

The Link between QMS Certifications and Customer Satisfaction in the Guyanese Market

George De Freitas*, N. S. Shanthi

Management Studies, Texila American University, Georgetown, Guyana, South America

Abstract

The Quality Management System (QMS) certification like ISO 9001 stands as a recognized strategic asset for enhancing business performance alongside operational efficiency and customer satisfaction. The research examines how QMS certification affects customer satisfaction in Guyana by comparing performance between 50 certified companies and 50 non-certified companies. The study used a quantitative approach that involved stratified random sampling to obtain representation from various industries. The study assessed customer satisfaction with a 5-point Likert scale and applied descriptive statistics and independent t-tests to analyze differences between certified and non-certified businesses. Businesses with QMS certification demonstrate significantly better customer satisfaction ratings compared to businesses that lack this certification. The statistical analysis showed that certified businesses achieved higher mean satisfaction ratings (3.98) than non-certified businesses (3.20) with a significant t-test result ($t = 4.96$, $p = 0.00000314$). QMS certification appears to enhance service quality while creating stronger brand reputation and better customer feedback systems that ultimately build customer loyalty and trust. Non-certified businesses showed more variation in their satisfaction scores because of inconsistent service quality, weaker complaint resolution systems and lower competitive positioning. The research supports prior knowledge about QMS certification advantages by showing that structured quality management systems deliver products and services with higher consistency. The results provide actionable insights for Guyanese companies and government officials because QMS certification adoption improves service quality and customer satisfaction. Longitudinal studies need to investigate how QMS certification influences customer loyalty while identifying QMS implementation difficulties across various sectors.

Keywords: *Brand Reputation, Business Performance, Competitive Advantage, Complaint Resolution, Customer Satisfaction, Guyanese Market, Independent t-Test, ISO 9001, Quality Management System (QMS), Service Quality, Statistical Analysis, Stratified Random Sampling.*

Introduction

Business growth and market competitiveness depend on maintaining high customer satisfaction levels along with building brand loyalty. Quality Management System (QMS) certifications such as ISO 9001 serve as a standard method to ensure consistent quality standards while enhancing customer experiences through structured quality control and process standardization. Research shows that businesses holding QMS

certifications achieve better customer satisfaction through systematic quality assurance processes alongside effective customer feedback and strong complaint resolution systems [16, 17].

The acknowledged advantages of QMS certifications have not led many businesses especially in developing countries like Guyana to adopt formal quality management systems. Businesses that depend on informal quality control practices frequently deal with

inconsistent service delivery as well as ineffective complaint resolution systems which contribute to diminishing brand perception [19]. Research has not thoroughly examined how QMS certification affects customer satisfaction within Guyana's business landscape.

Hence this study aims to evaluate the impact of QMS certification on the customer satisfaction levels of businesses operating in Guyana. Specifically, the study aims to:

1. Use quantitative data analysis to examine customer satisfaction differences between QMS certified businesses and uncertified businesses.
2. Explore whether businesses with QMS certification achieve higher customer satisfaction ratings than businesses lacking such certification.
3. Identifies key factors that boost customer satisfaction among QMS certified businesses by examining their service consistency together with their complaint resolution structures and customer engagement practices.

The research holds significant importance for the Guyanese market because numerous businesses lack formal quality management systems which may result in uneven service quality and reduced customer satisfaction. This research compares certified and non-certified businesses to demonstrate the benefits of implementing Quality Management Systems. Business leaders and policymakers as well as industry executives will find the research outcomes beneficial for raising customer satisfaction levels while also advancing service standards and encouraging QMS certification adoption.

This research evaluates the effects of QMS certification on Guyana's business environment using data-driven methods while considering the growing importance of quality assurance and customer satisfaction for business success. This research which utilizes quantitative methodologies and statistical

analysis will enrich academic literature and deliver practical business insights through recommendations for adopting QMS certification benefits.

Literature Review

Businesses worldwide recognize Quality Management System (QMS) certification particularly ISO 9001 as a strategic tool that enhances business performance while boosting operational efficiency and customer satisfaction. Research findings show that structured quality frameworks deliver benefits through their ability to promote standardized processes and regulatory adherence while enhancing customer-focused improvements [17]. Many organizations attain QMS certification to boost their competitive edge and market trustworthiness while other enterprises function without structured quality management systems using informal quality methods and managerial decision-making [4].

The evaluation of customer satisfaction between certified and non-certified businesses serves as a fundamental measure for determining the effectiveness of QMS implementation. Certified businesses experience improved service consistency and lower defect rates through standardized processes that also boost customer perceptions. Non-QMS businesses frequently face operational inconsistencies while their feedback channels remain weak which leads to diminished customer trust. This literature review examines how QMS certification influences customer perceptions and business performance through service quality improvements. The review investigates the difficulties non-certified businesses face while also exploring methods they can use to preserve customer satisfaction without formal QMS structures.

Theoretical Background of QMS Certification and Non-QMS Businesses

The Quality Management System (QMS) certification builds on established quality management principles such as Total Quality Management (TQM) and Continuous Improvement (CI). Structured quality management frameworks such as ISO 9001 developed from foundational principles which function as the worldwide standard for quality assurance and customer satisfaction. Businesses adopted these principles to enhance operational efficiency and optimize processes while offering improved customer experiences [12].

Total Quality Management (TQM) combines organization-wide quality enhancement efforts with customer satisfaction by optimizing processes and committing leadership. The Total Quality Management (TQM) framework developed from the teachings of quality experts W. Edwards Deming, Joseph Juran, and Philip Crosby to incorporate customer focus, leadership engagement and standardized procedures together with elements based on data-driven decision-making [3, 4, 8]. ISO 9001-certified organizations widely use Deming's Plan-Do-Check-Act (PDCA) cycle as an established method for achieving continuous improvement through evidence-based quality process enhancements [5]. Organizations adopting TQM principles achieve higher process efficiency while experiencing reduced defect rates and improved customer satisfaction [12].

ISO 9001 certification builds upon TQM foundations to give businesses a systematic approach for managing processes and risks while engaging customers. The ISO 9001 framework consists of seven quality management principles which emphasize customer focus together with leadership, people engagement, process approach, continuous improvement, evidence-based

decision-making and relationship management [7]. Businesses can create standard operational processes and enhance their regulatory adherence as well as customer trust through these guiding principles. Studies show that organizations with ISO 9001 certification enhance their operational performance and customer loyalty through consistent quality control and standardized service delivery [17, 18].

The SERVQUAL framework by Parasuraman, Zeithaml, and Berry (1988) delivers a major theoretical approach for examining both quality management and customer satisfaction. This model identifies five key service quality dimensions that significantly influence customer perceptions: The model defines five essential service quality dimensions that substantially affect customer perceptions including reliability, assurance, tangibles, empathy, and responsiveness. Through structured quality management systems businesses achieve superiority over non-certified competitors by ensuring stable service delivery standards together with comprehensive employee training and feedback systems for customer problem resolution. Organizations that hold certification and combine ISO 9001 standards with SERVQUAL principles create systematic approaches to advance service quality which leads to robust customer relationships and competitive advantage [13].

Businesses that do not obtain formal QMS certification typically adopt informal quality management methods whose execution varies based on leadership style and organizational culture alongside industry-specific needs [19]. Non-QMS businesses manage to deliver high-quality service by adopting strong leadership and customer-centric methods yet they do not possess standardized processes or systematic customer feedback loops as well as continuous improvement systems unlike QMS-certified firms [6]. Companies lacking structured quality control measures face higher chances

of service inconsistencies along with operational inefficiencies and customer dissatisfaction.

Research studies demonstrate that businesses operating without a formal QMS face significant operational risks. Research demonstrates that non-certified businesses show more service inconsistency, lower customer retention rates, and increased complaint occurrences relative to ISO-certified businesses [11, 21]. Research demonstrates that businesses without QMS face challenges in sustaining service quality which results in reduced reliability to meet customer expectations [19]. These businesses often operate without established risk assessment methods that leave them exposed to quality breakdowns, supply chain interruptions, and violations of regulations [15].

QMS certification and quality management theories demonstrate how structured methods lead to better business performance and satisfied customers. TQM, Continuous Improvement, ISO 9001, and SERVQUAL frameworks give businesses systematic methods to optimize procedures while reducing inefficiencies and upholding quality standards. Businesses without QMS certification can utilize different quality improvement methods to preserve customer trust while keeping their competitive edge despite QMS's structured evidence-based framework for quality excellence. Further studies need to discover how organizations without QMS certification can incorporate quality management principles into their service processes especially in sectors where ISO standards are not compulsory yet high-quality delivery remains essential.

Impact of QMS Certification on Customer Satisfaction

Improved Product and Service Quality

Empirical research shows that companies certified with Quality Management Systems (QMS) have better product reliability and higher service quality with fewer defects than non-certified organizations according to [16]. ISO 9001 certification requires businesses to develop standardized workflows and implement strong quality control measures while establishing risk management strategies. Consistency in product and service delivery emerges from these factors which helps build greater customer trust and satisfaction.

Sampaio et al. (2009) demonstrated that organizations certified under ISO 9001 achieve better results in quality control processes alongside improvements in operational efficiency and risk management. The research demonstrates that certification helps businesses establish corrective and preventive actions which leads to a reduction in defects and operational inefficiencies. According to [6], companies that employ structured quality systems surpass non-certified organizations in terms of product consistency maintenance and meeting customer specifications while reducing service variability. The research demonstrates how QMS certification connects directly with customer satisfaction because higher product quality results in increased consumer trust and stronger brand loyalty [6].

Enhanced Customer Perception and Brand Reputation

ISO 9001 certification demonstrates an organization's dedication to quality and business excellence while establishing their reliability [18]. Certification confirms that businesses adhere to international quality standards which helps customers view them as more credible and trustworthy. Research demonstrates that QMS certification improves

brand reputation and customer loyalty especially in competitive markets which demand distinctiveness.

Phi et al.'s 2018 research shows consumers connect ISO certification with better service dedication alongside more organized operations and improved customer satisfaction focus. According to research by Casadesus and Karapetrovic (2005) businesses that obtain QMS certification gain a competitive edge through demonstrating their organizational dedication to quality assurance and ongoing improvement. The positive perception toward brands committed to quality excellence and standardized processes influences purchasing behavior because consumers tend to choose these brands [2].

Customer Feedback and Complaint Resolution

Structured customer feedback mechanisms within a QMS framework enable continuous improvement and customer-centric decision-making according to ISO 9001 requires companies to develop organized methods for gathering customer feedback which must be analyzed and addressed to allow for effective problem resolution [2].

The study by Benner and Veloso (2008) shows that businesses with QMS certification achieve quicker complaint resolution and improved customer retention through their proactive handling of customer problems. Certified organizations that use data-driven quality enhancements will improve customer satisfaction while reducing repeat complaints and developing enduring customer relationships [1].

Businesses without QMS certification typically do not have standardized complaint-handling procedures which result in extended response times and unresolved customer problems along with decreased customer satisfaction rates [20]. The weaknesses show why QMS certification gives businesses a

strategic edge through superior customer trust and service quality.

Challenges of Businesses Without a QMS

Inconsistent Product and Service Quality

Firms that do not implement a formal Quality Management System (QMS) show increased product and service quality variations due to their absence of standard quality control procedures [19]. Business inconsistencies create unpredictable customer interactions and result in both higher defect numbers and service interruptions.

The research of Flynn et al (1994) demonstrated that organizations which do not implement structured quality systems face difficulties in standardizing product quality which leads to increased defect rates as well as negative customer feedback [6]. Research demonstrates that organizations without QMS systems struggle to apply process optimization leading to operational inefficiencies and inconsistent quality outcomes [11]. Customer satisfaction and brand trust become compromised by these difficulties especially when dealing with sectors that demand exactness and uniform performance.

Lack of Structured Customer Feedback Mechanisms

Businesses without QMS certification usually do not maintain structured methods to gather and evaluate customer feedback [20]. Businesses without effective customer feedback loops encounter difficulties in discovering service gaps and handling customer complaints while implementing corrective actions.

The study by Benner and Veloso (2008) shows that businesses with formal quality management systems resolve customer complaints more effectively and achieve better customer retention and satisfaction outcomes. Non-QMS businesses typically handle customer complaints reactively which creates

delayed responses and unresolved issues that diminish customer trust [19].

Impact on Brand Perception and Competitive Advantage

The absence of QMS certification can hinder companies from showcasing their quality dedication which deteriorates brand perception and customer loyalty [15]. Certified businesses are perceived by customers as providing better service quality which creates disadvantages for non-QMS firms [2].

ISO certification represents a fundamental requirement for gaining supplier approval and establishing business partnerships which non-certified companies may be denied access [21]. Non-QMS businesses face difficulties competing with certified firms which restricts their customer base expansion and long-term growth prospects.

Empirical Evidence on Customer Satisfaction in QMS and Non-QMS Businesses

A variety of empirical studies demonstrate the significant relationship between QMS adoption and customer satisfaction. Research by Terziovski et al. (2003) shows that ISO 9001 certification leads to improved customer satisfaction in manufacturing and service sectors [21]. Karapetrovic et al. (2010) also found companies with QMS certification achieve higher customer retention rates compared to those without certification [9]. The study by Khan et al. from 2024 demonstrated that businesses with ISO certification achieve higher customer satisfaction levels compared to companies without certification. Business performance improves through enhanced customer satisfaction according to data from Pakistan's chambers of commerce and industry on companies holding IMS Quality standards certification [10]. Studies that investigate companies without quality management systems find several operational challenges.

For instance the study by Martínez-Costa and Martínez-Lorente (2007) confirmed that non-certified businesses received more customer complaints and had lower repeat purchase rates demonstrating the necessity of structured quality management frameworks to secure customer loyalty and brand trust [11].

Potential Strategies for Non-QMS Businesses to Improve Customer Satisfaction

Despite the absence of a formal QMS, businesses can achieve higher customer satisfaction through alternative methods. Businesses can reduce inconsistencies in products and services through informal quality control methods like conducting internal audits and standardizing processes.

Establishing structured feedback loops between businesses and customers will improve responsiveness and issue resolution. Businesses that implement employee training programs aimed at service excellence will see improved customer interactions and higher satisfaction levels. Non-QMS businesses can obtain formal quality management framework benefits by implementing digital tools like automated complaint management systems and data-driven quality monitoring tools. Non-certified businesses can achieve competitive advantages in quality-focused markets through strategy integration which minimizes service variations.

Research shows that QMS certification leads to better customer satisfaction because it improves product quality and creates structured customer feedback while strengthening brand reputation. Successful implementation of Quality Management Systems requires leadership dedication along with ongoing process refinement and efficient execution beyond the scope of certification.

Businesses without a QMS certification experience higher customer dissatisfaction because their products show quality inconsistencies and they have less effective

complaint-handling systems and reduced brand perception. Non-certified companies achieve customer satisfaction through effective leadership and customer-focused approaches but structured quality systems give businesses a competitive advantage. Studies should evaluate different quality management approaches for companies that do not seek formal QMS certification while maintaining competitiveness in markets that value quality.

Materials and Methods

Research Design

A quantitative research methodology is applied to investigate how QMS certifications influence customer satisfaction within the Guyanese market. This research examines customer satisfaction levels between QMS-certified businesses and non-certified businesses through a cross-sectional survey study. The study examines customer satisfaction metrics through a comparative analysis of business groups with and without QMS certification.

A structured questionnaire served to gather information about customer satisfaction ratings as well as perceptions of service quality and the effects of QMS implementation. The survey determined satisfaction levels through a 5-point Likert scale which ranged from 1 indicating "very dissatisfied" to 5 meaning "very satisfied".

Sampling Method

The research utilizes stratified random sampling to obtain a sample of businesses that accurately represents different sectors of the Guyanese economy such as manufacturing, services retail and hospitality.

Stratified sampling requires dividing the target population into distinct subgroups based on industry type before randomly selecting businesses within each group proportionally to their market representation. The methodology reduces selection bias and improves the

applicability of findings across different populations.

A total of 100 businesses were selected, with:

1. 50 QMS-certified businesses, and
2. 50 non-certified businesses.

The study's sample size captures enough variability in customer satisfaction levels to maintain statistical rigor.

Data Collection Method

The structured questionnaire aimed to gather quantitative data concerning customer satisfaction levels and their perceptions of quality. The questionnaire consisted of two sections:

The business profile information section gathers data about the industry type, operational years, and certification status.

Customer Satisfaction Indicators examine multiple dimensions which include service quality levels along with reliability standards and responsiveness together with product quality measurements and complete customer satisfaction.

The survey was delivered through electronic means and face-to-face interactions to achieve maximum participation rates. The study engaged business owners alongside managers and customer service staff who offered perspective on customer satisfaction levels in relation to their company's QMS certification status.

Reliability and Validity

To ensure accuracy and credibility, the study incorporated the following reliability and validity measures:

1. The study conducted pre-tests of the survey using business participants to confirm its clear communication and operational functionality.
2. The study used Cronbach's Alpha Test to measure the internal reliability of the customer satisfaction scale.

3. Quality management professionals provided their expert validation to confirm the questionnaire's relevance.

Results

The study examined 100 Guyanese businesses from different sectors with 50

The Mean and Median Customer Satisfaction Scores for both Groups were as follows

Business Category	Mean Satisfaction Score	Median Satisfaction Score
QMS-Certified Businesses	3.98	4.0
Non-Certified Businesses	3.20	3.0

Data shows that businesses with QMS certification receive better satisfaction ratings than those without certification. QMS-certified businesses achieved a median satisfaction score of 4.0 which points to more stable satisfaction levels while non-certified businesses scored only 3.0 on the median indicating their satisfaction levels varied more widely.

Distribution of Satisfaction Scores

Researchers used boxplot analysis to examine the distribution patterns and range of customer satisfaction ratings within both groups. The analysis revealed that:

1. The distribution of customer satisfaction scores for QMS-certified businesses centered more around higher ratings which indicates stable satisfaction levels.
2. Non-certified businesses displayed higher score variability with numerous businesses receiving much lower satisfaction ratings.
3. The data shows that non-certified businesses exhibit greater variability in

QMS-certified companies and 50 non-certified companies. The data collected customer satisfaction levels using a 5-point Likert scale which defined 1 as "very dissatisfied" and 5 as "very satisfied".

Mean and Median Satisfaction Scores

customer satisfaction levels because their interquartile range (IQR) exceeds that of certified businesses.

Inferential Statistics: Independent t-Test

Researchers used an independent t-test to evaluate if the observed satisfaction score difference between QMS-certified and non-certified businesses reached statistical significance.

Hypothesis Testing

1. Null Hypothesis (H_0): The Null Hypothesis (H_0) suggests there is no substantial difference in customer satisfaction levels between businesses with QMS certification and those without it.
2. Alternative Hypothesis (H_1): QMS-certified businesses experience significantly greater customer satisfaction than businesses without QMS certification.

The T-test Produced the following Results

Statistical Test	Value
t-statistic	4.96
p-value	0.00000314 (or 3.14e-06)

The null hypothesis is rejected because the p-value (0.00000314) falls well below the threshold of 0.05, showing that QMS certification leads to statistically significant

improvements in customer satisfaction. The observed difference in customer satisfaction scores stems from QMS certification implementation rather than random chance.

Discussion

The Impact of QMS Certification on Customer Satisfaction in Guyana

This research demonstrates that Quality Management System (QMS) certification leads to increased customer satisfaction in Guyanese market businesses. QMS-certified businesses attained a mean satisfaction score of 3.98 which exceeded the 3.20 satisfaction score of non-certified businesses by a significant margin. Statistical evidence from the t-test results ($t = 4.96$, $p = 0.00000314$) demonstrates that the observed differences in customer satisfaction between certified and non-certified businesses stem from structured quality management frameworks rather than random chance.

Research studies show that businesses with Quality Management System (QMS) certification achieve better customer satisfaction and service quality while enhancing their brand image [16, 17]. The ISO 9001 certification incorporates Total Quality Management (TQM) principles which require certified businesses to implement standardized processes along with continuous improvement strategies and structured customer feedback systems [4, 12]. Structured approaches lead to consistent delivery of products and services that build stronger customer trust and loyalty [18].

QMS Certification and Product/Service Quality

The enhancement of product and service quality stands out as the main driver for elevated customer satisfaction within businesses possessing QMS certification. Businesses implementing QMS frameworks benefit from reduced error levels and enhanced service reliability while also meeting customer expectations better [6]. The study confirms this observation because businesses with QMS certification showed higher satisfaction scores in a more focused

distribution pattern which demonstrates their ability to provide dependable customer experiences.

The satisfaction ratings from non-certified businesses showed more variation which demonstrated that customer experiences lacked consistency. The evidence shows that companies without structured quality management systems tend to face quality inconsistencies that damage customer trust and retention [15, 19].

QMS Certification and Brand Reputation

The research shows that QMS certification strengthens brand perception which results in increased customer trust. Studies indicate that customers view ISO 9001-certified businesses as more dependable and professional which increases their likelihood to engage with these businesses [2, 18]. The study results align with previous findings because businesses with certification showed higher and more consistent customer satisfaction scores.

By contrast, non-certified businesses find it challenging to prove their quality commitment which reduces their competitive power in markets where customer perceptions influence buying choices [14]. The wider spread of satisfaction scores among non-certified businesses in this study suggests that their reputations are less stable, which may limit their ability to gain long-term customer loyalty.

Customer Feedback and Complaint Resolution Mechanisms

QMS-certified businesses stand out in this study for their successful management of customer feedback and complaints. QMS certification demands business establishments to adopt structured quality management principles which create defined processes for managing customer issues and measuring service effectiveness alongside continuous improvement initiatives (Benner & Veloso,

2008). According to the SERVQUAL framework customer satisfaction depends on responsiveness, assurance and reliability [13].

The research supports this theory because businesses with certification demonstrated significantly improved customer satisfaction scores which show their customer engagement processes work better. Non-certified businesses face challenges in their efforts to systematically gather and analyze customer feedback which results in delayed problem-solving and decreased customer satisfaction [20].

Challenges Faced by Non-Certified Businesses

The investigation identifies multiple obstacles non-certified businesses encounter when aiming to preserve customer satisfaction. Non-certified businesses demonstrate lower and inconsistent satisfaction scores that align with previous studies about the restrictions faced by companies lacking formal quality systems [11, 19].

The key challenges are:

1. The absence of standardized practices results in quality variances which yield inconsistent customer experiences.
2. Businesses without a formal QMS struggle to establish effective systems for customer feedback collection and response which reduces their capability to enhance service quality.
3. Non-certified businesses struggle to maintain customer interest because consumers view these businesses as less trustworthy and professional which reduces their competitive edge.

Implications for Businesses in Guyana

The results of this study have important implications for businesses operating in the Guyanese market. Given the statistically significant impact of QMS certification on customer satisfaction, businesses that seek to improve service reliability and customer

perceptions should consider implementing QMS frameworks.

For non-certified businesses, adopting informal quality management practices—such as customer feedback mechanisms, process standardization, and service quality monitoring—may help mitigate some of the challenges identified in this study [15]. However, without a formalized QMS structure, these businesses may continue to face difficulties in maintaining consistent customer satisfaction.

Government and industry bodies in Guyana can also use these findings to promote QMS adoption, particularly in industries where customer satisfaction plays a crucial role in business success. Financial support for certification programs alongside quality training workshops and ISO compliance incentives could motivate businesses to obtain QMS certification which would elevate service standards throughout the Guyanese market.

Limitations and Future Research

While this study provides strong empirical evidence on the impact of QMS certification on customer satisfaction, some limitations should be acknowledged:

1. The research gathered data at only one point in time which resulted in failing to examine satisfaction trends over time.
2. The stratified sampling method achieved wide sector representation however some industries continue to encounter specific challenges during QMS implementation.
3. Customer satisfaction ratings collected from business representatives served as the study's data source which may introduce subjectivity.

Subsequent research should involve longitudinal studies that track customer satisfaction dynamics between certified companies and those without certification over time. By studying industry-specific QMS effects researchers can uncover best practices that suit different business sectors.

Conclusion

The research examined how Quality Management System (QMS) certification affects customer satisfaction levels in Guyana through a comparative study of certified and non-certified companies. The study demonstrates a strong positive connection between QMS certification and customer satisfaction since certified businesses show higher satisfaction mean and median scores together with statistically significant independent t-test results ($t = 4.96$, $p = 0.00000314$). QMS-certified businesses demonstrate superior service quality standards and brand strength alongside improved customer feedback systems which results in higher levels of customer satisfaction and loyalty.

Research findings align with a literature review that demonstrates ISO 9001-certified organizations achieve improved service delivery and customer satisfaction by adopting structured quality frameworks and standard processes along with continuous improvement principles [16, 17]. The research findings correlate with studies which show that QMS certification boosts brand perception and customer trust because customers tend to link certified businesses with superior reliability and professionalism [18].

Businesses without certification encounter increased difficulties in delivering uniform service quality as demonstrated through more variable customer satisfaction scores. Businesses lacking QMS certification encounter service inconsistency problems and weaker customer feedback systems that damage brand credibility and hinder their customer retention and competitive abilities. The findings correspond with existing literature which shows that companies lacking structured quality management systems typically face increased service variability, higher defect levels, and diminished customer confidence [11, 19].

These findings carry substantial importance for Guyana's business sector. Businesses aiming to boost customer satisfaction and service quality while securing their market position need to evaluate QMS certification as a strategic business move. Non-certified businesses can reduce service variability issues by implementing informal quality management methods including customer feedback systems, standardized service protocols along with employee training programs. Guyana's policymakers and industry leaders should investigate strategies to advance QMS certification through government incentives along with quality training workshops and certification support programs to enhance service quality across local businesses.

The study presents compelling empirical support for QMS certification benefits but faces limitations due to its cross-sectional design and potential industry-specific variations along with dependence on self-reported satisfaction data. Subsequent investigations need to employ longitudinal research methods to evaluate the effects of QMS certification on customer satisfaction over time while examining the effectiveness of QMS across different industries.

The research findings demonstrate that QMS certification leads to notable improvements in customer satisfaction throughout the Guyanese market while underscoring the vital role of structured quality management systems in business success and customer perception enhancement. Organizations that emphasize quality management systems achieve elevated customer satisfaction while building strong brand recognition which enables them to sustain long-term success against market competition.

Conflict of Interest Statement

The author(s) declares no competing interests.

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