

OPTIMIZING OPERATIONAL EXCELLENCE: A TOTAL QUALITY MANAGEMENT APPROACH TO ENHANCE ORGANIZATIONAL PERFORMANCE AT ABU DHABI AIRPORT COMPANY

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Abstract

This research investigates the intricate dynamics of quality management principles, focusing on the evolution and application of quality control and assurance in the operations of Abu Dhabi Airports Company (ADAC). Employing a comprehensive review of quality management literature, the study traces the historical progression of quality management from inspection to Total Quality Management (TQM). Emphasizing the significance of customer focus, continuous improvement, and employee involvement, the research elucidates how these principles have shaped the quality phenomenon. The examination of ADAC's adherence to quality principles reveals its essential role in the aviation industry. As an entity entrusted with the critical task of ensuring air travel safety and customer satisfaction, the integration of quality control and assurance is indispensable. The study aligns these principles with ADAC's commitment to transforming Abu Dhabi into a global aviation hub, highlighting the organization's essential role in the competitive aviation phenomenon. Through a comparative analysis of quality control and quality assurance, the study underscores the nuanced differences and complementary roles these processes play in ensuring the highest standards. The application of quality management principles at ADAC is showcased through meticulous planning, adherence to international standards, and a commitment to continuous improvement. The research provides recommendations for ADAC, emphasizing ongoing training programs, technological integration, stakeholder engagement, and cultural sensitivity. These recommendations aim to enhance organizational performance, sustain competitiveness, and solidify ADAC's position as a global leader in airport operations and services.

Keywords: Quality Management, Aviation Industry, Abu Dhabi Airports Company (ADAC), Total Quality Management (TQM), Continuous Improvement.

INTRODUCTION

In the current global economy, competitiveness is intricately linked to the influx of human capital. The social and human resource policy serves as a systematic amalgamation of multifaceted goals and initiatives, playing an essential role in guiding both government and private sector entities. This policy implementation, if executed effectively, becomes the cornerstone for the development of economic growth, robust infrastructure, a secure environment, quality education, and other essential services. Abu Dhabi Airports, established as a Public Joint Stock Company in 2006, holds

a significant position in Abu Dhabi's economic vision for 2030 outlined by the government. Tasked with addressing the Emirate's aviation infrastructure needs, the company plays a vital role in realizing the overarching vision of economic development.

The primary objective of Abu Dhabi Airports Company (ADAC) is to position Abu Dhabi as an international aviation hub, thereby catalyzing economic growth and attracting a higher influx of tourists. At the core of ADAC's mission is the commitment to delivering top-notch services and facilities to customers, airlines, and other stakeholders. The company consistently reviews and enhances every aspect of its operations, driving ambitious development initiatives to improve airport infrastructure and operational capacity.

Quality is huge for business success, both on a domestic and international scale. The nexus between quality and excellence directly influences customer satisfaction, setting the trajectory for organizational direction. ADAC, akin to other organizations, grapples with the challenge of implementing Total Quality Management (TQM) to elevate organizational performance. For ADAC, the pursuit of quality is not just a strategic imperative but aligns with its broader vision of becoming a global aviation center.

Ensuring quality starts with a meticulous focus on product quality throughout the production process. The pillars of quality assurance and control stand as indispensable components of a robust quality management system, ensuring that products meet predefined standards. However, comprehensive quality management goes beyond mere compliance; it encompasses a customer-focused strategy, recognizing that customer satisfaction is the bedrock of success. The alignment of a customer-focused strategy with a robust gross profit margin becomes instrumental in securing customer satisfaction and loyalty (Maghfuriyah et al., 2019; Udriyah et al., 2019).

The utility of TQM in enhancing service quality and efficiency has been a focal point in various studies. TQM instills a quality-oriented mindset among organizational stakeholders, promoting a culture of operational excellence. However, challenges persist in achieving continuous improvement, with only a fraction of organizations successfully navigating this path. Research underscores the reciprocal association between TQM and innovation, emphasizing its profound impact on operational performance. In the context of Abu Dhabi, the implementation of TQM necessitates a tailored framework that factors in the unique cultural, economic, and social characteristics of the region.

The advent of the COVID-19 pandemic has accentuated the urgency of effective problem management. TQM, recognized globally as a key philosophy for enhancing goods and services, assumes heightened significance in times of crises. The pandemic has underscored the critical need for organizations, including ADAC, to proactively manage challenges and disruptions.

Recent studies spotlight the positive impact of TQM on businesses in Abu Dhabi, enhancing competitiveness. Additionally, the synergy between TQM and Enterprise Resource Planning (ERP) emerges as a potent force positively influencing organizational performance. This convergence of methodologies offers practical implications for achieving excellence in a fiercely competitive market (Azam et al., 2021; Azam et al., 2023). However, the specific application of TQM within ADAC remains a relatively unexplored terrain.

The study presented here aims to fill this critical gap by delving into the potential benefits of TQM implementation and its nuanced impact on organizational performance within the highly competitive aviation industry in Abu Dhabi. As ADAC operates within the dynamic aviation sector, understanding the relationships between Management Commitment, Continuous Improvement, and Organizational Performance assumes huge importance. This research endeavor seeks to unravel these intricacies, providing valuable insights for individuals, scholars, and companies operating in the aviation sector, particularly within the unique context of Abu Dhabi. The competitive and globalized nature of the economy places a premium on human capital. In this milieu, social and human resource policies become guiding mechanisms for both government and private sectors, setting the stage for economic growth, infrastructure development, and the provision of vital services. Abu Dhabi Airports Company (ADAC), as an essential player in Abu Dhabi's economic vision, shoulders the responsibility of aligning with the government's goals. Established in 2006, ADAC has been instrumental in revamping the Emirate's aviation infrastructure, contributing significantly to economic aspirations.

ADAC's core objective is to position Abu Dhabi as a global aviation center, stimulating economic growth and drawing in more tourists. The company's unwavering commitment to delivering top-tier services and facilities underscores its role in realizing Abu Dhabi's economic vision. Through consistent review and enhancement initiatives, ADAC has bolstered airport infrastructure and operational capacity, aligning with global standards.

Quality, synonymous with excellence, is a key player for organizational success in domestic and international aspects. For ADAC, the challenge lies in implementing Total Quality Management (TQM) to elevate organizational performance. This endeavor is not merely a strategic pursuit; it aligns with the broader vision of transforming Abu Dhabi into a global aviation hub.

Quality assurance and control, integral components of a robust management system, ensure products meet predefined standards. Yet, comprehensive quality management transcends compliance; it necessitates a customer-focused strategy, recognizing customer satisfaction as the cornerstone of success. The amalgamation of a customer-focused approach with a healthy gross profit margin becomes instrumental in securing customer loyalty.

Numerous studies underscore the utility of TQM in enhancing service quality and efficiency, promoting a culture of operational excellence. However, challenges persist in achieving continuous improvement, with only a fraction of organizations navigating this path successfully. Research emphasizes the reciprocal association between TQM and innovation, underscoring its profound impact on operational performance. In Abu Dhabi, TQM implementation demands a framework tailored to its unique cultural, economic, and social characteristics. The COVID-19 pandemic has heightened the importance of effective problem management. TQM, recognized globally for enhancing goods and services, assumes heightened significance in crisis scenarios. The pandemic has underscored the critical need for organizations, including ADAC, to proactively manage challenges and disruptions.

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a potent force positively influencing organizational performance. However, the specific application of TQM within ADAC remains relatively unexplored.

This study aims to bridge this gap by exploring the potential benefits of TQM implementation and its nuanced impact on organizational performance within Abu Dhabi's competitive aviation industry. Operating in a dynamic sector, ADAC's relationships between Management Commitment, Continuous Improvement, and Organizational Performance assume huge importance. This research endeavor seeks to unravel these intricacies, providing valuable insights for individuals, scholars, and companies in the aviation sector, particularly within the unique context of Abu Dhabi.

LITERATURE REVIEW

Quality management has evolved into an essential aspect of management thinking since the mid-twentieth century and continues to maintain its significance (Beckford, 2016; Tham et al., 2017; Rachmawati et al., 2019). Before delving into the concept of Total Quality Management (TQM), it is imperative to comprehend and analyze the multifaceted nature of quality. Baporikar (2020) asserts that quality is no longer a mere option; it has become an essential strategy for survival in the modern world. Juran (2018) underscores the essential role of customer satisfaction in providing excellent service.

The literature presents a diverse range of definitions of quality, each offering a unique orientation and conceptualization of excellence (Phan et al., 2019). Evans and Lindsay (2013) categorize quality definitions into four basic roots: value and excellence, compliance to standards, and meeting the needs and expectations of customers. The compliance to standards root, due to its precision, is conducive to quality measurement, while the value excellence root is challenging to measure because of its lack of accuracy. Parasuraman et al. (1993) assert that meeting or exceeding customer expectations is the foundational principle underpinning all quality definitions, likely to be used in future studies. Despite their differences, these definitions converge on the central theme of meeting or exceeding customer demands and expectations. Defining quality, however, is a complex task, characterized by its dual nature as both a personal and social construct (Scharager, 2018). Quality is challenging to describe, perceived differently by individuals based on their viewpoints and experiences, and is deeply embedded in the overall project context. It is a matter of personal values and judgments that shape the criteria for selecting attributes (Ovbiagele and Mgbonyebi, 2018). This subjective nature may explain why quality is often considered to be in the eye of the beholder. In current enterprises, neglecting the prioritization of quality can lead to increased costs, time overruns, client loss, and project failure. The implications of quality are far-reaching, influencing the success and sustainability of organizations in a competitive phenomenon. The application of these principles is particularly pertinent to organizations like the Abu Dhabi Airports Company (ADAC), which operates within the dynamic and competitive aviation industry. ADAC, established in 2006 by the Abu Dhabi government, plays an essential role in realizing the economic vision for 2030. Its overarching goal is to transform Abu Dhabi into an international aviation center, driving economic growth and attracting global tourists. In this pursuit, the

significance of quality cannot be overstated. ADAC's commitment to delivering top-tier services and facilities aligns with the essence of quality management. The varied definitions of quality presented by experts find resonance in ADAC's operations. Fitness for use, as Juran posits, is essential for an aviation company catering to diverse customer needs. Judging quality by the customer, as advocated by Deming, aligns with ADAC's customer-centric approach. Equating quality with consumer satisfaction, a concept championed by Ishikawa, becomes a guiding principle for ADAC's service delivery. Meeting customer requirements, in line with Oakland's definition, encapsulates ADAC's dedication to providing services that meet or exceed the expectations of its diverse stakeholders. The roots of quality definitions proposed by Evans and Lindsay – value and excellence, compliance to standards, and meeting customer needs – are integral to ADAC's operations. The aviation industry demands adherence to stringent standards, making the compliance to standards root crucial for maintaining operational efficiency and safety. Simultaneously, the value and excellence root aligns with ADAC's pursuit of excellence in service delivery, creating a unique value proposition for its customers.

In the aviation sector, where safety, efficiency, and customer satisfaction are huge, the implementation of TQM becomes not only relevant but imperative. TQM principles, grounded in the idea of meeting or exceeding customer expectations, resonate with ADAC's mission to ensure top-notch services and facilities. The interplay between quality, customer satisfaction, and operational excellence becomes the cornerstone of ADAC's strategy. As a major player in the aviation industry, ADAC's commitment to quality has far-reaching consequences. Failing to prioritize quality could lead to increased costs, compromise safety, and result in dissatisfied customers. In a competitive market, where airlines and airports vie for customer loyalty, ADAC's dedication to quality becomes a key differentiator. Moreover, the concept of quality, as defined by various experts, is deeply ingrained in the operations and mission of Abu Dhabi Airports Company. Whether it's fitness for use, customer judgment, consumer satisfaction, or meeting customer requirements, the multifaceted nature of quality finds expression in ADAC's commitment to delivering excellence in the aviation sector. Understanding and applying Total Quality Management principles becomes not just a strategic choice but a fundamental necessity for ADAC's success and sustainability in the dynamic and competitive phenomenon of the aviation industry.

Evolution of TQM

Total Quality Management (TQM), a methodology deeply ingrained in modern organizational practices, can trace its roots back to Statistical Process Control (SPC) developed by Walter Shewhart in the 1920s at Bell Laboratories. Shewhart's pioneering work focused on identifying measurable variables in the manufacturing process, laying the groundwork for a systematic approach to quality improvement centered around the plan-do-check-act cycle (Hellman and Liu, 2013). As the concept of TQM evolved, various academics proposed distinct stages, with a commonly acknowledged model identifying four major phases: Quality Inspection (QI), Quality Control (QC), Quality Assurance (QA), and Total Quality Management (TQM) (Dale et al., 2016).

Juran (1991) and Harris et al. (2013) align with this model, emphasizing the essential role of these stages in shaping the development of TQM.

Quality Inspection (QI): The inception of Total Quality Management (TQM) is marked by the Quality Inspection stage, a phase where the primary focus is on scrutinizing the final product to identify defects. This initial approach is reactive, addressing issues post-production and heavily relying on inspections to ensure product quality. While Quality Inspection lays the foundation for quality control, its effectiveness is limited due to its reactive nature, potentially leading to increased costs and inefficiencies. Understanding this foundational stage is particularly crucial for organizations like the Abu Dhabi Airports Company (ADAC), as it reflects early attempts to ensure product quality, setting the stage for more proactive quality management approaches.

The complexity of the manufacturing process during the Second World War period gave rise to the emergence of the inspection and quality control phase, representing the first stage in TQM's evolution. With a substantial number of workers assigned to a small number of supervisors, the risk of losing control over the manufacturing process became evident. Consequently, full-time inspectors were employed to maintain quality standards consistently. During this phase, quality became synonymous with inspection, often conducted during the manufacturing process itself (Dahlgaard et al., 2007). Harris et al. (2013) similarly emphasized that checking and inspection were huge in this early stage, eventually evolving into the comprehensive framework of Total Quality Management.

In alignment with this historical context, Dahlgaard-Park, Reyes, and Chen (2018) underscored inspection as the cornerstone of quality during this phase. Inspection, according to them, was the primary means of ensuring quality, marking a critical evaluation point in the manufacturing process. Components or materials failing to meet specified quality criteria were either discarded or returned to the manufacturer for reprocessing. However, this evaluation process did not involve direct participation from operators, suppliers, or customers in assessing the overall quality of the product.

For ADAC, recognizing and comprehending this historical phase of Quality Inspection is essential, considering its role in the aviation industry. The early focus on inspecting final products aligns with the industry's need for stringent safety and quality standards. As aviation inherently involves complex manufacturing processes, the foundational emphasis on inspection laid the groundwork for later, more sophisticated quality management approaches within the aviation sector.

The shift from mere inspection to a more comprehensive quality management approach became imperative as industries evolved. The limitations of the inspection-centric model became apparent, prompting the need for a more proactive and inclusive framework. In the aviation industry, where safety and reliability are huge, the lessons learned from the Quality Inspection phase are particularly relevant. ADAC's commitment to transforming Abu Dhabi into a global aviation hub necessitates a nuanced understanding of the historical development of TQM.

As TQM evolved beyond the initial phase, subsequent stages incorporated broader principles such as Quality Control, Quality Assurance, and Total Quality Management. Each phase represented a

step towards a more comprehensive and proactive approach to quality, reflecting a cultural shift within organizations. For ADAC, operating in a dynamic and safety-critical industry, the transition from Quality Inspection to Total Quality Management underscores a commitment to continuous improvement, customer satisfaction, and overall excellence.

Moreover, the historical phase of Quality Inspection represents the genesis of Total Quality Management. This initial stage, marked by a reactive focus on inspecting final products, set the foundation for subsequent advancements in quality management. For ADAC, understanding this foundational phase is not just a historical exercise but a strategic imperative. It provides insights into the early efforts to ensure product quality, offering valuable lessons for the aviation industry. ADAC's commitment to the highest standards in aviation aligns with the principles of Total Quality Management, making the journey from inspection to comprehensive quality management a crucial aspect of its pursuit of operational excellence and global recognition in the aviation sector.

Quality Control (QC): In the progression of Total Quality Management (TQM), organizations recognized the limitations of the initial stage focused on mere inspection. This realization led to the emergence of the Quality Control (QC) stage, marking a shift towards a more proactive approach centered on preventing defects through process control. Within this stage, there is a notable emphasis on in-process monitoring to ensure conformity to specifications, with statistical techniques like Statistical Process Control (SPC) becoming crucial tools for continuous improvement. For the Abu Dhabi Airports Company (ADAC), operating in the dynamic aviation industry, the QC stage holds particular relevance. It signifies a strategic move towards more proactive quality management, aligning with the industry's stringent safety and efficiency standards.

The second phase of TQM's evolution witnessed an even greater emphasis on quality control, characterized by a commitment to conformance to standards, standardization, and measurement. Notably, statistical quality control and the rejection of non-conforming goods at the end of the manufacturing process became prevalent. This era saw the extensive use of control charts and random sample procedures, developed by pioneers such as Shewhart and Dodge-Roaming between 1924 and 1931, to enhance the research process. Stewart's contributions during this period were instrumental in distinguishing between randomly caused variances, representing natural variations, and variances resulting from specific causes in the manufacturing process that could be addressed through quality control interventions. These interventions aimed to increase the predictability of the production process, reflecting a growing sophistication in quality management methodologies (Dahlgaard et al., 2018).

Quality Control, as defined by the International Organization for Standardization (ISO 2009), encompasses operational activities and processes employed to ensure that quality criteria are met. Under this definition, any action contributing to quality improvement or serving the control management function is considered a quality control activity. This includes operational processes, product design, and outputs. Quality control, during this stage, was intricately linked with the application of statistical methodologies and was associated with meeting quality objectives. It

extended beyond the inspection of finished products and services, focusing primarily on preventing deficiencies and scrutinizing operating processes to ensure alignment with required specifications (Bani Ismail, 2012).

For ADAC, navigating the complexities of the aviation industry, the QC stage represents a crucial juncture. The aviation sector's relentless commitment to safety and efficiency necessitates a proactive quality management approach. In an industry where the margin for error is minimal, the shift towards preventing defects through rigorous process control aligns with ADAC's mission to uphold the highest standards. The application of statistical techniques, a hallmark of the QC stage, resonates with the aviation industry's demand for precision and reliability.

Ellis et al. (2000) underscored the impact of successful quality control approaches, emphasizing a reduction in errors and defects, alongside improved process control. Quality control, as they highlighted, is not merely about setting standards but ensuring their sustained and maintained application through methods such as selection, defect prevention, measurement, and continuous improvement. In the context of ADAC, where the smooth functioning of airport operations and the safety of passengers are huge, the principles of quality control become integral to the organization's operational philosophy.

Moreover, the Quality Control stage in the evolution of TQM marks a significant leap towards proactive quality management, emphasizing process control and prevention of defects. ADAC, as a key player in the aviation industry, finds resonance in this stage, aligning its operations with the industry's exacting standards. The meticulous application of statistical techniques and a commitment to preventing deficiencies signify not just a historical progression but a strategic imperative for ADAC's pursuit of excellence in the aviation sector. The lessons from the QC stage underscore the importance of a proactive quality mindset, a critical component in ensuring the safety, reliability, and efficiency of airport operations.

Quality Assurance (QA): Moving beyond the process-centric approaches of the earlier stages, the Quality Assurance (QA) stage in the evolution of Total Quality Management (TQM) signifies a broader organizational commitment to quality. In the aviation industry, where safety and reliability are huge, QA plays an essential role in aligning the entire organizational culture with an unwavering commitment to quality. This stage ensures that processes are not only designed but also executed to meet established quality standards. It involves all employees in the pursuit of quality, emphasizing prevention over correction. The QA stage marks a cultural shift towards a more comprehensive and proactive quality mindset within the organization. For the Abu Dhabi Airports Company (ADAC), operating in the dynamic and safety-critical aviation sector, the QA stage is particularly pertinent, shaping the organizational ethos to prioritize quality in every facet of its operations.

As TQM evolved into its third stage, the focus shifted away from merely identifying faults at the end of the process towards a continuous improvement approach, targeting the root causes of problems at their source. This emphasis on addressing the root cause is a hallmark of the QA stage, demonstrating a strong commitment to organizational planning with the intent to eliminate flaws

and prevent their recurrence (Dale et al., 2013). Dahlgard et al. (2007) have illustrated how quality assurance builds upon the foundation laid by the previous two stages, with a heightened focus on addressing the needs of consumers. Phrases like “right first time” and “fit for purpose” became recurrent during the QA stage, underscoring the imperative for consistency in delivering quality. International quality standards, such as the ISO 9000 series, are instrumental in establishing the requirements for quality assurance, providing a framework for organizations like ADAC to adhere to rigorous quality standards (Harris et al., 2013).

Quality assurance, as defined by Giordidze (2012), encompasses a collection of actions performed before the planning process or the manufacturing of items to provide higher quality to customers. Emphasizing defect and error prevention, QA aims to improve production and related processes to reduce or avoid any contingencies that might cause errors or defects in the first place. In the aviation industry, where precision and reliability are non-negotiable, QA assumes a critical role in ensuring that every aspect of the operational processes aligns with the highest quality standards. It goes beyond mere defect detection, focusing on a proactive approach to prevent issues before they occur.

For ADAC, the QA stage represents a strategic imperative. The aviation industry demands a level of commitment to quality that transcends traditional approaches. The QA stage aligns with ADAC’s mission to be a leader in the aviation sector, emphasizing a culture where every employee is actively involved in ensuring the highest standards. As the aviation industry faces increasing scrutiny and evolving regulatory requirements, the QA stage positions ADAC as an organization committed not only to meeting but exceeding the expectations of passengers, airlines, and regulatory bodies.

Moreover, the Quality Assurance stage in TQM’s evolution represents a critical juncture, especially for organizations operating in safety-critical sectors such as aviation. For ADAC, the QA stage is not merely a theoretical framework but a practical commitment to a culture of excellence and reliability. It goes beyond compliance with standards; it ingrains a proactive and comprehensive quality mindset in every aspect of the organization. As ADAC navigates the complexities of the aviation industry, the lessons from the QA stage provide a roadmap for sustained success, aligning with its vision to be a global leader in aviation services.

Total Quality Management (TQM): The culmination of the evolution of Total Quality Management (TQM) is the TQM stage, representing a holistic organizational approach that involves all aspects of the business. This final stage signifies a profound cultural shift, with continuous improvement becoming ingrained in the organizational culture. Key principles of TQM, including customer focus, employee involvement, continuous improvement, and strategic leadership, shape the organization’s ethos. For the Abu Dhabi Airports Company (ADAC), operating in the competitive aviation industry, TQM is not just a theoretical framework; it is a practical commitment to exceeding customer expectations and promoting a culture of innovation and excellence.

In the context of ADAC's mission to transform Abu Dhabi into a global aviation hub, TQM principles align seamlessly. The stages of TQM's evolution, from early quality inspections to the comprehensive TQM approach, mirror ADAC's journey in prioritizing quality in its operations. The stringent safety standards in the aviation industry necessitate a proactive and holistic approach to quality, making the principles of TQM invaluable for ADAC's success. As ADAC navigates the complexities of the aviation sector, the TQM stage provides not only historical context but also a strategic roadmap for achieving sustainable success and operational excellence. The commitment to TQM principles ensures that ADAC not only meets industry standards but exceeds them, positioning itself as a leader in the global aviation phenomenon.

The term "Total Quality Management" was coined by Oakland and Oakland (2001), defining it as a method to improve the effectiveness and adaptability of an organization as a whole, emphasizing quality in all functional areas. TQM represents a commitment to continuous improvement involving everyone in the organization. The term "total" signifies the involvement of everyone, "quality" indicates a concern for customer satisfaction, and "management" refers to the people and processes required to achieve that quality.

TQM principles include customer-supplier interfaces at the heart of the approach, emphasizing the involvement of everyone in the organization in the continuous improvement effort. This commitment to quality requires clear communication of quality objectives and a transformation of the organizational culture. For ADAC, these principles resonate with its vision to be a leader in the aviation sector, ensuring that every employee is actively involved in maintaining the highest standards.

Feigenbaum (1991) was the first to use the term "total quality" about a product, emphasizing concerns within an organization. Ishikawa (1985) explored the Japanese concept of "total quality control," referring to company-wide quality control involving all employees. Oakland (2014) defined TQM with phrases like customer focus, employee participation, continuous improvement, and the integration of quality management throughout the organization. The fundamental characteristics of TQM include a customer-centric approach, a people-first approach, management leadership, continuous improvement, the use of information and analysis, strategic and quality planning, employee training, supplier integration, full participation, and teamwork (Sureshchandar et al., 2001).

As TQM evolved, it shifted from being a means of gaining a competitive edge to a holistic strategy for surviving in a challenging customer demand environment. TQM requires a commitment to continuous improvement, placing the onus of accountability for quality concerns on management. This approach focuses on improving processes, shifting the focus away from results or finished products and toward the processes that produce them.

In quality management, there are ten major dimensions, including employee training, increased management commitment and assistance, organizational quality, employee participation, supplier quality management, continuous support, leadership, improvement in quality procedures, a customer-focused approach, analysis and information, employee satisfaction, and the use of

statistical techniques (Laohavichien et al., 2011). For ADAC, these dimensions are crucial in ensuring a comprehensive and effective implementation of TQM principles.

Moreover, TQM is not just a management idea; it is a collection of principles and approaches that have stood the test of time. For ADAC, embracing TQM means embracing a commitment to excellence, innovation, and exceeding customer expectations in the competitive aviation industry. The ten major dimensions of quality management provide a comprehensive framework for ADAC to integrate TQM principles into its operations. As ADAC continues its journey to be a global leader in aviation services, TQM serves not only as a historical foundation but as a dynamic strategy for ongoing success and excellence.

FINDINGS AND DISCUSSIONS

The discourse here explores three essential elements of the quality management system, particularly from the perspective of American quality gurus and their beliefs. The focus is on customer-centric practices, continuous improvement, and the crucial involvement of employees in these quality management principles. These concepts serve as guiding principles for organizations, and their relevance is explored in the context of the Abu Dhabi Airports Company (ADAC).

Customer focus stands out as a cornerstone of quality management, aligning with the philosophy that putting the client first is huge. This principle is underscored as one of the fundamental elements in a quality control system, emphasizing its centrality for improved quality and commercial performance. According to Yas et al. (2021), a total customer-centric approach is vital, requiring personnel and management in the manufacturing industry to adhere to customers' specifications during the product manufacturing phase.

In the case of ADAC, which operates in the dynamic aviation industry, understanding and embodying customer focus are crucial. As a public joint stock company under the Abu Dhabi government's vision, ADAC's goal is to position Abu Dhabi as an international aviation center. Embracing a customer-centric approach ensures that ADAC not only meets industry standards but exceeds them, promoting positive customer experiences and attracting more tourists to the region. Whether it's enhancing airport facilities or optimizing services for airlines and customers, ADAC's commitment to customer focus aligns with the principles advocated by American quality gurus.

Continuous improvement, a principle championed by Japanese quality gurus, serves as the second essential element of a quality management system. This concept emphasizes the need for corporations to continually enhance their products to stay competitive in a rapidly changing external environment. Jimoh et al. (2019) assert that continuous development is key to achieving market dominance, especially in a competitive phenomenon where rivals are consistently innovating to attract customers.

For ADAC, operating in the dynamic and competitive aviation sector, the principle of continuous improvement is highly relevant. The aviation industry evolves with technological advancements and changing customer expectations. ADAC's ambitious development initiatives, such as improving airport infrastructure and operational capacity, align with the idea of continuous improvement. By staying abreast of industry trends, adopting innovative technologies, and refining

services, ADAC positions itself as a leader in the aviation sector, echoing the principles of quality advocated by both American and Japanese gurus.

The third principle of employee involvement is a critical component of a successful quality management system. This principle stresses the importance of engaging employees in the process of enhancing product quality. Beraldin, Danese, and Romano (2020) argue that organizations can only become industry leaders through an integrated systems approach to customer service, process management, and employee involvement.

In the context of ADAC, where the goal is to make Abu Dhabi an international aviation hub, the principle of employee involvement becomes integral. Employees must be actively engaged in decision-making processes and other crucial decisions related to the airport's operations. Studies have consistently shown that when employees are involved in decision-making, they exhibit higher levels of dedication and passion, contributing to overall organizational success (Liu, 2021). ADAC's commitment to involving its workforce aligns with the principles of employee participation advocated by quality gurus.

Furthermore, the importance of senior management in promoting a culture of quality is highlighted. Managers must communicate quality standards and motivate employees to ensure the desired results in terms of product quality. Neyestani (2017) emphasizes the need for quality standards and measurements to guide employees and control various categories of quality costs.

For ADAC, establishing and communicating quality standards is imperative in the aviation sector, where safety and efficiency are huge. The company's commitment to a solid quality management system is reflected in its initiatives to recruit and retain customers, thereby gaining a competitive advantage in the marketplace. ADAC's success in transforming Abu Dhabi into an international aviation hub is intricately linked with the adoption of quality management principles that prioritize customer focus, continuous improvement, and employee involvement.

Moreover, the principles of quality management, as advocated by American and Japanese gurus, provide a robust framework for organizations aiming to excel in their respective industries. In the case of Abu Dhabi Airports Company (ADAC), these principles serve as a strategic guide for achieving excellence in the competitive aviation sector. The alignment of ADAC's initiatives with customer focus, continuous improvement, and employee involvement underscores the company's commitment to quality and its aspirations to be a leader in the global aviation phenomenon.

CONCLUSION AND RECOMMENDATIONS

In conclusion, the discussions above underscore the huge importance of quality management principles, encompassing both quality control and quality assurance, in the operations of organizations, with a specific focus on the context of Abu Dhabi Airports Company (ADAC). The evolution of Total Quality Management (TQM), from early inspection stages to a holistic organizational approach, provides a strategic roadmap for ADAC's pursuit of excellence in the competitive aviation industry. Quality control ensures that every aspect of airport facilities and services adheres to established standards, addressing deviations to safeguard safety and customer satisfaction. Moreover, quality assurance takes a comprehensive approach, ensuring that ADAC's

operations, from planning to execution, consistently meet and exceed customer expectations. ADAC's commitment to transforming Abu Dhabi into a global aviation hub aligns seamlessly with the principles of TQM, emphasizing continuous improvement, customer focus, and employee involvement. The discussions further emphasize the cultural shift towards a proactive and holistic quality mindset, essential for ADAC's success in the stringent and dynamic aviation sector. The positive word-of-mouth resulting from customer satisfaction and the adherence to international quality standards position ADAC as a leader in airport operations, reinforcing its competitive advantage and sustainability in the global aviation phenomenon.

Quality control stands as a cornerstone in the pursuit of delivering products of the utmost quality to customers. The systematic approach it entails involves a meticulous examination of manufactured products, allowing them to be accepted or rejected based on pre-established criteria. The primary goal of this process is to meet the specific needs and expectations of customers. Notably, the emphasis on high-quality products extends beyond mere compliance with standards; it plays an essential role in generating positive word-of-mouth. Satisfied customers become advocates, contributing to an expanded customer base—a strategic advantage in competitive markets. Eliminating elements that could compromise product performance is a core objective, ensuring that the final product is not only fault-free but fully functional and reliable. This commitment to quality assurance becomes particularly critical to safeguard a company's reputation.

Quality assurance, a complementary process, broadens its focus beyond the finished product. It thoroughly evaluates and assures the quality of a product throughout its entire development life cycle. The distinctiveness of quality assurance lies in its process-driven strategy, involving precise procedures aimed at achieving organizational goals related to the product's quality. This extends from the conception of an idea to the completion of the product. Quality assurance, therefore, is not concerned solely with the product's final state but with its consistency, correctness, and dependability throughout its developmental journey. The attention to detail and adherence to customer needs and expectations throughout this process are huge.

In the specific context of the Abu Dhabi Airports Company (ADAC), which operates within the dynamic aviation industry, the importance of quality control and assurance cannot be overstated. In the aviation sector, safety and customer satisfaction are non-negotiable aspects. Quality control plays a critical role in ensuring that airport facilities, services, and infrastructure meet and exceed the established standards. Whether it is the maintenance of airport runways, stringent security protocols, or efficient passenger services, the rigorous application of quality control measures is imperative. This ensures any deviations are promptly identified and rectified, maintaining a high level of safety and customer satisfaction.

Quality assurance, on the other hand, takes a panoramic view. It ensures that every facet of the airport's operations, from initial planning stages to the final execution, aligns seamlessly with the expectations of customers and stakeholders. For ADAC, which envisions transforming Abu Dhabi into a global aviation hub, a comprehensive quality assurance approach becomes indispensable. It

involves meticulous planning, adherence to international quality standards, and a commitment to continuous improvement throughout the airport's life cycle.

The commitment to quality management, encompassing both quality control and quality assurance, uniquely positions ADAC as a leader in the aviation sector. Customer satisfaction, operational efficiency, and safety are huge in aviation, and ADAC's alignment with quality principles ensures a robust and reliable airport experience. The positive word-of-mouth resulting from customer satisfaction becomes a key contributor to ADAC's competitive advantage in the dynamic and highly regulated aviation market. As ADAC continues to evolve and expand its operations, several recommendations emerge to enhance organizational performance and sustain competitiveness. Firstly, a continued emphasis on ongoing training programs for its workforce, particularly focusing on Total Quality Management (TQM) principles, is recommended. This ensures that employees at all levels are well-versed in TQM concepts, promoting a culture of continuous improvement and customer-centricity (Dewi et al., 2019; Nguyen et al., 2019; Pambreni et al., 2019).

Secondly, leveraging technology, including the implementation of sophisticated Enterprise Resource Planning (ERP) systems, is crucial. Automation and data analytics can streamline and integrate quality management processes, enhancing decision-making, facilitating real-time monitoring, and contributing to the efficiency and effectiveness of quality control and assurance efforts. Additionally, active engagement with stakeholders, including customers, airlines, and employees, in quality improvement initiatives is essential. Establishing regular feedback mechanisms and promoting collaborative partnerships can provide valuable insights into areas that require attention and innovation. Furthermore, considering the unique cultural and economic context of Abu Dhabi, tailoring the TQM framework to align with local values and practices is recommended. Cultural sensitivity and awareness can enhance the effectiveness of TQM implementation, ensuring it resonates with the local community and workforce.

In conclusion, the integrated application of quality control and quality assurance principles is indispensable for organizations operating in industries where customer satisfaction, safety, and efficiency are huge. For ADAC, these principles serve as a guiding framework, ensuring that the aviation hub not only meets but exceeds international standards. The commitment to quality management contributes to ADAC's success in the competitive aviation phenomenon, reinforcing its position as a global leader in airport operations and services. Through continued focus, adaptation, and innovation, ADAC can fortify its commitment to excellence, ensuring sustained growth and customer satisfaction in the ever-evolving aviation industry.

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