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COLLEGE OF BUSINESS AND ECONOMICS
SCHOOL OF MANAGEMENT
DEPARTMENT OF MANAGEMENT



**EFFECT OF TOTAL QUALITY MANAGEMENT PRACTICE ON PERFORMANCE OF
BREWERY FACTORY (The CASE OF DASHEN BREWERY Share Company)**

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**A THESIS SUBMITTED TO THE SCHOOL OF MANAGEMENT DEPARTMENT OF
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MEKELLE, ETHIOPIA**

DECLARATION

I, **Nigusse Kelemu**, declare that this thesis is the result of my own work and all sources or materials used for this thesis have been appropriately acknowledged. This thesis is submitted in partial fulfillment of the requirements for Master of Business Administration. I confidently declare that this thesis has not been submitted to any other institutions anywhere for the award of any academic degree, diploma, or certificate.

Place: Mekelle University.

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Date of Submission: October, 2024

Signature -----

CERTIFICATION

This is to certify that this thesis entitled “**Effect of Total Quality Management Implementation on Performance of Brewery factory; Case study of dashen brewery S.C**” submitted in partial fulfillment of the requirements for the award of Masters of Business Administration to the College of Business and Economics, Mekelle University, through the Department of Management done by Mr. Nigusse Kelemu, ID No. CBEMBA39/11 is an authentic work carried out by him under my guidance. The matter embodied in this project work has not been submitted earlier for award of any degree or diploma to the best of my knowledge and belief.

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Acronyms

TQM = Total Quality Management

TQMS = Total Quality Management System

TQMP = Total Quality Management Practices

OP = Organizational Performance

CSA = Central Statistical Agency

EQA = Ethiopian Quality Awards

CF = Customer Focus

CI = Continuous Improvement

EI = Employee Involvement

TMS = Top Management Support

RM = Resource Management

PR = Product Realization

CRM = Critical Review of Major Issues

PF = Process Focus

Abstract

This research investigates the impact of Total Quality Management (TQM) implementation on the performance of Dashen Brewery Share Company in Ethiopia, focusing on data collected from 2015 to 2023. This is due to the reason that companies frequently assume QMS practices and ISO certification can improve organization performances. Employing a mixed-methods approach, the study integrates quantitative performance metrics with qualitative insights from management and employee interviews. Financial statements & performance reports are used as secondary data and Questioners & interview are used as primary data. Purposive sampling used to select the interviewees and respondents for the questionnaire. The collected data was analyzed using both descriptive and inferential statistics as well as tested for its significance using SPSS version 20 software. Findings reveal that key TQM practices—such as top management commitment aspect, customer focus, continuous improvement and innovation, employee involvement practices, reward and recognition, effective communication and information systems and Benchmarking—significantly influence performance metrics ($p < 0.05$), including product quality, operational efficiency, and employee engagement. Despite these positive outcomes, challenges persist, such as insufficient employee involvement, lack of comprehensive training, and limited resources, which hinder the effective implementation of TQM. The research contributes to the body of knowledge by providing empirical evidence of TQM's significance within the Ethiopian brewing sector, offering practical recommendations for organizations seeking to enhance performance through effective quality management strategies.

Keywords: *Total Quality Management (TQM), Organizational Performance, Performance Metrics, Employee Engagement, Continuous Improvement and Quality Practices.*

CHAPTER-ONE

1. Introduction

This chapter provides an overview of the study's background, problem statement, objectives, research questions, scope, methods, significance, and thesis outline. It sets the stage for understanding the role of TQM in enhancing organizational performance, particularly in the Ethiopian brewing industry.

1.1 Background of the Study

In today's competitive marketplace, organizations face significant challenges in meeting customer demands while ensuring efficiency in operations. As highlighted by Patyal and Koilakuntla (2017), customers have become increasingly powerful, compelling organizations to respond quickly with high-quality products at minimal costs. To achieve increased market share and maintain a competitive edge, companies must supply a diverse range of products promptly. This dynamic landscape necessitates continuous enhancements in organizational performance through the implementation of effective Quality Management (QM) practices (Patyal&Koilakuntla, 2015b). Over the past few decades, companies worldwide have struggled to navigate the complexities of an everchanging business environment, requiring management to adopt more intelligent and innovative strategies to sustain or gain competitive advantages (Nkemkiafu, 2015). Many manufacturing organizations have embraced various improvement philosophies, including Quality Management Systems (QMS), Lean Production, Just-InTime (JIT) strategies, and Business Process Reengineering (BPR), to enhance their operational effectiveness. These philosophies aim to optimize organizational performance both internally and in the external market, reinforcing their importance in today's industrial context (Heizer & Render, 2004). Among these practices, Total Quality Management (TQM) stands out as a powerful approach that has garnered considerable attention over the last two decades (Jung & Wang, 2006). As competition intensifies, manufacturing companies increasingly strive to enhance product quality and reduce operational costs. Many organizations are prepared to implement drastic changes in response to market demands to stay ahead of competitors; however, there is a persistent need for ongoing maintenance and improvement of quality management practices. Research indicates that while many companies implement quality systems, continuous process improvement remains a challenge (Zu, Fredendall, & Robbins,

2006). This highlights the need for organizations to prioritize quality practices associated with their QMS to achieve sustained success. TQM is distinct from other quality concepts such as quality control or quality assurance, as it encompasses the entire organization rather than focusing on isolated aspects of production (Evans & Dean, 2003). Originally developed by Edwards W. Deming post-World War II to enhance production quality, TQM was later adopted by Japanese manufacturers in the 1950s, leading to remarkable improvements in their industries and establishing a significant global presence by the 1980s (Evans & Dean, 2003). In response, Western manufacturers recognized the need to move away from outdated assembly line models and initiated their quality improvement initiatives, marking the emergence of TQM as a continuous quality improvement strategy during the 1980s and 1990s. Maximizing organizational performance is paramount, as it directly correlates with market-oriented and financial goals (Kuvaas, 2006). Employee performance is influenced by various factors, including managerial standards, quality management practices, skills, and commitment. However, this study emphasizes TQM as a vital component in enhancing overall organizational performance. Previous research has shown that organizational performance can be measured through financial and market criteria, such as return on investment (ROI), market share, and profit margins (Li, Ragu-Nathan, & Rao, 2006; Stock, Greis, & Kasanda, 2000). The recognition that enduring improvement requires a focus on daily management practices, staff competency, and client-provider relationships underscores the all-encompassing nature of TQM (Nwabueze, 2001; Demirbag et al., 2006). Effective management practices, including how organizations engage with customers, formulate strategies, measure performance, analyze data, and train employees, are crucial enablers of quality and business success (Schonberger & Knod, 1997). This study aims to evaluate the effect of Total Quality Management on organizational performance, specifically focusing on Dashen Brewery PLC. Established in 1988 E.C. in Gondar, Ethiopia, and with a second plant opened in Debrebirhan in 2003 in partnership with Vasari Global from England, Dashen Brewery S.C. has emerged as a leading alcoholic beverage producer in the country. The company has achieved ISO 9001 and ISO 14001 certifications, demonstrating its commitment to quality and environmentally friendly practices. Additionally, it is recognized by the Ethiopian Quality Awards (EQA) for its implementation of TQM practices. Dashen Brewery produces a variety of products, including Dashen beer, Jano beer, Balageru

beer, Dashen draught, Balageru draught, and Lucy Malt, with the goal of maximizing market share, sales volume, and profitability to remain competitive in the market.

1.2 Gap Analysis

Total Quality Management (TQM) has emerged as a pivotal approach for organizations striving to enhance their competitive edge by improving product quality and operational efficiency. Despite its recognized significance, a notable gap exists in the application and impact of TQM, particularly within the Ethiopian manufacturing sector.

This gap warrants a thorough examination to inform the implementation of TQM practices at Dashen Brewery PLC, a leading player in the Ethiopian brewing industry. First and foremost, existing literature predominantly emphasizes the implementation of TQM in Western and Asian contexts, which may not accurately reflect the complexities faced by Ethiopian organizations. Studies such as those by Zu, Fredendall, and Robbins (2006)

Much of the available literature focuses on qualitative aspects or case studies from other regions, failing to provide a robust analysis of TQM's direct impact on performance metrics specific to the Ethiopian context. Li, Ragu-Nathan, and Rao (2006) identify various performance indicators such as return on investment (ROI) and market share; however, similar assessments of these metrics in relation to TQM implementation in Dashen Brewery remain unexplored.

Additionally, many organizations, including Dashen Brewery, may adopt TQM frameworks without a thorough understanding of the practical challenges involved in their execution. Nwabueze (2001) emphasizes that sustainable improvement in quality management is contingent on the quality of management practices employed daily.

However, studies exploring how Ethiopian breweries navigate these challenges during TQM implementation are limited, leading to gaps in understanding the full scope of TQM's impact. Furthermore, there is a deficiency in research that connects the implementation of TQM practices with specific operational outcomes within the Ethiopian brewing industry as those by Stock, Greis, and Kasanda (2000)

Lastly, the need for continuous improvement in quality management practices post-TQM implementation is a recurring theme in the literature. While studies indicate that many organizations fail to sustain improvements after initial TQM adoption (Zu et al., 2006)

1.2. Statement of the Problem

Problem Statement The competitive landscape of the Ethiopian brewing industry has intensified, compelling companies like Dashen Brewery PLC to seek innovative approaches to enhance operational performance and maintain market share. Despite the recognized benefits of Total Quality Management (TQM) in improving product quality and customer satisfaction, Dashen Brewery is not giving attention for effectively implementing TQM practices. A crucial issue lies in the inadequate understanding and application of TQM principles among employees, which undermines the overall effectiveness of quality management initiatives. The workforce's limited knowledge regarding TQM methodologies leads to inconsistent quality practices, thereby impacting operational performance negatively (Annual Company Report, 2021). In addition to these implementation challenges, there is a critical need to empirically evaluate the impact of TQM on organizational performance metrics such as profitability, market share, and customer satisfaction. While existing literature indicates that TQM can yield positive outcomes, a distinct lack of empirical evidence in the Ethiopian context leaves a gap in understanding its effectiveness at Dashen Brewery. This is further complicated by the tendency of organizations to overlook the continuous improvement aspect of TQM postimplementation, as highlighted by Zu et al. (2006). Failure to develop sustainable strategies for continuous improvement may result in stagnation or regression in quality performance. Therefore, this study aims to address the central problem: How can Dashen Brewery effectively implement TQM practices to enhance its performance amidst these identified barriers? By investigating this question, the research seeks to provide actionable insights that can contribute to both the brewery's operational success and the broader understanding of TQM application in the Ethiopian manufacturing sector

1.4 General Objective

The general objective of this study is to comprehensively assess the influence of Total Quality Management (TQM) implementation on the operational performance of Dashen Brewery Share Company. By investigating the relationship between TQM practices and key performance metrics, the research aims to highlight how these management strategies enhance product quality, customer satisfaction, and overall competitiveness in the brewing industry.

Specific Objectives

- 1. Evaluate TQM Practices:** Analyze the specific TQM practices implemented at Dashen Brewery and assess their alignment with best industry standards to determine effectiveness.
- 2. Enhance Product Quality:** Investigate the impact of TQM on product quality metrics and identify opportunities for ongoing improvements in manufacturing processes.
- 3. Measure Customer Satisfaction:** Assess how TQM initiatives affect customer satisfaction levels and loyalty, utilizing customer feedback and retention data.
- 4. Improve Operational Efficiency:** Examine the effects of TQM on operational efficiency by analyzing productivity levels and waste management practices.
- 5. Analyze Financial Impact:** Explore the relationship between TQM implementation and financial performance indicators, such as return on investment (ROI) and profit margins, to understand economic benefits.
- 6. Recommend Strategic Improvements:** Provide targeted recommendations for optimizing TQM practices at Dashen Brewery, with the aim of bolstering organizational performance and sustaining competitive advantages.

1.5 Research Questions

This research aims to address the following questions to explore the impact of Total Quality Management (TQM) on Dashen Brewery's performance:

- 1. How does TQM influence product quality at Dashen Brewery?** This question seeks to understand the specific ways in which TQM practices enhance the quality of the brewery's products, including process improvements and quality assurance measures.
- 2. What is the effect of TQM on employee engagement and operational efficiency?** This inquiry examines the relationship between TQM implementation and employee motivation, along with its contribution to streamlining operational processes, ultimately leading to improved productivity.
- 3. How does TQM affect customer satisfaction in the brewery industry?** This question focuses on assessing the extent to which TQM initiatives contribute to customer satisfaction and loyalty, analyzing customer feedback and performance metrics.
- 4. What challenges does Dashen Brewery face in implementing TQM?** This inquiry identifies potential barriers and difficulties encountered in the adoption of TQM principles, exploring internal and external factors that may hinder successful implementation.

1.6 Scope of the Study

This study is specifically focused on the operations of Dashen Brewery in Ethiopia, examining the implementation of Total Quality Management (TQM) practices from 2015 to 2023. It aims to assess how these practices have influenced critical performance metrics, including production efficiency, employee engagement, and customer satisfaction. By narrowing the scope to this period, the research will provide targeted insights into the effectiveness of TQM (Top Management Commitment aspects, Customer Focus, Continuous Improvement & Innovation, Employees Involvement Practices, Employee Training, Reward and recognition, Communication and information system, Benchmarking) in enhancing the brewery's overall performance.

1.8 Significance of the Study

This study holds significant relevance for various stakeholders, including Dashen Brewery management, employees, customers, and the broader Ethiopian brewing industry. By examining the impact of Total Quality Management (TQM) implementation on the performance of Dashen Brewery Share Company, this research contributes to both theoretical and practical knowledge in several key areas:

1. Contribution to Knowledge in Quality Management:

The research enhances the understanding of TQM principles and practices within the context of the Ethiopian brewing industry. By identifying specific TQM strategies employed by Dashen Brewery and their effects on performance metrics, the study provides empirical evidence that can inform both academics and practitioners about the nuances of quality management in developing economies. This contributes to the existing body of literature on TQM by integrating local case studies that reflect regional challenges and opportunities.

2. Practical Implications for Dashen Brewery:

The findings from this study offer valuable insights for Dashen Brewery's management in assessing the effectiveness of their TQM initiatives. By analyzing performance data and employee feedback, the research identifies strengths and areas for improvement in the implementation of TQM practices. This information is critical for strategic decision-making, enabling the company to refine its quality management processes, enhance operational efficiency, and ultimately improve overall performance. The study also aims to foster a culture of continuous improvement within the organization, motivating employees to actively engage in TQM practices.

3. Impact on Employee Engagement and Satisfaction:

By exploring the relationship between TQM implementation and employee engagement, the study underscores the importance of involving employees in quality initiatives. The research highlights how effective TQM practices can lead to higher job satisfaction, increased morale, and improved productivity. This has implications not only for employee well-being but also for organizational performance, as engaged employees are more likely to contribute positively to the company's goals. The study serves as a resource for developing employee training and development programs aligned with TQM principles.

4. Enhancing Customer Satisfaction and Loyalty:

Customer satisfaction is a critical determinant of business success, particularly in the highly competitive brewing industry. This research investigates how TQM practices influence customer perceptions and satisfaction levels. By demonstrating the correlation between TQM implementation and customer loyalty, the study provides Dashen Brewery with actionable recommendations for enhancing customer relations. The insights gained can inform marketing strategies and customer service improvements, ultimately leading to increased market share and brand reputation.

5. Contribution to Policy and Industry Standards:

The findings of this study can inform policymakers and industry regulators about the benefits of TQM practices within the Ethiopian brewing sector. By showcasing the positive effects of TQM on company performance, the research advocates for the adoption of quality management frameworks across the industry. This has the potential to elevate industry standards, improve product quality, and enhance the competitiveness of Ethiopian breweries on a global scale. In summary, this study is significant not only for Dashen Brewery but also for the broader brewing industry and academia. It provides a comprehensive examination of TQM implementation and its impact on performance, contributing to the advancement of quality management practices in Ethiopia. The insights gained from this research can lead to tangible improvements in operational processes, employee engagement, customer satisfaction, and overall industry standards.

1.9 Organization of the Thesis

This thesis is organized into five chapters, each designed to build upon the previous sections while addressing the central theme of Total Quality Management (TQM) implementation and its impact on the performance of Dashen Brewery Share Company. The outline is as follows

CHAPTER TWO

2. REVIEW OF RELATED LITERATURE

2.1. Introduction

This chapter is an overview of literature pertaining to quality management and performance of manufacturing firms in Nairobi County. The theories underpinning the study are to be highlighted. Additionally, the chapter discusses quality management and the practices applied in manufacturing firms. Performance in manufacturing firms is covered as well as the relationship between quality management and performance in manufacturing firms. Finally, the summary and conceptual framework is also highlighted.

2.2. Theoretical Literature

The study was guided by the three theories; quality improvement theory, theory of constraint and Resource-Based View (RBV).

2.2.1 Quality Improvement Theory

Quality Improvement Theory proposes that a component of quality management is that it places duty regarding fabricating associations decisively at the entryway of top administration (Deming, 1986). The hypothesis expresses that the administration is in charge of the frameworks, and that the framework produces 80 percent of the issues in firms (Hill, 1995). Deming (1986) noticed that no quality administration framework could prevail without top administration duty; the administration puts resources into the procedures, makes corporate culture, chooses providers and grows long haul connections. Deming's Quality Improvement Theory gives business an arrangement to take out low quality control issues through successful administrative systems. Management's conduct shapes the corporate mentality and characterizes what is essential for the achievement and survival of the firm. Hubert (2000) has put forward the hypothetical approach of Deming (1986) in regard to the quality administration framework, and it visualizes the production of a hierarchical framework that encourages participation and figuring out how to encourage the execution of process administration rehearses. This, thus, prompts the persistent change of the procedures, items, and administrations and imparts worker fulfillment. These are basic to advancing client center, and eventually, helping in the survival of any association. Deming (1986) put stock in a precise way to deal with critical thinking and advanced the generally known Plan Do Check Act cycle. The Plan Do Check Act (PDCA) cycle of ceaseless

change is an all-inclusive quality change idea whose point is to always enhance execution, consequently decreasing the distinction between client prerequisites and the execution of the assembling firms (Goetsch and Davis, 2006). The hypothetical quintessence of the Quality Improvement Theory concentrated on quality worries in the making of an authoritative framework that cultivates participation and learning for encouraging the usage of process administration rehearses, which, thus, prompts execution (Anderson et al., 1994). Oakland (2004) focused on that the obligations of top administration ought to lead the pack in changing procedures and frameworks. Administration assumes a critical part in guaranteeing the achievement of value administration since it is the top administration's duty to make and impart the vision to move the firm toward execution change.

2.2.2 Theory of Constraints

Theory of Constraints (TOC) was initially displayed in 1984 by Eliyahu M. (Goldratt and Cox, 1984) through his progressive book, *The Goal*. TOC gives the strategy to characterize what to change, what ought to be changed to, and how to impact the change to persistently enhance the execution of a whole framework. TOC, as TQM, regards change as a progressing procedure. In any case, rather than concentrating on restricted enhancements in all zones, it assaults the one limitation or bottleneck that restrains the framework's execution. TOC can be utilized as an indispensable system to help the usage of QM. It must not supplant QM, yet rather be utilized as a part of helping the organization to discover issues in its execution and center the QM endeavors toward the association's objective. TOC is an incredible approach in nonstop change, however has very little been broadly concentrated on. In the light of this, it is imperative to decide the degree of QM and TOC execution. TOC which is an arrangement of ideas, standards and apparatuses that can be utilized to enhance administration of frameworks and expand execution by distinguishing the 10 most prohibitive restricting component that requirements the framework's execution and overseeing it. It concentrates on enhancing execution as opposed to decreasing expenses. By and large, TOC is a mix of logic, ideas, standards, and apparatuses imagined to augment the execution of any framework by recognizing, overseeing and breaking the most prohibitive restricting variable that limitations framework execution. Rahman (1998) outlined the idea of TOC that each framework must have no less than one requirement and the presence of limitations speaks to open doors for development. The one primary part of TOC,

which contrasts from conventional change methodologies, is the way it assesses change endeavors. Numerous quality change endeavors are centered around accomplishing the most elevated cost decreases. Kazim (2008), contends that hypothesis of imperatives depends on the rule that a chain is just as solid as the weakest connection or limitation and to lift and deal with the requirement as fundamental.

2.2.3 Resource-Based View

The Resource Based View (RBV) accentuates the association's assets as the essential determinants of competitive advantage and implementation. It embraces two suppositions in breaking down competitive advantage (Barney, 2001). This model accepts that organizations inside an industry might be heterogeneous regarding the assets that they control. Second, it accepts that asset heterogeneity may hold on after some time on the grounds that the assets used to execute firms' schemes are not mobile across firms (i.e., a portion of the assets can't be exchanged and are hard to collect). Asset heterogeneity (or uniqueness) is viewed as an important condition for an asset package to add to competitive advantage. The Resource-Based View Theory is to a great extent in light of behavioral and sociological worldview and considers organizational variables and their fit with the world as the significant determinants of progress. System models with this interior introduction have a solid 'inside out' approach that considers inside process factors, (for example, quality improvement, product advancement, and adaptability and cost effectiveness) as the most powerful achievement elements. 11 Since assets mirror a lot of the components of abilities, this study likewise centered on the performance ramifications of some internal attributes of the organizations (Barney, 2001), for this situation capacities of organizations, persistent change and client centeredness. In dissimilarity, the basic contention of the Resource-Based View Theory is that uncommon, matchless, non-substitutable assets make a company's heterogeneity, and that fruitful firms are those that get and protect significant and impossible to miss assets that outcome to an organization's decent execution emerging from the maintainable upper hand that emerges thereof (DiMaggio and Powell, 1991). Organizational readiness figures out what sort of value administration frameworks to seek after, since the assets that an association has will impact what the firm does or does not do. The methodologies so attempted will then impact the execution of the firm and help the firm pick up an upper hand in the commercial center, coming about to upgraded performance.

2.3 Quality Management Practices

The American Society for Quality Control characterizes quality as "the aggregate components and attributes of an item or administration made or performed to fulfill clients' needs at the period of buying and during utilization" Talha, (2004). Quality management on the other hand, can be defined as a managerial approach geared towards in cooperating inherent managerial tendencies of planning, control and improvement. Manufacturing-based definition positions quality management as design activities and manufacturing practices aimed at enhancing product quality. The ISO 9000 defines quality management as the set coordinated activities directing and controlling an organization's quality projections. The activities encapsulate quality planning, quality control, quality improvement and quality assurance. Value is defined as identifying the client's wants and their fulfillment. Numerous associations have concentrated on quality and diminished their expenses to increase consumer loyalty e.g. Toyota in Japan, Samsung in South Korea. As indicated by (Foster, 2001 and Maguad, 2006) accomplishing consumer loyalty relies on upon not just how well and how closely quality activities in the few areas of the association work exclusively but also on how well they cooperate. As indicated by Kusaba (1995), quality alludes to the diverse workmanship of different exercises. Thus every business or movement has a varied meaning of value, for instance in sales the term quality is more centered around the client, while in manufacturing, the term quality is more centered around the production procedure, and in development, quality alludes to both service provided and outputs. Hradesky (2003) notes that quality is dictated by the client and the marketplace and incorporates all the items characteristics. Quality incorporates everything that the customer expects and requires and is persistently evolving. The definition considered the clients who direct the quality, and alterable as indicated by client necessities. Mukherjee (2006) shows that quality fulfills three F's- Fit, Form and Function. This is a customary meaning of value is essentially bound to an item fulfilling the requirement for the required measurements, fitment, required frame and feel. The item ought to likewise have the capacity to satisfy the capacities fancied to be performed by the item. Quality is more than an instrument or issue used to increase upper hand for organizations since it involves survival. In this way, the greater part of the quality ideas specified above concentrate on giving an item that fulfills and address the clients issues. Quality is subsequently to a great degree essential for the associations to guarantee that they have conveyed their items or administrations as indicated by the client desires and necessities (Muchemu, 2008). In addition,

every individual has his or her own idea of value and it is extremely hard to give particular definition for quality, yet there is most likely and everybody can concur that, quality is flawlessness through control, precision, and fulfillment in work. The philosophy of quality management has identified its key drivers as the vehicle to achieving manufacturing excellence within an organization. Quality management is aimed at elimination of error and waste in the manufacturing environment by get things right the first time through mechanisms such as continuous improvement, statistical measurement and having a mentality of zero defect (Lindsay & Evans, 2007). In the manufacturing scene, the definition of quality differs from that of the service industry. Manufacturing organizations produce tangible products that can be seen, touched as well as directly measured. This means that quality in the manufacturing firms has a focus most of the time on tangible product features. According to Moore (2012) the most common definition of quality in manufacturing is on conformance. Conformance is defined as the degree to which the characteristics of a product meet standards that have been preset. Quality in the manufacturing scene is also defined in terms of performance, reliability, the features, durability and serviceability. Interestingly, Altiook (2012) argues that one cannot inspect quality into a product. A product will remain in the same quality it was produced during inspection no matter how many inspections are done, it will remain unchanged. The delivering of quality for optimal performance in an organization is integral and involves also practices that prevent failure from occurring and hazardous that would jeopardize performance. The benefits of quality in a manufacturing organization can only be underscored by the pattern of spread and through quality initiatives Muchemu (2008) postulates. Through quality management, there are two purposes that are achieved in a manufacturing setting. Firstly, the present situation is well known preferably through a recent study that was done based on past development. Secondly, the focus is additionally on future areas of concentration. Unquestionably, quality concepts have been identified empirically to spread unevenly in the functional areas of an organization states (Crosby, 1979). The questions that are considered include: which are the functional areas that have the highest spread and why? What implications are created by the uneven spread of quality concepts in an organization? When answers are gotten to such questions, the management of an organization is able to frame and come up with quality management strategies. In a manufacturing setting, at its early stages of development, the concentration on quality is in functional areas that will bring about the highest benefits or profits suggests (Zabel& Avery,

2002). This areas are mostly in operations/manufacturing and product design. As an organization grows in time, quality initiatives spread to other functional areas such as services, sales, marketing and administration. All in all the incremental benefits of quality initiatives should be planned for implemented at all the stages of growth for an organization to achieve optimal performance.

2.4 Organizational Performance

Performance measurement tools can also be availed within the organizational framework. Activities around this area establishes the most important client needs, identifying specific quantifiable outputs and establishing targets against which results are to be scored. A variety of perspectives exists on the best approach to measure and quantify organizational performance depending on the dynamics of the industry. 14 Measuring profitability margins highlight the amount a given organization has invested in its operations. Raw growth revenue is important as it highlights the organizational expansion capacity and the scope of potential economies of scale. The market share of an organization can also be used to highlight its success relative to its immediate competition. In manufacturing organizations, brand loyalty can also be used to gauge the consumer loyalty and overall retention. It is only through performance that organizations are able to grow and progress (Crosby, 1979). In a manufacturing setting, knowing the determinants of organizational performance is key in predicting the future, considering the numerous economic crises and shocks that have hit the economic landscape in the globe. The factors that are of most impact are isolated and then treated with utmost interest so as to ensure superior performance (Zabel& Avery, 2002). Further on, knowing the factors that generate success and how they can be measured is of critical importance Operational performance, measurement can be grounded on the consumer's expectations within a the manufacturing firm in terms of the sales data on what the clients order for most of the time and what is not ordered and the handling of complaints. All in all its the management of customer relationship (Gudrun, 2009). Operational performance measurement can also be implemented on the employees through meetings and having appraisals. Through the Quality Cost Delivery (QCD) system, which is a capture of the seven key drivers of the manufacturing operations (Moore, 2012)? The QCD measures include: not right first time (NRFT) which is a measure of the rate at which defective units are produced. Stock turns on the other hand gauges the number of times a business sells and

replaces its inventory (Anyango, Wanjau&Mageto, 2013). Overall equipment effectiveness measures whether the most is being made from a piece of equipment. We also have the people productivity which measures the number of worker hours taken to produce each unit of output. Floor space utilization is a measure of the level of revenue generated per square meter of factory floor space. Delivery schedule achievement (DSA) on the other hand, measures the success in delivering the goods that are promised to a client to the schedule that was promised. Value added per person measures the amount of value the manufacturing process adds to the raw materials and compares it to the number of people involved in the whole process.

2.5 Quality Management and Organizational Performance

Through quality management (QM), an organizational strategy can be adopted that leads to improvement of product and service quality (Moore, 2012). QM over the years has been sold as a commodity and remedy that can solve a lot of organizational problems which include high performance in a firm. Through the contingency theory in contrast to this, which is all about “no one best way” asserts that high performance comes about as a result of the alignment between organization systems/processes and implicating context factors. Most studies indicate a positive relationship between QM and performance while some studies indicate a negative relationship (Mohanty, 2008). Thus organizational performance refers to how effectively and efficiently manufacturing firms are conducting their activities so as to achieve optimal productivity (Rajab, 2014). In the manufacturing sector, the measure of performance is in the form of different metrics such as schedule performance. Further on, performance can also be measured through the use of measurement systems that are implemented in production plants and service delivery (Hoyle, 2007). The implementation of systems gives the organization the ability to keep track of business progress. The knowledge that is gained on the manner in which the different areas of a business are performing is fundamental and additionally, the right measurement system will determine this. The measures of performance in the manufacturing scene have to be quantifiable factors that may be clearly linked to success indicators such as operational and financial performance, value creation, competitive advantage and synergy. In the manufacturing scene, performance measures go beyond the financial aspects argues (Crosby, 1979). The first step in the measurement of performance in the manufacturing scene is through the identification of the key areas that drive business performance. The next step is the setting up of performance targets

which assist in giving everyone an opportunity to know what is being aimed for (Buchholz & Appelfeller, 2011). Preliminary evidence indicates that firms which adopt quality management practices experience better performance compared to those that do not (Zabelet al, 2002). The customers in the world of today have their demand on high quality products more sensitized. Organizations that cannot deliver this have the risk of running out of business thus an indication of poor performance. Based on empirical evidence, McCollum (2004) demonstrates that world class organizations such as General Electric and Motorola have attributed their performance to having one of the best quality management programs in the world. The two companies are noted to have implemented the Six-Sigma quality program. In the initiative, the level of defect is reduced to approximately 3.4 parts per million (Mohanty, 2008). This can only be achieved when every employee in the organization is trained on quality issues (McCollum, 2004). Motorola in the long run was able to win the prestigious Malcom Baldrige National Quality Award in 1988. In both companies, quality is considered as a critical factor that leads to the increased sales and market share thus good performance. Quality management in an organization can be achieved only when the top brass such as managers and top executives play their role in driving the change (Hoyle, 2007). Besides this, there are other factors and principles that drive the implementation of QM. Hoyle (2007) highlights that over and over again that the top management of an organization as a driving force in ensuring firms achieve an orientation to quality. In the process, firms are able to create value, establish objectives and systems that will satisfy the expectations of customers which in the long run will improve on the performance of the organization. When quality management is successfully implemented in an organization, it will lead to performance drivers such as lower costs, greater efficiency, better product quality, improved market share, increased motivation and satisfaction (Altiok, 2012).

2.6. Summary of Literature Review and Conceptual Framework

This section presents the summary of literature review, conceptual framework which depicts the relation between the variables in the study and hypotheses which the study sought to test.

2.6.1. Summary of Literature Review

Quality management is an integral component essential for the excellence of any given manufacturing organization, to enable their survival in the rapidly changing business

environment. Recognizing quality as a key ingredient to performance is likely to propel an organization to greater heights.

Table 1 Summary of Literature Review and Knowledge Gaps

Scholar	Study	Objectives	Key Findings	Knowledge Gaps
Tata & Prasad, (1998)	Cultural and structural constraints on total quality management implementation	To determine cultural and structural constraints on total quality management implementation	Organizational culture affects performance	The study did not measure the effects of the constraints on performance.
Prajogo& McDermott, (2005)	The relationship between total quality management practices and organizational culture	To establish the relationship between total quality management practices and organizational culture	Total quality management practices affects organizational culture	The study focus on culture while the present study will focus on performance
Lindsay & Evans, (2007)	Managing for Quality and Performance Excellence	To find out how quality management affect business performance	Quality management significantly affects performance	The study was done in a developed world while the present study will be done in 18 Kenya.
Terziovski and power (2007)	Increasing ISO 9000 certification: a continuous	To find out how culture, management	There is a positive relationship	The study did not consider quality

	improvement approach	responsibility, employee involvement affect performance	between continuous improvement and quality culture and a firm's performance	management practices and its effects on performance
Ab-Wahid and Corner (2009)	Critical success factors and problem in ISO maintenance	To find out the critical success factors in ISO maintenance	There is a positive relationship between strategic, financial, and continuous improvement and a firm's performance	The study did not find out how CSF influence performance
Bell and Omachonu (2011)	Quality system implementation process for business success	To find out how Quality system implementation affect performance	There is significant linkage between improved documentation, firms performance and organizational performance	The study did not consider performance of manufacturing firms
Anyango,; Wanjau, and Mageto, (2013)	Assessment of the relationship between ISO 9001	To find out the relationship between ISO	There is positive relationship	The study was biased towards quality

Kenya	certification and performance of manufacturing firms in Kenya	9001 certification and performance of manufacturing firms in Kenya	between financial HRM, firms performance, HRM and control measures and a firm's performance	managers, who may have been subjective, whereas the current study used quality assurance managers and internal auditors
Njuguna, M. (2013)	Value Chain Management Practices And Supply Chain Performance of Large Manufacturing Firms in Nairobi	To establish the relationship between value chain management and supply chain performance	Quality improvement within the value chain improved supply chain performance	The study measured supply chain performance while current study will focus on organizational performance
Mutua, J. (2014).	Quality management practices and financial performance of cement manufacturing firms in Kenya	To establish the quality management practices adopted by cement manufacturing firm in Kenya and financial performance of the same	Most cement manufacturing firms that implemented quality management practices recorded high sales turnover leading to organizational performance.	The study considered only cement manufacturing firms leaving out firms in other sectors

Rajab, A.F (2014)	Quality management practices and supply chain performance of large scale manufacturing firms in Kenya	To determine the extent to which quality management practices are implemented by large scale manufacturing firms in Kenya	Quality management practices have been practiced to a large extent by the large manufacturing firms in Nairobi, Kenya.	The study measured supply chain performance while current study will focus on organizational performance
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The empirical literature encompasses the need for quality management practices and how they influence performance of manufacturing firms in Kenya. Studies that have been done have concluded that quality management practices are important for improving performance and the quality of goods and services provided by these manufacturing firms. However, none of the studies have addressed issues of total quality management practices and organizational performance in Dashen brewery factory. Therefore the researcher found it necessary to address these issues by determining the quality management practices (Top Management Commitment aspects, Customer focus, Continuous Improvement and Innovation, Employee Involvement practices, Employee training, Rewards and Recognition, Communication and information systems and Benchmarking) adopted by Dashen Brewery s,c and their relationship with the performance of the organization.

Conceptual model

TQM Dimensions

Some of the researchers identify that the most influential dimensions of TQM are those that are intangible, behavioral and also known as the soft variables consisting of customer focus, human resource focus and leadership as these dimensions are invisible but have a direct impact on company's performance (Dow et al., 1999; Flynn et al., 1995; Powell, 1995). After comprehensive review of the literature we find that most of the researchers evaluate TQM through six dimensions; strategic planning, leadership, information and analysis, customer focus, process management and people management (Miranda, 2003; Prajogo and Hong, 2008; Prajogo and Sohal, 2003; Terziovski and Samson, 1999). According to Curkovic et al., (2000) the most successful dimensions of TQM are customer focus, employee empowerment and top management support. Shenawy et al., (2007) argue that no research explicate the key dimensions of TQM. Due to this inconsistency in previous research it is difficult to identify the exact dimensions of TQM (Hoang et al., 2006). However, majority of the researchers agree that the most significant dimensions of TQM are customer focus, continuous improvement, employee involvement and top management support (McAdam and Armstrong, 2001; Prajogo and Sohal, 2003; Zairi, 1997). The current study uses these four most influential dimensions of TQM in order to investigate their relationship with organizational performance.

1. Top Management Commitment aspects

The definition of commitment is “a force that binds an individual to a course of action of relevance to one or more targets” (Meyer & Herscovitch, 2001). Top management commitment plays a vital role in building trust with employees, and must go beyond adopting slogans of improving quality and become more involved in quality efforts at various planning and implementation and monitoring phases. Top managers must focus on developing people's skills and capacities through the engagement of employees in several kinds of training programs, which provide the organization with a skilful sales-force and marketing team (Jones & Grimshaw, 2012). Top managers should involve all employees in the implementation and design stages in order to meet the expectations of stakeholders, customers, and to raise levels of quality and satisfaction (Pencarelli et al., 2013). The managers must have profound knowledge of TQM, a willingness to actively participate and enthusiasm. They need clearly

defined terms for good understanding of the work; otherwise employees may develop their own definitions which might lead to unfavorable outcomes for the organization and stakeholders (Sanzo&ALvarez, 2012).

2. Customer focus

Customer focus is the extent to which an organization continuously satisfies customer needs and expectations (Zhang, 2000). It refers to achieve long term organizational Mehmoodet al665 objectives. It is considered as one of the basic dimensions of TQM (Bank, 2000).

According to Hackman and Wageman (1995) one of the most frequently used TQM practices is obtaining information about customers. Sila (2007) and Brah et al., (2002) both claims that the success of any organization in near future would depend upon the satisfaction of its customers' needs efficiently and effectively on continuous basis. Customer focus is the basic principle of TQM which emphasizes on creating value for the customers which results in organization development (Juran, 1988; Mele and Colurcio, 2006; Woodruff, 1997). Proper implementation of TQM dimensions attains higher level of organizational performance. Customer focus is one of the major indicators of performance enhancement. Some scholars find that TQM implementation increases customer satisfaction (Lee et al., 2010; Liu et al., 2002) and improve organizational performance (Irani et al., 2004; Powell, 1995). In quality management settings, changing needs of the customers are identified and performance of the organization is measured against customers' requirements (Bullington et al., 2002; Deming, 1986; Hackman and

3. Continuous Improvement and Innovation

Continuous improvement refers to the ways of avoiding from defects and makingimprovement in the procedure of converting inputs into outputs. Deming (1986) definecontinuous improvement as removing the defects and continuously improving theproducts features and service quality. Continuous improvement is a TQM dimension thatdirects a firm in its daily management, involving the continuous effort from everyindividual to achieve firm's goals of improved quality, satisfying customer's needs andultimately enhancing the firm's performance (Ooi et al., 2006). In quality managementsettings work processes are constantly reviewed which reduces mistakes and waste ofmaterials that improves the organizational effectiveness (Anderson et al., 1994; Spencer,1994; Walton, 1986). Continuous commitment on the implementation of TQM does

have a significant positive effect on firm performance. Continuous improvement endorsed by organizations stimulates organizational members for innovations and quality performance (Prajogo and Sohal, 2003). It is one of the most effective quality management initiatives to achieve significant improvement in organizational performance. From the above discussion it is observed that the literature supports the relationship between continuous improvement and organizational performance.

4. Employee Involvement practices

Employees are the most important asset for any firm as they provide support in productivity and performance enhancement. In order to become competitive firms must train their employees to improve their abilities and skills which increases their TQM Dimensions and Organizational Performance. Prajogo and Sohal (2001) propose that proper implementation of TQM dimensions in organizations fosters employees for innovation and organizational effectiveness. Some scholars find that in quality management system optimal human resource strategies positively affect organizational performance (Delaney and Huselid, 1996; Delery and Doty, 1996). Similarly, Li (2000) find that employee training, their participation in decision making and information sharing are tools that enable the organization to use their resources effectively which in turn enhance the organizational performance. Training and development increases employee's loyalty and empowers them to take active part in change process for continuous improvement that ultimately enhances organizational performance (Lorente, et al., 1999; Mertins et al., 1997). From the above literature generated in various parts of the world we expect that employee involvement would positively relate with organizational performance.

5. Employee training

Goetsch and Davis (2010) defined —training as an organized, systemic series of activities

designed to enhance an individual's work related knowledge, skills, and understanding or motivation (p.262). Tsang and Antony (2001) stated that training helps to improve employee's confidence and hence improves their personal development. Training is the primary practice that organizations use to develop particular skills in employees; skills that are necessary for carrying out quality principles. Dale and Bunney (1999) mentioned that there is no doubt that the training and education of all employees in an organization is vital to ensure that a continuous

quality improvement process will be ongoing and that staff perceive and understand the meaning of quality. Every organization has a basic responsibility to educate and train its employees, but this responsibility becomes much more central to an organization's success when the organization attempts to introduce quality programs such as TQM. Deming, Juran and Crosby indicate the importance of training to the quality management of organizations by describing such organizations as learning centers in which employees continually adapt to new work roles and tasks (Tsang and Antony 2001). Ishikawa (1985) added that quality begins and ends with training.

Oakland (1995, p. 309) believes that: —training is the single most important factor in actually improving quality and business performance, once there has been commitment to do so. For training to be effective, however, it must be planned in a systematic and objective manner. Therefore, it is necessary to train in order to educate individuals about the nature and principles of TQM, and to provide them with the skills and techniques they need for problem solving, with the aim of improving their career development prospects, and at the same time enhancing customer satisfaction.

6. Rewards and Recognition

The purpose of a reward and recognition system is to influence employees' performance by reinforcing desirable values and behavior. Organizations which effectively implement TQM Endeavour to establish a system which catches people in the act of doing the right thing from a values or behavior perspective (Hradesky, 1995). The most important reason for an organization to establish a rewards system is to encourage its staff to work harder and so function more successfully. Sallis (1993) believes that to do a good job, employees need recognition and encouragement of their achievements and successes. They need leaders who appreciate their achievements and lead them to even greater success. This system could be a combination of two types of rewards: tangible ones and intangible ones, such as staff receiving recognition for work well done. Juran (1989) believes that a reward system is an important factor in encouraging organizational development. He argues for the benefits of the reward system: —The reward system not only serves its basic purpose of rewarding employee performance; it also serves to inform all concerned of the upper manager priorities. If goals are revised but the reward system is not, the result as viewed by subordinates is conflicting

signals. Most subordinates resolve this conflict by following the priorities indicated by the reward system (p.211)l. Motwani (2001) indicated seven critical success factors for TQM implementation after examining six empirical studies. Among the things that he recommended attention be given to were reward and recognition systems. Whalen and Rahim (1994) mentioned that a lack of proper reward and recognition systems was one of the barriers that affected quality management implementation. This was supported by Nagi and Cheng (1997) who found that lack of reward and recognitions systems were among the impediments to TQM implementation. Najmi and Kehoe (2000) affirmed that one of the barriers for successful quality development was the lack of appropriate performance measurement systems.

Theoretically and practically, there are agreements as to the importance of both monetary and non-monetary rewards. In an organization it is possible to use a combination of both types of rewards to provide motivation for staff. When staff know that they will be rewarded for their extra efforts in quality improvement, there will be a sense of teamwork and continuous improvement that allows TQM to be implemented more effectively.

7. Communication and information systems

Goetsch and Davis (2010) defined communication as the transfer of a message (information, idea, emotion, intent and feeling or something else) that is both received and understood. He added that communication is the oil which keeps the total quality engine moving, and observes that it plays a facilitative role in a total quality setting. According to Evans and Dean (2000), communication and information systems are key processes for any team attempting to improve its quality. Tsang and Antony (2001) observe that communication and information systems are crucial factors in the implementation of TQM. At all levels employees have to perform quality improvement responsibilities within an organization and they therefore, need to be made aware of any appropriate feedback in order to ascertain whether decisions they have made previously have had any effect on improvements to overall quality. Employees need to be provided with the authority to take control of their activities and also the ability to implement continuous improvement. Management guidance is vital in ensuring that organizational aims are met. Moreover, Sila and Ebrahimpour (2002) found that communication and information systems play an important role in successful TQM implementation in the literature. In addition, according to Ghobadian and Gallea (1997), the establishment of

effective communications and information systems are a very important factor for TQM implementation. Bharati and Berg (2003) pointed out that communication and information system are important elements that can contribute to successful TQM implementation and influence service quality. Goetsch and Davis (2010) mentioned that some of the key elements of the TQM concept are customer focus (internal and external), top management, total employee involvement and empowerment, team work, problem prevention and solving, and continuous improvement. Each of these elements is dependent on effective communication and information systems. Tobin (1990) reported on the role of information systems in TQM implementation, and stated that in order to satisfy the multiple anticipations of the customer a host of new, challenging, information systems will be required to capture the data required by managers. He emphasized that a new system will be needed to gather and report quality data and to help employees in the performance of their work, with an even greater emphasis on networking across functional lines to eliminate islands of information that is not effectively communicated throughout the organization. Communication and information systems are very important in TQM because of the increased need for information that is accessible to teams throughout the organization. Therefore, organizations should aim to develop communication and information systems best suited for their organizations, in order to implement quality improvement strategies.

8. Benchmarking

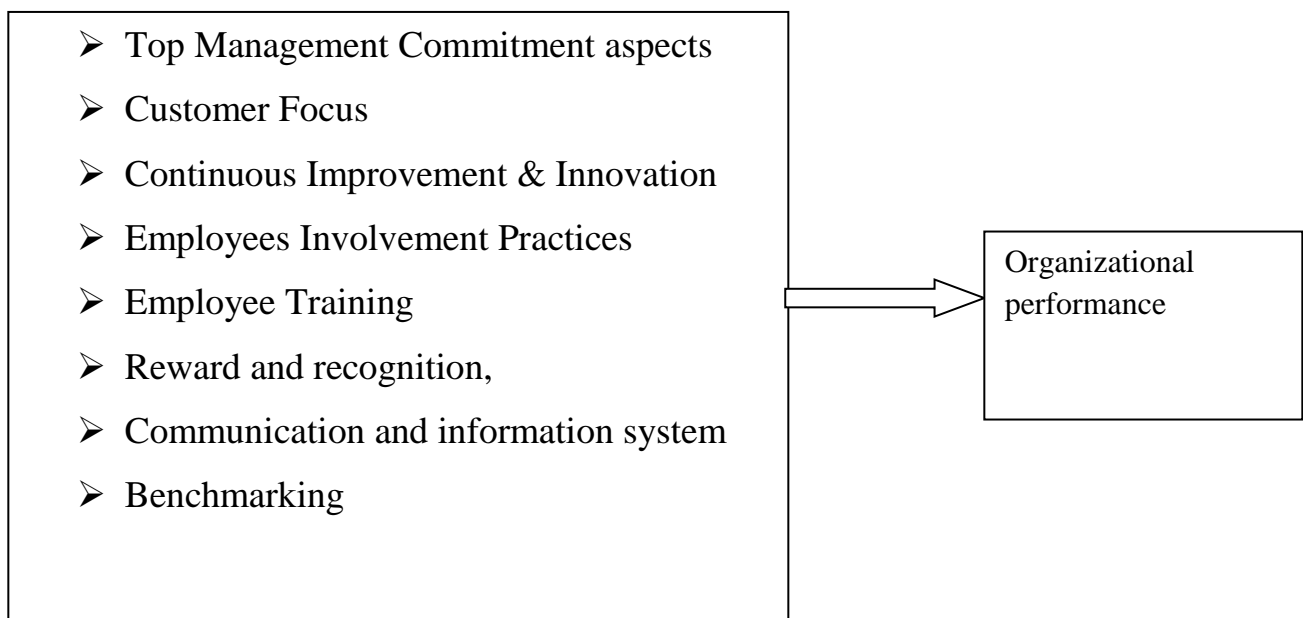
Benchmarking is a vital component of efforts to achieve best practice in management and represents a significant element of the TQM process. Benchmarking can be considered as a method of assessing industrial competitiveness, and the practice of benchmarking has been viewed in the literature as one of the ways in which organizations can promote continuous improvement in their performance (Jain et al., 2008). According to Oakland (1995), benchmarking is the continuous process of measuring products, services and processes against one's toughest competitors or those organizations recognized as industry leaders. He adds that this results in a search for best practice, which will lead to superior performance and competitive advantage, through measuring performance, continuously implementing change, and emulating best practice. Liston (1999, p.98) agrees with Oakland, and highlights a key objective behind benchmarking; customer satisfaction. He defines benchmarking as: A tool used to improve

products, services or management processes by analyzing the best practices of other companies or institutions to determine standards for performance, and how to achieve them to increase customer satisfaction. According to Zairi, (1996, p. 19) the formal definition of benchmarking used by Rank Xerox is: —A continuous, systematic process of evaluating organizations recognized as industry leaders, to determine business and work process that represent best practices, establish rational performance goals.

Benchmarking involves the search for instances of best practice which lead to improvements in performance, thereby helping an organization to appreciate where it is strong and where it is weak in comparison to its competitors. This then allows it to incorporate best practice, as observed from research, into its own operations (Evens and Dean, 2000). Authors such as Zairi, (1994); Sallis (1993) have identified four types of benchmarking, these are:

2.6.2 Conceptual Framework

The conceptual framework depicts the relation between the dependent and independent variables in the study. Rajab, A.F (2014)



CHAPTER -THREE

3. Research Design and Methodology

3.1. Description of the study area

Dashen Brewery factory was found in 1988 E.C in Gondar 773 kilometers far from A.A in the northern part of Ethiopia, and the plant in Debrebirhan 130 k.ms far from A.A was found in 2003 E.C in partnership with an England company Vasari Global Dashen brewery S.C is one of the most leading alcoholic beverage companies in Ethiopia. Dashen brewery S.C is ISO 9001 and ISO 14000 certified for its quality products and environmentally friendly waste management. In addition, Dashen brewery S.C is EQA (Ethiopian Quality Awards) certified for implementing total quality management practices. Dashen brewery produces variety of products such use Dashen beer, Jano beer, Balageru beer, Dashen draught, Balageru Draught and Lucy Malt to maximize its market share, sales volume and profit to be competitive in the market.

3.2. Research Design

Research design as a plan for a study, providing the overall framework for collecting data. MacMillan and Schumacher (2001:166) define it as a plan for selecting subjects, research sites, and data collection procedures to answer the research question(s). They further indicate that the goal of a sound research design is to provide results that are judged to be credible. For Durrheim (2004:29), research design is a strategic framework for action that serves as a bridge between research questions and the execution, or implementation of the research strategy.

Research can be classified as descriptive, explanatory and exploratory depending on the specific purpose that the research tries to address. Descriptive research sets out to describe and to interpret what is. It looks at individuals, groups, institutions, methods and materials in order to describe, compare, contrast, classify, analyze and interpret the entities and the events that constitute the various fields of inquiry. It aims to describe the state of affairs as it exists. On the other hand, explanatory research, aims at establishing the cause and effect relationship between variables. The researcher uses the facts or information already available to analyze and make a critical evaluation of the data/information. Exploratory research is less formal, sometimes even unstructured and focuses on gaining background information and helps to

better understand and clarify a problem. It can be used to develop hypotheses and to develop questions to be answered (Abiy et al., 2009).

Therefore, both descriptive and explanatory research designs were used in this study since it is most suitable due to the characteristics of the purpose of the study. Thus, this can be investigated through a descriptive and explanatory research designs.

Descriptive researches were used to obtain a picture of feedbacks of various beer products consumers with a view to determine the consumers' level of preference to local beer various products.

Explanatory study was also used to understand and explain the relationship and effect between different Variables (Top Management Commitment aspects, Customer Focus, Continuous Improvement & innovation, Employees Involvement Practices, Employ Training, Reward and recognition, Communication and information system and Benchmarking) has positive influence towards brand preference of the beer customers

3.3. Research approach

As described in Kowalczyk (2016), researchers have a choice of three basic methods to choose from when carrying out business research, depending on a number of factors involved in the research. On the one hand, the researcher may use a quantitative research method to test hypotheses and make predictions by using measured amounts and ultimately describe an event by using figures. This method enables the researcher to use numbers in statistical tests to ensure that the results have a statistical relationship and uses numbers to explain their findings. On the other hand, the researcher may use a qualitative research method in which they describe the kind and quality of a subject while interpreting and attempting to understand an event. This method enables the researcher to use texts to explain their findings. Through this research method, the audience is given a mental picture of what the researcher is seeing, making it difficult to quantify results with statistical procedures. Also, a researcher may choose to employ a mixed method in which the researcher uses a combination of quantitative and qualitative methods to completely describe an event. With mixed methods, biases characteristically associated with one method (quantitative or qualitative) are thought to cancel out (Creswell, 2003). According to Creswell (2003) the decision of what method a researcher employs depends on (a) the research problem, (b) the researcher's experience, (c) the reporting audience, (d) whether the researcher wants to

specify the kind of information to be collected or let it arise from the data being collected, and (e) whether data to be collected is numeric or text (Creswell, 2003).

Quantitative approach involves the generation of data in quantitative form which can be subjected to rigorous quantitative analysis in a formal and rigid fashion. Qualitative approach to research is concerned with subjective assessment of attitudes, opinions and behavior. Research in such a situation is a function of researcher's insights and impressions. It is a technique of focus group interviews, projective techniques and depth interviews, but not subjected to rigorous quantitative analysis (Kothari, 2004).

This research study employed a mixed of both qualitative and quantitative research approach. In this study, quantitative research approach was used that the research involves hypothesis testing, correlation analysis, regression analysis and other quantitative methods. This research involves studying variation in the dependent variable as a result of change in independent variables, without any intervention of the researcher. And also the research used qualitative research approach to describe the extent of organization' performance of Dashen brewery plc by using frequency and percentage.

3.4 Research Population and sampling methods

3.4.1 Target population

Population can also be called a study population which refers to the aggregation of elements from which a sample is actually selected (Churchill & Brown, 2004). For the purpose of this study, the target populations are selected employees from concerned departments.

The population in this researcher consists of the employees who work in the factory. For the purpose of this study, the target population are employees who worked a minimum of 6 months or above in the factory because it is assumed that those employees could have a complete picture of the total quality management concept than who works less than 6 months.

3.4.2. Sample size and Sampling technique

3.4.2.1 Sample size

Population used for this study was all employees who work in dashen factory corresponding to the period of the collection data. When taking the sample, there are two major techniques to choose between, these are probability and non-probability sampling. Non probability sampling is a technique in which units of the sample will be selected on the bases of personal judgment and convenience (Zikmund, 2003). The target populations of the study was the factory managers,

employees of the selected dashen brewery excluding secretaries, guards and other supportive staffs whom they are insignificant for the study. These included the level of precision, the level of confidence or risk and the degree of variability in the attributes being measured that enable the researchers to determine appropriate sample size (Miauou&Michener, 1976). Populations used for this study are all concerned departments corresponding to the period of the collection data.

In this study, a convenient sampling technique was employed to select departments involved in the quality management system of the company. The targeted departments included sales, marketing, finance, operations, human resource management, production, quality assurance, engineering, and supply chain.

After selecting these departments purposefully, the researcher then applied random sampling techniques to determine the sample size for each department. This approach ensured that the sample reflected the diversity and characteristics of the workforce, while considering factors such as precision, confidence level, and variability of the attributes being measured, as highlighted by Miaouou& Michener (1976).

. Therefore, the total numbers of the above departments are.

The population of each departments of Dashen brewery currently is as follows:-

<i>Sales</i> -----	<i>20</i>
<i>Marketing</i> -----	<i>10</i>
<i>Finance</i> -----	<i>21</i>
<i>Operation</i> -----	<i>15</i>
<i>Human resource management</i> -----	<i>8</i>
<i>Production</i> -----	<i>21</i>
<i>Quality department</i> -----	<i>7</i>
<i>Engineering</i> -----	<i>15</i>
<i>Supply</i> -----	<i>7</i>
<i>Total population</i>-----	<i>120</i>

$$n = \frac{N}{1 + N(e)^2}$$

$$n = \frac{120}{1 + 120(0.05)^2}$$

$$1 + 120(0.05)^2$$

$$n = \frac{120}{1 + 1.3}$$

$$n = \frac{120}{2.3} = 92$$

$$n = \frac{120}{1.3} = 92$$

1.3

Whereas n=sample size which is = 92

N = total population = 120 e =sampling error 5%

Proportional sample size from each stratum is calculated by using the following formula:

$$N_s = \frac{n * N_p}{N}$$

Where: n= sample size for each departments

N_p= the total population of each department n= the total sample of the population

N= the total number of all departments

Accordingly, the table 2: below shows the proportionate sampling for each Departments based on the above given formula.

Table 2 Proportionate sample distribution for each of departments

S.N	List of departments	Total number of population	No. of sample size	
1	<i>Sales</i>	20	16	
2	<i>Marketing</i>	10	8	
3	<i>Finance</i>	21	9	
4	<i>Operation</i>	15	8	
5	<i>Human resource management</i>	8	4	
6	<i>Production</i>	21	20	
7	<i>Quality department</i>	7	10	
8	<i>Engineering</i>	11	10	
9	<i>Supply</i>	7	7	

	<i>Total population</i>	<i>120</i>	92	
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3.4.2.2. Sampling Technique

In this study, the researcher employed a non-probability sampling technique, which refers to methods where certain members of the population do not have a known or equal chance of being selected. This approach relies on the researcher’s judgment and assumptions about the population, guiding the selection of subjects.

According to Kothari (2004), non-probability sampling is particularly useful in exploratory research, where the goal is to gain insights and understanding rather than to generalize findings to the entire population. This technique allows the researcher to focus on specific individuals or groups believed to provide relevant information about the study topic.

In the context of this research, non-probability sampling facilitated the selection of employees from various departments involved in the quality management practices of Dashen Brewery. By intentionally choosing participants based on their roles and experiences, the researcher aimed to gather in-depth insights into the implementation and effectiveness of total quality management systems within the organization.

To enhance the robustness of the findings, random sampling was applied within the selected departments. This ensured that every individual in those departments had an equal chance of being chosen, mitigating some of the biases inherent in non-probability sampling. This combination of methods provided a more balanced representation of employee perspectives, enriching the data collected and allowing for more reliable conclusions about the effectiveness of total quality management practices at Dashen Brewery.

3.5. Data Types and Sources

Due to the nature of the study in order to achieve the objectives of the study, the researcher used both primary and secondary data. Accordingly, the primary quantitative data was collected from the survey respondents through questionnaires and with both open and closed ended questions and the Secondary data from documented reports. As the aim of this study is to assess effect of quality management on organizational performance, the researcher was used primary and secondary sources of data to collect relevant information from the target respondents.

3.6. Data Collection Methods and Instruments

This study employed primary and secondary data source. For the study both data collection methods, namely; questionnaires (including closed and open-ended questions) to collect both qualitative and quantitative primary data was used. The quantitative primary data was collected through both closed and open-ended questions and the qualitative primary data was also collected through interview and the secondary data was collected from documents.

The questionnaire designed for this study was originally drafted in English language and then translated into Amharic language by professional translators. The questionnaire for the independent variables were consisted of linker type statements about which respondents were to ask to indicate their degree of agreement using a five point scale from 1- strongly disagree to 5- strongly agree which is consistent with Xin-y et.al (2015), Furqan et.al(2014), Yuawen (2009). Accordingly, self-administered questionnaire was developed based on multiple-item measurement scales from the literature. In addition to the linker type of statements the questionnaire also includes different questions with different alternative choices to understand quality management.

3.7. Methods of Data Processing

After finishing the entire field works (bearing in mind that field editing was made by both the researcher as well as advisors) and house editing were handled by the researcher because the consistency and completeness of the data was checked and cleaned every day for completeness, consistency, and in order to overcome problems during the data collection. After cleaning the data gathered, the collected data was processed (coded, cleaned and edited) before analysis so as to make data entry easy and efficient. The survey data was coded, counted, categorized, recorded, and organized in a Microsoft Office Excel Spreadsheet. Statistical Package for Social Sciences (SPSS) version-23 software was utilized for data entry and editing.

For presentation of data appropriately, the researcher used different types of descriptive data analysis methods among frequency, percentage, and simple tabulation, cross tabulation and mean.

3.8. Methods of Data Analysis

In this study, descriptive statistical method of data analysis was employed. The study used descriptive statistical method of data analysis to analyze the quantitative primary data collected

from sample respondents using questionnaire. The qualitative primary data collected via was analyzed through a narrative way to support the data from the quantitative primary data collected from respondents questionnaire and the narrative information helps to make conclusion about the study. Therefore, the primary sources of data from this study were analyzed by using both qualitative and quantitative methods of data analysis to address the specific objectives of the study.

Correlation analysis was manipulated to test the proposed hypothesis whether there is a positive significant relationship between the independent variables and dependent variables. The regression analyses was applied to determine by how much percent the independent variable explains the dependent variable which is brand preference after testing the normality of data and multi collinearity. In addition, the equation of multiple regressions on this study is generally built around two sets of variables, namely dependent variables, organizational performance and independent variables Top Management Commitment aspects, Customer Focus, Continuous Improvement & innovation, Employees Involvement Practices, Employ Training, Reward and recognition, Communication and information system and Benchmarking

. The basic objective of using regression equation on this study is to make the researcher more effective at describing, understanding, predicting, and controlling the stated variable.

The mathematical expression for the regression model is given as follows:

$Y_i = f(\text{customer focus, Continuous Improvement, Employee Involvement, Top Management Support, Resource Management, Product Realization, Critical Review of Major Issues, process focus})$.

$$Y_i = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6 + \beta_7 X_7 + \epsilon$$

Where:

Y_i = organizational performance

β_0 = Constant

$$Y_i = \beta_0 + \beta_1 CF + \beta_2 CI + \beta_3 EI + \beta_4 TMS + \beta_5 RM + \beta_6 PR + \beta_7 CRM + \beta_8 PF + \epsilon_0$$

Where;

OP= organizational performance

CF= customer focus

CI= Continuous Improvement

EI= Employee Involvement

TMS = Top Management Support

RM= Resource Management

PR= Product Realization

CRM = Critical Review of Major Issues

PF=process focus

ϵ_0 = sampling error

CHAPTER FOUR

Data Analysis and Interpretation

4.1. Introduction

This chapter presented the empirical data collected from the case company through standard questionnaire, which was triangulated by interviewing the four members of top management of the case company questions. The analysis of the data has been done by making use of SPSS 20.0 data processing software. The findings of the data collected were analyzed and discussed thoroughly so as to meet the research objectives defined and answer research questions posed. 81 respondents from the case company approached through personal contact for data collection as designed in the research methodology of this research. These respondents were requested to complete the designed questionnaire. Out of these 96 respondents, 92 respondents agreed and responded, resulting in a response rate of 95.83 percent.

4.2. Profile of respondents

After the standard questionnaire had been tested for the content validity, it has been distributed to the 96 respondents. Fortunately, 92 questionnaires were complete. Hence the data collected from 92 respondents were used for analysis.

Table 3 Education Qualification of the respondents

	Frequency	Percent	Valid Percent	Cumulative Percent
Diploma	1	1.1	1.1	1.1
Valid Bachelor's Degree	46	50.0	50.0	51.1
Master's Degree	45	48.9	48.9	100.0
Total	92	100.0	100.0	

Source: Own survey (2024)

From the respondents, 1% (1), 50 % (46) and 48.9 % (45) were diploma holders, BA/BSC professionals and masters and above in their educational background and this indicates most of the workers are BA degree which leads the workers have understanding of total quality management

Table 4 Work Experience (Year)

	Frequency	Percent	Valid Percent	Cumulative Percent
1 - 3 years	8	8.7	8.7	8.7
4 - 6 years	32	34.8	34.8	43.5
Valid 7 - 9 years	17	18.5	18.5	62.0
10 and above	35	38.0	38.0	100.0
Total	92	100.0	100.0	

Source: Own survey (2024)

The majority (53.3%) of the respondents has work experience of 4 to 9 years. The minimum respondents work experience is two years (Table 4.2). 14.5% (11 respondents) were female respondents

Table 5 Respondents' sex profile

	Frequency	Percent	Valid Percent	Cumulative Percent
Male	71	77.2	77.2	77.2
Valid Female	21	22.8	22.8	100.0
Total	92	100.0	100.0	

The majority (77.2%) of the respondents has males. The minimum respondents is females (Table 5). 14.5% (11 respondents) were female respondents

Table 6 Age of the respondent

	Frequency	Percent	Valid Percent	Cumulative Percent
26 - 30	18	19.6	19.6	19.6
31 - 40	55	59.8	59.8	79.3
Valid 41 - 45	17	18.5	18.5	97.8
46 - 50	2	2.2	2.2	100.0
Total	92	100.0	100.0	

4.3. Descriptive analysis of major quality management practices

The quality management system practices considered in this research as defined in the standard questionnaire and discussed in the literature part are top management commitment, supply relationship management, customer relationship management, workforce management, process management, product or service design and quality information analysis. As shown in Table 4.3, minimum score value for constructs are below the mean value, 3.0. Whereas the maximum mean value for all is greater than 4.67. The mean average value is also for all greater than the average value, 3.0, and the deviation about the average mean value is for all less than 0.63531 standard deviation. This indicates the respondents agree the quality management system practices had positive effect on the performance of the organization in a relatively small variation.

4.3: Descriptive Statistics for quality management practices

Table 7 Table Descriptive statistics for Top Management Commitment Aspects

S.no	Item Statements	VP (%)	P (%)	Sat (%)	G (%)	VG (%)	T (%)	Mean	Remark
1	Organizational leaders take on the responsibility for developing quality-oriented management systems	2(2.2)	4(4.3)	38(41.3)	24(26.1)	24(26.1)	92(100.0)	3.7	High
2	Company leadership has provided the necessary resource to meet the new requirements resulting from quality management system implementation	2(2.2)		32(34.8)	42(45.7)	16(17.4)	92(100.0)	3.8	High
3	Leaders personally evaluate the application and advancement of total quality principles	--	17(18.5)	22(23.9)	40(43.5)	13(14.1)	92(100.0)	3.5	Low
4	Leaders assign resource for nonstop improvement of the management system	6(6.5)	15(16.3)	13(14.1)	58(63.0)		92(100.0)	3.3	Low
5	Company leadership has provided conducive working environment to employee involvement in quality management process	1(1.1)	18(19.6)	17(18.5)	38(41.3)	18(19.6)	92(100.0)	3.6	High
6	The company leadership influence the decision of selecting qualified suppliers and certifying suppliers for quality material	3(3.3)	6(6.5)	28(30.4)	32(34.8)	23(25.0)	92(100.0)	3.7	High
7	The company leadership has inspired staff and management in effective and efficient use of the resource and efforts of the institution towards quality excellence	1(1.1)	9(9.8)	32(34.8)	50(54.3)		92(100.0)	3.4	Low
8	Leaders intermingle with customers and keep in mind their contributions when designing goods and services	1(1.1)		37(40.2)	41(44.6)	13(14.1)	92(100.0)	3.7	High

VP=Very Poor, P=Poor, Sat=Satisfactory, G=Good, VG=Very Good, T=Total, Weighted Average =3.6

As the result in the table above shows the high score (3.7) suggests that the respondents strongly agree that leadership is effectively taking charge in creating systems that prioritize quality management and leaders' commitment to quality management systems is vital for setting clear standards, goals, and processes that encourage continuous improvement and ensure that quality is consistently maintained across the organization.

The survey results on Leadership in Quality Management reveal mixed perceptions of leadership's role in driving quality initiatives and ensuring that the necessary systems, resources, and strategies are in place. While there are areas where leadership is seen as effective, there are also areas that require improvement, particularly in areas related to continuous improvement and the personal involvement of leaders in quality initiatives.

This item received a mean score of 3.7, reflecting a positive perception of leadership's role in establishing quality management systems. 41.3% of respondents rated it as "Good," and 26.1% rated it as "Very Good." This indicates that leadership is seen as proactive in developing systems that focus on quality management. However, some dissatisfaction was expressed by the 4.3% rating it as "Poor," which may suggest areas for greater leadership involvement or visibility in this area.

This item received a mean score of 3.8, which is high, showing that the company leadership is perceived as providing adequate resources for quality management system (QMS) implementation. 45.7% rated it as "Good," and 17.4% rated it as "Very Good." This demonstrates a positive outlook on the support provided by leadership in terms of resourcing the QMS. The 2.2% rating it as "Very Poor" suggests that there may be some employees who feel that resources could be better allocated or more readily available.

This item received a mean score of 3.5, indicating a relatively low perception of leadership's personal involvement in evaluating quality principles. The 18.5% rating it as "Poor" and only 14.1% rating it as "Very Good" suggest that employees feel leadership could do more in terms of personally evaluating and advancing total quality management principles. This item appears to be a clear area for improvement, where leadership involvement could be increased.

This item received a mean score of 3.3, indicating a low perception of leadership's role in allocating resources for continuous improvement. 6.5% rated it as "Very Poor," and 16.3% rated

it as "Poor," signaling that employees may not feel that leadership is sufficiently investing in ongoing improvements to the quality management system. The 63% rating it as "Good" suggests that some employees do recognize efforts in this regard, but this area would benefit from stronger leadership commitment to resource allocation for improvement.

This item received a mean score of 3.6, indicating a relatively high level of satisfaction with leadership's efforts to create an environment conducive to employee involvement in quality management. 41.3% rated it as "Good," and 19.6% rated it as "Very Good." This suggests that leadership is making efforts to engage employees in the quality process. However, 19.6% rated it as "Poor," indicating that more work is needed to foster a fully supportive environment for quality-focused employee participation.

This item received a mean score of 3.7, indicating that leadership is perceived as playing an important role in the selection of qualified suppliers and ensuring that only certified suppliers are chosen for quality materials. 34.8% rated it as "Good," and 25% rated it as "Very Good." This reflects a strong leadership presence in the supplier selection process, although there is a slight need for improvement given the 6.5% who rated it as "Poor."

This item received a mean score of 3.4, suggesting that while leadership is somewhat effective in inspiring staff and management, there is room for improvement in their ability to encourage the efficient and effective use of resources toward quality excellence. 54.3% rated it as "Good," and 9.8% rated it as "Poor," signaling that while many employees are motivated by leadership, there is still work to be done to ensure that everyone is aligned and effectively utilizing resources.

This item received a mean score of 3.7, indicating that leadership is somewhat successful in engaging with customers and considering their feedback when designing products and services. 44.6% rated it as "Good," and 14.1% rated it as "Very Good." This suggests that leadership recognizes the importance of customer involvement in the design process, but there is still room for improvement in terms of leadership's direct engagement with customers.

Table 8 Descriptive statistics for Continuous improvement and innovation

S.no	Item Statements	VP (%)	P (%)	Sat (%)	G (%)	VG (%)	T (%)	Mean	Remark
1	The company undertake quality audits and evaluation regularly	3(3.3)	4(4.3)	24(26.1)	33(35.9)	28(30.4)	92(100.0)	3.9	High
2	Use of customer complaints as a method to initiate improvements in current processes	3(3.3)	6(6.5)	42(45.7)	30(32.6)	11(12.0)	92(100.0)	3.4	Low
3	The company evaluate the performance of suppliers on continuously	1(1.1)	13(14.1)	18(19.6)	39(42.4)	21(22.8)	92(100.0)	3.7	High
4	The company improves employees competencies through trainings	3(3.3)	6(6.5)	28(30.4)	38(41.3)	17(18.5)	92(100.0)	3.7	High
5	Regular departmental and employee appraisals carried out	--	7(7.6)	34(37.0)	43(46.7)	8(8.7)	92(100.0)	3.6	Low
6	The company undertakes quality audits and evaluation regularly	--	5(5.4)	13(14.1)	47(51.1)	27(29.3)	92(100.0)	4.0	High

VP=Very Poor, P=Poor, Sat=Satisfactory, G=Good, VG=Very Good, T=Total, Weighted Average =3.7

As the result in the table above shows the company's regular quality audits and evaluations show a high level of commitment to ensuring processes meet standards. Regular audits are a core element of quality management systems (QMS) because they help identify inefficiencies and areas for improvement. This high score suggests that the company is committed to maintaining quality and ensuring that processes remain up-to-date with best practices. This indicates that the continued investment in quality audits will help the company stay competitive by maintaining rigorous standards and adapting to any industry changes. The leadership should ensure that audits cover not just internal processes but also market and customer feedback.

This item received a lower score, indicating that the company may not be fully utilizing customer complaints to drive improvements. Customer complaints are a valuable source of feedback, revealing gaps in service, product quality, or customer expectations. The company needs to develop a more structured process for analyzing and addressing customer complaints. Complaints can offer direct insights into areas where the company is failing to meet customer expectations, and addressing them can lead to more meaningful improvements.

This indicates that the company is effective in continuously evaluating suppliers, ensuring that it works with suppliers who meet quality standards and contribute to the overall success of the company. Continuous evaluation of suppliers is critical, as the quality of the inputs directly affects the end products. The company should maintain strong supplier relationships and periodically review performance metrics to ensure alignment with quality standards. The company is seen as improving employee competencies through training, which helps in building a skilled and knowledgeable workforce capable of maintaining and improving product and service quality. Investment in training is essential for fostering innovation and continuous improvement. The company should continue to provide relevant training and development programs that align with organizational goals, enhancing employee performance and engagement.

Regular departmental and employee appraisals are crucial for measuring individual and team performance. A score of 3.6 suggests that while appraisals may be occurring, they may not be as systematic or effective as they could be. Improving the structure of employee and departmental

appraisals can help in recognizing areas for improvement and fostering a culture of accountability. Regular feedback and performance evaluations could increase motivation and guide employees toward meeting organizational goals.

While the company excels in areas like quality audits, supplier evaluations, and employee training, there is a clear need for improvement in using customer complaints for improvement and ensuring regular appraisals are conducted in a more systematic manner. Addressing these areas will help the company become more agile in adapting to customer needs and more efficient in managing employee performance.

This shows that the company must give more attention on customer complaints and employee appraisal. But, Continuous improvement and innovation has a positive effect to the organizational performance.

Table 9 Descriptive statistics for Customer Focus

S.no	Item Statements	VP (%)	P (%)	Sat (%)	G (%)	VG (%)	T (%)	Mean	Remark
1	The company focuses on improved satisfaction of our clients	2(2.2)	8(8.7)	26(28.3)	38(41.3)	18(19.6)	92(100.0)	3.7	High
2	The company focuses on better communication with our clients	1(1.1)	10(10.9)	16(17.4)	49(53.3)	16(17.4)	92(100.0)	3.8	High
3	The company focuses on a decline in the number of customer criticisms and grievances.	1(1.1)	12(13.0)	43(46.7)	36(39.1)		92(100.0)	3.2	Low
4	The company focuses on client consolidation, returning clients and loyal clients	1(1.1)	3(3.3)	35(38.0)	39(42.4)	14(15.2)	92(100.0)	3.7	High
5	The company responds quickly to customers complaints	--	16(17.4)	35(38.0)	32(34.8)	9(9.8)	92(100.0)	3.4	Low

6	Complaints are seen as a competitive advantage for company	--	10(10.9)	24(26.1)	48(52.2)	10(10.9)	92(100.0)	3.6	High
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VP=Very Poor, P=Poor, Sat=Satisfactory, G=Good, VG=Very Good, T=Total, Weighted Average =3.6

This item shows that the company places a strong emphasis on improving client satisfaction. A majority of responses (60.9%) are in the "Good" or "Very Good" categories, reflecting the company's focus on customer satisfaction. The company's approach to improving satisfaction is positive and should continue to be a core strategy. Further enhancing personalized customer service or gathering more specific customer feedback could further elevate satisfaction levels.

Effective communication is key to a strong customer relationship, and the company is doing well in this area. The company should continue fostering clear and open lines of communication with clients. This might include offering more channels for communication, such as digital platforms or regular customer check-ins, to further enhance the client experience.

While a majority (85.8%) of respondents rate this as satisfactory or higher, the relatively low mean suggests that the company could improve in proactively reducing customer complaints. This could be a sign that the company is not consistently identifying and addressing the root causes of customer grievances.

The company should adopt a more proactive approach to identifying potential issues before they escalate into complaints. This could involve more regular customer surveys or focus groups to gauge customer sentiment and identify potential areas of improvement.

The company is perceived to have a strong focus on client retention and loyalty, which is reflected in the high ratings for this item. Focusing on returning clients is a key indicator of a company that values long-term customer relationships and recognizes their importance. The company could further strengthen its client retention strategies by offering loyalty programs, personalized services, or incentives for returning clients. This could help ensure long-term profitability and stability.

The company seems to have some room for improvement in responding to complaints swiftly, with a significant portion (55.2%) indicating that the response time is not as fast as it should be. This could be affecting customer satisfaction and trust in the company.

To improve in this area, the company could implement a more structured system for handling complaints, such as a dedicated customer service team or a streamlined process for fast resolution. Ensuring prompt responses is crucial for maintaining customer loyalty.

This item shows that a majority of respondents believe the company sees complaints as an opportunity to improve and gain a competitive edge. This reflects a positive attitude towards handling complaints, indicating that the company may be using customer feedback as a way to refine its offerings.

The company should continue to view complaints as a valuable source of information for improvement. Developing a system that quickly analyzes complaints and makes adjustments to products or services based on feedback could lead to continuous growth and innovation.

Table 10 Descriptive statistics for Employee Involvement Practices

S.no	Item Statement	VP (%)	P (%)	Sat (%)	G (%)	VG (%)	T (%)	Mean	Remark
1	Employees' effective knowledge and learning capability will provide sustainability of quality management in the firm	1(1.1)	15(16.3)	14(15.2)	44(47.8)	18(19.6)	92(100.0)	3.7	Low
2	Employees are involved in decision making that affect their work	1(1.1)	22(23.9)	38(41.3)	30(32.6)	1(1.1)	92(100.0)	3.1	Low
3	Quality does not originate in one department of function; it is the concern of the whole firm	2(2.2)	10(10.9)	23(25.0)	32(34.8)	25(27.2)	92(100.0)	3.7	Low
4	Employees are given opportunity to suggest quality improvement	1(1.1)	5(5.4)	24(26.1)	37(40.2)	25(27.2)	92(100.0)	3.9	High
5	Training is given to all employees based on the result of the training needs assessment to improve quality	--	11(12.0)	12(13.0)	51(55.4)	18(19.0)	92(100.0)	3.8	High
6	The employees are provided with feedback on their quality performance	--	7(7.6)	20(21.7)	44(47.8)	21(22.8)	92(100.0)	3.9	High

7	Effective training will lead to employees' loyalty to the firm, motivation, and work performance	1(1.1)	3(3.3)	12(13.0)	52(56.5)	24(26.1)	92(100.0)	4.0	High
8	If employees are educated on producing dependable and high quality products and/or services, their full participation in the production stage would be more productive	--	5(5.4)	8(8.7)	43(46.7)	36(39.1)	92(100.0)	4.2	High

VP=Very Poor, P=Poor, Sat=Satisfactory, G=Good, VG=Very Good, T=Total, Weighted Average =3.8 (Table 10)

The survey results on Employee Involvement and Knowledge Management reflect the importance of fostering employee engagement, knowledge, and skills to support quality management and organizational performance. The overall results indicate some strengths in areas such as training and feedback, but there are also areas that require attention for improvement.

This item received a mean score of 3.7, indicating a generally positive perception of the role of employee knowledge and learning in sustaining quality management. However, the responses also reveal some dissatisfaction, with 16.3% of respondents rating it as "Poor." While most employees (47.8%) rated it as "Good" and 19.6% rated it as "Very Good," this suggests that while there is awareness of the importance of employee learning for quality sustainability, the effectiveness of this initiative might need improvement.

This item received a mean score of 3.1, indicating relatively low satisfaction regarding employee involvement in decision-making. A significant portion of respondents (23.9%) rated it as "Poor," and only 32.6% rated it as "Good." This suggests that Dashen Brewery may not be involving employees adequately in decisions that directly impact their roles, which could negatively affect employee motivation, engagement, and overall quality outcomes.

This item received a mean score of 3.7, indicating that while employees understand that quality is a company-wide responsibility, there is room for improvement. With 34.8% rating it as "Good" and 27.2% as "Very Good," employees generally agree with the holistic approach to quality management. However, there is still some dissatisfaction, with 13.1% rating it as "Poor."

This suggests that there may be a lack of full integration of quality practices across all departments, requiring more cross-functional collaboration.

With a mean score of 3.9, this item shows a more positive response. Most respondents (40.2%) rated it as "Good," and 27.2% rated it as "Very Good." This indicates that employees are given some opportunities to contribute to quality improvement initiatives. However, 5.4% rated it as "Poor," suggesting that there could be more systematic or widespread opportunities for employee involvement in these areas.

This item received a mean score of 3.8, reflecting a positive response overall. 55.4% rated it as "Good," and 19.0% rated it as "Very Good," indicating that employees appreciate the alignment of training with quality improvement needs. However, there is still some room for improvement, as a portion of employees (12%) rated it as "Poor." Ensuring that training needs are accurately assessed and met for all employees will further enhance the effectiveness of training programs.

This item received a strong mean score of 3.9, with 47.8% of respondents rating it as "Good" and 22.8% as "Very Good." This indicates that Dashen Brewery has a solid mechanism for providing feedback on quality performance. However, a few employees (7.6%) rated it as "Poor," suggesting that feedback may not be consistent or comprehensive across the organization.

With a mean score of 4.0, this item shows a positive response, reflecting the belief that training has a direct impact on employee loyalty, motivation, and performance. Most employees (56.5%) rated it as "Good," and 26.1% rated it as "Very Good." This demonstrates a strong belief in the value of training programs in fostering long-term employee engagement and performance.

This item received the highest mean score of 4.2, indicating strong agreement with the statement. Employees believe that educating them on producing high-quality products leads to greater productivity and engagement in the production process. With 46.7% rating it as "Good" and 39.1% as "Very Good," this suggests that Dashen Brewery's focus on product quality education is effective in improving employee participation and performance.

As the result in the table above shows us, Employee Involvement Practices perceptions are low in Employees' effective knowledge and learning capability will provide sustainability of quality management in the firm, Employees are involved in decision making that affect their work and

Quality does not originate in one department of function; it is the concern of the whole firm in comparison to the weighted average. This shows that the company should give more attention to knowledge and learning capability, decision making and the effect of Quality in all department. But, Employee Involvement Practices has a positive effect to the organizational performance.

Table 11 Descriptive statistics for Employee Training

S.no	Item Statement	VP (%)	P (%)	Sat (%)	G (%)	VG (%)	T (%)	Mean	Remark
1	Training is regarded as one of the most important factors in improving quality	1(1.1)	4(4.3)	7(7.6)	39(42.4)	41(44.6)	92(100.0)	4.3	High
2	Training is in the total quality concept is given to all employee in the organization	--	7(7.6)	8(8.7)	37(40.2)	40(43.2)	92(100.0)	4.2	High
3	Employees are trained to improve interactive skills (such as communication skill, effective meeting skills, and leadership skills)	--	8(8.7)	6(6.5)	45(48.9)	33(35.9)	92(100.0)	4.1	High
4	Employees are trained in problem identification and problem solving techniques	3(3.3)	7(7.6)	14(15.2)	28(30.4)	40(43.5)	92(100.0)	4.0	Low
5	Seminars and workshops in quality issues are arranged for employees as part of an ongoing process.	2(2.2)	7(7.6)	16(17.4)	37(40.2)	30(32.6)	92(100.0)	3.9	Low
6	Training and education covers the entire workforce as part of an ongoing process	--	3(3.3)	20(21.7)	42(45.7)	27(29.3)	92(100.0)	4.0	Low

VP=Very Poor, P=Poor, Sat=Satisfactory, G=Good, VG=Very Good, T=Total, Weighted Average =4.1 (Table 11)

The Training and Education section of the survey highlights the importance of continuous learning and skill development for employees at Dashen Brewery. The survey responses suggest that training is generally valued, but there are some areas where further improvement could be made. Here's a detailed analysis of each item:

This item received the highest mean score of 4.3, indicating that employees strongly believe in the importance of training for quality improvement. A large percentage of respondents (44.6%) rated it as "Very Good," while 42.4% rated it as "Good." The results reflect a positive attitude toward the role of training in driving quality, suggesting that Dashen Brewery has been successful in emphasizing the value of training in its quality management efforts.

With a mean score of 4.2, this item also received a positive response, suggesting that employees appreciate the focus on total quality management (TQM) training. 43.2% rated it as "Very Good," and 40.2% rated it as "Good." The results indicate that Dashen Brewery has been proactive in educating its employees on quality concepts, helping them understand the broader objectives of the organization. However, there is room for improvement, as some employees (7.6%) rated it as "Poor," which may indicate gaps in ensuring TQM is fully implemented across all levels.

This item received a mean score of 4.1, indicating that employees value the training provided for enhancing their interactive and leadership skills. A significant portion of respondents (35.9%) rated it as "Very Good," while 48.9% rated it as "Good." The results suggest that Dashen Brewery's focus on building key soft skills is appreciated. However, a small percentage (8.7%) rated it as "Poor," signaling that not all employees feel fully supported in this area.

This item received a lower mean score of 4.0, which is still considered good but indicates room for improvement. 43.5% of respondents rated it as "Very Good," while 30.4% rated it as "Good." However, 10.9% rated it as "Poor" or "Very Poor," suggesting that while the majority of employees find the training beneficial, some feel that the training in problem-solving techniques may not be sufficiently comprehensive or effective.

This item received a mean score of 3.9, reflecting a generally positive perception of the availability of seminars and workshops. However, a notable percentage (9.8%) rated it as "Poor" or "Very Poor." This suggests that while seminars and workshops are offered, they may not be as frequent, accessible, or impactful as needed to fully engage employees in ongoing quality improvement initiatives.

With a mean score of 4.0, this item indicates that employees believe training is generally inclusive across the workforce. However, similar to other items, there are some areas of dissatisfaction, as evidenced by 6.6% of respondents rating it as "Poor" or "Very Poor." This suggests that there might be disparities in the training provided to different employee groups or areas for improvement in ensuring consistency in the educational approach.

As the result in the table above shows us, Employee Training perceptions are low in items Employees are trained in problem identification and problem solving techniques, Seminars and workshops in quality issues are arranged for employees as part of an ongoing process and Training and education covers the entire workforce as part of an ongoing process in comparison to the weighted average. This shows that a little more focus needed on items problem identification and problem solving techniques, Seminars and workshops in quality issues and Training and education covers the entire workforce

Table 12 Descriptive statistics for Reward and Recognition

S.no	Item Statement	VP (%)	P (%)	Sat (%)	G (%)	VG (%)	T (%)	Mean	Remark
1	There is appropriate reward and recognition for outstanding performance in the Dashen	3(3.3)	22(23.9)	31(33.7)	16(17.4)	20(21.7)	92(100.0)	3.3	Low
2	There are insufficient opportunities for promotion	2(2.2)	11(12.0)	28(30.4)	36(39.1)	15(16.3)	92(100.0)	3.6	High
3	Management generally encourages, rewards, accepts, evaluate, and implements employee's suggestion in quality matters	5(5.4)	11(12)	33(35.9)	26(28.3)	17(18.5)	92(100.0)	3.4	Low
4	Reward and recognition activities effectively stimulate employee commitment to quality improvement.	3(3.3)	8(8.7)	26(28.3)	30(32.6)	25(27.2)	92(100.0)	3.7	High
5	Employees and/or teams are recognized for achievement in quality improvements	4(4.3)	3(3.3)	27(29.3)	28(30.4)	30(32.6)	92(100.0)	3.8	High

VP=Very Poor, P=Poor, Sat=Satisfactory, G=Good, VG=Very Good, T=Total, Weighted Average =3.6 (Table 12)

The Reward and Recognition system at Dashen Brewery, as indicated by the survey responses, reveals varying levels of satisfaction across different dimensions. Here's a detailed analysis of each item in this category:

The item on the appropriateness of rewards and recognition for outstanding performance received the lowest score in this section, with a mean of 3.3. Only 21.7% of respondents rated it as "Very Good," and a significant percentage (26.8%) rated it as "Poor" or "Very Poor." This suggests that the reward system may not be perceived as adequately recognizing or valuing the contributions of employees. Dashen Brewery may need to reassess its reward strategies to ensure that exceptional performance is more effectively recognized and incentivized.

This item received a higher mean of 3.6, indicating that employees are generally more satisfied with the availability of promotion opportunities. A significant portion of respondents (39.1%) rated it as "Good," and 16.3% rated it as "Very Good." However, there remains a concern for the 14.2% of respondents who rated it as "Poor" or "Very Poor." While promotion opportunities seem to be in place, further efforts could be made to ensure that they are accessible to all employees, and the criteria for promotion are transparent and fair.

The item concerning management's approach to employee suggestions, especially in quality matters, received a mean score of 3.4. While 28.3% rated it as "Good" and 18.5% rated it as "Very Good," a notable percentage (17.4%) rated it as "Poor" or "Very Poor." This suggests that while some employees feel their suggestions are valued, there is room for improvement in how management handles and implements employee input. Strengthening the feedback loop and creating a more receptive environment for suggestions could improve employee satisfaction in this area.

This item received a relatively high mean score of 3.7, indicating that reward and recognition activities are somewhat effective in fostering employee commitment to quality improvement. With 32.6% of respondents rating it as "Good" and 27.2% as "Very Good," there is a positive perception of the impact of rewards and recognition on motivating employees. However, further efforts could be made to ensure that these activities are more closely aligned with the specific goals of quality improvement.

The highest-rated item in the reward and recognition category, this item received a mean score of 3.8. A significant percentage of respondents (32.6%) rated it as "Very Good," with an additional 30.4% rating it as "Good." This suggests that employees and teams involved in quality improvement initiatives generally feel recognized and appreciated for their contributions. The organization seems to be performing well in acknowledging quality-focused achievements.

As the result in the table above shows us, Reward and Recognition are low in items there is appropriate reward and recognition for outstanding performance in the Dashen, Management

generally encourages, rewards, accepts, evaluate, and implements employee's suggestion in quality matters in comparison to the weighted average.

This shows that a little more focus needed on items reward and recognition for outstanding performance and encourages, rewards, accepts, evaluate, and implements employee's suggestion in quality matters. But, Reward and Recognition has a positive effect to the organizational performance.

Table 13 Descriptive statistics for Communication and Information Systems

S.no	Item Statement	VP (%)	P (%)	Sat (%)	G (%)	VG (%)	T (%)	Mean	Remark
1	There is communication system inside the institution that allow easily communication between top management and employees and between customers and the Dashen	3(3.3)	3(3.3)	26(28.3)	60(65.2)	--	92(100.0)	3.6	Low
2	There is a clear and consistent process for the communication of mission statement and objectives defining quality values, expectations and focus	1(1.1)	3(3.3)	27(29.3)	25(27.2)	36(39.1)	92(100.0)	4.0	High
3	There is effective inter-communication between various levels.	1(1.1)	3(3.3)	22(23.9)	56(50.9)	10(10.9)	92(100.0)	3.8	High
4	There is an advanced technological information system to support implementing quality management system	--	5(5.4)	22(23.9)	35(38.0)	30(32.6)	92(100.0)	4.0	High
5	In Dashen brewery uses information system to provide high quality data and information to employees	--	7(7.6)	22(23.9)	36(39.1)	27(29.3)	92(100.0)	3.9	High

VP=Very Poor, P=Poor, Sat=Satisfactory, G=Good, VG=Very Good, T=Total, Weighted Average =3.8 (Table 13)

The findings from the table above provide insights into how Communication and Information Systems are perceived in the organization, specifically focusing on the Dashen Brewery.

Communication between Top Management, Employees, and Customers: The item regarding the communication system that allows easy communication between top management, employees, and customers received a relatively low score, with a mean of 3.6. Although 65.2% of respondents rated it as

"Good," the presence of 6.6% who marked it as "Poor" or "Very Poor" suggests there is room for improvement in the communication system. This points to potential challenges in creating a seamless flow of information between management, staff, and customers. It may indicate the need for more accessible communication channels or a better structure to facilitate this flow.

Communication of Mission and Objectives: The item evaluating the communication of the organization's mission statement, objectives, and quality values, expectations, and focus received a high mean score of 4.0. This indicates that the process for communicating these key elements is well-established and effective. A substantial percentage of respondents (39.1%) rated it as "Very Good," suggesting that the organization is succeeding in conveying its core messages about quality and values.

Inter-Communication between Various Levels: The communication between different organizational levels also scored well, with a mean of 3.8. While 50.9% rated this as "Good," and 10.9% rated it as "Very Good," there are still a few areas where the inter-level communication could be enhanced, particularly for the 3.3% who rated it as "Poor." This suggests the need to further strengthen the communication processes between higher and lower levels in the company to ensure everyone is aligned with organizational goals.

Technological Information Systems: The use of advanced technological information systems to support the implementation of quality management systems received a high mean score of 4.0, indicating that the company is effectively leveraging technology to manage and improve quality practices. This score suggests that Dashen Brewery is investing in modern technologies that support its operations, enhancing the overall effectiveness of its quality management systems.

Use of Information Systems for Quality Data: The final item, which assesses the use of information systems to provide high-quality data and information to employees, also scored highly with a mean of 3.9. This suggests that the information systems are performing well in delivering data that helps employees make informed decisions, enhancing operational effectiveness.

As the result in the table above shows us, communication and Information Systems is low only in item There is communication system inside the institution that allow easily communication between top management and employees and between customers and the Dashen in comparison to the weighted average. This shows that a little more focus needed in item communication system inside the institution that allow easily communication between top management and employees and between customers .But, Communication and Information Systems has a positive effect to the organizational performance

Table 14 Descriptive statistics for Benchmarking

S.no	Item Statement	VP (%)	P (%)	Sat (%)	G (%)	VG (%)	T (%)	Mean	Remark
1	Benchmarking is used to identify the best procedure for improvement from other organizations with similar interests and goals		3(3.3)	25(27.2)	40(43.5)	24(26.1)	92(100.0)	3.9	Low
2	There is an emphasis on benchmarking the services and processes with respect to those of other beer factory	1(1.1)	1(1.1)	16(17.4)	50(54.3)	24(26.1)	92(100.0)	4.4	High
3	There is an emphasis on benchmarking the level of customer focus with those of other beer factory	1(1.1)	1(1.1)	15(16.3)	54(58.7)	21(22.8)	92(100.0)	4.0	High
4	The organization uses benchmarking to identify the needs for change		6(6.5)	9(9.8)	67(72.8)	10(10.9)	92(100.0)	3.9	Low
5	There is emphasis on prevention of errors rather than correction after the fact		6(6.5)	21(22.8)	55(59.8)	10(10.9)	92(100.0)	3.8	Low
6	There is a use of self-assessment tools and other mechanisms to track and improve performance gaps in the implementation and effectiveness of system, process and practice		6(6.5)	14(15.2)	42(45.7)	30(32.6)	92(100.0)	4.0	High

VP=Very Poor, P=Poor, Sat=Satisfactory, G=Good, VG=Very Good, T=Total, Weighted Average =4.0 (Table 14)

While this item received a mean score of 3.9, indicating a generally positive perception, the "Very Poor" and "Poor" responses combined are still significant, suggesting that benchmarking is not consistently used across the organization to identify best practices. The company should enhance its benchmarking practices and apply them systematically across various departments to identify areas for improvement. Strengthening a culture of continuous benchmarking would help the organization to stay competitive by adopting best practices from similar organizations.

This item has a strong positive perception, with a mean score of 4.4. A majority of respondents rated it as "Good" or "Very Good," indicating that the company places a strong emphasis on benchmarking its services and processes against industry peers, particularly other beer factories.

The organization's focus on benchmarking against other beer factories is commendable, and it would be beneficial to continue this practice while looking for innovative ways to incorporate feedback from these comparisons into operational processes.

This item received a mean score of 4.0, indicating that the company is effectively using benchmarking to measure customer focus against competitors. This is critical in maintaining a competitive edge in customer service and experience.

The company should continue to benchmark customer satisfaction and focus levels against competitors, which can help identify areas where customer service may be lacking. Strengthening relationships with customers based on these findings could further improve customer loyalty.

Despite a relatively high mean score, the combination of "Very Poor" and "Poor" responses indicates that the organization might not consistently use benchmarking as a tool for identifying change requirements. This suggests that the need for change is not always identified through benchmarking practices.

The company should enhance its use of benchmarking to actively identify areas where changes are necessary. This could be achieved by implementing regular benchmarking reviews and aligning them with strategic change initiatives.

Although the mean score of 3.8 is relatively positive, there is still a sizable portion of responses in the "Poor" and "Very Poor" categories. This indicates that the organization may not fully emphasize the prevention of errors, opting instead for correction after the fact.

The company should focus more on preventive measures and adopt proactive strategies to avoid errors, such as training employees, refining processes, and implementing quality control systems. Moving towards a culture of prevention will help reduce costs associated with error correction and improve overall efficiency.

As the result in the table above shows us, Benchmarking is low in items 1, 4 and 5 in comparison to the weighted average. This shows that a little more focus needed in items Benchmarking is used to identify the best procedure for improvement from other organizations with similar interests and goals, the organization uses benchmarking to identify the needs for change and there is emphasis on prevention of errors rather than correction after the fact. But, Benchmarking has a positive effect to the organizational performance

The results from Table 14 show that the organization has a strong foundation in benchmarking practices but also has areas where improvement is needed. The first item, which assesses the use of benchmarking to identify the best procedures for improvement, received a mean score of 3.9, indicating a relatively low level of benchmarking compared to other items. Although 43.5% rated it as "Good," there is still room for the company to increase its efforts in using benchmarking proactively for improvement.

In contrast, the organization performs well in benchmarking services and processes with those of other beer factories, with a high mean score of 4.4. This suggests that the company is effectively comparing its services and processes against competitors in the industry. Similarly, benchmarking the level of customer focus with other beer factories received a mean score of 4.0, showing that the company is focused on customer satisfaction and is using competitive data to enhance its customer-focused practices.

However, the benchmarking practices aimed at identifying the need for change and preventing errors, rather than merely correcting them, received lower mean scores of 3.9 and 3.8, respectively. These results suggest that the organization may not be using benchmarking as proactively as it could to identify areas that require change before issues arise. To address this, the company should consider placing more emphasis on benchmarking as a tool for early identification of areas for improvement, rather than waiting for problems to manifest. Additionally, focusing on preventing errors through benchmarking could improve long-term operational efficiency and minimize corrective actions.

Finally, the use of self-assessment tools and mechanisms to track performance gaps in the implementation of systems, processes, and practices received a strong mean score of 4.0, indicating that the company is effectively utilizing these tools for continuous improvement. Overall, while the company excels in certain aspects of benchmarking, it should place more focus on using benchmarking as a tool for identifying needs for change and preventing errors, rather than just correcting them after the fact.

Table 15 Descriptive statistics for Organizational Performance

S.no	Item Statement	VP (%)	P (%)	Sat (%)	G (%)	VG (%)	T (%)	Mean	Remark
1	Total quality management improves organizational sales volume	1(1.1)	1(1.1)	7(7.6)	29(31.5)	54(58.7)	92(100.0)	4.5	High
2	Total quality management improves organizational Profit		3(3.3)	3(3.3)	25(27.2)	61(66.3)	92(100.0)	4.6	High
3	Total quality management improves organizational Market share		3(3.3)	7(7.6)	21(22.8)	61(66.3)	92(100.0)	4.5	High
4	Total quality management improves organizational productivity		2(2.2)	8(8.7)	21(22.8)	61(66.3)	92(100.0)	4.5	High

VP=Very Poor, P=Poor, Sat=Satisfactory, G=Good, VG=Very Good, T=Total, Weighted Average =4.5 (Table 15)

Note: Organizational performance perception /tasks are high in all item statements in comparison to the weighted average. This shows us the organization is in a good position related to the organizational performance parameters.

4.4. Descriptive analysis of major organizational performance constructs

As defined in the methodology of this research and discussed in the literature part, the performance measures which can reflect the company's performance considered in this research are business performance, product quality and operational performance variables.

4.3. Impact of total quality management dimensions on organizational performance

4.3.1 Descriptive analysis for the variables

Emphasizing total quality management from the customer's perspective is regarded as a significant development in the brewery industry. This study aimed to assess the organizational performance of Dahan Brewery S.C. in relation to service quality, using total quality management practices commonly applied in the brewery sector as quality measures. The dimensions examined included employee training, top management commitment, continuous improvement and innovation, customer focus, benchmarking, rewards and recognition for customers, and communication and information systems.

As detailed in Chapter Three, organizational performance was evaluated using a five-point Likert scale, where 1 denotes "strongly disagree," 2 means "disagree," 3 signifies "neutral," 4 indicates "agree," and 5 stands for "strongly agree." Prior to analyzing the impact, mean scores and standard deviations were calculated, and ranks were assigned to each dimension based on these results.

Table 16 Summary of the Descriptive statistics of the study variables

Variables	observation	Mean	Std. Deviation
Top Management Commitment Aspects	92	3.845902	0.6674421
Continuous Improvement and Innovation	92	3.790984	0.6001842
Customer Focus	92	3.768852	0.6575791

Employees Involvement Practices	92	3.744731	0.55198
Employee Training	92	3.691803	0.6118108
Reward and Recognition	92	3.614754	0.680383
Benchmarking and information system	92	3.568852	0.4946126
Benchmarking	92	3.409836	0.587952
Organizational Performance	92	3.811475	0.5937967

(Table 16) *Source: own survey (2024)*

The descriptive statistics of the study variables provide a detailed snapshot of Dashen Brewery's performance in key quality management areas. The highest mean score of 3.85, with a standard deviation of 0.67, reflects a strong commitment from top management toward quality management. This is followed closely by the Continuous Improvement and Innovation variable, which has a mean of 3.79 and a standard deviation of 0.60, indicating a solid focus on innovation and ongoing enhancement. Customer Focus also scored highly, with a mean of 3.77 and a standard deviation of 0.66, demonstrating the company's commitment to customer satisfaction.

In terms of employee involvement, the mean score of 3.74 and standard deviation of 0.55 suggest that employees are moderately engaged in decision-making processes, although there is room for improvement. Employee Training received a mean of 3.69 and a standard deviation of 0.61, indicating that training programs are somewhat effective, but there is potential for further development. The Reward and Recognition variable scored a mean of 3.61 with a standard deviation of 0.68, suggesting that while employees are recognized to some extent, there is a need for more robust recognition and reward mechanisms.

Benchmarking and information systems were also evaluated, with a mean score of 3.57 and a standard deviation of 0.49, indicating that Dashen Brewery uses benchmarking and information systems, but these areas can be further optimized. The Benchmarking variable specifically showed a lower mean of 3.41, pointing to the need for the company to learn more from other organizations and improve its benchmarking efforts. Finally, Organizational Performance scored the highest in the study, with a mean of 3.81 and a standard deviation of 0.59, demonstrating that Total Quality Management (TQM) practices have had a positive impact on sales, profitability, and productivity.

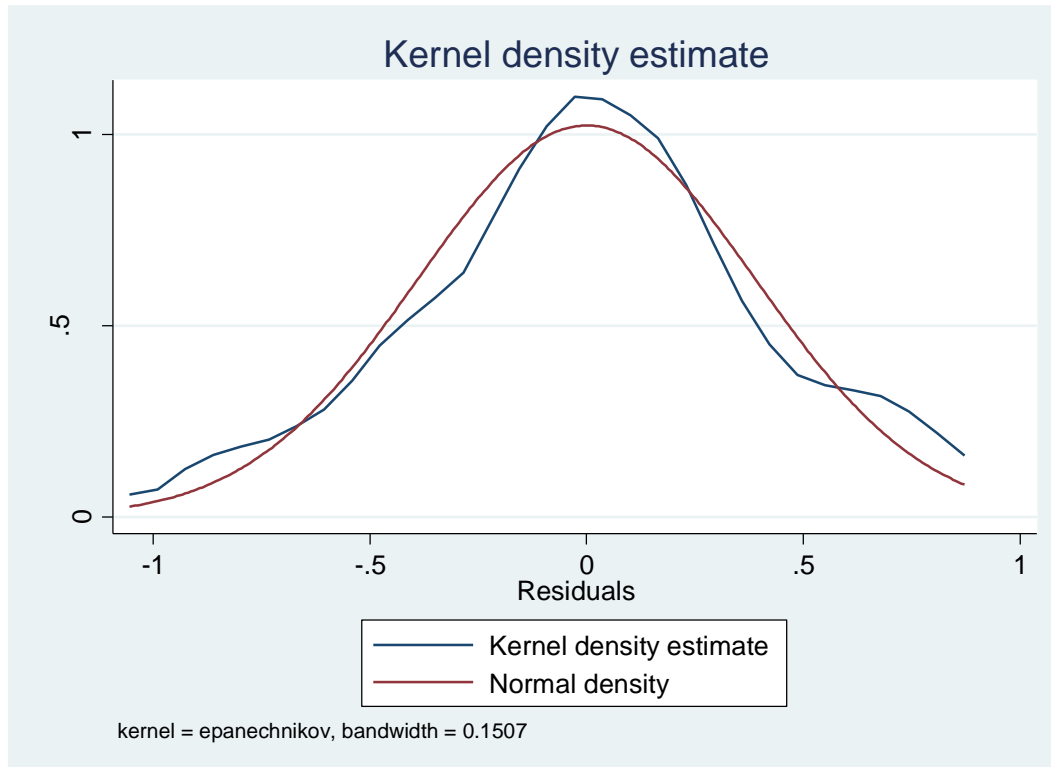
Overall, while Dashen Brewery demonstrates strong performance in many aspects of quality management, areas such as employee involvement, reward systems, and benchmarking require further focus and improvement to ensure the company's continued success and competitiveness.

The standard deviation was analyzed to assess how responses varied from the mean. Since all standard deviations were below 1, this suggests a general consensus among respondents, indicating that opinions were closely aligned.

4.3.2 Normal Distribution test

As scholars said “data examination is time consuming, but necessary.” initial step in any analysis that researchers calculates, the impact of normality, multicollinearity, and missing data. Thus, the objective of these data examination in this study was as much to reveal accurate data for further analysis and came up with accurate findings. Further, normality degree is tested to which the distribution of the sample data corresponds to the normal distribution. Accordingly, the normal distribution test for this study, as one can see, is bell shaped, or normal curve as depicted in figure 4.5 below.

Figure 4 1: Normal distribution curve



Source: survey data 2024

4.3.3 Multicollinearity

Multicollinearity measures to which a variable can be explained by the other variables in the analysis. As multicollinearity increases, it complicates the interpretation of the variate because it is more difficult to the effect of any variable owing their interrelationship. Also, to assess multicollinearity, researchers should adopt a tolerance or VIF that has been established in the regression of each independent on all the others (Garson, 2007). According to (Garson, 2007), the rule of thumb is that tolerance values less than 0.20 and the VIF greater than 10; suggest that researchers should view the results with caution. Tolerance values less than 0.10 indicates a sign of multicollinearity problem, suggesting that researchers should reconsider the independent

variables (Lin, 2008, Thompson & O’Hair, 2008). (O’Brien, 2007) and VIF values below 10 indicate that multicollinearity is not a problem for multicollinearity (Myers, 1990).

With regard to this study, multicollinearity of variables was tested and examined by using the variance inflation factor (VIF) values for each of the regression coefficients.

Multicollinearity happens when there are high predictors much of the same information. A small tolerance value and a large VIF value implying there exist multicollinearity. In this study, tolerance values between 0.278585 and 0.594393, and VIF between 3.76 and 1.68. Therefore, tolerance value and VIF are in the acceptable threshold as statistics values shown below, the tolerance and VIF showed that there was no multicollinearity because VIF of all variables were less than 10.

Table 17 multicollinearity statistics

Variable	VIF	Tolerance
MTAN Top Management Commitment Aspects,	3.76	0.266178
Continuous Improvement and Innovation	3.59	0.278585
Customer Focus,	3.28	0.304771
Employees Involvement Practices	2.58	0.386957
Employee Training	2.15	0.466136
Reward and Recognition	2.03	0.493098
Benchmarking and information system	1.98	0.503985
and Benchmarking	1.68	0.594393
<i>mean VIF</i>	2.63	

(Table 17) Source: own survey (2024)

4.3.4 Missing variables

Missing variable is an information not available about the respective variable about whom other variables are available. Missing variable often occurs when a researcher fails to include the important variable data which is omitted in the collection of data during the survey. Hence, in this research there was no omitted variable.

4.4 Correlation analysis of the variables

After examining the data using different techniques to test the accuracy of the data, the following task was to evaluate the inter-correlations among all variables. In this study, this was done to test the hypothesis regarding their relationships among them. As one can see in the following table 18, all of the variables have a positive and statistically significant relationship with organizational performance and is presented below. Moreover, a correlation coefficient is a very useful tool to summarize the relationship between two variables with a single number that falls between -1 and +1 (Field, 2005). A correlation analysis with Pearson’s correlation coefficient was conducted on all the independent and dependent variable in this study to explore the relationship between variables.

Table 18 Correlation results

OP	TMCA	CI&I	CF	EIP	ET	R&R	C&IS	BM
1.000								
0.483	1							
0.418	0.628	1						
0.331	0.316	0.375	1					
0.387	0.146	0.436	0.185	1				
0.369	0.004	0.304	0.104	0.966	1			
0.256	0.642	0.727	0.111	0.357	0.268	1		
0.400	0.484	0.568	0.090	0.312	0.234	0.769	1	
0.665	0.252	0.447	0.194	0.604	0.586	0.567	0.620	1

(Table 18) Source: Survey 2024

N= 92

TMCA = Top Management Commitment Aspect

CI&I = Continuous Improvement and Innovation

CF = Customer Focus

EIP =Employee Involvement Practices

ET = Employee Training

R&R = Reward and Recognition

C&IS = Benchmarking and Information System

B = Benchmarking

OP =Organizational Performance

- *The level of significant is derived from the regression table to create a linkage correlation with that regression.*

In this study, the interpretation of all correlations was guided by Cohen (1988) and Field (2005), who suggest that correlation within the ranges $r = .10$ to $.29$ or $r = -.10$ to $-.29$ may be classified as weak, correlation within the ranges of $r = .30$ to $.49$ or $r = -.30$ to $-.49$ may be classified as medium and correlations within the ranges of $r = .50$ to 1.0 or $r = -.50$ to -1.0 may be classified as strong. These values are equally strong, whether positive or negative.

To conclude, Pearson correlation analysis was used to measure the association among the eight dimensions which comprise of five out of eight independent variables of this research had positive strong and significant relationships with organizational performance. The results also show that each of the independent variable was associated with organizational performance separately. These independent variables were statistically significant at $p < 0.01$, and 0.05 levels. The highest level of significance was employee involvement practice (0.008) of the eight variables; top management commitment aspect, communication and information systems and reward and recognition have strong and positive relationship with the dependent variable but the weakest level of significant probably.

The correlation between independent variable and dependent variable shows also five of them to be positive and significant which means an improvement in any of the five independent variables can bring enhancement on organizational performance and it is proved that three of the

dependent variables have strong correlation with organizational performance but not significant as the regression table 4.9 indicates.

The correlation analysis conducted in this study aimed to explore the relationships between the various independent variables and Organizational Performance

The results, as shown in Table 18, reveal that all the independent variables have a positive and statistically significant correlation with organizational performance, meaning that improvements in any of these variables are associated with enhanced performance.

Starting with Top Management Commitment Aspects the correlation with organizational performance is 0.483, indicating a moderate positive relationship. This suggests that the commitment and involvement of top management in quality initiatives are key contributors to better organizational outcomes. Similarly, Continuous Improvement and Innovation shows a correlation of 0.418, which also falls within the medium positive range. This points to the importance of fostering a culture of continuous improvement and innovation, which in turn boosts organizational performance. Customer Focus, with a correlation of 0.331, has a moderate positive effect on organizational performance as well, highlighting the significant role of customer satisfaction in driving success.

Another important factor, Employee Involvement Practices, correlates with organizational performance at 0.387, again reflecting a moderate positive relationship. This suggests that actively involving employees in decision-making and quality management practices has a notable impact on organizational success. Employee Training shows a correlation of 0.369, indicating a moderate positive effect, implying that investing in employee development leads to improved performance.

On the other hand, Reward & Recognition has a weaker correlation of 0.256, which is considered a weak positive relationship. While there is still a positive association, this indicates that the impact of reward and recognition systems on performance is less significant compared to other factors. Communication and Information Systems with a correlation of 0.400, also exhibits a moderate positive relationship, underscoring the importance of efficient communication and information-sharing systems in enhancing organizational performance. Finally, Benchmarking correlates at 0.400, indicating that benchmarking practices, which involve comparing organizational processes against best practices in the industry, also contribute positively to performance.

Overall, the correlation analysis suggests that factors such as top management commitment, continuous improvement, customer focus, employee involvement, and training have a stronger and more consistent positive effect on organizational performance. While Reward & Recognition remains important, it has a weaker impact compared to the other variables. These findings underscore the importance of focusing on organizational practices that foster employee engagement, continuous development, and a customer-centric approach to drive performance improvements.

4.5. Inferential analysis

Correlation is very useful research tools but they tell us nothing about the predictive power of variables (Field, 2005). To support the correlation tools, a regression analysis was deployed to further investigate the relative importance of the independent variables in predicting the dependent variable as shown in table 4.9, Regression analysis is a statically method which is used to explain and predict dependent variable from independent variables.

In other words, in this research, a multiple regression analysis was conducted with the purpose to investigate the influence of total quality management by the eight dimensions on organizational performance. The multiple regressions are a constructive statistical method used to identify the correlation between a single dependent factor and several independent variables (Seelbach, et al., 2011; Vesey, et al., 2011). The multiple regressions assume that variables on the sample have normal distributions, it means, is extremely important to check the normality of the variables with the purpose to identify the existence of outliers. The non-normally distributed variables can impact in distortion of the results on multiple regressions as discussed above in the section of data examination.

Table 20, shows the results of the regression model using respondents' overall judgment of total quality management as the dependent variable, this variable being measured on a five-point Likert scale type and the eight total quality management factors presented above as the independent variables.

The result of multiple regressions indicates a very strong R^2 . The coefficient of determination (R^2) is a number that indicates how well data fit a statistical model. It is a measure of how well observed outcomes are replicated by the model. . From the analysis, the eight dimensions of total

quality management explained 70.75% the organizational performance as represented by the coefficient of determination (R^2) 0.7075 is explained by the eight independent variables tested and the predictor variables performed extremely well in explaining the variance toward the overall organizational performance in the Dahen brewery S.Cs service.

The model also indicates other factors contribute 29.25 % towards organizational performance that indicates further research is needed to identify the additional factors that influence the level of organizational performance in the Dahen brewery S.C.

In this study, The F-ratio was used to establish whether there exist a significance relationship between total quality management (Independent variable) and organizational performance (Dependent variable). From the analysis, F- ratio has a value of =37.58, and significant at $p=0.000$ and therefore the model is statistically significant. This implies that the model can be used for prediction purposes. Therefore, it is possible to say that the regression model adopted in this study could have not occurred by chance and is considered as significant.

Table 19 ANOVA table for Multiple Regressions

Model	R	R square		Adjusted R Square	
1	0.852565	0.7268		0.7075	
	Sum of square	Df	Mean of squares	F	Sig.
Regression	31.0090039	8	3.875	37.58	.000
Residual	11.6549305	114	0.096		
Total	42.6639344				

- A. Predictors: (Constant), top management commitment aspect, continuous improvement and innovation customer focus, employee involvement practice, employee training, reward and recognition, communication and information systems, benchmarking.
- B. Dependent Variable: organizational performance

Table 20 Regression Standard coefficient Beta table

Var.	Standard coef, Beta	Std. Err.	t	Sig.
(Constant)	0.0809741	.248001	0.33	0.745
Top Management Commitment Aspect	0.0747103	.0567378	1.32	0.191
Continuous Improvement and Innovation	0.1627594	.0958104	1.70	0.092
Customer Focus	0.1932392	.0942871	2.05	0.043
Employees Involvement Practices	0.1933762	.0713745	2.71	0.008
Employee Training	0.1718447	.0904123	1.90	0.060
Reward and Recognition	0.0777343	.0831475	0.93	0.352
Communication and information system	0.017959	.0727319	0.25	0.805
Benchmarking	0.1104456	.0611087	1.81	0.073

Var.	Standard coef, Beta	Std. Err.	t	Sig.
(Constant)	0.0809741	.248001	0.33	0.745
TMCA	0.0747103	.0567378	1.32	0.191
CII	0.1627594	.0958104	1.70	0.092
CF	0.1932392	.0942871	2.05	0.043
EIP	0.1933762	.0713745	2.71	0.008
ET	0.1718447	.0904123	1.90	0.060
RR	0.0777343	.0831475	0.93	0.352
CIS	0.017959	.0727319	0.25	0.805
BMRK	0.1104456	.0611087	1.81	0.073

(Table 20)Source: survey 2024

The relative effect of dimensions was then examined by comparing the magnitude of regression coefficients as indicated in Table 20 above. The first dimension with the greatest effect on organizational performance was Employees Involvement Practices with a coefficient beta ($\beta = 0.1933762$) by Customer Focus ($\beta = 0.1932392$), and Employee Training ($\beta = 0.1718447$) Continuous Improvement and Innovation with a coefficient ($\beta = 0.1627594$)

Regression analysis was utilized to examine the impact of various Total Quality Management (TQM) factors on organizational performance. The dependent variable in this case is organizational performance, while the independent variables include aspects like Top Management Commitment, Continuous Improvement and Innovation, Customer Focus, Employees Involvement Practices, Employee Training, Reward and Recognition, Communication and Information Systems, and Benchmarking. The results, as presented in Table 20, reveal the degree to which each independent variable influences organizational performance.

The analysis shows that Customer Focus (CF) and Employee Involvement Practices (EIP) are the most significant predictors of organizational performance. Both variables have relatively high Beta coefficients (0.1932 for CF and 0.1934 for EIP), suggesting a strong positive relationship with organizational performance. Additionally, these variables have significant p-values (0.043 for CF and 0.008 for EIP), meaning their contributions to organizational performance are statistically significant. This indicates that improving these areas can have a significant and beneficial impact on overall performance.

Similarly, Continuous Improvement and Innovation (CII) also presents a moderate positive relationship with organizational performance, with a Beta of 0.1628. Although the significance value of 0.092 is slightly above the conventional threshold of 0.05, it still suggests a meaningful influence on performance. Employee Training (ET) shows a Beta coefficient of 0.1718, with a p-value of 0.060, indicating that, while not statistically significant at the 0.05 level, it still has a potential positive influence on performance.

Benchmarking (BM), with a Beta value of 0.1104 and a p-value of 0.073, demonstrates a weaker relationship with organizational performance compared to the aforementioned variables. Despite not being statistically significant, this variable still shows some positive influence, suggesting that further investment in benchmarking practices could yield moderate improvements in performance.

On the other hand, Top Management Commitment Aspect (TMCA) has a relatively low Beta coefficient of 0.0747, and its p-value of 0.191 indicates that it does not significantly impact organizational performance in this study. Similarly, Reward and Recognition (R&R) and Communication and Information Systems (CIS) show very weak relationships with organizational performance. With Beta coefficients of 0.0777 and 0.0179, respectively, and p-values of 0.352 (R&R) and 0.805 (CIS), these variables do not have a statistically significant impact on performance, suggesting that they may not be as effective in influencing organizational outcomes in this context.

Meanwhile Table 20 also indicates that employee involvement practice, customer focus, employee training, continuous improvement and innovation and Benchmarking, have significant contribution to organizational performance because their significant values were less than 0.05, 0.1, 0.01 except top management commitment aspects, reward and recognition, benchmarking and information system which their significant value is more than 0.05 which are insignificant values.

Regression analysis shows how much assessments do each independent variable affect organizational performance, dependent variable. By using this regression analysis, one may assess the direct relationship between variables as well as show the causal relationship and the nature of relationship between variables (Aiken et al., 1991; Foster et al., 2004).

As shown in Table 20, all of the eight dimensions appeared as significant independent variables in the regression model. The model was written as follows:

$$Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \beta_5X_5 + \beta_6X_6 + \beta_7X_7 + \beta_8X_8 + \varepsilon$$

Where,

Y = the dependent variable representing organizational performance

$$\text{Organizational performance} = 0.0809741 + 0.07447103(\text{TMCA}) + 0.1627594(\text{CII}) + 0.1932392(\text{CF}) + 0.1718447(\text{ET}) + 0.1932392(\text{EIP}) + 0.0777343(\text{RR}) + 0.017959(\text{CIS}) + 0.1104456(\text{BMRK})$$

At 5% level of significance, five variables i.e. employee involvement practice, customer focus, employee training, continuous improvement and innovation and benchmarking were statistically significant since their p-values is less than the acceptable threshold of 0.1. However, top management commitment aspects, reward and recognition and benchmarking and information system were statistically insignificant since their p values were above the acceptable threshold.

The result of the regression analysis shows that there was a positive relationship between the eight independent variables and the dependent variable "organizational performance" as the eight coefficients of the independent variables carried positive signs. This indicated that the organizational performance depended largely on these eight variables. In other words, when there is a higher performance level in these dimensions, organizational performance increases. In addition, the regression coefficients indicate that a one unit change in a specific dimension would lead to a specific change in the overall organizational performance.

Regarding the impact of independent variables on the dependent variable, Table 4.10 illustrates the regression coefficients (β) of the eight dimensions. Employee Involvement Practices has the highest coefficient ($\beta = 0.1933762$), followed closely by Customer Focus ($\beta = 0.1932392$) and Employee Training ($\beta = 0.1718447$). Continuous Improvement and Innovation has a coefficient of ($\beta = 0.1627594$), and Benchmarking shows ($\beta = 0.1104456$). Reward and Recognition has a coefficient of ($\beta = 0.0777343$), while Top Management Commitment stands at ($\beta = 0.0747103$). Lastly, Communication and Information Systems has the lowest coefficient at ($\beta = 0.017959$).

These findings suggest that a one-unit increase in Employee Involvement Practices would result in a 19.32% increase in organizational performance, assuming other variables remain constant. Similarly, a one-unit increase in Customer Focus would lead to a 19.32% increase in performance, while a one-unit increase in Employee Training would result in a 17.18% increase. Continuous Improvement and Innovation would lead to a 16.28% increase, and a one-unit increase in Benchmarking would contribute to an 11% increase in performance. Reward and Recognition would lead to a 7.7% increase, and Top Management Commitment would result in a 7.5% increase. Finally, an increase in Communication and Information Systems would contribute a 1.8% increase in performance.

Furthermore, Employee Involvement Practices holds the highest standardized beta coefficient at 0.1933762, indicating its most substantial effect on performance, while Communication and Information Systems shows the lowest standardized beta at 0.017959. Additionally, five independent variables demonstrate significant relationships with organizational performance ($p < 0.05$, $p < 0.01$, $p < 0.1$), while Top Management Commitment, Reward and Recognition, and Communication and Information Systems do not show statistically significant relationships ($p > 0.1$).

4.8 Interview Question Analysis

For this study, five individuals from middle management and experts, alongside members of the top management, were interviewed. The interview questions, totaling nine, are outlined in Appendix D. According to the interviewees, the company implemented the Quality Management System (QMS) to enhance product quality, reduce defects, improve communication about quality, boost market performance, and increase customer satisfaction. The top management was focused on enhancing the company's reputation to drive sales and market performance through the management system's implementation.

The interviewees had varied experiences with Total Quality Management Systems (TQMS); five had comprehensive experience from registration and gap analysis to certification and system maintenance, while others had partial experience. When asked how long it took to implement the QMS, all interviewees reported it took about one and a half years. The interviewer then inquired about the mandatory procedures for implementing ISO 9001:2008 QMS, and responses varied based on their roles and understanding. Key processes identified by all included awareness creation, gap analysis, document preparation, implementation, monitoring, reporting, conducting audits, and certification.

The interviewees believed that implementing Total QMS mainly increased the company's sales performance and improved organizational performance in areas such as product quality and operations. However, there was some confusion regarding QMS principles. Six interviewees, primarily from top management and quality experts, noted that the QMS implementation was based on the Total QMS conceptual model by ISO, which they believed was essential for achieving desired outcomes. The principles embedded in this model need to be effectively applied for continuous improvement. The remaining three agreed with this perspective but showed varying levels of understanding, with two needing further clarification on the principles.

When asked about the steps taken to implement QMS, the responses were consistent. Following management commitment, awareness programs were conducted at all organizational levels, leading to gap analysis and the preparation of a quality manual, procedures, and specifications. The key steps included implementation, monitoring progress, reporting performance, auditing, and certification. When asked if they had a QMS manual, all confirmed its existence, describing it as the central document detailing quality objectives, policies, procedures, and a process map for customer satisfaction.

In response to how they identified gaps from standard requirements, interviewees explained that they first pinpointed processes and resources, established criteria and key performance indicators, and ensured that measurement and monitoring tools were in place. This indicated a solid understanding of conducting gap analysis. Regarding the certification process, all interviewees confirmed that it includes a preliminary audit, assessment, gap analysis, certificate audit, and recertification.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

The previous chapter provides an analysis of the data collected through different instruments. Based on that, in this chapter, discussion of findings, conclusions are drawn from the empirical data and in the final part, recommendations, research limitations and future research suggestions in this area are forwarded

5.1 Discussion of Finding and summery

The overall mean score for organizational performance was 3.81, with independent variables (TQM dimensions) ranging from 3.85 to 3.57. Top management commitment ranked highest among TQM dimensions, while communication and information systems received the lowest rating, indicating areas for improvement.

Employee performance is essential for service quality. Providing proper training to enhance skills and knowledge is crucial for empowering employees to meet diverse customer needs.

Prior to correlation and regression analyses, the data met statistical assumptions regarding normality and multicollinearity, ensuring reliable results.

Pearson correlation analysis revealed strong positive relationships among all TQM dimensions—employee involvement, customer focus, employee training, continuous improvement, benchmarking, top management commitment, reward and recognition, and communication and information systems—indicating that they collectively contribute to organizational performance.

The regression analysis demonstrated that five TQM dimensions—employee involvement practice, customer focus, employee training, continuous improvement, and benchmarking—have a significant positive relationship with organizational performance. The model explained approximately 70.75% of the variance in organizational performance ($R^2 = 0.7075$), indicating a strong predictive capability.

Employee involvement practice emerged as the most impactful dimension ($\beta = 0.193$), followed by customer focus and employee training. Other dimensions like top management commitment and communication systems showed less significant effects.

While managers had a generally positive perception of TQM practices, their views on actual organizational performance did not align with the assessed TQM levels. Additionally, TQMI

experts noted government support for infrastructure but highlighted a need for greater focus on TQM standards to enhance the reputation of Dahan Brewery S.C.

5.2 Conclusion

The study reveals that Dahlen Brewery's leadership demonstrates a strong commitment to quality management systems, taking responsibility for their development and ensuring resources are provided to meet initial requirements. However, there is a noticeable gap in the leadership's personal involvement in the ongoing evaluation and improvement of these systems. While employees feel supported in their involvement with quality management, more consistent resource allocation and continuous engagement from leadership in the day-to-day quality initiatives are necessary. Additionally, while the company has a customer-focused approach, there is room to further strengthen relationships with suppliers and increase leadership's direct interaction with customers to refine product offerings.

Dahlen Brewery exhibits a strong focus on quality management and customer satisfaction, as reflected in their commitment to regular audits, performance evaluations, and employee training. The company has shown a high commitment to improving customer relations, with efforts geared towards enhancing client satisfaction and fostering better communication. However, there are areas for improvement, especially in how customer complaints are handled. Despite a strong focus on customer satisfaction, the company's response to complaints and use of feedback for continuous improvement could be enhanced to create a more proactive approach. Additionally, while supplier evaluation and employee competencies are high priorities, consistent evaluations and departmental appraisals seem to be lacking, which could limit further growth and performance optimization.

The survey results suggest that Dahlen Brewery has a strong focus on employee training and its impact on quality management, with employees receiving regular training and feedback. A majority of employees believe that effective training contributes to motivation, performance, and loyalty. The company emphasizes the importance of training to improve quality and has adopted a holistic approach, involving all employees in continuous education. However, the involvement of employees in decision-making and their participation in suggesting quality improvements is relatively low. Although the firm has established training programs in areas such as communication and problem-solving, there is still room for improvement in creating a more inclusive environment for employees to contribute to decision-making and quality initiatives.

The correlation analysis conducted in this study reveals that all independent variables, including top management commitment, continuous improvement, customer focus, employee involvement, training, reward and recognition, communication and information systems, and benchmarking, have a positive relationship with organizational performance. However, the strength of these relationships varies. Variables such as top management commitment, continuous improvement, employee involvement, and training show moderate to strong positive correlations, indicating their significant role in enhancing organizational performance. On the other hand, reward and recognition, though still positively correlated, have a weaker impact compared to other factors.

These results suggest that organizations can improve their performance by focusing on areas like management involvement, continuous development, and fostering a culture of innovation.

In conclusion, the regression analysis reveals that Customer Focus and Employee Involvement Practices are the most significant factors influencing organizational performance, with Continuous Improvement and Innovation and Employee Training also contributing positively, though at a moderate level. Benchmarking demonstrates potential, but its effect on performance is relatively weaker. Meanwhile, Top Management Commitment, Reward and Recognition, and Communication and Information Systems appear to have minimal impact on organizational performance in this study.

The regression analysis indicates that Employee Involvement Practices and Customer Focus are the most significant factors influencing organizational performance, with both contributing equally to performance improvements. Employee Training and Continuous Improvement and Innovation also have a substantial impact, though slightly weaker. Benchmarking demonstrates a moderate effect, while Reward and Recognition, Top Management Commitment, and Communication and Information Systems have a minimal influence on performance in this study. These findings suggest that practices directly involving employees and focusing on customer needs are the most critical drivers of organizational performance.

.5.3 Recommendations

These findings may help Dahlen brewery S.C managers in assessing the current position of their Dahlen brewery S.C's and inspire them to improve their understanding of customer behavior. Indirectly, it will not only improve total quality management of the Dahlen brewery S.Cs that leads to organizational performance but also generate consistent net profit, positive words of mouth, and long term relations.

Dahlen Brewery should prioritize addressing gaps in its response to customer complaints and feedback. Implementing a more structured approach to handle complaints and transforming them into actionable insights for process improvement would strengthen its quality management efforts. Furthermore, the company could benefit from instituting more frequent departmental appraisals and expanding employee development programs to enhance their competencies.

Dahlen Brewery should focus on enhancing employee involvement in decision-making processes, particularly those that directly impact their work and the quality of products or services. Encouraging employees to actively participate in decision-making will foster a stronger sense of ownership and responsibility. Additionally, it is crucial to ensure that training programs are regularly updated and comprehensive, covering all aspects of total quality management. Increasing seminars, workshops, and training on advanced problem-solving and quality improvement techniques will empower employees to contribute more effectively. Finally, Dahlen

Brewery should look into structuring feedback mechanisms more efficiently, ensuring that employees have a clearer understanding of their individual performance and how it contributes to the overall quality management system.

The results of the study indicate that Dashen Brewery has made notable strides in implementing quality management practices, with strong commitment from top management, a focus on continuous improvement, and a moderate level of customer focus. Organizational performance, particularly in terms of sales, profit, and productivity, has shown significant improvement due to the adoption of Total Quality Management (TQM) principles. However, there are areas requiring further attention, such as employee involvement, reward and recognition systems, and benchmarking practices. Despite the positive outlook, the company should focus on addressing gaps in these areas to maintain and enhance its competitive advantage.

It is recommended that Dashen Brewery enhance its employee involvement in decision-making processes, particularly regarding quality improvement initiatives, and improve its reward and recognition mechanisms to foster greater employee motivation and commitment. Additionally, the company should strengthen its benchmarking practices by learning from other organizations in the industry, particularly in customer focus and process improvements. Improving employee training programs, especially those focusing on problem-solving and leadership skills, will also be essential in sustaining quality management.

Based on the findings, it is recommended that organizations prioritize strengthening top management commitment, fostering a culture of continuous improvement, and enhancing employee involvement practices, as these have the most significant positive impacts on organizational performance. Additionally, while reward and recognition systems are valuable, their effectiveness could be improved by integrating them more closely with the overall organizational strategies that emphasize employee growth, innovation, and customer satisfaction. Investing in robust communication and information systems, as well as benchmarking practices to improve organizational performance with industry best practices.

Based on these findings, it is recommended that organizations place greater emphasis on enhancing Customer Focus and Employee Involvement Practices, as these have the strongest and most statistically significant impact on organizational performance. Further attention should be directed toward Continuous Improvement and Innovation and Employee Training, as these factors, while somewhat less significant, still hold promise for improving performance. Additionally, organizations should explore ways to strengthen Benchmarking practices to realize its full potential. Lastly, while Top Management Commitment, Reward and Recognition, and Communication and Information Systems currently show limited influence on performance, these areas should be revisited to ensure they are effectively contributing to

Based on the results, it is recommended that organizations prioritize Employee Involvement Practices and Customer Focus to maximize performance outcomes. Additionally,

attention should be given to improving Employee Training and fostering a culture of Continuous Improvement and Innovation. While other factors such as Benchmarking may hold potential, their influence is less pronounced and should be explored further. Lastly, organizations should evaluate and enhance areas such as Reward and Recognition, Top Management Commitment, and Communication and Information Systems to ensure these elements are contributing effectively to organizational success.

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APPENDIX I:
MEKELLE UNIVERSITY
COLLEGE OF BUSINESS AND ECONOMICS
SCHOOL OF MANAGEMENT



Questionnaire for respondents

Dear Respondent,

I am one of the students of Mekelle University, I am currently undertaking a research proposal for partial fulfillment for the award of Master's Degree in Business Administration and I am conducting a survey which involves the collection of valuable data on “The **effect of Total quality management implementation on organizational performance**” in Dashen Brewery S.c as partial fulfillment of the MBA. You are kindly requested to answer this small questionnaire which will only take about 5 minutes to answer and will help me a lot. The information gained from this questionnaire will be used for academic purpose and your responses will be treated with full confidentiality.

Thank you for devoting your valuable time for answering the questions below

If you would like further information about this study, or have problem in completing this

Questionnaire please contact me via +251-9 14-70-23-43

Your cooperation will be highly appreciated.

Instruction: Please mark your answer with a tick mark (√) in the space provided

PART I. PERSONAL PROFILE OF THE RESPONDENT

1. Gender: Male Female

2. Age:
18-25 26- 30 31 - 40
41-45 46-50 > 50

3. Education level :
< 12th Grade 12 Grade completes Diploma
Bachelor’s Degree Master’s Degree PHD

4. Marital status:

Single Married
 Divorce Widowed

5. Income level

Less than Birr 2,000 Birr 2,001- 3,500
 Birr 3,501-5,000 Birr 5,001-8,000
 Birr 8,001-10,000 greater than Birr 10,000

5 Duration of service:

A. 1-3 years -6 years
 B. 7-9 years and above

Part II Perception statements

Instruction: Please put a tick mark (√) the most appropriate response number against each statement where (1= very poor 2= poor 3= satisfactory 4= Good 5= Very good

1. Top Management Commitment aspects		1	2	3	4	5
1	Organizational leaders take on the responsibility for developing quality oriented management systems					
2	Company leadership has provided the necessary resources to meet the new requirements resulting from quality management systems implementation					
3	Leaders personally evaluate the application and advancement of total quality principles					
4	Leaders assign resources for nonstop improvement of the management system					
5	Company Leadership has provided conducive working environment to employee involvement in quality management process					

6	The company Leadership influences the decision of selecting qualified suppliers and certifying suppliers for quality material					
7	The company leadership has inspired staff and management in effective and efficient use of the resources and efforts of the institution towards quality excellence					
8	Leaders intermingle with customers and keep in mind their contributions when designing goods and services					
2. Continuous Improvement & Innovation						
1	The company undertakes quality audits and evaluation regularly					
2	Use of customer complaints as a method to initiate improvements in current processes					
3	The company evaluate the performance of suppliers on continuously					
4	The company improves employees competencies through trainings					
5	Regular departmental and employee appraisals carried out					
6	The company undertakes quality audits and evaluation regularly					
3. Customer Focus						
1	The company focuses on improved satisfaction of our clients.					
2	The company focuses on better communication with our clients.					
3	Company focuses on a decline in the number of customer criticisms and grievances.					
4	The company focuses on Client consolidation, returning clients and loyal clients					
5	The company responds quickly to customers complaints					
6	Complaints are seen as a competitive advantage for company					
4. Employees Involvement Practices						
1	Employees' effective knowledge and learning capability will provide sustainability of quality management in the firm.					
2	Employees are involved in decision making that affect their work					
3	Quality does not originate in one department or function; it is the concern of the whole firm					
4	Employees are given opportunity to suggest quality improvement					
5	Training is given to all employees based on the results of the training needs assessment to improve quality					
6	The employees are provided with feedback on their quality performance					
7	Effective training will lead to employees' loyalty to the firm, motivation, and work performance.					
8	If employees are educated on producing dependable and high-quality products and/or services, their full participation in the production stage would be more productive					
5. Employee Training						
1	Training is regarded as one of the most important factors in improving quality					
2	Training in the total quality concept is given to all employees in the organization.					

3	Employees are trained to improve interactive skills (such as communication skills, effective meeting skills, and leadership skills).					
4	Employees are trained in problem identification and problem-solving techniques					
5	Seminars and workshops in quality issues are arranged for employees as part of an ongoing process.					
6	Training and education cover the entire workforce as part of an ongoing process.					
6. Reward and recognition						
1	There is appropriate reward and recognition for outstanding performance in the Dashen.					
2	There are insufficient opportunities for promotion.					
3	Management generally encourages, rewards, accepts, evaluates, and implements employees' suggestions in quality matters.					
4	Reward and recognition activities effectively stimulate employee commitment to quality improvement					
5	Employees and/or teams are recognized for achievements in quality improvement.					
7. Communication and information system						
1	There is communication system inside the bank that allows easy communication between top management and employees and between customers and the Dashen					
2	There is a clear and consistent process for the communication of mission statement and objectives defining quality values, expectations and focus.					
3	There is effective inter-communication between various levels.					
4	There is an advanced technological information system to support implementing quality management system.					
5	In Dahan brewery uses information systems to provide high quality data and information to employees					
8. Benchmarking						
1	Benchmarking is used to identify the best procedures for improvement from other organizations with similar interests and goals.					
2	There is an emphasis on benchmarking the services and processes with respect to those of other beer factory.					
3	There is an emphasis on benchmarking the level of customer focus with those of other beer factory					
4	The organization uses benchmarking to identify the needs for change.					
5	There is emphasis on prevention of errors rather than correction after the fact.					
6	There is a use of self – assessment tools and other mechanisms to track and improve performance gaps in the implementation and effectiveness of system, process and practice.					

Organizational performance						
1	Total quality management improves organizational sales volume.					
2	Total quality management improves organizational profit					
3	Total quality management improves organizational market share					
4	Total quality management improves organizational productivity					

Part III

Please indicate the following open-ended question freely.

1. To improve organizational performance, training plays an important role with regard to total quality management. Would you be able to explain to me how total quality management is trained to the employees here? If yes when and where your staffs undertake a formal education or short term training?

2. Measuring satisfaction is very important for manufacturing industry, would you be able to explain to me how customer satisfaction is measured and managed to encourage repeat purchase?

3. What do you think to improve organizational performance in the future?

4. What are your major challenges to total quality management implementation?

5. What do you recommend the company to respond quickly to customer's complaints?

6. What type of trainings are expected regarding to total quality management and organizational performance?

7. What are the major reward and recognition packages that can motivate the employees?

8. How do you explain to management's commitment towards total quality management and organizational performance?

9. Any suggestion

Thank you again!