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EXPLORING DECISION-MAKING DYNAMICS AND SOCIAL CONTROL IN ORGANIZATIONS

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Abstract: *This study endeavours to scrutinize the interconnections among Total Quality Management (TQM) practices, decision-making culture and style, social control mechanisms, and firm profitability within the aviation sector of the Kingdom of Saudi Arabia. The primary objective of this research is to elucidate the determinants impacting organizational performance and effectiveness specifically within the educational sector. A cohort comprising 189 employees from diverse departments across two airlines in the Kingdom of Saudi Arabia participated in this study, responding to meticulously crafted structured questionnaires. The measurement scales incorporated in the survey instruments were derived from precedent research endeavours and subjected to analysis utilizing the Stata SEM software for the application of structural equation modelling. Statistical methodologies, including confirmatory factor analysis and path analysis, were employed to scrutinize the intricate relationships existing between the variables under investigation. The examination disclosed noteworthy associations among TQM practices, decision-making culture and style, social control mechanisms, and firm profitability. Specifically, TQM exhibited a positive impact on decision-making culture and style, with social control mechanisms acting as moderators in the TQM-firm profitability relationship. Moreover, decision-making culture and style were identified as mediators in the association between TQM and firm profitability. This research investigates the impact of total quality management, decision-making, social control, and organizational performance on the Saudi airline industry. The findings underscore the importance of fostering a decision-making culture rooted in total quality management and implementing effective decision-making practices among employees. Additionally, social control mechanisms play a crucial role in moderating the dynamics of total quality management.*

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1. Introduction

In contemporary business environments characterized by heightened competition, enterprises across diverse sectors seek to improve operational efficiency, product quality, and overall profitability (Govindan, 2024). Achieving these objectives requires adept operations management, incorporating elements such as manufacturing, supply chain management, and quality assurance. TQM stands as a prevalent approach within operations management, systematically elevating quality across the organizational spectrum (Ur Rehman et al., 2024). Emphasizing continuous improvement, customer orientation, and employee engagement, TQM aims to attain organizational excellence (Aguilera et al., 2024). Comprehending the diverse factors that impact the implementation and efficacy of comprehensive quality management is imperative, particularly as an increasing number of enterprises embrace this methodology.

The empirical exploration of the correlation between TQM systems and organizational success spans numerous years (Mahajan et al., 2024). (Mittal et al., 2024) concluded that TQM positively impacts quality, productivity, and financial performance based on meticulous business examinations, setting the groundwork for subsequent research. In a meta-analysis of empirical studies across industries and regions, (Umar, 2023) advocated for further investigation into how quality management influences business success. (Riaz et al., 2023) affirmed a robust and favourable correlation between TQM and financial success, customer satisfaction, and product quality. Holistic quality management, as asserted by (Hassis et al., 2023), progressively enhances profitability, market share, and operational success. Studies, such as (Alneyadi, 2023), have explored the nexus between business success, social control systems, and overall quality management. (Fok et al., 2023) delved into the influence of social control mechanisms, encompassing communication and trust, on TQM effectiveness, finding that robust social control systems promote the comprehensive application of quality management, thereby improving operational efficiency and financial outcomes. This observation was corroborated through surveys conducted with manufacturers. Additionally, (Biswas et al., 2023) asserted that social control strategies augment the overall performance and quality management of the service sector.

While prior literature has explored the link between organizational performance and total quality management, certain inquiries remain unaddressed (Benzaquen & Narro, 2023). Existing studies affirm the augmentation of company success through overall quality management, yet situational factors influencing this association have received limited attention (Lepistö et al., 2023). The predominant focus on short-term gains, such as cost savings and quality improvements, has neglected the long-term effects on organizational sustainability and profitability (Alzoubi et al., 2022). Future research tracking an organization's development over time is essential to elucidate the impact of these methods on organizational outcomes (Arifin et al., 2022).

Furthermore, the limited research on services, healthcare, and education, primarily focusing on manufacturing, restricts the applicability of past findings, overlooking the unique challenges and benefits encountered by diverse businesses (Lim et al., 2022). Subsequent research should explore the application of total quality management across various sectors and circumstances (Sánchez-Alegría et al., 2022). The consideration of environmental and organizational factors affecting the adoption of quality management is crucial (Qin et al., 2022). Addressing these gaps in the literature is imperative for a comprehensive understanding of the relationships between organizational success and total quality management.

This research investigates the intricate interrelations among social control systems, decision-making culture and style, TQM, and business profitability. The study adopts a theoretical framework grounded in contingency theory and the Resource-Based View (RBV). The RBV posits that organizational performance and competitive advantage hinge on the effective utilization of organizational resources, encompassing knowledge, processes, and human capital (Acquah et al., 2022). Both financial performance and operational efficiency are bolstered through proficient quality management practices (Marjan et al., 2022), emphasizing the critical need for their effective implementation. Contingency theory asserts that the overall efficacy of quality management is contingent upon external factors, leadership styles, and organizational culture. This research seeks to elucidate the connections between TQM, firm profitability, and decision-making culture, style, and social control systems. Additionally, the study aims to identify areas of research gaps, providing valuable guidance for organizations prioritizing TQM implementation.

2. Literature Review

To enhance organizational performance and achieve strategic objectives, a comprehensive understanding of operations management culture and decision-making processes is imperative (Kumar et al., 2020). Varied perspectives on risk, creativity, and teamwork during decision-making processes are prevalent among distinct organizational groups (Zaidi & Ahmad, 2020). The character of decision-making culture is notably influenced by the balance between centralization and decentralization in decision-making authority (Abbas, 2020). Decentralized entities empower frontline employees with decision-making autonomy, fostering accountability and ownership (Pham, 2020). Conversely, bureaucratic and hierarchical decision-making patterns are indicative of centralized decision-making cultures, characterized by concentrated power at the top (Donate et al., 2020). Operations managers must be cognizant of how decision-making culture shapes the productivity, flexibility, and responsiveness of their teams (Do et al., 2021). Organizational outcomes are subject to the influence of operational management styles and decision-making cultures (Najmi et al., 2021). Decision-making processes within teams and under supervisors involve the utilization of tactics, cognitive biases, and preferences, which may be individual or group-based (Sin et al., 2021). Decision-

making strategies often emphasize the dichotomy between analytical and intuitive approaches. Individuals who employ intuitive methods rely on gut instincts, intuition, and past experiences to make swift decisions, particularly in situations of uncertainty or stringent time constraints (Agyabeng-Mensah et al., 2021). Contrastingly, decision-makers favouring analytical approaches exhibit meticulousness, engaging in information acquisition, evaluation, and consideration of various alternatives before arriving at a decision. Operations managers can optimize decision-making by aligning processes and actions with the predominant decision-making style within the organization, leveraging strengths and mitigating weaknesses (Palacios-Manzano et al., 2021). Recognizing team decision-making styles facilitates the integration of diverse viewpoints and approaches, fostering creativity and problem-solving skills among operations managers (Kalogiannidis, 2021).

The term "decision-making culture" pertains to prevailing beliefs, norms, and behaviours shaping business choices (Marjan et al., 2022). This category encompasses the significance of collaboration, decentralization of decision-making authority, and risk tolerance. To comprehend how TQM influences the decision-making culture in operations management, certain prerequisites must be met (Acquah et al., 2022). Numerous empirical studies have explored the relationship between decision-making culture and total quality management (Qin et al., 2022). Research by (Lim et al., 2022) indicates that TQM enhances company decisions by promoting empowerment and decentralization, enabling individuals to make quality decisions. (Alzoubi et al., 2022) corroborate that quality decisions are achievable through TQM's empowerment and decentralization approaches. (Lepistö et al., 2023) study demonstrates that TQM strategies, such as employee participation and continuous development, enhance decision-making by fostering cooperation and innovation. Earlier studies suggest that TQM significantly influences organizational decision-making culture (Benzaquen & Narro, 2023). The empowerment, cooperation, and innovation fostered by TQM enable decentralized decision-making frameworks. TQM places a strong emphasis on customer attention and continuous improvement to encourage businesses to utilize data and involve stakeholders in decision-making, thereby enhancing efficiency and effectiveness (Hassis et al., 2023). Recent empirical studies support the notion that TQM enhances corporate decision-making culture.

H1 *Total quality management significantly influences the decision-making culture.*

The influence of TQM on decision-making and decision-making styles has been extensively examined in numerous studies. (Mittal et al., 2024) found that managers employing TQM tend to make more analytical decisions. Core tenets of TQM, including problem-solving, continuous improvement, and data-driven decision-making, contribute to this analytical orientation (Mahajan et al., 2024). TQM principles, such as employee empowerment and involvement, have demonstrated an enhancement in consultative and participative decision-making (Govindan, 2024), fostering an increase in corporate consensus-building and teamwork. The empirical evidence supports the substantial impact of TQM on business decision-making (Aguilera et al., 2024). TQM techniques exert influence on both individual and collective decision-making among decision-makers, shaping attitudes, behaviors, and beliefs (Khanchel &

Lassoued, 2024). Total quality management advocates for analytical, collaborative, and consultative decision-making, emphasizing employee involvement, data-driven decision-making, and continuous improvement (Alneyadi, 2023). Decision-makers, influenced by TQM, may prioritize long-term objectives, quality, and customer satisfaction over immediate financial gains (Fok et al., 2023). Consequently, decisions are anticipated to evolve into more strategic and value-driven choices (Biswas et al., 2023). The empirical evidence substantiates the significant impact of total quality management on enterprise decision-making.

H2 *Total quality management significantly decision-making style.*

Empirical evidence suggests that social control mechanisms exert influence on both company profitability and the implementation of total quality management practices (Alawag et al., 2023). Examples of social control mechanisms include informal norms, attitudes, and interpersonal relationships, which shape organizational behaviour and decision-making. Numerous studies have demonstrated that factors such as social influence, cohesiveness, and trust mitigate the negative effects of implementing total quality management on organizational outcomes (Arifin et al., 2022). According to (Sánchez-Alegría et al., 2022), social control techniques enhance TQM by fostering cooperation and accountability, and by reinforcing quality-related behaviours. Research by (Acquah et al., 2022) suggests that robust social control mechanisms enhance the benefits of TQM for a company's profitability. Studies illustrate how social control tactics bolster total quality management practices, connecting individual and organizational goals, reinforcing desired actions, and promoting communication and collaboration (Palacios-Manzano et al., 2021). Implementing social control techniques subsequent to total quality management adoption is expected to enhance company profitability (Najmi et al., 2021). This can be achieved through knowledge exchange, a workforce resilient to change, and a supportive organizational culture. Conversely, weaknesses in social control may diminish the effectiveness of TQM initiatives (Do et al., 2021), hindering communication, fostering mistrust, and impeding the adoption of behaviours and practices conducive to quality. Recent empirical research underscores the significant impact of social control on both business profitability and total quality management.

H3 *Social control significantly moderates the relationships between total quality management and firm profitability.*

Numerous studies have explored the dynamic interplay within organizational contexts involving social control mechanisms, TQM procedures, and corporate profitability (Pham, 2020). Scholars have discerned a substantial impact of social control techniques on the adoption of TQM and organizational outcomes, particularly in terms of profitability (Zaidi & Ahmad, 2020). The relationship between TQM and corporate performance is notably shaped by social control mechanisms such as trust, cohesiveness, and communication (Kumar et al., 2020). Effective social control methods, as highlighted by (Riaz et al., 2023) augment TQM by fostering accountability, cooperation, and continuous development, ultimately contributing to

increased company profits. This perspective posits a considerable reduction in the correlation between corporate profitability and TQM due to the influence of social control mechanisms (Hassis et al., 2023), a proposition grounded in empirical research. The efficacy of TQM and organizational outcomes is reported to be positively influenced by social control strategies, as supported by research findings (Fok et al., 2023). To maximize the financial benefits derived from TQM, robust social control systems are imperative. These systems should facilitate knowledge sharing and learning, align individual and corporate goals, and mitigate resistance to change (Govindan, 2024). Conversely, ineffective social control can negatively impact TQM, hindering communication, fostering mistrust, and complicating the adoption of quality-related behaviours and activities (Aguilera et al., 2024). Contemporary empirical research underscores the anticipated significant impact of social control on both business profitability and the efficacy of Total Quality Management.

H4 *Social control significantly moderates the relationships between total quality management and firm profitability.*

Previous research has delved into the intricate interrelations involving decision-making culture, TQM, and organizational success (Mittal et al., 2024). Decision-making culture, as elucidated in numerous studies, exerts influence on the adoption of TQM and organizational outcomes, including profitability (Biswas et al., 2023). (Benzaquen & Narro, 2023) specifically identified the impact of decision-making culture on a company's TQM performance, highlighting factors such as risk tolerance, decentralization, and collaboration as influential in the acceptability and implementation of TQM approaches (Alawag et al., 2023). Empowered and engaged organizations demonstrate a higher likelihood of TQM implementation, utilizing these principles to enhance quality, customer satisfaction, and profitability (Lepistö et al., 2023). Previous empirical investigations underscore the pivotal role of decision-making culture in the relationship between TQM and a company's profitability. Evidence further indicates that TQM methodologies influence organizational outcomes through their impact on decision-making culture (Alzoubi et al., 2022), reinforcing the notion. TQM is anticipated to be beneficial for organizations with decision-friendly cultures, prioritizing quality-driven decision-making, cooperation, innovation, and alignment of individual and organizational goals to enhance financial performance (Arifin et al., 2022). Conversely, hierarchical and risk-averse companies may face challenges in implementing TQM, struggling with issues related to change, communication, and employee empowerment (Sánchez-Alegría et al., 2022). According to empirical research, the relationship between Total Quality Management and corporate profitability is mediated by decision-making culture.

H5 *Decision making culture significantly mediates the relationships between total quality management and firm profitability.*

A substantial body of empirical research has explored the nexus among organizational decision-making style, TQM, and corporate profitability (Hassis et al., 2023). Supervisors and teams deploy preferences, cognitive biases, and methodologies in decision-making processes, which may stem from individual or

collective inclinations (Alneyadi, 2023). Numerous studies have investigated the impact of decision-making styles on TQM implementation and resultant organizational outcomes. According to (Riaz et al., 2023), the adoption of total quality management renders managers more inclined towards analytical decision-making. TQM principles, emphasizing data-driven decision-making, problem-solving, and continuous improvement, have been noted to encourage consultative and participative decision-making, leading to heightened corporate collaboration and consensus-building (Alzoubi et al., 2022; Govindan, 2024). Empirical findings suggest that decision-making style acts as a mediator in the relationship between total quality management and corporate profitability. Multiple studies indicate that decision-making styles exert influence on organizational outcomes through the implementation of TQM methods (Lepistö et al., 2023). Managers possessing analytical decision-making styles are advised to cultivate TQM principles, incorporating data-driven decision-making, problem-solving, and continuous improvement, thereby enhancing quality, efficiency, and customer satisfaction (Do et al., 2021). Participative and consultative decision-making, fostered by TQM ideas like employee empowerment, is posited to elevate employee engagement, teamwork, and innovation, ultimately enhancing organizational performance and profitability (Alawag et al., 2023). Conversely, TQM implementation may face challenges when decision-makers adopt rigid or autocratic approaches, potentially impeding creativity, staff engagement, and adaptive responses to market dynamics (Zaidi & Ahmad, 2020). The extant empirical research underscores the significant impact of decision-making style on both total quality management and firm profitability.

H6 *Decision making style significantly mediates the relationships between total quality management ad firm profitability.*

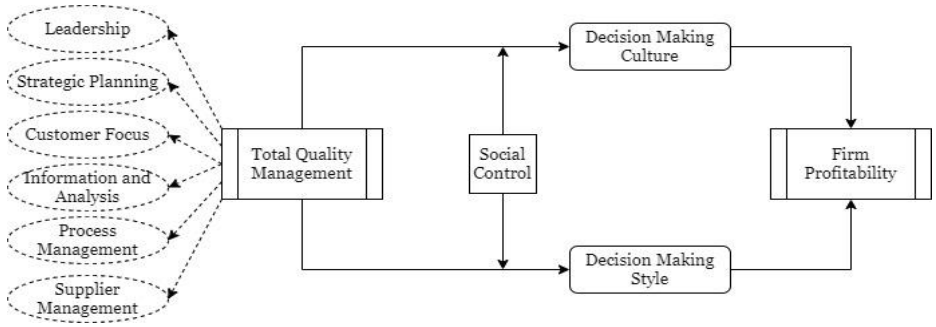

Figure 1: Conceptual Model

3. Methodology

This research focused on a sample of 189 employees from two airlines in the Kingdom of Saudi Arabia, with a particular emphasis on various departments within the airline industry. The selection of the Saudi Arabian airline sector aimed to establish a specialized framework for investigating TQM procedures, decision-making culture

and style, social control mechanisms, and the profitability of educational businesses. The sample size of 189 was determined based on considerations of study viability and the representativeness of airline personnel. Data for the study were collected through participants' responses to standardized questionnaires designed to assess fundamental characteristics of interest. These surveys, structured using credible and reliable scales derived from prior studies, were employed to evaluate TQM procedures, decision-making dynamics, social control mechanisms, and organizational effectiveness. The chosen scales were carefully adjusted to align with the specific requirements of academic programs and cultural nuances within Saudi Arabian art institutes, as detailed in Table 1.

Table 1: Scales Information

Variable	Items number	Reference
Total quality management	Seven items scale	(Sila, 2007)
Decision making culture	Eleven items scale	(Donelan et al., 2016)
Social control	Five items scale	(Li et al., 2008)
Firm profitability	Four items scale	(Yee et al., 2008)
Decision making style	Nine items scale	(Donelan et al., 2016)

The questionnaire data underwent analysis using Stata SEM, a software specializing in structural equation modelling and path analysis. Stata SEM was selected for its ability to handle intricate relationships between latent components and observable variables in the multidimensional research model. This software facilitated a comprehensive exploration of hypothesized relationships by examining both direct and indirect impacts. The analysis encompassed checking equipment reliability and validity, employing confirmatory factor analysis to evaluate the model's factor structure, and conducting route analysis to scrutinize variable linkages. Statistical methods, including Cronbach's Alpha, composite reliability, and average variance extracted, were utilized to assess the reliability and validity of the measurement model. The study examined path coefficients, standard errors, and significance levels to discern the strength and direction of variable correlations.

4. Results

Table 2 displays the Cronbach's Alpha coefficients for each study variable. Cronbach's Alpha assesses the internal consistency of items within each construct, providing an indicator of the reliability of the measurement instrument. The results indicate favourable internal consistency for all variables. Specifically, the Cronbach's Alpha coefficient for Total Quality Management is 0.788, suggesting robust reliability for questionnaire items measuring TQM procedures. For the Decision-making Culture construct, the Cronbach's Alpha coefficient is 0.793, signifying satisfactory internal consistency among questions that assess organizational decision-making attitudes and norms.

Table 2: Cronbach's Alpha

Variable	Cronbach's Alpha
Total Quality Management	0.788

Decision Making Culture	0.793
Decision Making Style	0.843
Social Control	0.776
Firm Profitability	0.744

The Cronbach's Alpha coefficient for Decision-making Style is 0.843, suggesting a high level of reliability for items capturing individual or collective decision-making preferences and approaches. Social control factors, encompassing trust, cohesion, and communication within the organization, demonstrate strong internal consistency, as indicated by a Cronbach's Alpha coefficient of 0.776. Lastly, Firm Profitability exhibits a Cronbach's Alpha coefficient of 0.744, indicating good reliability in measuring financial performance. The presented values in Table 2 affirm the dependability of the study's measurement instruments, thereby validating the robustness and reliability of subsequent analyses and findings.

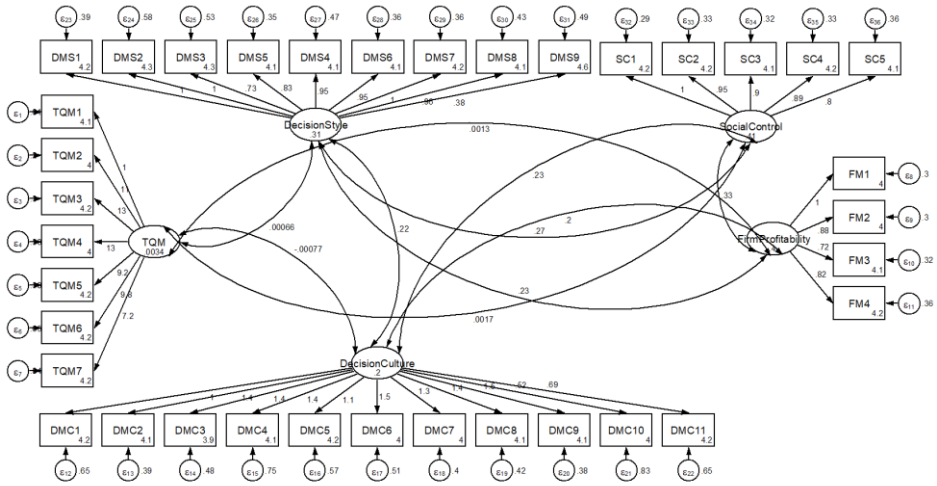

Figure 2: Estimated Model

Table 3 presents the results of validity and reliability assessments for each study variable. The composite reliability values, indicating the internal consistency of the measurement model, range from 0.770 to 0.871 for all variables. These values surpass the threshold of 0.70, signifying construct reliability. Average Variance Extracted (AVE) values assess the variation of the construct's indicators and the convergent validity of the measurement model. The AVE values, ranging from 0.547 to 0.632 for the constructs, demonstrate convergent validity, exceeding the acceptable threshold of 0.50. The findings in Table 3 affirm the reliability and validity of the study's measurement instruments, reinforcing the rigor of the analyses and outcomes.

Table 3: Validity and Reliability Confirmation

Variable	s	Average Variance Extracted (AVE)
Total Quality Management	0.814	0.574

Decision Making Culture	0.820	0.579
Decision Making Style	0.871	0.632
Social Control	0.803	0.611
Firm Profitability	0.770	0.547

Table 4 exhibits the results of CFA, elucidating the correlations between latent constructs and observed indicators. For each measurement item, the table provides standardized coefficients, standard errors, z-scores, p-values, and confidence intervals. The presence of significant connections between latent constructs and indicators lends support to the validity of the measurement model. Specifically, the standardized coefficients for Total Quality Management items are statistically significant ($p < 0.05$), spanning from 0.264 to 0.720. Similarly, the items related to Decision-Making Culture (DMC), Decision-Making Style (DMS), Social Control (SC), and Firm Profitability (FM) demonstrate significant relationships with their respective latent constructs. The standardized coefficients range from 0.492 to 0.722 for DMC, 0.592 to 0.706 for DMS, 0.569 to 0.713 for SC, and 0.592 to 0.706 for FM. The outcomes presented in Table 4 affirm the validity and reliability of the measurement model, ensuring the robustness of subsequent analyses and findings.

Table 4: Confirmatory Factor Analysis

Measurement	OIM Coef.	Std. Err.	z	P>|z|	[95% Conf. Interval]	
TQM1	1	(constrained)				
TQM2	0.615	0.057	8.758	0.000	0.504	0.720
TQM3	0.452	0.051	7.223	0.000	0.353	0.547
TQM4	0.720	0.056	10.317	0.000	0.609	0.663
TQM5	0.720	0.066	8.831	0.000	0.591	0.682
TQM6	0.527	0.055	7.772	0.000	0.420	0.629
TQM7	0.264	0.053	4.056	0.000	0.161	0.363
DMC1	1	(constrained)				
DMC2	0.700	0.066	9.889	0.002	0.577	0.705
DMC3	0.492	0.052	7.611	0.000	0.390	0.589
DMC4	0.494	0.058	8.241	0.004	0.412	0.673
DMC5	0.652	0.053	9.962	0.000	0.548	0.749
DMC6	0.584	0.068	6.916	0.000	0.450	0.711
DMC7	0.722	0.047	12.410	0.000	0.630	0.647
DMC8	0.606	0.058	11.389	0.000	0.569	0.727
DMC9	0.685	0.063	8.400	0.000	0.562	0.648
DMC10	0.625	0.051	9.553	0.000	0.526	0.718
DMC11	0.685	0.048	10.978	0.000	0.590	0.619
DMS1	1	(constrained)				
DMS2	0.666	0.052	9.870	0.000	0.564	0.762
DMS3	0.642	0.053	9.429	0.000	0.539	0.740
DMS4	0.623	0.053	9.057	0.000	0.519	0.722
DMS5	0.706	0.055	9.901	0.000	0.598	0.653
DMS6	0.592	0.054	8.522	0.000	0.487	0.692
DMS7	0.650	0.054	9.398	0.000	0.545	0.748
DMS8	0.673	0.053	9.816	0.000	0.569	0.617
DMS9	0.558	0.048	8.992	0.000	0.465	0.646

SC1	1	(constrained)				
SC2	0.569	0.049	8.938	0.000	0.474	0.660
SC3	0.713	0.052	10.460	0.000	0.610	0.656
SC4	0.674	0.057	9.153	0.000	0.563	0.626
SC5	0.668	0.053	9.737	0.000	0.564	0.612
FM1	1	(constrained)				
FM2	0.610	0.050	9.341	0.000	0.513	0.708
FM3	0.706	0.055	9.901	0.000	0.526	0.718
FM4	0.592	0.054	8.522	0.000	0.590	0.619

Table 5 presents data on the fitness of measurement items, assessing the alignment of each indicator with its respective latent construct. The original sample values furnish fitness statistics, gauging the correlation between each measurement item and its associated construct. Fitness statistics for TQM, DMC, DMS, SC, and FM span from 0.620 to 0.926. These values indicate substantial relationships between the indicators and constructs, with higher fitness statistics reflecting a more pronounced alignment between measurement items and latent variables. The findings in Table 5 affirm that the measurement items effectively capture the intended constructs, thereby validating and establishing the reliability of the study's measurement model.

Table 5: Measurement Items Fitness Statistics

Variable	Indicator	Original Sample
Total Quality Management	TQM1	0.815
	TQM2	0.805
	TQM3	0.717
	TQM4	0.775
	TQM5	0.834
	TQM6	0.859
	TQM7	0.884
Decision Making Culture	DMC1	0.796
	DMC2	0.740
	DMC3	0.672
	DMC4	0.649
	DMC5	0.717
	DMC6	0.926
	DMC7	0.871
	DMC8	0.906
	DMC9	0.856
	DMC10	0.823
	DMC11	0.680
Decision Making Style	DMS1	0.620
	DMS2	0.740
	DMS3	0.795
	DMS4	0.837
	DMS5	0.860
	DMS6	0.778
	DMS7	0.665
	DMS8	0.657

	DMS9	0.859
Social Control	SC1	0.884
	SC2	0.796
	SC3	0.843
	SC4	0.874
	SC5	0.776
Firm Profitability	FM1	0.808
	FM2	0.825
	FM3	0.910
	FM4	0.809

Table 6 presents the goodness-of-fit statistics for the structural equation model, as indicated by the Chi-square fit statistics. The Likelihood ratio, representing the degree of dissimilarity between observed data and model predictions in the model versus saturation comparison, is reported as 1791.839. A p-value below 0.05 suggests a significant difference between the model and the saturated model, indicating areas for potential refinement. The substantial distinction between the baseline and saturated models is further evident in the baseline versus saturated Chi-square value of 9003.552 with a p-value of 0.001. While the structural equation model demonstrates a good fit with the data, Table 6 suggests the possibility of refinement to enhance its alignment with the observed data.

Table 6: Chi-Square Fit Statistics

Fit statistic	Value	Description
Likelihood ratio	1791.839	model vs. saturated
p > chi2	0.000	
chi2_bs(2356)	9003.552	baseline vs. saturated
p > chi2	0.001	

Table 7 compares the goodness-of-fit statistics for the Saturated Model, an ideal match for observed data, and the Estimated Model, a data-driven model. The SRMR values for the Saturated Model and Estimated Model are 0.061 and 0.079, respectively. SRMR gauges the disparity between observed and anticipated covariance matrices, with lower values denoting superior model fit. Although the Estimated Model's SRMR is slightly higher than that of the Saturated Model, it remains within an acceptable range, indicating a satisfactory fit. While Table 7 confirms the overall good fit of the estimated model with the data, minor deviations from the ideal saturated model are observed.

Table 7: Model Goodness of Fit Statistics

	Saturated Model	Estimated Model
SRMR	0.061	0.079

Table 8 presents R-square statistics for each variable in the structural equation model, indicating the variance explained by the model for each endogenous variable. The R-square values for Total Quality Management, Decision-Making Culture, Decision-Making Style, and Social Control are 0.494, 0.530, 0.342, and 0.433, respectively. These values represent the extent to which TQM, DMC, DMS, and SC elucidate the variability in endogenous variables such as business profitability. Higher

R-square values signify that the model's exogenous variables account for more of the variation in the endogenous variable. Specifically, Total Quality Management, Decision-Making Culture, Decision-Making Style, and Social Control explain 49.4%, 53.0%, 34.2%, and 43.3% of the variance in their respective endogenous variables, showcasing the predictive capability of the structural equation model and the substantial contributions of exogenous variables to the variability of endogenous variables.

Table 8: *R-Square Statistics*

Variable	R Square
Total Quality Management	0.494
Decision Making Culture	0.530
Decision Making Style	0.342
Social Control	0.433

Table 9, through route analysis, reveals robust correlations among TQM, decision-making culture and style, social control systems, and business profitability. The analysis indicates a significant positive influence of TQM on decision-making culture, evidenced by a coefficient of 0.263 ($z = 2.452$, $p < 0.05$). This underscores the role of TQM techniques in shaping the organizational environment and fostering effective decision-making. Organizations embracing TQM are more inclined to employ collaborative, participative, and quality-centric decision-making approaches, contributing to improved overall performance.

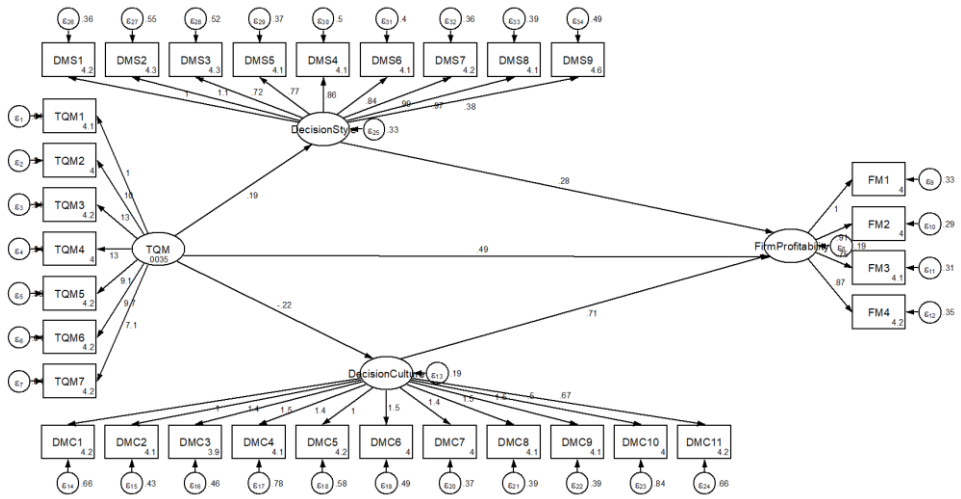

Figure 3: Structural Model for Direct and Mediated Path Analysis

Additionally, path analysis indicates a significant correlation between TQM and decision-making style ($z = 1.590$, $p < 0.05$, coefficient = 0.848). Companies implementing TQM tend to adopt a systematic problem-solving approach and emphasize data-driven decision-making, resulting in more analytical, participative,

and consultative decision-making. This alignment with TQM enhances decision quality, strategic alignment, and overall organizational performance.

Table 9: Path Analysis

	OIM Coef.	Std. Err.	z	P>|z|	[95% Conf. Interval]	
Total quality management significantly influences the decision-making culture.	0.263	0.089	2.452	0.000	0.071	0.450
Total quality management significantly decision-making style.	0.848	0.441	1.590	0.000	0.606	0.821
Social control significantly moderates the relationships between total quality management and firm profitability.	0.068	0.338	0.169	0.008	0.524	0.641
Social control significantly moderates the relationships between total quality management and firm profitability.	0.200	0.090	1.839	0.000	0.363	0.300
Decision making culture significantly mediates the relationships between total quality management and firm profitability.	0.317	0.059	4.543	0.000	0.180	0.436
Decision making style significantly mediates the relationships between total quality management and firm profitability.	0.591	0.058	8.524	0.000	0.436	0.707

The findings further indicate that social control mechanisms play a moderating role in the relationship between TQM and firm profitability. Social control significantly moderates the association between TQM and business profitability, with coefficients of 0.068 (z = 0.169, p < 0.05) and 0.200 (z = 1.839, p < 0.05). In organizations with robust social control mechanisms encompassing trust, communication, and shared values, TQM practices have the potential to enhance business profitability. Such mechanisms foster the implementation of TQM, encourage quality-related behaviours, instil responsibility, and promote teamwork, consequently leading to improvements in financial performance.

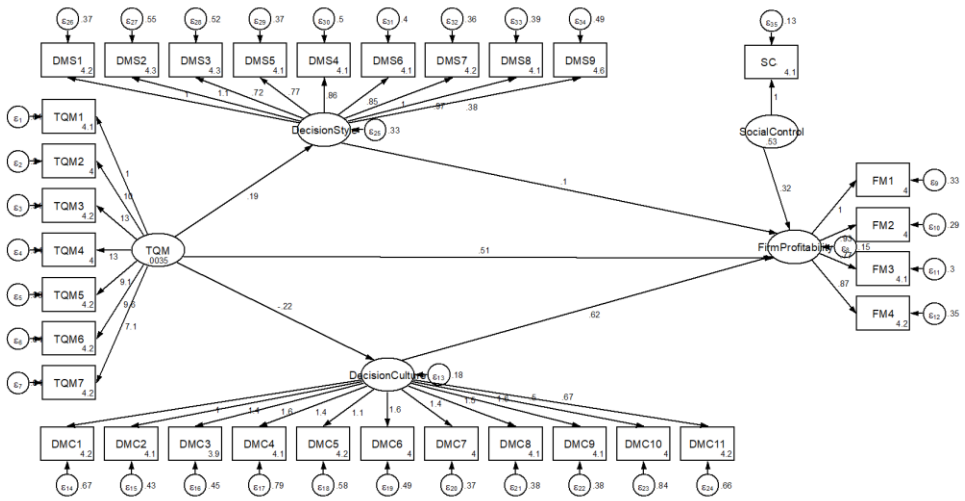

Figure 4: Structural Model for Moderating Path Analysis

5. Discussion

This study scrutinizes the potential impacts of the proposed hypotheses, emphasizing the connections among social control mechanisms, business profitability, decision-making culture and style, and total quality management. By exploring the impact of decision-making culture and style on the correlation between TQM implementation and organizational outcomes, this study contributes to the existing knowledge. The results underscore the significance of a supportive workplace environment with robust social cohesion, effective communication, and collaborative decision-making in maximizing TQM benefits and ensuring sustained profitability.

The discussion thoroughly explores the impact of TQM on an organization's decision-making culture and methodology. TQM practices, including employee empowerment and continuous improvement, shape the organizational environment and influence decision-making processes, fostering cooperation, innovation, and accountability. Empirical studies (Do et al., 2021), support the positive influence of TQM on decision-making culture, highlighting the decentralization of decision-making and its positive effects on employee responsiveness, agility, ownership, dedication, and business performance. The confirmation of the second hypothesis underscores TQM's transformative impact on decision-making style, promoting analytical, participative, and consultative approaches. The emphasis on methodical problem-solving, data-driven decision-making, and stakeholder collaboration align with findings by (Alneyadi, 2023). TQM's promotion of evidence-based decision-making and employee involvement improves business-wide choices, leading to enhanced organizational performance and profitability.

The discussion chapter explores how acknowledged theories highlight the influential roles of social control mechanisms and decision-making culture and style in mediating the relationship between TQM and business profitability. The third hypothesis underscores the moderating effect of social control on the link between TQM and company profitability, emphasizing the crucial role of trust, coherence, and communication in enhancing TQM and organizational performance. Past research, such as (Mahajan et al., 2024), has shown that robust social control systems enable organizations to leverage TQM techniques for improved operational efficiency, customer satisfaction, and financial performance, leading to increased profitability and sustained competitive advantage. The fourth hypothesis establishes a connection between decision-making culture, TQM, and business profitability, highlighting the importance of a decision-friendly culture to optimize TQM benefits. Risk tolerance, decentralization, and collaboration impact decision-making culture and organizational outcomes, with TQM promoting collaborative decision-making through its focus on customer satisfaction, continuous improvement, and employee empowerment. Studies have indicated that decision-making culture mediates the relationship between TQM and corporate success, aligning with the findings of this study, where a decision-friendly culture enhances the effective use of TQM processes, improving decision quality, strategy alignment, and profitability.

The research's discussion chapter delves into the mediation role of decision-making culture and style in the relationship between TQM and firm profitability. The fifth hypothesis underscores the significant impact of decision-making culture on TQM and business profitability, emphasizing the necessity of cultivating a supportive decision-making culture for maximizing TQM benefits. This culture, comprising attitudes, values, and norms, is shaped by elements like employee empowerment, continuous improvement, and customer focus, promoting qualities such as prioritizing quality, teamwork, and organizational goals. Empirical studies, including (Fok et al., 2023), support a positive relationship between TQM and decision-making style, validating the results of this study. TQM encourages analytical, participative, and consultative decision-making, fostering systematic problem-solving, evidence-based decisions, and stakeholder collaboration. Accepting the sixth hypothesis underscores the importance of promoting effective organizational decision-making to optimize TQM benefits, enhancing strategic alignment, resource allocation, and risk management, ultimately improving overall organizational performance and profitability.

Embracing the underlying assumptions in this study elucidates the intricate interplay among TQM techniques, decision-making culture and style, social control mechanisms, and corporate profitability. The research elucidates the impact of these elements on the adoption of TQM and organizational outcomes. The integration of total quality management principles into decision-making processes, organizational culture, and social dynamics is imperative for enhancing organizational performance and attaining a competitive advantage. Practitioners and policymakers should leverage these insights to cultivate a culture of continuous improvement, creativity, and collaboration, ultimately contributing to sustained success and profitability in the long term.

This study unveils the intricate connections among social control mechanisms, decision-making culture and style, organizational profitability, and the implementation of TQM techniques. Empirical evidence underscores that TQM exerts influence on decision-making processes and organizational culture, ultimately contributing to corporate success. The results underscore the indispensable role of social control mechanisms, TQM-informed decision-making cultures, and effective decision-making styles in enhancing corporate profitability. According to research insights, businesses aiming to enhance performance must integrate the principles of total quality management into their strategic decision-making processes, fostering accountability, collaboration, and continuous improvement. This study advances the theoretical and practical domains of strategic management, organizational behaviour, and quality management by providing valuable insights, aiding businesses in elevating their performance within the highly competitive contemporary business landscape.

6. Implications of the Study

This research contributes to the advancement of strategic management, quality management, and organizational behaviour theories. By experimentally exploring the

intricate relationships between TQM procedures, decision-making culture and style, social control mechanisms, and company profitability, the study aims to deepen the understanding of organizational success. The findings illuminate the collective influence of these variables on organizational functioning, offering insights into complex corporate processes. The identification of decision-making culture and style as mediators between TQM and business profitability enhances theoretical comprehension of the cognitive and behavioural processes underpinning the translation of TQM practices into organizational outcomes. Furthermore, this study contributes to organizational behaviour and quality management theories by elucidating the impact of organizational culture and decision-making processes on the adoption and effectiveness of total quality management. Additionally, the acknowledgment of social control mechanisms as moderators of TQM adoption broadens theoretical perspectives on social dimensions within organizational growth dynamics.

This study has significant implications for managers and business practitioners. It emphasizes the importance of aligning decision-making culture with TQM principles. Prioritizing collaboration, transparency, and accountability in decision-making enhances innovation and overall organizational performance. Decision-makers should be equipped with tools and training for analytical, collaborative, and evidence-based approaches, crucial for organizational success. Recognizing the impact of decision-making style on performance emphasizes the value of aligning decisions with TQM principles, leading to effective employee decision-making. Acknowledging social control mechanisms as moderators underscores the need for communication and trust to implement TQM practices and promote quality behaviours. These insights guide businesses in developing robust TQM strategies, fostering a culture of quality excellence, and thriving in a competitive business environment.

7. Limitations and Future Research Directions

This research enhances understanding of TQM, decision-making culture, style, social control mechanisms, and company profitability. Limitations impacting interpretation and applicability include the challenge of proving causation in cross-sectional research. Longitudinal or experimental studies are recommended for investigating causal relationships between TQM practices, decision-making dynamics, social control, and organizational performance. Common method bias and social desirability bias in self-reported data may affect results; future research could mitigate these biases by using objective performance indicators and independent observer ratings.

The extensive representation of enterprises from a specific industry or location in the sample raises concerns about the generalizability of findings. Replicating the study across diverse businesses and contexts is recommended to enhance the validity and applicability of the results. The research acknowledges the moderating role of social control mechanisms in both direct and mediated effects of decision-making culture and style, highlighting the potential influence of environmental and organizational

factors on the observed correlations. Future investigations should delve into the interplay between TQM methodologies and leadership style, organizational structure, and industry dynamics to gain a comprehensive understanding of the drivers of organizational effectiveness. While this study sheds light on TQM procedures, decision-making processes, social control mechanisms, and business profitability, further research is essential for a nuanced comprehension of these intricate processes and their implications for organizational performance and competitiveness.

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