's performance in enhancing customer satisfaction will be considered.

This survey is a part of research study that will implement the philosophy of Total Quality Management (TQM) as a Business Sustainability concept to investigate ways of enhancing customers' satisfaction among cleaning companies in Finland. The main objective of this survey is to investigate the impact of selected factors as a determinant of an organisation's performance towards customer satisfaction. The information will be used for research purposes only and no attempt will be made to identify any individual or organisation in any of our publications.

**INSTRUCTIONS**

This questionnaire consists of four main sections. Please read the questions carefully before answering them.

**SECTION 1: GENERAL INFORMATION**

**In this section, we would like to know about your organisation in general. Please tick (✓) in the appropriate boxes or fill in the blanks.**

1. Indicate your gender      Male (   )                  Female (   )
2. Please indicate the highest level of education attained  
Vocational course (   ) Bachelor's degree (   ) Master's degree (   ) PhD (   )

3. How long have you being working as a cleaner?  
Below 6 months ( ) 1 – 2 years ( ) 2 – 3 years ( ) 3 – 4 years above 4 years ( )

4. Please select the applicable job status level  
Full time worker ( ) Part-time worker ( )

5. Which of the following quality initiatives has your company implemented?  
(Tick as many as apply).  
Developing strategies for total quality ( ) Employee management to improve quality ( )  
Development of a quality system ( ) Communication processes improvement ( )  
Customer satisfaction initiatives ( ) Establishing measures of quality progress ( )

### SECTION 2: IMPACT OF TQM PRACTICES

**Total Quality management is defined as a continuous effort by the management as well as employees of a particular organisation to ensure long term customer loyalty and customer satisfaction.**

How has your firm implemented total quality management practice? (Mark √)

.....  
.....  
.....

**The section below deals with your opinion of Total Quality Management. The following statements are presented for your evaluation.** Using a scale of 1-5, where 5= strongly agree; 4=Agree; 3=Neutral; 2= Disagree; 1=strongly Disagree; Please indicate the extent to which you agree with the following statements? (Mark √)

STATEMENTS	1	2	3	4	5
<b>COMMUNICATION MANAGEMENT</b>					
There are well developed communication systems in your organization					
Sharing of information on quality improvement areas is seamless between departments in your organisation					
There is free flow of quality management information from management to employees in your organisation					
Employees within your organisation easily share information on areas of improvement on quality service delivery among themselves					
There is a well-developed feedback mechanism in your organisation					
Constant feedback through open communication is supported during every phase of executing an improvement within your organisation					

STATEMENTS	1	2	3	4	5
<b>EMPLOYEES MANAGEMENT</b>					
As part of implementation of quality management in the company, employees' quality of life is effectively managed by the company's top management					
The company spends a large amount of its annual budget on employee training and development on total quality management systems					
Your organisation quality management systems program promotes the freedom of employees to use their initiative in matters of customer delivery					
The company management has promoted the establishment of an environment that encourages employee efforts toward attainment of organisational objectives					
Employees at all levels have the responsibility and authority to make decisions that affect them and their work teams					
Employee's ideas are valuable; your organisation relies greatly on employees to identify opportunities for improvement					

**SECTION 3: TQM ON CUSTOMER SATISFACTION AND BUSINESS  
SUSTAINABILITY**

**This section deals with your opinion of the impact of the implementation of TQM practices on Customer Satisfaction and Business Sustainability. The following statements are presented for your evaluation.** Using a scale of 1-5, where 5= strongly agree; 4=Agree; 3=Neutral; 2= Disagree; 1=strongly Disagree; Please indicate the extent to which you agree with the following statements? (Mark √)

STATEMENTS	1	2	3	4	5
Implementation of quality management systems has increased company's profitability					
Quality management systems have enhanced company growth which have contributed to company performance					
Effective implementation of quality management systems has increased company competitiveness and resulted in acquisition of bigger market share					
Quality management systems have enhanced service delivery in the Company					
Implementation of quality management systems has ensured effective waste reduction in operations					
Quality management systems improve operation efficiency thus reducing operation costs					
Implementation of quality management systems focuses on increased retention as a result of customer satisfaction					
Our company has developed a culture that emphasises quality.					
Employee satisfaction has increased.					
Employee turnover has decreased.					
Do you consider your TQM program successful?					

#### SECTION 4: PERCEPTION ON BARRIERS TO TQM

This section requires you to help us identify the barriers or difficulties faced in trying to adopt TQM in your organisation. Using a scale of 1-5, where 5= strongly agree; 4=Agree; 3=Neutral; 2= Disagree; 1=strongly Disagree; Please indicate the extent to which you agree with the following statements?

STATEMENTS	1	2	3	4	5
Lack of understanding					
Lack of preparation (No budget, no sponsor)					
Resistance to change					
Lack of vision					
Lack of top management commitment					
Lack of customer focus					
Lack of resources					
Lack of systems and structures for TQM activities					
Staff availability for training					
Costly consultancy & training programs					
Lack of rewards and recognition					
Lack of effective measurement, procedures and benchmark indices					

**Source:** Author's Design