Determinants of Decision-Making Effectiveness in Saudi Arabia's Public Sector: The Moderating Role of Organizational Culture

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Abstract: Decision making is one of the important capability of managers in all organizations. This importance increases in Saudi Arabia due to the governance and structural reforms based on vision 2030. This study examines how employee empowerment, organizational communication, and information availability and quality affect decision-making effectiveness in Saudi's public organizations. It also explores how organizational culture moderates these associations. A quantitative research technique and standardized questionnaire collected data from Saudi public organization decision-makers. A purposive sampling was used. A total of 203 responses were collected. Data was analyzed using Smart PLS 4. The results show that all three independent components improve decision-making, with information availability and quality being the strongest predictor. Organizational culture moderated the connection between all the variables and decision-making effectiveness, suggesting that collaborative and innovative cultures are better for empowerment, communication and information quality. However, gender did not moderate any of the paths indicating that equity is increasing in the country. Public sector managers should promote employee empowerment, improve communication, and provide access to high-quality information. The study highlights the importance of organizational culture in enhancing decision-making and offers guidance for creating a culture that maximizes these practices.

Keywords: Decision-making effectiveness, organizational communication, organizational culture.

I. INTRODUCTION

Decision-making effectiveness is crucial to any organization's performance and sustainability. Accurate decision making can lead to better organizational future not only for the organization but also for employees [1]. Decision making is important in all organizations. However, its importance increases in public sector organizations. This is because this sector is in charge of providing public service to citizens and affect the total population of a country [2, 3]. Prior literature is dominated by studies that attempt to identify the predictors of decision making effectiveness for private sector while when it comes to the public sector and especially in emerging economies, the studies are still evolving [4]. One of the leading emerging economies is the Saudi Arabia which has launched the vision of 2030 to increase the effectiveness of the public sector and reduce the dependency on oil [5].

Effective decision-making in Saudi Arabia's public organizations has become crucial owing to national projects like Saudi Vision 2030, which aim to diversify the economy, improve governance, and boost efficiency [6]. Increasing public sector complexity has made decision-making more complicated, requiring a deep understanding of organizational dynamics, personnel engagement, and information resource utilization [7]. Employee empowerment has been a major topic in organizational effectiveness research and practice [8]. Empowered employees are more engaged, imaginative, creative, and dedicated to organizational goals [9]. Empowering employees is giving them greater power and responsibility, which may lead to more informed, diverse, and wise decisions [10]. When employees engage in decision-making, they provide unique perspectives

that high management may overlook [11]. This strengthens decision-making, resulting in more detailed and effective decisions that meet organizational and public needs [12].

Along with employee empowerment, organizational communication affects decision-making. Effective communication ensures that relevant information flows across hierarchical levels and departments, fostering transparency and collaboration [13]. Effective communication channels are essential for making informed public sector decisions when several stakeholders and administrative tasks are involved [14]. Communication also aligns organizational members with similar goals, supporting a unified decision-making approach that is vital for effective and equitable public sector service delivery [15]. Without quality assurance, information availability is insufficient. Information availability and quality are crucial for efficient decision-making since data correctness, relevance, and timeliness may greatly impact decision results [16]. Quality information gives decision-makers a solid foundation for their decisions, whereas inaccurate or inadequate information can lead to mistakes [17]. In public organizations, where decisions often affect society, decision-makers need relevant and trustworthy information. Thus, information availability and quality are essential to public sector organizations' transparency, accountability, and efficiency goals [18].

Employee empowerment, organizational communication, and information quality affect decision-making effectiveness, although their impact differs per organization [19]. Organizational culture strongly affects how these components affect decision-making [20]. Organizational culture—the values, beliefs, and practices that shape employee behavior sets the stage for decision-making [21]. In a culture that values cooperation, transparent communication, and innovation, employee empowerment, communication, and information quality may improve decision-making [22]. Top-down decision-making frameworks may limit employee empowerment, open communication, and information sharing in a hierarchical society [23]. Thus, public organizations seeking to improve decision-making must understand how organizational culture affects these traits and decision-making effectiveness [24].

In Saudi Arabia's public sector, organizational culture strongly influences decision-making [6]. Hierarchical systems and centralized decision-making have defined the Saudi public sector. Vision 2030 improvements aim to modernize governance and management, encouraging employee participation and a more collaborative, transparent decision-making process [25]. The changing organizational context offers a unique chance to examine how cultural changes might improve public sector decision-making [26]. This study analyses the synergistic effects of employee empowerment, organizational communication, and information availability and quality on public organization decision-making effectiveness to improve the literature. It studies how organizational culture moderates these relationships. This research focusses on Saudi Arabia's public organizations, therefore based on the new reforms which aims to increase the participation of woman in decision making position, this study examines the moderating role of gender to identify the differences in decision making effectiveness between male and female decision makers.

This study has theoretical and practical implications for public sector leaders and policymakers. Understanding the factors that impact decision-making effectiveness may help public organizations improve governance, staff engagement, and service delivery. This study highlights the importance of a supportive and collaborative corporate culture to moderate the benefits of employee empowerment, communication, and information quality in decision-making. This study synthesizes employee empowerment, organizational communication, and information quality, taking into account organizational culture to fill a gap in the literature. This study examines decision-making effectiveness in Saudi Arabia's public sector, which is understudied, especially in light of Vision 2030's governance and structural changes. Studying public sector decision-making, especially in emerging economies, is newer than private sector research. This study enhances previous research by incorporating three essential determinants such as employee empowerment, corporate communication, and information availability and quality into a unified framework. The study also incorporates organizational culture as a moderating variable, providing a comprehensive view of how collaborative and creative cultures affect decision-making effectiveness, something prior studies have understudied. The study uses gender as a moderating factor to examine how Vision 2030 policy changes have affected women in leadership roles, revealing if gender discrepancies affect public sector decision-making. The study uses quantitative methodologies and PLS-SEM analysis to analyses data from Saudi Arabian public organization decision-makers, providing context-specific insights that improve generalizability. This research advises policymakers and public sector managers to create an enabling organizational culture, empower employees, improve communication, and access high-quality information to improve decision-making. This study addresses these essential gaps to provide a comprehensive

and empirically proven approach that promotes academic discourse and informs governance measures to improve public sector decision-making in Saudi Arabia and other similar situations.

II. LITERATURE REVIEW

1. THEORETICAL FRAMEWORK

Based on the variables that are included in this study, several theories are deployed to explain the causal relationship between the variables and the role of organizational culture and gender as moderating variables. Empowerment theory states that giving people autonomy, resources, and decision-making power boosts engagement and motivation, improving organizational performance [27]. Empowerment in public companies allows employees at all levels to make decisions, making decision-making more democratic and inclusive. Empowerment promotes creativity, determination, and responsibility, which are necessary for good decision-making. Communication theory emphasizes organizational information distribution. According to this idea, organizational decision-making depends on communication structure and management [28]. Effective communication ensures that decision-makers get relevant and timely information from all organizational levels, boosting cooperation and understanding. Information quality focusses data accuracy, relevance, completeness, and timeliness in decision-making [29]. The ability to receive better information is crucial to decision-making in this setting. Informative, accessible information helps decision-makers make strategic decisions.

Organizational culture moderates the impact of empowerment, communication, and information quality on decision-making. Cultural theory states that an organization's values, norms, and practices guide decision-making [30]. Cooperative, transparent, and participatory cultures improve empowerment, communication, and information quality, leading to better decision-making. However, hierarchical or change-resistant civilizations may reduce these benefits. This paradigm provides a systematic analysis of the connection between internal organizational features and cultural variables that affect public organization decision-making efficacy. In Saudi Arabia's changing governance environment, empowerment, communication, and information quality theories, moderated by organizational culture, underpin public sector decision-making efficacy research.

Social role theory posits that cultural gender norms influence workplace conduct and decision-making. According to the theory, women priorities cooperation, inclusivity, and comprehensive information processing, whereas men value independence, task focus, and efficiency [31]. These differences can affect how men and women see organizational empowerment, communication, and information quality. Female community workers may make better judgements in cultures that value empowerment and participatory communication because they value cooperation and shared decision-making. Male workers who seek autonomy and success may interpret empowerment as individual control rather than inclusion. Women want detailed, accurate information for collaborative decision-making, which encourages high information quality, whereas men choose timeliness and relevance for solo decision-making. In this study, social role theory explains how gender moderates the effect of empowerment, communication, and information quality on decision-making.

2. CONCEPTUAL FRAMEWORK

2.1 Employee Empowerment and Decision-Making Effectiveness

Improving organizational performance, especially decision-making, requires employee empowerment. Individuals with authority and responsibility may improve decision-making by contributing unique ideas and information, improving organizational outcomes [32]. Empowering individuals boosts creativity, inventiveness, and involvement, which are essential for decision-making [33]. Empowerment gives workers ownership and accountability for organizational goals, encouraging them to participate in decision-making [34]. Empowering staff can improve informed, diverse, and inclusive results in public organizations, whose actions often affect society [35]. Empowering public sector workers boosts commitment and motivation, which improves organizational decision-making [36]. Empowerment improves organizational decision-making. In hierarchical public sector institutions, employee participation in decision-making can improve results by employing worker knowledge and abilities [37]. Worker participation in decision-making matches the rise of participatory governance, especially in public institutions seeking transparency and accountability. Thus, the following is hypothesized:

- H1: Employee empowerment has a positive effect on decision making effectiveness.

2.2 Organizational Communication and Decision-Making Effectiveness

Organizational communication involves sharing ideas, information, and feedback. Effective communication improves decision-making, especially in complex organizations like the public sector [38]. Decision-makers can get complete, accurate, and timely data from hierarchical communication [39]. It promotes transparency, cooperation, and strategic alignment [40]. Public organizations must communicate well to preserve cohesion and coordination while making decisions with several departments, stakeholders, and external parties [18]. Open communication channels minimize information silos and help decision-makers make better decisions. Communication encourages varied organizational members to collaborate on decisions [41]. Effective communication systems help businesses make more accurate and timely decisions, improving performance [42].

Misunderstandings, delays, and confrontations from poor communication can hinder decision-making [15]. In open, accountable public sector enterprises, poor communication can lead to poor decision-making, damaging public trust and reputation [16]. Thus, good decision-making requires open communication. Therefore, it is hypothesized:

- H2: Organizational communication has a positive effect on decision making effectiveness.

2.3 Information Availability and Quality in Decision-Making

Since decisions based on insufficient or incorrect information might hurt organizational performance, information accessibility and quality are crucial [43]. Due to the widespread effects of public decisions, accurate and timely information is essential. Superior information helps decision-makers assess risks, forecast outcomes, and make educated decisions that meet organizational and public needs [44]. Relevant, accurate, current, and comprehensiveness describe high-quality information. Decisions with lots of data are more likely to succeed [45]. In contrast, poor knowledge can lead to errors, inefficiency, and poor results. Information quality strongly affects decision-making [29]. Maintaining information integrity and availability is essential for open and accountable governance in public institutions [46]. Information sharing and access inside an organization, together with its qualities, affect decision-making. Since decision-makers can evaluate relevant data and handle emerging issues, organizations with excellent data management systems and information-sharing protocols make better decision [47]. Therefore, this study hypothesized the following:

- H3: Information availability and quality affect positively decision-making effectiveness.

2.4 Organizational Culture as a Moderator

Organizational culture is the shared values, beliefs, norms, and practices that govern work [30]. In collaborative, open companies, employee empowerment, communication, and information quality may boost decision-making. A nurturing culture encourages involvement, creativity, and open communication, improving decision-making [48]. Hierarchical or rigid companies may impede empowerment and communication owing to top-down decision-making. Organizational culture affects information transmission and employee empowerment, which can improve or hinder decision-making [49]. In public companies, culture may empower or hinder employee empowerment, communication, and decision-maker information. Nurturing cultures encourage employee involvement, inventiveness, and open communication, empowering workers to make important decisions [48]. Empowered employees may be more confident in expressing fresh ideas or providing crucial insights in a participatory culture, boosting decision-making. Open communication channels in a collaborative culture allow relevant information to flow freely across departments, enabling well-informed decisions that reflect diverse perspectives [50].

Culture may mitigate the benefits of empowerment and communication in hierarchical or restricted corporate cultures. Rigid or hierarchical systems may limit employee autonomy and engagement [51]. In these cultures, top management makes decisions, which deters subordinates who may feel limited in their participation and ideas. Empowerment programs may fail if workers regard decision-making processes as restricted and less open to input from other organizational levels [49]. Hierarchical cultures often hinder clear communication, impeding knowledge transfer. In cultures with unidirectional and authoritarian communication, crucial insights and information may not reach decision-makers, lowering decision quality [19]. Even with strong information systems, cultural barriers to information flow may prevent data use, impacting decision-making [20].

Organizational culture affects information quality perception and use. In collaborative and transparent cultures, employees and managers value and use high-quality information because it aids decision-making [8]. Instead, restrictive cultures that value compliance and respect to processes may overshadow the importance of high-quality information, limiting its ability to improve decision outcomes [16]. Understanding how

organizational culture moderates' decision-making in public enterprises, where stakeholder considerations and legal compliance are often involved, is vital. Public organizations seeking to increase decision-making efficacy must carefully assess and, when possible, encourage empowerment, honest communication, and data-informed decision-making [21]. Public institutions in Saudi Arabia and elsewhere may maximize the benefits of empowerment, communication, and information quality on decision-making efficacy by prioritizing participation, transparency, and information distribution [22]. In Saudi Arabia's Vision 2030 governance framework, recognizing organizational culture as a moderator can improve public sector practices and decision-making.

- H4: Organizational culture moderates the effect of employee empowerment on decision making effectiveness.
- H5: Organizational culture moderates the effect of organizational communication on decision making effectiveness.
- H6: Organizational culture moderates the effect of information availability and quality on decision making effectiveness.

2.5 Gender as a Moderator

Cultural and societal norms that define male and female worker duties, expectations, and interactions distinctively impact workplace gender dynamics in Saudi Arabia [52]. Vision 2030 reforms emphasize female workforce participation and public sector gender equality. This changing setting makes gender a potential moderator in organizational processes, notably decision-making. Gendered analysis shows how empowerment, communication, and information quality affect public sector decision-making effectiveness for men and women in Saudi Arabia. Saudi public organizations often empower members with autonomy, resources, and decision-making ability. Due to Saudi gender conventions, male and female employees may react differently to empowerment initiatives. Women, who traditionally hold fewer decision-making roles, may be more engaged and motivated when given autonomy, seeing it as an opportunity to actively contribute to organizational goals [53]. Men experienced with decision-making authority may see empowerment as resource or job control. Thus, female employees may respond more strongly to empowerment and decision-making efficacy in inclusive and equitable decision-making environments.

- H7: Female employees benefit more from empowerment and decision-making effectiveness in Saudi Arabia's public sector than male employees. Communication styles can change by gender, impacting corporate decision-making. In Saudi Arabia, women stress relational and inclusive communication to foster openness and involvement, in line with customary respect and regard [54]. These communication tactics encourage collaboration and diverse perspectives, which may improve decision-making. Men may communicate hierarchically and task-focused, stressing efficiency and directives. These differences suggest that open, participatory communication may benefit women more in decision-making circumstances.
- H8: Organizational communication improves decision-making effectiveness in Saudi Arabia's public sector more for women than men. Effective decision-making requires high-quality information, yet gender may impact information appraisal and processing. Women in Saudi Arabia, known for their careful decision-making, may highlight detailed information to ensure organizational compliance and reduce ambiguity [55]. Men may value timeliness and relevancy more, indicating risk tolerance. The gender differences suggest that women may value information quality more than men to make good decisions.
- H9: Information quality improves decision-making effectiveness in Saudi Arabia's public sector more for women than men.

III. RESEARCH METHOD

This quantitative study examined the relationships between employee empowerment, organizational communication, and information availability and quality and decision-making efficacy. Organizational culture and gender moderate these linkages. Quantitative methods provide statistical examination of variable connections, allowing objective testing of study hypotheses. The study uses a cross-sectional survey to gather the data. This design accurately depicts Saudi Arabia's public organization's decision-making processes and how organizational factors affect decision making effectiveness.

In Saudi Arabia, managers, department heads, and senior executives make public sector decisions. Decisions by these individuals affect organizational results. Their knowledge and experience are crucial to understanding public sector decision-making efficacy. Purposive sampling retains relevance and attention. This sampling method allows the researcher to carefully choose decision-makers, ensuring that the data collected is relevant to the study's goals. A desired sample size of 300 participants assures statistical power for the study. The sample size enables Structural Equation Modelling (SEM), which requires a larger sample to give reliable results for complex models. Structured questionnaires collect data. A questionnaire helps collect standardized data from a large cohort of respondents for this quantitative study. Each section of the questionnaire focuses on a main research component: employee empowerment, organizational communication, information availability and quality, organizational culture, and decision-making effectiveness.

Employee empowerment was measured using instruments like [35] which pertains to psychological empowerment scale and include employee empowerment's meaning, competence, self-determination, and influence. The instrument of [56] which is related to communication Openness scale was used to assess organizational communication clarity, frequency, and efficacy. The instrument of information availability and quality was measured using scales from [29]. The scales are related to accurate, relevant, and timely information. The organizational culture section was assessed using [57] organizational Culture Assessment Instrument (OCAI) to assess the organization's attributes, leadership style, and management practices. The decision making effectiveness was measured using items modified from [58] scale, which evaluates choice quality, timeliness, and alignment with organizational goals.

The questionnaire measures respondents' agreement with each issue using a five-point Likert scale from 1 (strongly disagree) to 5 (strongly agree). The questionnaire was translated using back-to-back translation. Two experts participated in the validation of the questionnaire and the corrections of the scale in both Arabic and English language. Next, a pilot study was conducted to assess the reliability of the measurements. The pilot tested was conducted on a small sample of decision-makers to ensure clarity, reliability, and validity before dissemination of the questionnaire.

The data was collected via online and print questionnaires to maximize participation and ensure that all decision-makers in the public entities targeted in this study can access the questionnaire. People without access to digital platforms received paper surveys, while those with access received online surveys using Google Forms. Before data collection begins, relevant authorities provided ethical authorization, and participants were required to give informed consent, indicating their voluntary participation and understanding of the study's goals. Researchers informed participants that they can leave the study at any time without penalty.

A total of 211 responses were collected. Several analyses were conducted to assess the goodness of the data. The missing value analysis reveal that three of the responses have missing values and they removed accordingly. The outlier was tested and five responses were identified as outliers. This has resulted in 203 complete and usable responses. Further, the normality and multicellularity were assessed. Value of Skewness and Kurtosis is less than absolute 1 and the value of variance inflation factors (VIF) is less than five (5). Table 1 shows the results.

Table 1: Data examination.

Variable	Missing Values	Outliers	Skewness	Kurtosis	VIF	Cronbach's Alpha (Pilot study)
Employee Empowerment	1	2 responses	-0.24	-0.45	1.2	0.85
Organizational Communication	1	1 response	-0.31	-0.36	1.3	0.88
Information Quality	0	1 response	-0.15	-0.52	1.1	0.9
Organizational Culture	0	1 response	-0.27	-0.4	1.4	0.87
Decision-Making Effectiveness	1	0 responses	-0.2	-0.33	1.2	0.89

IV. FINDINGS

1. DESCRIPTIVE INFORMATION OF RESPONDENTS

Demographic analysis of respondents provides a complete view of the sample, necessary for assessing representativeness and context. Male participants (65%) outnumber female participants (35%), consistent with Saudi public sector worker gender ratios. The majority of respondents (39.9%) are aged 30-39, followed by 40-49 (30%), indicating a seasoned workforce with likely professional knowledge. Minor segments (14.8% and 15.3%) under 30 and 50+ indicate a low number of younger or near-retirees. Managers make up 30% of management occupations, followed by Department Heads and Senior Executives (25.1%) and Directors (19.7%). This distribution shows the sample's diverse management and executive roles. Experience with 35%, 11-15 years (25.1%), and 1-5 years (20.2%). The smallest cohort, those with over 16 years of experience (19.7%), shows that most respondents are in their early to mid-career stages, bringing both new and established perspectives. Education shows that 49.8% of respondents have a Bachelor's degree, 35% a Master's, and 15.3% a Doctorate. Due to their knowledge-intensive nature, public sector jobs often require higher academic credentials for decision-making and leadership. Table 2 shows the demographic information of respondents.

Table 2: Demographic information.

Variable	Category	Frequency	Percentage (%)
Gender	Male	132	65.00%
	Female	71	35.00%
Age Group	20-29	30	14.80%
	30-39	81	39.90%
	40-49	61	30.00%
	50 and above	31	15.30%
Position	Manager	61	30.00%
	Department Head	51	25.10%
	Senior Executive	51	25.10%
	Director	40	19.70%
Years of Experience	1-5 years	41	20.20%
	6-10 years	71	35.00%
	11-15 years	51	25.10%
	16+ years	40	19.70%
Education Level	Bachelor's	101	49.80%
	Master's	71	35.00%
	Doctorate	31	15.30%

N=203

2. VARIABLES DESCRIPTION

The respondents' average values for employee empowerment, organizational communication, and information availability and quality were mostly positive. The mean employee empowerment score was 3.85, suggesting that most decision-makers view moderate to high empowerment in their businesses. Organizational communication scored 3.70, indicating its moderate performance but room for improvement. The mean score for information availability and quality was 3.92, showing a high perception of decision-making information

accuracy and relevance. The dependent variable, decision-making effectiveness, averaged 3.88, showing that respondents view their organization's decision-making processes as successful yet flawed. The moderating variable, organizational culture, had a mean score of 3.75, indicating that organizational norms and practices favour efficient decision-making but are diverse.

Table 3: Descriptive information of variables.

Variable	Item	Mean	Std.	Overall Mean
Employee Empowerment	The work I do is very important to me	3.90	0.65	3.85
	My job activities are personally meaningful	3.80	0.65	
	I care about what I do in my job	3.85	0.65	
	I am confident about my ability to do my job	3.90	0.65	
	I am capable of performing my job tasks well	3.80	0.65	
	I have mastered the skills necessary for my job	3.85	0.65	
	I have significant autonomy in determining how I do my job	3.80	0.65	
	I can decide how to perform my tasks	3.85	0.65	
	I have control over how I complete my work	3.90	0.65	
	My work impacts the overall goals of my organization	3.80	0.65	
	I influence what happens in my department	3.85	0.65	
	I have a say in the outcomes of the decisions	3.90	0.65	
Organizational Communication	Communication is open and transparent	3.70	0.68	3.70
	I am regularly informed about what is happening	3.60	0.68	
	Communication is clear	3.80	0.68	
	I am comfortable sharing opinions	3.65	0.68	
	Information flows freely across levels	3.75	0.68	
Information Availability and Quality	The information I need is readily available	3.90	0.72	3.92
	Data used is accurate and reliable	4.00	0.72	
	Access to complete information	3.80	0.72	
	Information provided is relevant	3.85	0.72	
	I receive up-to-date information	4.05	0.72	
Organizational Culture	Collaboration and teamwork are encouraged	3.70	0.7	3.75
	Innovation is valued	3.80	0.7	
	Shared sense of purpose	3.75	0.7	
	Employees take initiative	3.65	0.7	
	Leadership fosters openness	3.85	0.7	
Decision-Making Effectiveness	Decisions are well-informed	3.90	0.67	3.88
	Timely decisions	3.85	0.67	

Aligns with strategic goals	3.90	0.67
Based on accurate information	3.80	0.67
Outcomes reviewed	3.85	0.67
Considers organizational impact	3.75	0.67
Efficient processes	3.90	0.67

3.   STRUCTURAL EQUATION MODELLING

The measurement model was assessed. The Cronbach's Alpha as well as the composite reliability were assessed and they have values above 0.70. This indicates that the measurement has reliability. Factor loading was assessed and all the items have factor loading above 0.70. In addition, to assess the convergent validity, the average variance extracted showed that all the values above 0.50 indicating that more than half of the variation in the variables can be explained by the measurement. Table 4 shows the reliability and validity.

Table 4: Reliability and validity.

Variable	Cronbach's alpha	Composite reliability	AVE
Decision Making Effectiveness	0.944	0.945	0.818
Employee Empowerment	0.925	0.926	0.817
Information availability and Quality	0.904	0.906	0.78
Organizational Communication	0.903	0.906	0.675
Organizational Culture	0.904	0.946	0.717

For the discriminant validity, it was assessed using HTMT' correlation which assume that correlation should not exceed 0.85. As shown in Table 5, all the correlation is lower than 0.85 indicating that there is no issue of discriminant validity.

Table 5: Discriminant validity.

Variable	DME	EE	IAQ	OCM	OC
Decision Making Effectiveness					
Employee Empowerment	0.553				
Information availability and Quality	0.725	0.512			
Organizational Communication	0.696	0.462	0.622		
Organizational Culture	0.215	0.115	0.04	0.051	

The study used Smart Partial Least Squares Structural Equation Modelling (PLS-SEM) to evaluate how independent variables affect decision-making effectiveness and how organizational culture moderates this effect. Figure 1 shows the results of testing the structural model.
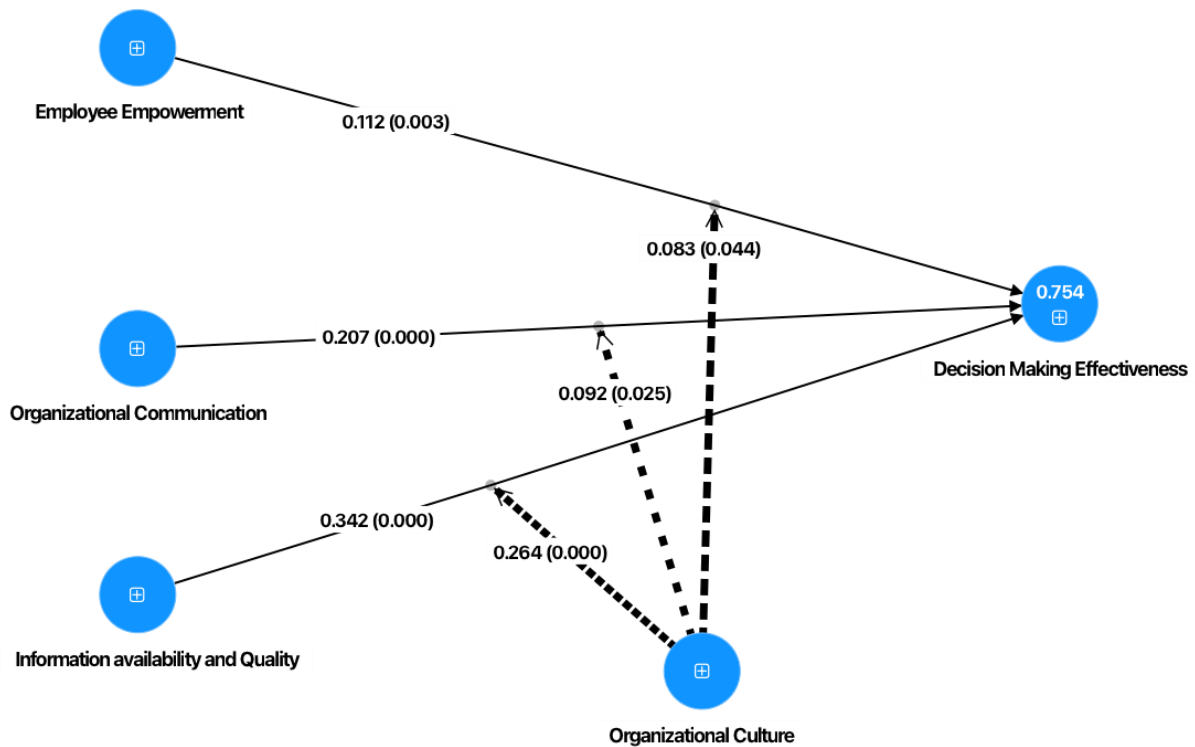
FIGURE 1. Structural model.

For details results of the hypotheses testing which include the direct and the moderating effect of organizational culture, Table 6 shows the results.

Table 6: Results of testing the direct and moderating role of organizational culture.

Path	B	Std	T	P values
Employee Empowerment -> Decision Making Effectiveness	0.112	0.037	3.013	0.003
Organizational Communication -> Decision Making Effectiveness	0.207	0.040	5.200	0.000
Information availability and Quality -> Decision Making Effectiveness	0.342	0.049	7.001	0.000
Organizational Culture x Employee Empowerment -> Decision Making Effectiveness	0.083	0.041	2.015	0.044
Organizational Culture x Organizational Communication -> Decision Making Effectiveness	0.092	0.041	2.238	0.025
Organizational Culture x Information availability and Quality -> Decision Making Effectiveness	0.264	0.054	4.916	0.000

The SEM showed that all three independent variables directly affected decision-making effectiveness. Empowering employees considerably enhances decision-making effectiveness ($\beta = 0.112$, $p < 0.001$), enhancing organizational choices. This supports the idea that employee empowerment improves decision-making. Organizational communication improves decision-making effectiveness ($\beta = 0.207$, $p < 0.001$), highlighting the importance of open and transparent communication. The results show that transparent and communicative businesses make better decisions faster. Information availability and quality were the strongest predictors of

decision-making efficacy ($\beta = 0.342$, $p < 0.001$). This means decision-makers rely on accurate, complete, and relevant information to make informed decisions. Information quality is crucial to public sector decision-making due to its enormous influence.

Analyzing the interaction terms between organizational culture and each independent variable assessed its moderating impact. The study found that organizational culture significantly moderated the impact of employee empowerment on decision-making effectiveness ($\beta = 0.083$, $p < 0.05$). In collaborative, open businesses, employee empowerment improved decision-making. This suggests that a supportive workplace culture boosts employee empowerment and decision-making. Organizational culture also moderated significantly the association between communication and decision-making effectiveness ($\beta = 0.092$, $p < 0.05$), suggesting that organizational culture can improve communication and its impact on decision-making effectiveness. Organizational culture moderated the relationship between information quality and decision-making effectiveness ($\beta = 0.264$, $p < 0.01$). This suggests that high-quality information aids decision-making across all organizational cultures. The importance of information quality across corporate cultures emphasizes its role in effective decision-making.

This study also includes the testing of gender as a moderating variable. As shown in Figure 2, the gender did not moderate any of the relationship between employee empowerment, organizational communication, and information availability and quality with decision making effectiveness. Therefore, all the hypotheses that are related to gender as a moderator were rejected. The lack of a moderating influence of gender on the analyzed interactions indicates that gender may not substantially differentiate experiences of empowerment, communication, and information quality in Saudi Arabia's public sector. This discovery underscores the potential influence of cultural homogeneity, organizational structure, and continuous changes on gender dynamics.
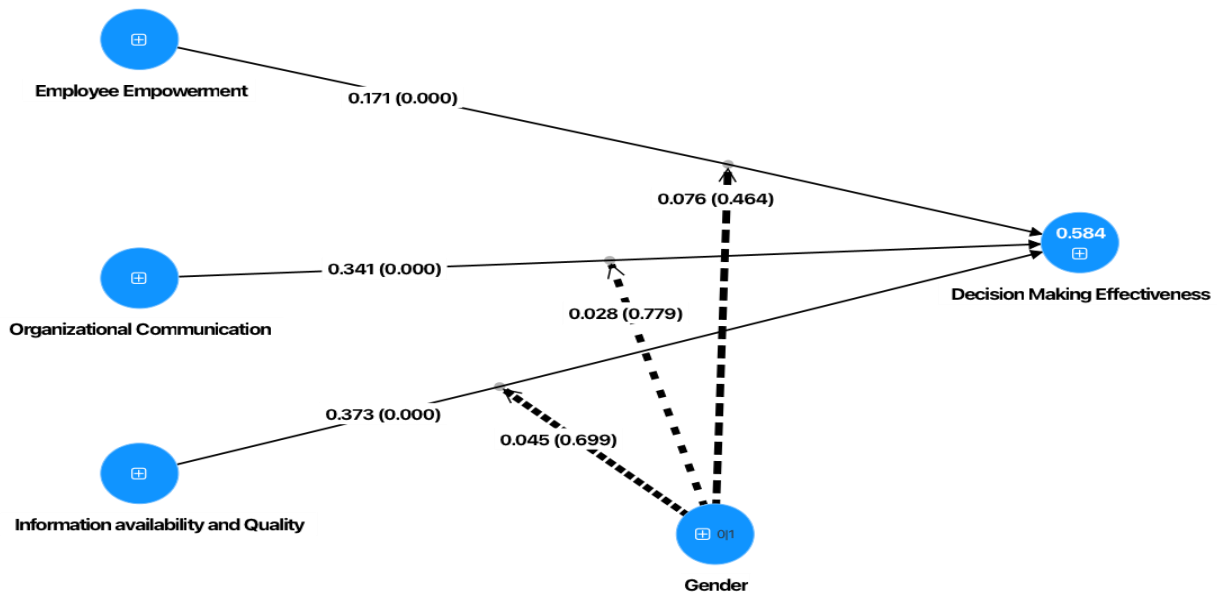

FIGURE 2. Structural model of gender as a moderator.

The R-squared (R^2) value for decision-making effectiveness was 0.754, indicating that the independent variables (employee empowerment, organizational communication, and information quality) and moderating variable (organizational culture) account for 75.4% of the variance. The R-square in structural model of gender reduced to 58.4%. This shows the model's strong explanatory power, demonstrating that these factors impact Saudi public organization decision-making.

V. DISCUSSION

Given Saudi Vision 2030's governance changes, this study's findings provide insights on public organization's decision-making effectiveness. The findings show that employee empowerment, organizational communication, and information availability and quality improve decision-making. Organizational culture moderates the

relationship between employee empowerment, organizational communication, and information availability and quality, and decision-making effectiveness, revealing how cultural context might affect organizational practices on decision-making. According to prior research, empowering employees improves their ability to meaningfully contribute to organizational goals, leading to more informed and inclusive decision-making [33]. By incorporating worker perspectives, empowering workers in public institutions promotes democratic decision-making. This study underscores the growing emphasis on participatory governance in public organizations, where staff participation is vital for innovation and accountability.

The significant influence of corporate communication on decision-making efficacy emphasizes the need for clear, open communication channels to improve decision outcomes. According to the literature [39], effective communication spreads relevant information across organizational layers, increasing transparency and cooperation. This result is especially relevant for public enterprises, because decision-making often involves several departments and stakeholders. The absence of organizational culture moderation in this regard suggests that communication's role in decision-making is consistent across numerous organizations, emphasizing the need for transparent and effective communication. The best predictor of decision-making effectiveness was information availability and quality. This shows how important high-quality, accurate, and fast information is for decision-making [45]. Credible information is crucial in public enterprises, because decisions affect internal operations and public welfare. Many organizational cultures value information quality, indicating that decision-makers need high-quality information to make educated judgements.

Organizational culture moderated the empowerment-decision-making efficacy relationship. In collaborative, creative businesses, empowerment had a greater positive impact, highlighting the importance of cultural context in maximizing empowerment benefits [30]. This study shows that empowering employees is beneficial, but involvement, transparency, and innovation may boost its effectiveness. In hierarchical or rigid societies, empowerment may not fully benefit decision-making, limiting its impact. For gender, it seems that the reforms in Saudi Arabia have reduced the gaps between males and females. Research suggests that in highly regulated sectors, employees may have less flexibility in interpreting empowerment and communication practices, reducing gender-based variability [41].

VI. IMPLICATIONS

This study's findings affect public administration and organizational behavior theory and practice. Organizational culture moderates the relationship between employee empowerment, communication, information quality, and decision-making effectiveness, which improves the literature. Several studies have examined these aspects separately, however adding organizational culture as a moderator helps explain how the cultural framework affects internal practices. Culture significantly affects empowerment, communication, and information quality, suggesting that organizational tactics are culturally sensitive.

The findings provide practical recommendation for Saudi Arabian and other public sector leaders and policy makers. The strong positive link between employee empowerment and decision-making effectiveness suggests that public organizations should continue to promote empowerment, especially when employees have the freedom to make choices. This may involve providing subordinates more decision-making authority, teaching them to make better decisions, and encouraging initiative and innovation at work.

The findings emphasize the importance of effective communication in decision-making. Public organizations must invest in communication channels to ensure information flows freely across departments and hierarchies. This may need more clear communication policies, digital communication technology, and a culture of openness that encourages employees to share information and thoughts.

The study emphasizes the need of high-quality information in decision-making. Executives in the public sector must priorities information management systems that give decision-makers fast, accurate, and relevant data. In a digital era of rising information volume and complexity, this is crucial. Organizations may improve decision quality by providing decision-makers with data analysis and interpretation tools.

Public organizations must examine the cultural context of decision-making since organizational culture was found as essential moderator. A supportive and creative culture should accompany employee empowerment, organizational communication, and information availability and quality. This may involve promoting cooperation, inclusivity, and innovation in the workplace and reducing institutional or cultural barriers to employee decision-making.

VII. CONCLUSION

This study analyses the factors that determine decision-making effectiveness in Saudi public organizations, highlighting employee empowerment, organizational communication, and information availability and quality. These traits strongly affect decision-making, with information quality being the strongest predictor. Organizational culture moderated the connection between the examined variables and decision-making effectiveness, emphasizing the need to match empowerment strategies, communication, and information to the organization's culture. Gender was found not to moderate the relationship indicating the reduce in the gaps between genders in decision making positions. This study illuminates the complex dynamics of public organization decision-making, particularly in Saudi Arabia's governance reforms, improving theoretical knowledge and practical application. This study stresses organizational culture's moderating role in decision-making, revealing how internal practices interact with cultural factors. The findings show that public sector executives and policymakers must empower employees, improve communication, and provide access to high-quality information to improve decision-making. Organizational culture is important, thus attempts to improve decision-making must be tailored to the cultural context to ensure empowerment and associated activities are supported.

The findings of this study are limited to decision makers in Saudi Arabia public sector. Further research may examine leadership styles, technology integration, and political pressures in public organizations to see how this impact decision-making effectiveness. Expanding the research to other industries may help clarify the factors that affect decision-making in different organizations and cultures. More gender-based studies can be conducted to assess the role of gender in organizational and individual performance. This research improves governance and organizational performance in public institutions by giving theoretical insights and practical advice for public sector decision-making.

Conflict Of Interest

The authors have no potential conflicts of interest, or such divergences linked to this research study.

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