

The Impact of Perceived Ethical Leadership on Job Satisfaction in Saudi Arabian Technological Firms: The Moderating Role of Perceived Vision 2030 Initiative

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Abstract:

Introduction: This study aimed to explore the relationship between perceived ethical leadership and job satisfaction and the moderating role of perceived Vision 2030 initiatives in the context of Saudi Arabian technology firms, addressing the gap in empirical evidence on the topic. Past studies regarded national reforms as macro-level contextual factors; therefore, this study regarded Vision 2030 as a psychological factor at the employee level to allow for a micro-level contribution to Institutional Theory, along with Social Exchange Theory.

Methodology: A survey was conducted using a structured questionnaire measured on a five-point Likert scale from 450 employees at various organisational levels working in Saudi technological companies. Data were analysed using regression analysis, and moderation was performed using the Hayes PROCESS Macro (Model 1).

Results: The findings indicate that perceived ethical leadership was positively and significantly related to job satisfaction ($\beta = 0.262, p = 0.033$). Job satisfaction also showed a positive relationship with the Perceived Vision 2030 initiatives ($\beta = 0.081, p = 0.047$). Additionally, the moderating role of the interaction between perceived ethical leadership and perceived Vision 2030 initiatives was positive and significant ($\beta = 0.072, p = 0.029$). The model explained 54.6% of the variance in job satisfaction ($R^2 = 0.546, F = 179.053, p < 0.001$), although the magnitude of the moderating role was comparatively small ($\Delta R^2 = 0.0049$).

Conclusion: The results imply that employee job satisfaction can be improved by promoting ethical leadership and aligning organisational strategies with Vision 2030 activities. The results are especially applicable to managers and policymakers who seek to enhance workforce engagement, improve the organisational climate, and promote the sustainable development of the technological industry in Saudi Arabia.

Keywords: Ethical leadership, job satisfaction, vision 2030, moderation analysis, Saudi Arabia technology sector, moderating role.

1. INTRODUCTION

Rapid digitalisation across the Middle East has significantly transformed organisational practices, particularly in the technology industry. According to Ahmed *et al.*, (2025) and Alansi *et al.*, (2026), Saudi Arabia has become one of the most active economies in the region, investing in information and

communication technologies, artificial intelligence, and digital entrepreneurship to diversify its oil-dependent economy. According to Al-Roubaie (2025), government policy efforts have boosted the growth of information technology companies and information infrastructure in the Kingdom. Kazinform International News Agency (2025) estimates that the digital economy will contribute 19% of the GDP of Saudi Arabia by

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2030 and that the number of people working in the information and communication technology sector has surged by over 15% in the past five years (Canales, 2024). Despite this growth, technological organisations have increasingly confronted the problems of employee retention, job satisfaction, and effective leadership in highly competitive knowledge-intensive settings, as supported by the findings of Hauer *et al.*, (2021) and Venkat *et al.*, (2023). Steil *et al.*, (2022) show that dissatisfaction and turnover remain significant issues in technology sectors worldwide, with workers planning to switch jobs because of poor leadership practices and a lack of organisational support. Researchers such as Pujianto *et al.*, (2025) and Xu & Loang (2024) stress the critical importance of adopting leadership styles that foster equity, transparency, and ethics to sustain employee satisfaction and organisational performance.

One of the primary aims of Saudi Arabia's national development agenda, as outlined in the National Vision 2030, is to improve the technological sector and establish a knowledge-based economy. Alhamad *et al.*, (2024) and Alam *et al.*, (2023) also suggest the power of innovation ecosystems. Nevertheless, the high rate of industrial change puts pressure on organisations to ensure that productivity and employee welfare are maintained. Ethical leadership is an important dimension that affects employees' workplace experiences. In the concept of ethical leadership suggested by Brown *et al.*, (2005), ethical leadership is defined as the expression of normatively appropriate behaviour in actions and interactions between managers and subordinates such as listening to employees, considering their well-being, and consistently enforcing ethical standards. Similarly, Nejati *et al.*, (2021) stated that ethical leaders boost integrity, fairness, and accountability in organisational decision-making. Such leadership behaviours boost employees' perceptions of justice and trust, as stated by Sun *et al.*, (2023). Similarly, Tufan *et al.*, (2023) revealed that employees with ethical leaders experience positive job satisfaction and organisational commitment. However, in a rapidly changing technological world, leadership issues are not uncommon, as changes in the organisation can occur faster than leadership development (Adekanmbi & Ukpere, 2022).

Recent research, such as Saad, (2021), also shows that employees' perceptions of expanded institutional reforms may affect how they interpret leadership behaviours. Scholars of institutional and organisational behaviour argue that employees consider leadership practices within the wider socio-economic environment that defines organisational priorities. National transformation plans, such as Vision 2030, may thus be related to employee attitudes by emphasising the demands of ethical administration and responsible leadership (Al-Dossary, 2022). Nevertheless, the available literature (Ebrahim & Mohamed, 2024) on the analysis of ethical leadership and job satisfaction is mostly in Western or East Asian contexts and still lacks empirical data in Gulf economies, especially in Saudi Arabia's fast-growing technological field. To address these gaps, this study examines how perceived ethical leadership relates to employees' job satisfaction in Saudi technology companies and explores how perceived Vision 2030 initiatives moderate this relationship.

This study is novel in contributing to the literature by investigating the relationship between leadership and employee job satisfaction through employees' perceptions of macro-level policy changes in their organisational setting. This study does not introduce Vision 2030 as an environmental condition but rather examines the psychological internalisation of the national transformation initiatives by employees and how these perceptions influence ethical leadership effectiveness. By examining perceived Vision 2030 initiatives as a moderating factor, this study identifies the translation of macro-policy narratives into micro-level workplace attitudes and provides a contextually oriented outlook of the technology industry in Saudi Arabia. Empirically, it offers contextual evidence in the Saudi Arabian technological sector, where leadership has not been sufficiently researched, and presents its findings to managers and policymakers who are expected to support leadership practices aligned with Vision 2030 and enhance employee satisfaction and organisational sustainability.

Furthermore, this study considers Vision 2030 as a psychological construct, operationalised in comparison with other external macro-level variables in previous studies, such as Asfahani *et al.*, (2025) and Uluturk *et al.*, (2023), which treated national reform initiatives as exogenous variables for policy alignment in the organisational context. This provides a detailed analysis of how institutional forces are micro-internalised and transformed into employees' attitudes and behaviours. This study provides a greater understanding of the impact of national reform discourse on leadership performance by focusing on people's perceptions rather than structural policies. Therefore, it takes Institutional Theory beyond its traditional macro-centrism and demonstrates how the expanded policy frames intermingle with leadership practices to impact employee job satisfaction within the organisational setting, particularly in a fast-evolving technological environment.

The remainder of this paper is organised as follows. Subsequent to the introduction, relevant literature on the topic was reviewed, and study hypotheses were developed based on social exchange and institutional theories. The next section describes the research design, sampling methods, measurement instruments, and analytical techniques. The results are then presented and discussed in terms of implications and compared with findings from previous studies, such as Balzano *et al.*, (2025), to examine the scope of the findings. This study concludes with a discussion of the implications, limitations, and directions for future research.

2. LITERATURE REVIEW

2.1. Theoretical Framework

The theoretical framework of this study is founded on Social Exchange Theory (SET) and Institutional Theory, which are integrated to examine and analyse the mechanisms between Perceived Ethical Leadership (PEL) and employee Job Satisfaction (JS) in Saudi technological firms. In many companies, in accordance with the SET, leaders treat employees with fairness, transparency, and integrity, and positively about their job behaviours (Ruwanika & Massyn, 2024). As reported by Jamal *et al.*, (2023), ethical leaders serve

as role models, fostering trust and normative expectations, and thus contributing to employee satisfaction. Similarly, Rahman *et al.*, (2025) state that the ethical behaviour of leaders is internalised by employees to a certain degree, such that employees feel organisational support, which consequently raises their engagement and turnover intentions. Nazarian *et al.*, (2024) argue that when perceived congruence exists between leader behaviour and organisational values, employees' psychological contracts are strengthened, thereby increasing satisfaction.

An alternative perspective comes from Institutional Theory, which captures the broader socioeconomic and policy landscape in which leadership behaviours are understood. Institutional expectations and the external environment are also expected to influence organisational actions, as suggested by Katou and Kafetzopoulos (2025). Furthermore, Balzano *et al.*, (2025) signify that national transformation programmes, such as Vision 2030, are normative and regulative signals which affect employees' perceptions of desirable organisational and leadership practices. Similarly, Pham *et al.*, (2023) explain that leadership effectiveness is achieved when it is linked to a larger institutional agenda for transforming economies. This is helpful in understanding the moderation mechanism set forth in this study when combined with the Social Exchange Theory (SET). As employees follow ethical leadership, they manifest the same in return through positive attitudes, such as job satisfaction, as asserted by SET. Based on the theory of institutionalisation, however, if employees feel that the organisation is aligned with Vision 2030, then the ethical behaviours of employees are more legitimate, credible, and consistent with societal expectations, as highlighted in the analysis of Ruwanika and Massyn (2024).

Thus, employees are more likely to have a positive understanding and enhancement of their reciprocal understanding of ethical leadership. Therefore, Vision 2030 is theorised mainly as a background institutional mechanism rather than a direct predecessor of job satisfaction. It forms the environment of the organisation within which ethical leadership is understood, thus firming the effect of ethical leadership on employees' job satisfaction instead of determining it independently. In addition, Institutional Theory suggests that Vision 2030 primarily strengthens the interpretation and legitimacy of ethical leadership, although employees' perceptions of Vision 2030 may also exhibit a modest direct association with job satisfaction.

Social exchange and institutional theories are better integrated and provide a more complete explanation of employee behaviour than either theory individually. In line with this, the micro-level reciprocity mechanism, that is, how employees respond to ethical leadership by increasing their job satisfaction, is explained by SET, while the sense of ethical leadership as interpreted by employees is explained by Institutional Theory which focuses on the broader institutional context. The theories argue that reciprocal exchanges flourish when ethical leadership is seen as aligned with nationally accepted institutional agendas, such as Vision 2030. From this theoretical perspective, this integrated framework suggests that interpersonal exchange processes, combined with institutional

sense-making, jointly influence employee responses to ethical leadership, thereby providing a multilevel explanation of how a contextually embedded reform effort influences job satisfaction.

2.2. Hypotheses Development

2.2.1. Perceived Ethical Leadership and Job Satisfaction

Positive employee outcomes, especially Job Satisfaction (JS), have been consistently associated with Ethical Leadership (EL), although the mechanisms of action and contextual conditions are subtle and unclear. In this perspective, Torlak *et al.*, (2021) found that EL has a positive association with JS and Affective Commitment (AC) and a negative relationship with Turnover Intention (TI) in a survey of 153 accountants in Istanbul, conducted using Structural Equation Modelling (SEM). They point out the direct and indirect advantages of EL, and according to the Social Exchange Theory (SET), employees repay leaders' fairness and ethical behaviour by being more satisfied and committed. Nevertheless, this research is confined by its sector-specificity and limited study sample, which limits its generalisability. Moreover, from a similar perspective, Guo (2022) found that EL and employee satisfaction in Macau's service industry were positively associated, and media richness and perceived organisational transparency mediated this association. These findings are supported by the SET, which proposes that employees view ethical leaders as transparent and organisational supporters and react positively, as argued by Ahmed *et al.*, (2025) and Al-Roubaie (2025). Although convenience sampling was used in this study, it introduced selection bias and limited its external validity.

Udin *et al.*, (2023) extended the EL-JS association by showing that it depended on work-life balance (not work stress) among 110 workers in Indonesian privately owned hospitals. This highlights how organisational and personal resources are involved in the reciprocity between leaders and employees as part of the mechanism of response to supportive leadership through rewards and the SET. Brown *et al.*, (2005) and Uluturk *et al.*, (2023) also confirm a positive relationship between EL-JS among Turkish street-level bureaucrats, with the key mediating variables being the motivation to provide to the community and perceived organisational support. The longitudinal data show that job resources are much more important than job demands, a finding consistent with the SET principle, which states that employees are more responsive to positive resources than to negative constraints. Nevertheless, the emphasis on the public sector restricts its application to private technology companies.

Compared with these studies, it can be observed that EL positively influences JS improvement in various ways, including affective commitment, organisational support, and psychological resources, which can be explained by the reciprocity concept proposed by SET. Methodologically, cross-sectional surveys, sector-specific samples, and small datasets limit generalisability and causal inferences. These limitations in Saudi technological companies signify a gap: the EL-JS relationship has not been tested in the realm of innovation in

Saudi Arabia's technological sector. Based on the findings of the above literature and the identified literature gaps, this study makes the following claims.

H1: There is a statistically significant positive relationship between perceived ethical leadership and job satisfaction in Saudi Arabian technological firms.

2.2.2. Moderating Role of Perceived Vision 2030 Initiatives

The moderating role of large-scale national transformation initiatives in shaping organisational behaviour has attracted growing scholarly interest, particularly in emerging economies currently experiencing rapid institutional change. Although no direct empirical evidence is available on Vision 2030, other related studies offer some understanding of how the institutional context shaped by policies contributes to leadership-employee relations. According to Arous *et al.*, (2025), institutional settings shape employees' perceptions of leadership behaviour; thus, policies aimed at reform can reinforce the perceived legitimacy of ethical leadership. Similarly, Alotaibi and Campbell (2022) believe that organisations with robust institutional structures harmonise internal practices to meet external expectations, thus boosting employee trust and satisfaction. According to Social Exchange Theory (SET), such alignment is an indicator of organisational support, and employees tend to reciprocate by displaying a positive attitude towards the organisation, including job satisfaction, as Omar and Badawy (2025) also support. Moreover, according to Uluturk *et al.*, (2023), the Perceived Vision 2030 initiatives are conceptualised as employees' cognitive assessments of the correspondence between national reform goals and organisational behaviours, particularly in innovation, governance, and economic change. This construct indicates how employees perceive broader policy indicators in their work environment, as implied by Asfahani *et al.*, (2025). Using Institutional Theory, these perceptions inform individuals' sense-making of leadership behaviours and organisational priorities, thereby affecting attitudinal outcomes, including job satisfaction, through the contextual framing of expectations focused on reforms.

In comparison, research on national reform efforts in the Gulf and Asian regions indicates that policy-based change improves employee engagement when leadership practices are aligned with it. Asfahani *et al.*, (2025) note that public sector reforms in Oman were positively associated with employee satisfaction due to a strengthening of the sense of fairness and transparency. However, causal inference is restricted by the use of cross-sectional data. Conversely, Al-Hareri and Nassani (2025) found that transformational organisational contexts enhance the association between leadership and employee job satisfaction and turnover intentions; however, their study relied on Western samples, and the generalisability of the results remains a major concern. Conflicting research is also visible in studies such as Arous *et al.*, (2025), which assumes that there is no meaningful relationship between macro-level attempts in cases where employees believe that there is no relationship between policy rhetoric and organisational practice, focusing on the perspective that institutional structures improve the influence of leadership across the board.

These varying results from different studies indicate that the results of reform-oriented institutional environments on employee attitudes are unlikely to be consistent across studies. Although Alotaibi and Campbell (2022) found that organisations aligned with external reform agendas reported positive outcomes, Arous *et al.*, (2025) claimed that if there is a lack of coherence between policy discourse and practice, the advantages lose their effects. Likewise, Al-Hareri and Nassani (2025) reported that positive leadership impacts could be in settings where leadership actions are perceived to be congruent with the overall goals of transformation. Such differences suggest that to affect employee attitudes, institutions need to be supplemented by the attitudes that employees have toward them and how they are integrated within organisations. This incongruity indicates that considering the perceived Vision 2030 initiatives as a boundary condition that could reinforce or constrain the effect of ethical leadership on job satisfaction is important.

2.3. Conceptual Framework

Most of these studies used self-report survey designs and a single industry sample, which limited their external validity and increased shared method bias. However, the absence of longitudinal designs prevents the scope of knowledge regarding changes in institutional reforms over time and their impact on employees' perceptions. Nevertheless, as it may appear, as stated in the Institutional Theory, Al-Hareri and Nassani (2025) believe that national efforts, such as Vision 2030, bring about normative and regulative pressures that shape organisational behaviour and employee expectations. However, when employees notice the alignment of the goals of ethical leadership with Vision 2030, SET recommends a strengthened reciprocity mechanism that enhances job satisfaction. However, current studies do not provide empirical evidence of Vision 2030 as a moderating variable for privately owned technology firms in Saudi Arabia. This can be considered a major gap, considering that the industry is rapidly changing. To overcome this weakness and address the gaps in the literature, the current study proposes the following hypotheses (Table A) and a conceptual framework (Fig. 1).

There are theoretical grounds to anticipate the moderating effect of institutional reform initiatives on the relationship between ethical leadership and job satisfaction. According to the Social Exchange Theory, employees' perceptions of ethical leadership depend on their perceptions of the leader's actions in terms of fairness, trustworthiness, and support (Al-Hareri & Nassani, 2025). However, Institutional Theory suggests that leadership behaviour interpretations occur within a wider framework of norms and regulations (Katou & Kafetzopoulos, 2025). Ethical leadership could be seen as more legitimate and aligned with national transformation goals in organisations that are considered Vision 2030 champions which could lead to more positive responses from employees. On the other hand, low organisational alignment with Vision 2030 might lead to a lack of agreement in the perception of ethical leadership as a team trait rather than a policy of the entire organisation. This implies a lower reciprocal response from employees. This is because the interaction between exchange processes and the

institutional context is the theoretical basis for expecting a moderating effect.

H2: Perceived Vision 2030 Initiatives significantly and positively moderates the relationship between perceived ethical leadership and job satisfaction in Saudi Arabian technological firms.

3. METHODOLOGY

3.1. Research Design and Data Collection

The current study adopted a primary quantitative research design suitable for investigating the predictive relationship between variables and testing hypotheses in organisations. The respondents were surveyed using a structured questionnaire on a five-point Likert scale ranging from strongly disagree to strongly agree, a common method for measuring perceptual variables in behavioural research, as suggested by Russo *et al.*, (2021). To ensure the specific measurement of constructs and clarity, the questionnaire was split into the study's major constructs: Job Satisfaction, Perceived Ethical Leadership, and Perceived Vision 2030 initiatives. To ensure construct validity, items were extracted from the established scales (Appendix A). The items of ethical leadership were adapted from Brown *et al.*, (2005), where example items were specified as “*Listens to what*

employees have to say” and “*Disciplines employees who violate ethical standards*”. Similarly, items of job satisfaction were adopted from Spector, (2022), for instance, “*I feel I am being paid a fair amount for the work I do*”, “*When I do a good job, I receive the recognition for it that I should receive*”.

3.2. Construct Designing and Measurement

The Perceived Vision 2030 Initiatives construct was designed based on employees' perceptions of how much the goal of Saudi Vision 2030 is represented in their organisational environment. The construct was designed to represent the understanding of the impact of national reform initiatives on practices within organisations and leadership behaviour. The institutional change framework was followed by item generation based on the literature on institutional change and organisational adaptation, as well as the Vision 2030 framework. Three instruments were created to evaluate employees' perceptions of how Vision 2030 impacts organisational practices, their perceptions of leadership practices and the goals of Vision 2030, and the promotion of ethical and responsible leadership. The construct was defined as reflective, that is, the observed items reflected the perceived sense of alignment of the organisations with national reform efforts.

Table A. Hypotheses table.

Hypothesis	Relationship	Theoretical Basis	Key Supporting Literature	Expected Direction
H1	Perceived Ethical Leadership → Job Satisfaction	Social Exchange Theory (SET)	Torlak <i>et al.</i> , (2021); Guo (2022); Udin <i>et al.</i> , (2023); Uluturk <i>et al.</i> , (2023)	Positive
H2	Perceived Vision 2030 Initiatives × Perceived Ethical Leadership → Job Satisfaction	Social Exchange Theory (SET) and Institutional Theory	Arous <i>et al.</i> , (2025); Alotaibi & Campbell (2022); Asfahani <i>et al.</i> , (2025); Al-Hareri & Nassani (2025)	Positive Moderation

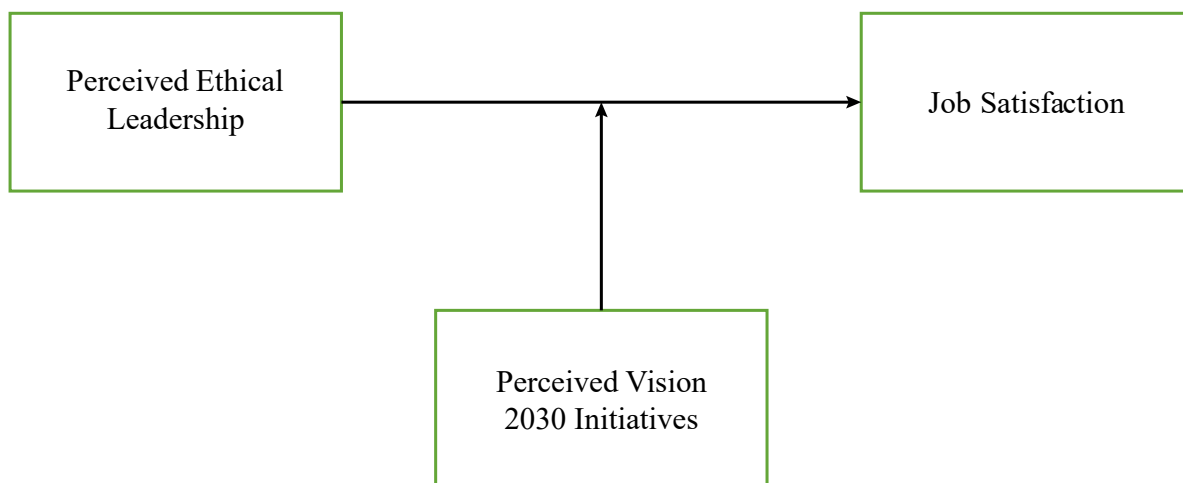


Fig. (1). Conceptual framework.

The use of three items to measure the Perceived Vision 2030 Initiatives is consistent with literature studies which suggest using fewer items when constructs have a conceptual focus and measurement efficiency is desired. When short scales measure the key conceptual domain of the construct and show acceptable psychometric characteristics, as proposed by Louangrath (2018), they effectively capture this construct. In a similar vein, Taherdoost (2019) states that there is no limit on the number of reflective indicators used, but only if reliability and validity are achieved. The construct was focused, and satisfactory inter-item correlations were found in this study; therefore, a three-item measure was considered appropriate and parsimonious. Future studies should validate this newly developed construct using confirmatory factor analysis in independent samples to develop its factorial stability, alongside convergent and discriminant validity, and generalisation within diverse organisational contexts. This kind of validation tends to reinforce confidence in the psychometric properties of the new construct and improve its application in future studies assessing employees' perceptions of national reform initiatives and outcomes in the workplace.

Such validation would strengthen confidence in the construct's psychometric properties and enhance its applicability in future research examining employees' perceptions of national reform initiatives and workplace outcomes.

The questionnaire scale was carefully and systematically constructed. The initial items were generated based on the literature on institutional change and the goals of such policies. The draft items were then reviewed by a panel of three academics with expertise in organisational behaviour and public policy to evaluate their clarity, relevance and content validity. Some minor wording changes were made in response to the reviewers' suggestions. The revised questionnaire was then pilot-tested with 75 employees from Saudi technological companies to check for item comprehensibility and preliminary reliability. Prior to data collection, the internal consistency of the instrument was tested through the pilot testing which showed strong internal consistency with Cronbach's alpha of 0.896, Table 1, before collecting data at full-scale.

Table 1. Pilot testing.

Reliability Statistics	
Cronbach's Alpha	N of Items
0.896	9

3.3. Participants and Sampling

The participants were selected from various Saudi Arabian technological companies in software development, information technology services, telecommunications services, digital solutions, and technology-enabled business services with an employee size between 250 and 1000, operating in major cities such as Jeddah, Riyadh, and Dammam. Organisations were identified through their accessible social media and professional networks. The recruitment approach was to recruit

from a range of organisations and different sizes and scopes of operations to gain input from various sections of the technology industry. Participants were recruited online through social media platforms such as Instagram, Twitter, and the official Facebook pages of technology firms, which allowed us to gather a non-homogeneous, geographically dispersed sample. Social media platforms have been employed as hiring tools because of their convenient reach to staff of geographically spread-out technological companies in Saudi Arabia. The social media pages that were contacted were operated by the company to maximise the chances of respondents working at the target company at the time of the study. However, it could have favoured those who were more active in digital interactions in the workplace and were more engaged with workplace communication platforms.

As suggested by Andrade (2021), purposive sampling was applied, as it enabled the researcher to select respondents with relevant knowledge and experience with the variables of this study. This method is particularly appropriate when a study requires information-rich cases from a particular industry. Although purposive sampling was used to ensure that only respondents with relevant experience and knowledge of the variables under study were included, it also introduced selection bias and constrained the generalisability of the results to the target population of the study.

Although this method is suitable for recruiting participants with a greater understanding of the research problem and topic, it may not adequately reflect the diversity of the broader workforce. Thus, the outcomes are explained and evaluated within the chosen sample of workers in the technology companies. As recommended by Kang (2021), the sample size was determined using G*Power analysis. In the case of a medium effect size ($f^2 = 0.15$), power of 0.95, and three predictors, the minimum required sample size was approximately 119. Nevertheless, the study's statistical robustness increases with the sample size, which is why the targeted sample size was 450. Eight hundred questionnaires were sent, of which 470 were returned, yielding a response rate of 58.75%. After screening for missing values and outliers, 20 responses were eliminated, leaving 450 responses for analysis. Purposive sampling was used to ensure that the respondents had relevant organisational experience; however, the research was unable to eliminate self-selection bias completely because participation was voluntary. Those who were more engaged in organisational activities or were more aware of Vision 2030 activities might have been more inclined to engage. Additionally, there was a relatively high proportion of respondents in senior management (29.33%), which might be indicative of the social media-based recruitment process and could have affected perceptions of leadership and organisational alignment with Vision 2030. Therefore, the results do not necessarily reflect the opinions of lower-level employees in an organisation.

3.4. Addressing Biases

Non-response bias was examined by comparing early respondents ($n_1 = 30$) with late respondents ($n_2 = 30$) on the study variables (PEL, PV, and JS) using independent-sample t-

tests. There were no statistically significant differences in the tests; therefore, there was no concern that non-response bias would affect the findings of this study ($p > 0.05$). In addition, Common Method Bias (CMB) was assessed using Harman's single-factor test. The exploratory factor analysis of all measurement items indicated that the variance was not explained by a single factor, and the first factor accounted for less than 50% of the total variance. This implies that the CMB was not a concern in this study. In addition, CMB was assessed using the full collinearity Variance Inflation Factor (VIF), as shown in Table 2. The results showed that none of the VIF values surpassed the threshold value of 3.3 which ruled out the issue of CMB in this study. Although Harman's single-factor test results indicated that common method bias was not a major concern, Podsakoff *et al.*, (2003) suggested that no single statistical test could completely rule out CMB. Consequently, as in all studies, caution should be exercised when interpreting the findings, despite the procedural and statistical corrections used.

3.5. Data Analysis Technique

First, the measurement model was assessed using SmartPLS 4.0, which can be used to carry out a confirmatory assessment of reflective constructs through Partial Least Squares Structural Equation Modelling (PLS-SEM). To check the reliability of the indicators, internal consistency reliability (Composite Reliability and Cronbach's alpha) and convergent validity (Average Variance Extracted and Heterotrait-monotrait) criteria were used in this software. Further, SPSS was used to analyse the data, and a moderation analysis was performed using the Preacher and Hayes PROCESS Macro, which allows robust testing of the interaction with bootstrapped confidence intervals, as recommended by Clement and Bradley-Garcia (2022).

3.6. Ethical Considerations

Ethical guidelines for studies involving human subjects were followed throughout the study. There was complete voluntary participation, and informed consent was obtained from all respondents prior to completing the questionnaire. Participants were informed of the purpose of the study, that the responses would be anonymous, that the responses would be kept confidential, and they could withdraw from the study without any consequences at any point in time. No personal identifiable data were collected, and the data were only analysed for academic research in accordance with the ethical guidelines of social and management sciences research.

4. RESULTS

4.1. Demographics Analysis

The results shown in Table 3 specify the demographic characteristics of the study participants in the sample ($n = 450$). Among the total participants, 55.56% were male and 41.11% were female, while 3.33% preferred not to answer. Further, regarding age group, 30.00% and 32.22%, were found in the age brackets of 25-34 years and 35-44 years, respectively. Among the total participants, 38.89% and 28.89% held bachelor's and master's degrees, respectively, whereas 30.22%

served at Team Leader or Supervisory levels, 24.44% at managerial levels, and 29.33% at Senior Management levels. Lastly, among the total participants, 23.33% had 3-5 years of industry experience, 31.11% had 6-10 years, and 26.67% had more than 10 years.

4.2. Reliability Analysis

The internal consistency and reliability of the model were examined using Cronbach's alpha, with a standard value of 0.7. The results are presented in Table 4.

The results in Table 4 show that Cronbach's alpha for all the constructs of the measurement model of the study is ($\alpha > 0.7$). This indicates that all three constructs have internal consistency and reliability.

4.3. Measurement Model Assessment

The results in Table 5 show high factor loadings ranging between (0.636 and 0.953), indicating that all observed items are strongly correlated with the underlying latent constructs. On the other hand, reliability is also established as all the constructs are found with Cronbach's Alpha and Composite Reliability values exceeding 0.7 ($\alpha > 0.7$). Finally, convergent validity was attained with Average Variance Explained (AVE) values higher than the standard value of 0.5. Furthermore, despite having the lowest standardised loading (0.636), well below the recommended minimum of 1.0, JS3 had a positive contribution to the construct's Composite Reliability and Average Variance Extracted which were both above the recommended thresholds. This item was therefore retained, since the exclusion did not significantly enhance the total psychometric characteristics of the model, but compromised the conceptual width of the job satisfaction construct, and thus the consistency of the tools used to measure it.

4.4. Discriminant Validity

The Heterotrait-Monotrait (HTMT) criterion was used to evaluate discriminant validity (Table 6). The HTMT ratios of Perceived Ethical Leadership-Job Satisfaction, Perceived Ethical Leadership-Perceived Vision 2030, and Perceived Vision 2030-Job Satisfaction were found to be 0.541, 0.515, and 0.423, respectively. The values of all are well below 0.85 which provides satisfactory discriminant validity and, therefore, evidence of the three constructs being empirically distinct.

4.5. Correlations

The correlation analysis (Table 7) shows that all variables in this study have statistically significant positive relationships. Job Satisfaction is positively correlated with Perceived Ethical Leadership ($r = 0.661$, $p = 0.01$), indicating that greater perceptions of ethical leadership are associated with higher employee satisfaction. Similarly, the Perceived Vision 2030 Initiatives showed a moderate correlation with Perceived Ethical Leadership ($r = .0539$, $p < 0.01$) and moderately high correlation with Job Satisfaction ($r = 0.629$, $p < 0.01$). These findings imply that employees with a positive outlook on national initiatives report high levels of satisfaction and positive perceptions of their leadership.

4.6. Process Model-Preacher and Hayes

According to the Process-Macro results (Table 8), the model has moderate predictive power and accounts for a significant percentage of the variance in job satisfaction ($R^2 = 0.546$, $F = 179.053$, $p < 0.001$). Perceived Ethical Leadership (PEL) has a positive, statistically significant direct relationship with Job Satisfaction ($\beta = 0.262$, $t = 2.130$, $p = 0.033$), confirming its importance as an essential predictor. The Perceived Vision 2030 initiative (PV) also showed a significant relationship with job satisfaction ($\beta = 0.081$, $t = 2.076$, $p = 0.047$). The interaction term (PEL $\times$ PV) was positive and significant ($\beta = 0.072$, $t = 2.250$, $p = 0.029$), indicating a significant moderating effect. The interaction changes in the explained variance ($\Delta R^2 = 0.0049$, $F = 4.777$, $p = 0.029$) indicate a small moderating effect of Perceived Vision 2030. The conditional effects also indicate that the relationship between PEL and JS is slightly enhanced with increased levels of PV, with the relationship starting with ($\beta = 0.478$) at low levels and ($\beta = 0.613$) at high levels. These

results confirm the direct and interaction effects of these variables on the dependent variables. In addition, the f^2 values indicate that job satisfaction is moderately related to Perceived Ethical Leadership ($f^2 = 0.320$) and moderately associated with Perceived Vision 2030 Initiatives ($f^2 = 0.247$), which shows significant practical contributions. However, there is a lack of practical significance in that the interaction effect is small ($f^2 = 0.010$), which is below Cohen's limit of small effect size, and not that much to be revealed by its statistical significance.

It should be noted that the conditional effects differ from the direct effect coefficient ($\beta = 0.262$) as the effects are estimated at specific levels of the moderator, that is Perceived Vision 2030 initiatives. The difference between the direct and conditional effects reflects the average and changes in the effect of ethical leadership on job satisfaction when the Perceived Vision 2030 scores were low, medium, or high. The higher the coefficients across each moderator level, the more evidence there is that the Perceived Vision 2030 initiatives have a moderating effect.

Table 2. Full collinearity VIF.

	VIF
Perceived Ethical Leadership -> Job Satisfaction	1.618
Perceived Vision -> Job Satisfaction	1.453
Perceived Vision x Perceived Ethical Leadership -> Job Satisfaction	1.351

Table 3. Demographics profile analysis.

Demographic Category		Frequency (n)	Percentage (%)
Gender	Male	250	55.56%
	Female	185	41.11%
	Prefer not to say	15	3.33%
Age Range	Below 25	50	11.11%
	25–34	135	30.00%
	35–44	145	32.22%
	45–54	70	15.56%
	55 and above	50	11.11%
Educational Qualification	Diploma	85	18.89%
	Bachelor's Degree	175	38.89%
	Master's Degree	130	28.89%
	Doctorate	60	13.33%
Current Job Position	Technical/Operational Staff	72	16.00%
	Team Leader / Supervisor	136	30.22%
	Manager	110	24.44%
	Senior Management	132	29.33%
Industry Experience	Less than 3 years	85	18.89%
	3–5 years	105	23.33%
	6–10 years	140	31.11%
	More than 10 years	120	26.67%

Table 4. Reliability analysis.

-	Reliability Statistics	
-	Cronbach's Alpha	No of Items
Perceived Ethical Leadership	0.899	3
Job Satisfaction	0.884	3
Perceived Vision 2030 Initiatives	0.854	3

Table 5. Measurement model assessment.

Latent Variables	Indicators	Factor Loadings	Cronbach's alpha	Composite Reliability	Average Variance Extracted (AVE)
Job Satisfaction	JS1	0.789	0.884	0.890	0.603
	JS2	0.884			
	JS3	0.636			
Perceived Ethical Leadership	PEL1	0.953	0.899	0.901	0.701
	PEL2	0.759			
	PEL3	0.785			
Perceived Vision 2030 Initiatives	PV1	0.890	0.854	0.857	0.703
	PV2	0.789			
	PV3	0.856			

Table 6. Discriminant validity-HTMT ratios.

-	Job Satisfaction	Perceived Ethical Leadership
Perceived Ethical Leadership	0.541	-
Perceived Vision	0.423	0.515

Table 7. Correlations.

Variable	M	SD	1	2	3
Perceived Ethical Leadership (PEL)	3.757	0.757	1	-	-
Job Satisfaction (JS)	3.65	0.856	0.661**	1	-
Perceived Vision 2030 Initiatives (PV)	3.549	0.887	0.539**	0.629**	1

Note: *** indicates significance at 1%, ** indicates significance at 5%, * indicates significance at 10%

Table 8. Direct and moderation analysis- using process macro.

Predictor	B	SE	t	p	95% CI (LL, UL)	F-square
Constant	1.269***	0.422	3.007	0.003	[0.441, 2.098]	-
Perceived Ethical Leadership (PEL)	0.262**	0.123	2.130	0.033	[0.021, 0.504]	0.320
Perceived Vision 2030 (PV)	0.081**	0.039	2.076	0.047	[0.002, 0.160]	0.247
PEL × PV	0.072**	0.032	2.250	0.029	[0.008, 0.154]	0.010
R	R ²	MSE	F	df1	df2	p
0.739	0.546	0.335	179.053	3	446	0.000
Interaction Effect						-
ΔR ²	F	df1	df2	p	-	-
0.0049	4.777	1	446	0.029	-	-
Conditional Effects of PEL on JS at Levels of PV						-
PV Level	Effect	SE	t	p	95% CI (LL, UL)	-
Low (2.67)	0.478	0.046	10.391	0.000	[0.388, 0.568]	-
Medium (4.00)	0.586	0.054	10.851	0.000	[0.480, 0.692]	-
High (4.33)	0.613	0.062	9.887	0.000	[0.490, 0.736]	-

Note: *** indicates significance at 1%, ** indicates significance at 5%, * indicates significance at 10%

5. DISCUSSION

The findings support H1, which posits a positive relationship between perceived ethical leadership and job satisfaction, as supported by previous studies (Guo, 2022); Torlak *et al.*, (2021). However, it is not only confirmatory; it is also possible to regard that in a range of situations, certain basic aspects of ethical leadership, such as fairness and transparency, can be effective in enhancing employee creativity. Work-life balance in this study is, however, not as prominently projected as in Udin *et al.*, (2023) because the study managed and observed work-life balance as a direct mediator, and this study demonstrates its direct relationship, presumably due to the nature of technological companies, where leaders tend to focus on short-term support rather than long-term well-being procedures. Similarly, Uluturk *et al.*, (2023) focused on organisational support, and the direct influence can be considered strong because of the relatively dynamic and non-formalised organisational structure of privately operated technological enterprises in Saudi Arabia. Such variations suggest that ethical leadership cues are more significant to employees in this industry regarding how they handle uncertainty, underscoring the role of leadership integrity in maintaining employee job satisfaction.

The consistency in the findings is explained by the applicability of ethical leadership behaviours across cultures or economies similar to Saudi Arabia. However, variations become apparent in the Saudi context, where corporate

hierarchies and the speed of sector growth can increase employees' dependence on leadership signals to find a stable work environment. In contrast to the Western environment, where institutional structures are more developed, employees in emerging economies emphasise leadership ethics to a greater extent as an alternative to formalised organisational structures. From the perspective of Social Exchange Theory (SET), the findings reinforce the idea that fair and ethical treatment is reciprocated by employees through positive attitudes (job satisfaction). Ethical leaders signal organisational support, strengthen psychological contracts, and boost employee well-being. In the case of Saudi technological companies, the findings indicate that leadership development programs grounded in ethical behaviour are essential for maintaining high levels of employee satisfaction in extremely competitive, innovation-driven environments.

The findings support H2, which states that perceived Vision 2030 initiatives have a positive moderating role in the relationship between ethical leadership and job satisfaction, although they are context-specific rather than universal. Although the outcomes of this study are consistent with those of Al-Hareri and Nassani (2025), who suggested that the role of leadership behaviours is interpreted in the context of institutional environments, the stronger moderating effect in this study could be attributed to the high visibility and strategic value of Vision 2030 in the Saudi context. Unlike Alotaibi and Campbell (2022), who argues that macro-level efforts do not

affect employees' job satisfaction in the case of weak organisational alignment, the current evidence suggests that workers in Saudi technological organisations perceive greater alignment between policy discourses and work practices. This implies that institutional legitimacy enhances the effectiveness of ethical leadership when employees adopt national reform objectives, underscoring the importance of situating organisational activities within a wider policy context.

This degree of association could be explained by the fact that Vision 2030 has become one of the cohesive national agendas and has strengthened expectations of responsible governance and organisational accountability. Workers who feel that leadership practices are consistent with the Vision 2030 objectives are likely to give ethical leadership behaviour greater credibility and meaning. Vision 2030 can be viewed through the lens of Institutional Theory as a normative and regulative process that creates organisational values and expectations for employees. This congruence enhances the performance of ethical leadership by situating it within a broader socioeconomic context. The results also indicate that Vision 2030 could be a perceptual signal rather than merely an institutional context for employees. Sensemaking, according to (Van Den Heuvel *et al.*, 2020), this is an ongoing process whereby employees make sense of larger environmental shifts and make meanings of organisational moves and actions. Organisational practices and leadership behaviours congruent with Vision 2030 goals can create a stronger sense of ethical leadership among employees. Similarly, a national reform process is projected through signalling theory to be a vehicle for sending priorities and values to employees, thus decreasing uncertainty about the organisational direction of the ministry. This means that employees may consider ethical leadership behaviour in a larger "transformation and legitimization" process.

Although the interaction between perceived ethical leadership and Vision 2030 initiatives was statistically significant, the variance explained by this interaction was relatively small. The moderating role has been drawn from this and should be considered with caution with respect to its practical significance. Employees' positive perception of Vision 2030 seems to reinforce the link between ethical leadership and job satisfaction, but it does not significantly impact the magnitude of this relationship. Thus, the study results indicate that the perception of Vision 2030 is not the most important factor contributing to employee satisfaction. However, the outcome of this study has theoretical relevance, as it offers preliminary findings that suggest that understanding national reform processes among employees can impact their perceptions of leadership behaviours. Perceived Vision 2030 activities can be viewed as a low-level boundary condition that only has a significant impact when it interacts with organisational leadership practices.

Another possibility for these findings is related to social desirability bias. However, with Vision 2030 being a prominent part of Saudi Arabia's national development agenda, employees tend to express positive perceptions of initiatives related to Vision 2030, even if they are not implemented yet.

Thus, positive appraisals of Vision 2030, training, and leadership approaches could also reflect, in part, expectations at the societal level rather than workplace experiences. Procedural remedies were used, but future studies may benefit from the use of multi-source or longitudinal data to investigate this association further.

The results did not show a strong connection between perceived ethical leadership and perceived Vision 2030 initiatives, as they were statistically significant, but the effect of that link was relatively small. Therefore, the results should be examined cautiously because the perceptions of Vision 2030 only slightly boosted the relationship between ethical leadership and job satisfaction, instead of changing it drastically. The statistical significance is, at least in part, due to the rather large sample size thus moderation cannot be interpreted as an explanatory mechanism. However, its result is still theoretically significant as it implies that the influence of ethical leadership on job satisfaction is slightly greater as a contextual factor of the national reform initiatives that employees experience, lending incremental support to the adoption of the context of the national reform initiatives for job satisfaction into the study of leadership.

IMPLICATIONS

These findings have significant theoretical and practical implications. In theory, this research seems to hold a certain degree of support for the relevance of Social Exchange Theory and institutional theory in relation to job satisfaction in Saudi technology companies. The results indicate that both interpersonal exchange processes and employees' perceptions of larger institutional structures, such as those for national reform processes, can play a role in the relationship between leadership and employee job satisfaction. Nonetheless, these connections need to be verified in various industrial, sectoral, and regional contexts. Practically, fairness, transparency, and accountability can be the basis of ethical leadership that would help the managers of Saudi Arabian technological enterprises increase employee satisfaction. Moreover, communication matching the objectives of Vision 2030 with organisational values and communication may reinforce employees' positive perceptions of leadership and the job at hand. For policymakers, the findings suggest that organisational behaviour can be influenced by aligning the principles of national programs, particularly in rapidly developing sectors such as technology, where employee attitudes can greatly contribute to performance and innovation.

CONCLUSION

This study analyses the relationship between perceived ethical leadership and job satisfaction in Saudi Arabian technological organisations and considers contextual factors such as Vision 2030 programs. The results demonstrate that ethical leadership is positively related to job satisfaction, and the correlation is strengthened when employees have positive perceptions of the national transformation efforts. The results show the need to be careful about organisational practices and contextual considerations when understanding employees'

attitudes. This implies that the effectiveness of leadership can be distinguished based on how employees perceive more generalised institutional change and their everyday work experiences. The conceptualisation of Vision 2030 as a micro-level psychology construct that is seen through employees' perceptions, as opposed to a mere macro policy initiative, is an important contribution to this study. This study further extends the growing body of research on leadership in the Gulf region by offering a more employee-centred perspective on institutional change by showing how interpretations of employee perceptions of leadership are influenced by national reform agendas.

LIMITATIONS

Despite the contributions of this study, it has some limitations related to its context. The cross-sectional methodology restricts insight into how employees' perceptions of Vision 2030 in Saudi technology-based companies can be altered, as the awareness of reforms may be transformed swiftly. The perceived Vision 2030 initiatives are understood through employees' subjective evaluation and can vary as employees are exposed to organisational communications and actively engage in the reformation process. Although purposive sampling was used to guarantee that the sample involved respondents with relevant knowledge and experience of the study constructs, purposive sampling leads to selection bias and restricts generalisation.

The sample can be over-representative of those more knowledgeable about the practices in organisations and Vision 2030 activities. Hence, probability sampling methods should be used in future research to increase representativeness and minimise sampling bias, thereby enhancing the external validity of the results for wider organisational and sectoral settings. Finally, focusing on technology companies limits the ability to generalise to other industries, where organisational set-ups or interpretations of reforms vary. Longitudinal, multisectoral, and multisource studies should be conducted to address these limitations and develop more comprehensive findings. Finally, the respondents occupying various positions within the organisation revealed that there were more managerial staff, senior managers, and managers than front-line and operation staff. Thus, the results can be more representative of managers' perceptions of ethical leadership and Vision 2030 than those of lower-level employees. The findings should hence be treated with caution when generalising across all employees at all levels within the technology industry of Saudi Arabia, and future studies should aim for a more balanced sample across hierarchies.

LIST OF ABBREVIATIONS

AVE	=	Average Variance Explained
CMB	=	Common Method Bias
HTMT	=	Heterotrait–Monotrait
JS	=	Job Satisfaction
PEL	=	Perceived Ethical Leadership

PLS-SEM	=	Partial Least Squares Structural Equation Modelling
SET	=	Social Exchange Theory
VIF	=	Variance Inflation Factor

AUTHORS' CONTRIBUTIONS

R.A. contributed to the study concept and design and writing of the paper. S.A. contributed to the study concept and design and writing of the paper. L.F. contributed to data collection and writing of the paper. F.A. contributed to data collection, review, and editing. All authors reviewed and approved the final version of the manuscript.

ETHICAL APPROVAL & INFORMED CONSENT

All procedures involving human participants were conducted in accordance with accepted ethical research guidelines. Participation in the study was voluntary, and informed consent was obtained from all participants prior to data collection. Responses were anonymised to protect participant confidentiality, and no personally identifiable information was disclosed.

AVAILABILITY OF DATA AND MATERIALS

The data supporting the findings of this study are available from the corresponding author upon reasonable request [R.A.].

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CONFLICT OF INTEREST

The authors declare that they have no competing interests that could have influenced the conduct or findings of this study.

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DECLARATION OF AI

The authors declare that no artificial intelligence tools or technologies were used in the preparation, analysis, or writing of this study. The authors take full responsibility for the content and originality of the work.

APPENDIX A

Questionnaire

Section A: Demographic Information

1. What is your gender?

- Male
- Female
- Prefer not to say

2. What is your age group?

- Below 25
- 25–34
- 35–44
- 45–54
- 55 and above

3. What is your highest educational qualification?

- Diploma
- Bachelor's Degree
- Master's Degree
- Doctorate
- Other

4. What best describes the current job position?

- Technical/Operational Staff
- Team Leader / Supervisor
- Manager
- Senior Management

5. How many years of experience does the respondent have in the technology sector?

- Less than 3 years
- 3–5 years
- 6–10 years
- More than 10 years

Section B: Survey Statements

Please indicate the level of agreement with the following statements.

Scale:

- 1 = Strongly Disagree
- 2 = Disagree
- 3 = Neutral
- 4 = Agree
- 5 = Strongly Agree

Ethical Leadership Adapted from (Brown <i>et al.</i> , 2005)	1. Listens to what employees have to say.
	2. Disciplines employees who violate ethical standards.
	3. Has the best interests of employees in mind.
Vision 2030 Alignment (Moderator)	1. Vision 2030 initiatives influence organisational practices in technological firms in Saudi Arabia.
	2. Organisations align their leadership practices with the strategic goals of Vision 2030.
	3. Vision 2030 initiatives encourage organisations to promote ethical and responsible leadership.
Job Satisfaction. Adopted from (Spector, 2022)	1. I feel I am being paid a fair amount for the work I do.
	2. When I do a good job, I receive the recognition for it that I should receive.
	3. I am satisfied with my job because it provides a positive and rewarding work experience.

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