



Impact of organisational change on job satisfaction: Field study in Yemeni telecom companies



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Orientation: The world has recently witnessed rapid communications and data transfer changes, pushing many companies, including Yemeni Telecommunications, towards change and development.

Research purpose: This study aimed to determine the impact of organisational change (OC) in its dimensions (technological, organisational and human) on job satisfaction.

Motivation for the study: Yemeni Telecommunications has experienced fluctuations in its employee satisfaction levels but it headed recently towards OC. The study works to find out the level of implementation of OC and its impact on the satisfaction of workers in the sector.

Research approach/design and method: This study uses the quantitative research method and the descriptive analytical approach.

Main findings: The beta value was 0.769, with a very high statistical significance ($p = 0.000$), indicating that OC has a significant and positive impact on job satisfaction.

Practical/managerial implications: Organisational change can provide employees with new opportunities for learning and professional development, which can motivate them to work harder. It also contributes to improving the work environment and providing a more positive environment for employees, which enhances their feeling of appreciation and, in turn, contributes to their feeling of satisfaction with their work.

Contribution/value-add: The study revealed the reasons for job satisfaction being at an average level and provided recommendations for a need to increase attention to the level of salaries, wages and fair distribution of returns, in addition to paying attention to the clarity and fairness of promotion criteria and performance evaluation policies in telecommunication companies to ensure increased job satisfaction.

Keywords: organisational change; job satisfaction; Yemeni communications; Yemeni telecommunications (Public Telecommunication Corporation [PTC]); Yemen Mobile; TeleYemen; YOU.

Introduction

Orientation

Today's world is witnessing many rapid and major changes, especially in the field of communications, technology, and the transfer of data and information. Indeed, the increasing speed of change at present depends primarily on the technology and communications revolution, the expansion of the scope of the Internet and its services, and the means and methods of transferring data and information, which has pushed many organisations towards change and development, especially telecommunication companies, including Yemeni Telecommunications (Al-Soswa, 2019).

Whatever the nature of the change, whether planned or spontaneous as a result of changes in internal or external environmental factors and regardless of the degree of response to this change, development in organisations, whether public or private, remains extremely important for survival, growth and continuity (Al-Maghribi, 2016, p. 352).

However, the success or failure of companies in achieving their goals does not depend on their financial resources alone. The human element is one of the most important elements of production in business organisations, the main reason for their existence and continuity, and the means through which they reach their goals (Munif, 2018).

This increases the importance of focusing on satisfaction among telecommunications workers and their care to increase job performance levels (Otera, 2018) and for the positive reflections of satisfaction in increasing job loyalty and employee retention (Mampuru et al., 2024).

Therefore, it is important to work to achieve job satisfaction among employees and balance the organisation's goals with the employees' goals, in addition to other success factors such as financial resources and advanced technology.

Research purpose and objectives

The success of business organisations depends on the experience and skills of the workers and also on the extent to which they are willing to employ those capabilities in accomplishing the work entrusted to them (Al-Azzawi & Jood, 2020). The application of change directly affects the organisation and its employees, and therefore the feeling of discomfort and loss of security among employees expresses their state of anxiety and is one of the factors of aversion to change and low performance, which requires motivating and inspiring employees and recognising their interests (Chansanam et al., 2020), with the need to provide an appropriate and fair reward system (Gunawan et al., 2024) and also train them and develop their skills (Mampuru et al., 2024).

The fact that the individual represents the focus of the production process and the most important elements of production must receive appropriate attention and good treatment to be able to provide performance with high quality (Ben Souilah, 2016).

However, Yemeni Telecommunications suffer fluctuations in the level of job satisfaction among their employees, as a study (Al-Absi, 2021) showed that job satisfaction among employees at MTN Yemen Co. (YOU Co. currently) was below average, with an arithmetic mean of 2.78 on the Likert pentameter scale.

Interestingly, the phrase 'I feel satisfied with belonging to the company' has a low approval score with an arithmetic average of 2.32, and according to the results of the questionnaire, most employees do not accomplish their work firsthand, cannot address emergency problems and do not make a great effort in their work commensurate with the nature of the tasks.

A study conducted on Sabafon Co. (Al-Idrisi & Al-Maghribi, 2016) showed that the level of indicators of satisfaction with financial factors was weak, as most respondents do not agree on the point that the salary is commensurate with the level of their performance as well as bonuses, overtime and allowances, each of which averaged individually below 2.82.

Another study (Anam, 2018) in the Yemeni telecom companies (Sabafon, MTN, Y, Yemen Mobile) found that

there was a defect in the promotion system and a lack of clear criteria for promotion, while the approval of the respondents about the promotion opportunities as a result of outstanding performance was weak (2.88), as well as the arithmetic average of the paragraphs on the axis of the effectiveness of the incentive system (2.87).

The results also showed a lack of fairness in the material and moral incentives granted to employees and a lack of an effective performance follow-up system.

From here, the researcher sought to measure the impact of organisational change (OC) on job satisfaction in these companies by answering the main question of the study represented in the following:

RQ - Is there an impact of OC in its dimensions (technological, organisational and human) on job satisfaction in its dimensions (wages, salary, fair return, content of work and diversity of tasks and opportunities for development and promotion available) in the Yemeni telecom companies?

Objectives

Through this study, the researcher seeks to know the impact of OC on job satisfaction in the Yemeni telecom companies and to determine the level of both OC and the level of employee satisfaction in the Yemeni telecom companies.

Literature review

Effective human resources management (HRM) plays a crucial role in improving organisational performance by enhancing employee satisfaction. While *Expectancy Theory* (Vroom, 1964) primarily focuses on motivation, it also emphasises the link between employee effort, performance and rewards. This theory suggests that employees are more likely to be satisfied with their jobs if they perceive that their efforts will directly lead to desirable rewards. However, in the context of *technological change*, if employees do not see clear career benefits from new technologies, their motivation and satisfaction may not improve as expected.

Classic job satisfaction theories such as *Herzberg's Two-Factor Theory* (1959) and *Hackman & Oldham's Job Characteristics Model* (1976) provide further insights. Herzberg differentiates between two main factors:

- *Motivators* (e.g. meaningful work, achievement, appreciation and responsibility), which directly enhance job satisfaction.
- *Hygiene factors* (e.g. salary, company policies and supervision), which do not inherently increase satisfaction but may prevent dissatisfaction if adequately addressed.

This aligns with *Hackman & Oldham's model*, which states that satisfaction is driven by *task variety, autonomy and feedback*.

OC that *improves job roles and autonomy* tends to increase satisfaction, whereas *technology-driven change* without proper training may cause stress rather than motivation.

Building on these theoretical foundations, the following conceptual framework (Figure 1) illustrates the interaction between different dimensions of OC and job satisfaction components in Yemeni telecom companies.

And also the theory of expectation (Vroom, 1964) believes that the satisfaction of the individual according to this theory depends on comparing what the individual gets in exchange for certain efforts with the size of his or her expectations, which vary from person to person, and you also see that the individual's motivation to do a certain work is the result of three factors (the individual's expectation that his or her effort will result in performance, and this performance is the means to obtain returns, and these returns are useful and attractive).

However, OC may lead to a decrease in motivation. Unless it is dealt with thoughtfully because of the close link between job satisfaction and intrinsic motivations for the job, then high-quality achievement or performance is the most common factor leading to job satisfaction. This is in addition to other factors, such as giving employees the responsibility and powers necessary to conduct their work (Herzberg, Mausner, & Snyderman, 1959). Job characteristics also play a role in job satisfaction through the employee's intrinsic motivation. These include the moral aspect (diversity and quality of tasks and the importance of work), feeling responsible for the results (autonomy) and gaining knowledge of the results (feedback) (Hackman & Oldham, 1976).

The level of trust employees have in their managers also plays a vital role in organisational communication, procedural justice, employee empowerment and development. Open communication in the organisation reduces fear of the unknown effects of change and thus reduces fear or anxiety resulting from ambiguity and enhances employees' sense of belonging to the organisation (Tzafir et al., 2004, pp. 39–40).

Accordingly, the conceptual model was designed to illustrate the relationship between OC and job satisfaction within Yemeni telecom companies (Figure 1).

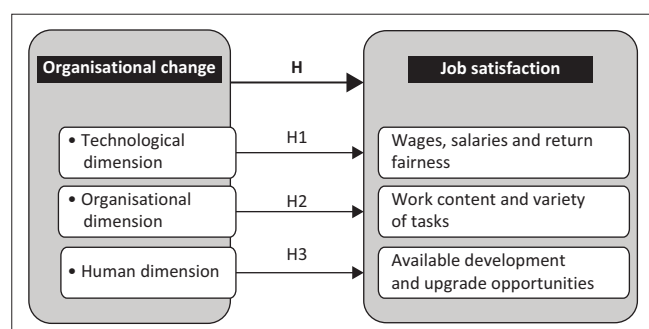


FIGURE 1: The cognitive model of the study.

The model conceptualises three key dimensions of OC (technological, organisational and human) as independent variables influencing job satisfaction. Job satisfaction is further categorised into three dimensions: wage fairness, job content and task variety and career development opportunities.

Hypothesis H represents the overall assumption that OC positively affects job satisfaction. The sub-hypotheses (H1, H2 and H3) specify the impact of each dimension separately.

This model aligns with Herzberg's Two-Factor Theory, where organisational and human resource (HR) changes can act as motivators, while technological change may function as a hygiene factor with limited direct influence on job satisfaction. Furthermore, Vroom's Expectancy Theory supports the idea that employees are more likely to perceive job satisfaction when changes in structure and HR policies create a clear link between effort and rewards.

By structuring these relationships, the model provides a framework for analysing how different forms of OC contribute to job satisfaction in a developing economy facing economic and political instability.

The hypotheses of the study were formulated as follows:

- Study hypotheses

Main hypothesis: There is a statistically significant effect at a significant level ($\alpha \leq 0.05$) of the OC on job satisfaction in the Yemeni telecom sector.

The following sub-hypotheses emerge from the previous main hypothesis:

- There is a statistically significant effect at a significant level ($\alpha \leq 0.05$) of the change in technology on job satisfaction in the sector.
- There is a statistically significant effect at a significant level ($\alpha \leq 0.05$) of the change in the organisational structure on job satisfaction in the sector.
- There is a statistically significant effect at a significant level ($\alpha \leq 0.05$) of the change in HR on job satisfaction in the sector.

Organisational change

Griffin considers that change is a fundamental shift in the organisation that may include changing the organisational structure and the number of its levels, the scope of supervision, production methods, and the quality of workers, machinery and equipment (Al-Marhadhi, 2021), and others define it as 'a process of transition from the current situation to another more efficient and effective situation' (Dodin, 2020, p. 19).

This study defines OC from a procedural perspective as changes that occur in each of the used technologies, the

organisational structure and HR, in the form of a proposal to improve the level of job satisfaction of workers in Yemeni telecom companies.

Organisational change has many areas, and the most important areas in which OC is applied are the three dimensions that this study addressed, and we explain them as follows:

1. *The technological dimension:* Technology refers to the application of technical processes, methods or knowledge to accomplish a specific task (Merriam-Webster, 2024).

Mahmoud (2019) distinguishes between technical and technology, arguing that technical is the method or means that allows only the transformation of primary resources into a product, while technology represents the sum of scientific and technical knowledge or methodological knowledge of technology.

Hence, technology change can be defined as a change in work methods, means, and equipment in a way that achieves employee satisfaction and achieves the organisation's goals.

2. *The organisational dimension:* It is the change in the organisational structure and includes the change in job design, conditions, occupant standards, performance evaluation criteria and work methods (Yahyawi, 2020).

Change in organisational structure can be defined as the redistribution of tasks, responsibilities and lines of communication as a result of adding, deleting or cancelling one or more administrative units, which contributes to achieving the organisation's goals.

3. *The human dimension:* The human element is considered to be one of the most important factors for the success of the organisation, and OC requires the creation or merging of some jobs, thus changing the type and size of HR and redistributing them.

Change in the human aspect has two shapes or forms (Al-Zebari, 2020), as listed hereunder:

- *Material change:* That is, replacing individuals with others through transfer, promotion, dismissal and retirement or appointing new individuals.
- *Behavioural change:* That is, changing individuals' attitudes and behaviour through seminars and courses.

Human change can be defined as the change resulting from the creation of new jobs or tasks for work or the introduction of new technology into it, and it translates into a change in the attitudes and behaviours of individuals or the individuals themselves.

It is clear from our earlier discussion that change in one of these dimensions necessarily requires – in many

cases – change in the rest of the dimensions by the previous changes, as the organisation expresses an open system in which a change occurs in one of its dimensions that affects the rest of them.

Job satisfaction

Job satisfaction is the general trend formed by compensation, incentives, career progression, and employee work training. Others defined it as the extent to which the employee feels his or her needs are satisfied, represented by the work environment, conditions, and financial compensation, and the extent to which managers understand the employee's desires and needs (Ibrahim, 2022, p. 361).

From a procedural perspective, job satisfaction represents the employee's feelings about wages and salaries, fairness of return, work content and opportunities for advancement and development for the individual in the Yemeni telecom companies.

The importance of job satisfaction

The importance of job satisfaction is growing because it is related to the life cycle of the individual and its impact on both his or her personal and professional life. Job satisfaction is the measure of the effectiveness of the performance of individuals in organisations, as satisfaction is reflected in the self-esteem and psychological aspects of employees (Abu Assaf & Al-Marei, 2019).

Rambabu (2019) argues that managers should pay attention to the level of job satisfaction in their organisations for several reasons. Job satisfaction extends to an employee's overall life, providing a sense of fulfilment. However, dissatisfaction leads to absenteeism, lack of engagement and a higher tendency to quit. Additionally, job satisfaction contributes to better physical and mental health, an essential yet often overlooked aspect.

It is clear from our earlier discussion that the importance of job satisfaction of employees for the role that satisfaction plays in achieving a healthy work environment that reflects positively on all individuals and constitutes an incentive towards providing better performance, which in turn also contributes to increasing the level of satisfaction for the individual and the group because satisfaction and performance depend on each other.

Job satisfaction factors

There are many factors of job satisfaction, as noted by Mohammad (2017, p. 15), including satisfaction with the job in general; satisfaction with wages, bonuses and incentives; satisfaction with growth and career advancement; satisfaction with the physical environment of work; satisfaction with the social aspect of the organisation; satisfaction with the style of supervision and leadership; satisfaction with the work group; and satisfaction with vertical contact and transparency.

Research design

Research approach

This study employed a quantitative research approach using a descriptive-analytical method, widely recognised for its effectiveness in examining administrative, social and humanitarian phenomena. The study is descriptive in its effort to assess the current state of OC and the level of job satisfaction within the Yemeni telecom companies. It is also analytical, aiming to explore the impact of OC on job satisfaction within these companies.

Research method

The researcher relied on the process of collecting data on a questionnaire designed to collect basic data from the research community by referring to relevant scientific theories such as Herzberg's factor theory, justice theory, Porter's motivation theory, and value theory and by taking advantage of previous studies. In addition to evaluating reliability using Cronbach's alpha, the study ensured the validity of the survey tools through expert reviews of the validity of the content and the analysis of confirmatory factors of the validity of the building. To reduce response biases such as social desirability and submission bias, the survey is designed in a clear and neutral format, ensuring anonymity, and includes inversely encrypted elements when necessary. Furthermore, cultural factors were considered by adapting the tool and testing it in advance in the local context to ensure clarity and relevance. These measures enhance the strength of the results of the study and the credibility of the results.

The questionnaire consisted of 37 paragraphs distributed over two axes and three dimensions for each axis. The first axis dealt with three dimensions (change in technology, change in structure and change in HR), from which six paragraphs emerged for each axis (Al-Wahsh, 2018; Farea & Alameri, 2018), and the questionnaire was also judged by several professors with experience and high qualifications in the field of business administration.

The second axis dealt with three dimensions (wages, salary and fairness of return; work content and diversity of tasks; and available development and promotion opportunities) emanating from it, that is, paragraphs 7, 7 and 5, respectively addressed by Al-Absi (2021), Al-Wahsh (2018), and Farea and Alameri (2018) in previous studies.

This is in line with previous studies, taking advantage of the Minnesota satisfaction questionnaire guide (Weiss et al., 1967) and commensurate with the study population.

Research participants

The research sample represents part of the study population, which is chosen in a certain way to represent this population (Al-Ariqi, 2020, p. 114). In this study, a random and non-relative sample was selected from all

administrative levels of each entity. Back to the sample table (Krejcie & Morgan, 1970), the sample size is (354) single. Questionnaires have been distributed, and it's the most appropriate tool for the study, as its vocabularies reflect the questions and hypotheses of the study (89% of them have been collected).

Measuring instruments

The Likert scale was adopted to measure the opinions of the sample members about the paragraphs of the questionnaire, being the most used in measuring tendencies, desires and attitudes (Majarrah, 2024). The seven-point scale was used because the increase in alternatives contributes to increasing stability rates (Al-Eidani, 2022), and the seven-metre Likert is considered a development of the five-point scale and is characterised by the fact that the successive options in it are less distant and more gradual, which allows participants to choose in a way that more accurately expresses their opinions or preferences and enhances the accuracy and reliability of measurement (Joshi et al., 2015).

The scale employed a seven-point continuum ranging from 7 ('strong agreement') to 1 ('strong disagreement'), designed to capture nuanced variations in respondents' attitudes, thereby enhancing measurement precision compared to traditional five-point scales (Vagias, 2006; Joshi et al., 2015).

Statistical analysis

From Table 1, it is clear that there is high stability in all dimensions of the study, where all values of the Cronbach's alpha coefficient were greater than 0.700, and this indicates that the study tool has high stability and internal consistency in its paragraphs and that it is applicable in different periods, which enhances the credibility and reliability of the results provided by the study.

Table 2 shows a strong correlation between the dimensions and the total variable for each (OC and job satisfaction), where all the values of the correlation coefficient were statistically significant, and this confirms the existence of convergence between the dimensions and the total variable, which indicates that they measure what they were developed to measure.

It is clear from Table 3 that the data follow a normal distribution, which enhances the reliability and generalisability of the results. The torsion coefficient values, which are between -2 and 2 , indicate that there is no torsion

TABLE 1: Measuring the stability of the study tool.

Dimensions	Cronbach's alpha	Number of paragraphs
Change in technology	0.890	6
Change in structure	0.928	6
Change in human resources	0.895	6
Wages, salaries and return fairness	0.940	7
Work content and variety of tasks	0.856	7
Available development and upgrade opportunities	0.852	5

in the distribution. In addition, flattening values are between -7 and $+7$, indicating a proportional distribution. This normal distribution confirms that the selected sample is very representative of the population.

Ethical considerations

Approval and ethical clearance were obtained from the Ministry of Communications and Information Technology in the Republic of Yemen (No. 5145/10.10.2023) based on a letter from the Business Administration Center at Sana'a University (No. 593/23.8.2023).

Results

Descriptive statistics

Independent variable organisational change

Table 4 presents the results of the study on the perceived significance of various dimensions of OC. The findings reveal that the 'change in technology' dimension received the highest agreement level among respondents, yielding a notably high mean ($M = 5.270$) with relatively low response variability (standard deviation [SD] = 1.131). This indicates that employees consider technological change to be the most critical aspect of organisational transformation, potentially aligning with innovation-driven organisational strategies.

The 'change in HR' dimension follows, demonstrating a moderately high mean ($M = 4.552$) alongside a noticeable level of dispersion ($SD = 1.346$). This suggests that modifications in HR practices are also regarded as a key component of organisational evolution, although perceptions vary more widely among employees.

TABLE 2: Measuring the validity of the study tool.

Dimensions	Correlation coefficients	Significance levels
Organisational change		
Change in technology	0.864	0.000
Change in structure	0.912	0.000
Change in human resources	0.905	0.000
Job satisfaction		
Wages, salaries and return fairness	0.835	0.000
Work content and variety of tasks	0.844	0.000
Available development and upgrade opportunities	0.915	0.000

TABLE 3: Measurement of normal distribution.

Variables	Convolution values	Flattening values
Organisational change	-0.639	-0.097
Job satisfaction	-0.015	-0.569

TABLE 4: Arithmetic means, standard deviations and relative importance of the independent variable: Organisational change.

Dimensions	Mean	SD	Relative importance (%)
Change in technology	5.270	1.131	75.3
Change in structure	4.401	1.429	62.9
Change in human resources	4.552	1.346	65.0
Organisational change	4.741	1.166	67.7

SD, standard deviation.

Conversely, the 'change in structure' dimension ranks lowest, registering a mean of $M = 4.401$ with the highest variability ($SD = 1.429$), implying that structural adjustments are perceived as less influential or more inconsistently experienced across the organisation. The relatively wider dispersion in structural change responses may reflect differing departmental impacts or varying adaptability to hierarchical modifications.

Overall, the composite score for OC ($M = 4.741$, $SD = 1.166$) suggests that employees generally perceive the extent of transformation as somewhat high. The prominence of technological change in particular resonates with established theoretical frameworks such as the Technology Acceptance Model (TAM), which underscores the role of perceived usefulness and ease of use in technology adoption within organisations.

Dependent variable: Job satisfaction

Table 5 presents the findings on the relative importance of different dimensions of job satisfaction. The results indicate that the 'job content' and 'task variety' dimension received the highest level of agreement among respondents, yielding a notably high mean ($M = 4.968$, $SD = 1.154$). This suggests that employees place significant value on engaging and diverse work responsibilities.

Following this, the 'opportunities for career development and promotion' dimension ranks second, with a mean score of $M = 3.956$, $SD = 1.413$, implying that employees consider career advancement and professional growth as essential components of their job satisfaction.

Conversely, the 'wages, salaries, and fairness of compensation' dimension ranks lowest, recording a mean of $M = 2.642$, $SD = 1.383$. This suggests that employees perceive financial compensation as a less influential factor in their overall job satisfaction compared to job variety and career development opportunities.

Overall, the composite job satisfaction score ($M = 3.855$, $SD = 1.141$) indicates that employees generally perceive their level of job satisfaction as moderate.

Thus, the study successfully assessed both the extent of OC and the level of employee satisfaction within Yemeni telecom companies. The findings reveal that OC in these companies is perceived as 'rather high', whereas job satisfaction remains at a 'moderate' level.

TABLE 5: Arithmetic means, standard deviations and relative importance of the dependent variable: Job satisfaction.

Dimensions	Mean	SD	Relative importance (%)
Wages, salaries and fairness of compensation	2.6416	1.38341	37.7
Job content and task variety	4.9683	1.15396	71.0
Opportunities for career development and promotion	3.9562	1.41259	56.5
Job satisfaction	3.8554	1.14058	55.1

SD, standard deviation.

Main hypothesis testing

The main hypothesis of the test

There is a statistically significant indicator at the significant level ($\alpha \geq 0.05$) for OC in functional management in the telecom companies in Yemen.

Table 6 presents the results of a regression analysis examining the relationship between OC and job satisfaction. The model summary indicates that the model is statistically significant ($p < 0.001$), with an R -squared value of 0.519, suggesting that OC explains a moderate amount of the variance in job satisfaction. The analysis of variance (ANOVA) further confirms the significance of the model, with an F -statistic of 342.901, $p < 0.001$.

The coefficients table reveals that the coefficient for OC is positive and statistically significant ($\beta = 0.721$, $t = 18.394$, $p < 0.001$), implying that higher levels of OC are associated with higher levels of job satisfaction. This finding suggests that employees who experience positive and effective OC tend to report greater satisfaction with their jobs. This study surprisingly found that OC, often perceived as disruptive, is associated with increased job satisfaction. An important implication is that the nature of the change might be positive and effectively implemented, leading employees to feel challenged, engaged and satisfied with their evolving roles within the organisation. Employees who experience positive and effective OC tend to report greater satisfaction with their jobs. This suggests that well-managed change initiatives can be a driver of employee satisfaction.

Thus, the main hypothesis: There is a statistically significant effect at a significant level ($\alpha \leq 0.05$) of the OC on job satisfaction in the Yemeni telecom sector, achieved.

Sub-hypothesis testing

Dependent variable: Job satisfaction

Table 7 shows a correlation coefficient of 0.761 between predicted and actual values of job satisfaction, indicating a strong positive relationship with changes in technology,

TABLE 6: Results of simple linear regression analysis for the main hypothesis.

Dimension	Model summary		ANOVA		Coefficients		
	R	R^2	f	p	B	t	p
Main hypothesis	0.721†	0.519	342.901	< 0.001*	0.705	18.394	< 0.001

ANOVA, analysis of variance.

†, Organisational change.

*, p -value significance in the ANOVA results ($p < 0.001$).

TABLE 7: Results of simple linear regression analysis to test the sub-hypotheses.

Dimensions	Model summary			ANOVA		Coefficients			VIF
	R	R^2	Adj. R^2	f	p	B	t	p	
Change in technology	0.761†	0.578	0.574	142.24	< 0.001*	-0.030	-0.558	0.577	2.157
Change in organisational structure	-	-	-	-	-	0.163	3.501	< 0.001	2.521
Change in human resources	-	-	-	-	-	0.525	10.642	< 0.001	2.497

ANOVA, analysis of variance; VIF, variance inflation factor; Adj., adjusted.

†, Predictor variable: Organisational change.

*, p -value significance in the ANOVA results ($p < 0.001$).

organisational structure and HR. The model explains 57.8% of the variance in job satisfaction ($R^2 = 0.578$), with an adjusted R^2 of 0.574, accounting for model complexity. The F -statistic of 142.24 and p -value less than 0.001 confirm the model's statistical significance, indicating that the independent variables collectively impact job satisfaction.

Regression analysis reveals that changes in technology have a negative and statistically insignificant coefficient ($\beta = -0.030$), suggesting no significant relationship with job satisfaction. Conversely, changes in organisational structure ($\beta = 0.163$, $t = 3.501$, $p < 0.001$) and HR ($\beta = 0.525$, $t = 10.642$, $p < 0.001$) are positively and significantly associated with job satisfaction. However, the absence of variance inflation factor (VIF) values limits the assessment of multicollinearity. Overall, the model indicates that positive changes in organisational structure and HR significantly enhance job satisfaction, while the impact of technological changes remains inconclusive and requires further investigation.

Discussion

Outline of the results

The findings of this study highlight the significant factors influencing job satisfaction, aligning with existing theories and prior research in organisational behaviour and HRM. Specifically, this study demonstrates that OC have a notable impact on job satisfaction within Yemeni telecom companies, thus achieving the main objective of this research.

The main hypothesis is: H – There is a statistically significant effect at a significant level ($\alpha \leq 0.05$) of the OC on job satisfaction in the Yemeni telecom sector, which has been achieved.

The results related to the sub-hypotheses were as follows:

Sub-hypothesis 1: H1 – There is a statistically significant effect at a significant level ($\alpha \leq 0.05$) of the change in technology on job satisfaction in the sector, which is not achieved.

Contrary to expectations, the study found that technological change had no statistically significant effect on job satisfaction. This contradicts previous research suggesting that digital transformation generally improves employee engagement and satisfaction (Tarafdar et al., 2007). However, several factors may explain this result within the Yemeni telecom sector.

One key factor is the economic conditions in Yemen, which may have shaped employees' priorities. In economically

challenging environments, employees often focus more on job security and financial stability rather than workplace innovations. As a result, even well-intended technological advancements may not translate into increased job satisfaction if employees perceive them as secondary to more immediate concerns, such as wage stability and career security. Similar findings have been reported in studies examining job satisfaction in crisis-affected economies (Artz & Kaya, 2014; Gutiérrez Banegas & Olivera Pérez, 2021; Nemteanu et al., 2021). Future research should further explore how macroeconomic conditions influence employee responses to different types of OC.

Firstly, job insecurity associated with automation and digital transformation could contribute to employee scepticism about technological change (Parker et al., 2017). Employees may fear that increased reliance on technology could lead to workforce reductions or role modifications, creating uncertainty rather than satisfaction.

Secondly, insufficient training and lack of digital literacy may prevent employees from effectively utilising new technologies, leading to frustration rather than improved work experiences (Bélanger et al., 2021). Without well-structured training programmes, employees may feel overwhelmed by new technologies, negating their potential benefits.

Thirdly, the economic and political instability in Yemen might shift employee priorities towards job security and financial stability rather than technological advancements. Research indicates that employees in crisis-affected economies tend to prioritise stability over workplace innovation (Artz & Kaya, 2014; Gutiérrez Banegas & Olivera Pérez, 2021; Nemteanu et al., 2021).

This may explain why OC and HR changes had a stronger impact on job satisfaction than technological change.

To explore this phenomenon further, future studies should examine the role of training programmes, employee perceptions of job security and leadership approaches in moderating the relationship between technological change and job satisfaction.

The second sub-hypothesis: H2 – There is a statistically significant effect at a significant level ($\alpha \leq 0.05$) of the change in the OC in job satisfaction in the sector, achieved.

This finding is consistent with previous studies by Herzberg et al. (1959) and Hackman and Oldham (1976) that emphasise the importance of organisational factors in shaping job satisfaction. For example, Herzberg's Personnel Theory emphasises the role of organisational policies and management (such as changes in structure and HR practices) as key drivers of job satisfaction. Similarly, the Job Characteristics Model developed by Hackman and Oldham highlights the importance of organisational structure and HR practices in enhancing job

satisfaction through rich job roles and supportive work environments.

These studies suggest that when employees see changes in structure as beneficial, they are more likely to feel valued and satisfied with their jobs.

The third sub-hypothesis: H3 – There is a statistically significant effect at a significant level ($\alpha \leq 0.05$) of the change in HR in job satisfaction in the sector, achieved.

This finding constitutes the strongest positive correlation between changes in HR and job satisfaction and is consistent with studies by Tzafirir et al. (2004) and Delaney and Huselid (1996) which emphasise the critical role of HR practices in employee satisfaction. Effective HR practices, such as comprehensive training, fair compensation and employee recognition, are central to enhancing job satisfaction. These practices do not meet basic needs not only for employees but also promote a sense of belonging and motivation, thus enhancing job satisfaction.

These findings are consistent with many theoretical frameworks in organisational behaviour. Herzberg's dual-factor framework distinguishes between motivational elements (e.g. recognition, growth opportunities) that enhance job satisfaction and hygiene factors (e.g. policies, supervision) whose absence triggers dissatisfaction. The significant positive impact of changes in organisational structure and HR practices supports Herzberg's idea that factors related to organisational policies and management practices are crucial for job satisfaction. Additionally, Hackman and Oldham's Job Characteristics Model suggests that job satisfaction is influenced by job design and organisational practices. The strong association between HR practices and job satisfaction supports this model, emphasising the role of job enrichment and supportive HR practices in enhancing employee satisfaction. Furthermore, Social Exchange Theory, which underlines the importance of reciprocal relationships between employers and employees, is also supported by the findings. Positive changes in organisational structure and HR practices can be seen as investments in employees, which are reciprocated with higher job satisfaction and loyalty.

Practical implications

The study's findings have practical implications for organisations aiming to improve job satisfaction. Prioritising positive changes in organisational structure and HR practices can significantly enhance employee satisfaction. Organisations should consider implementing clear and fair hierarchical structures, along with robust HR practices that support employee development, recognition and well-being. The insignificant relationship between technological changes and job satisfaction suggests that organisations need to manage technological transitions carefully. Providing adequate training, support and communication can help mitigate the potential negative impacts of

technological changes on job satisfaction. Additionally, in economies facing financial uncertainty, employees may prioritise job stability over technological advancements. Organisations should adopt a balanced approach that integrates job security measures, transparent compensation policies and structured technological adaptation strategies to enhance job satisfaction in such contexts.

The results of this study can be seen as generalisable about the impact of OC on job satisfaction in general, and this applies to the impact of change in both organisational structure and HR in business organisations on job satisfaction and the lack of impact of change in technology on job satisfaction. The reason may be because of the specificity of the economic situation and the blockade that Yemen has been experiencing for years and its repercussions on telecommunication companies in general and on the feeling of employees towards technological change. Their priority is the same level of change in HR and change in structure, and this may apply to all countries experiencing similar economic challenges.

In another context, the results of this study can contribute to enhancing public understanding of the effects of OC in turbulent environments, which calls for the need to take these factors into account when implementing OC in different sectors.

Limitations and recommendations

This study has several limitations as listed hereunder that should be considered when interpreting the results:

- **Geographical scope:** The study focuses exclusively on Yemeni telecom companies, which may limit the generalisability of findings to other industries or countries with different economic and political conditions. Future studies should consider cross-country comparisons to validate these findings.
- **Data collection constraints:** The study relied on self-reported survey data, which may introduce response biases such as social desirability bias and common method bias. Future research could incorporate qualitative methods (e.g. interviews or focus groups) to gain deeper insights into employee perceptions.
- **Temporal limitation:** The data collection period coincided with ongoing OC in Yemeni telecom companies. This means that long-term effects of change may not have been fully captured. A longitudinal study could provide a more comprehensive understanding of the evolving relationship between OC and job satisfaction.
- **Limited consideration of moderating variables:** While this study explored direct relationships, it did not account for potential moderating factors such as leadership style, employee adaptability and organisational culture, which may influence the impact of OC on job satisfaction. Future research should integrate these variables for a more nuanced analysis.

Based on the study's findings, the following recommendations are proposed to enhance job satisfaction during OC in Yemeni telecom companies:

- **Develop a balanced change strategy:** OC should be holistically planned, ensuring that technological, structural and HR changes complement each other. This will minimise resistance and improve employee engagement.
- **Improve training and digital adaptation:** Given the insignificant impact of technological change on job satisfaction, it is essential to provide comprehensive training programmes to help employees adapt to new technologies and reduce change-related stress.
- **Enhance employee participation in change processes:** Employees should be actively involved in decision-making regarding OC. Participatory change management can enhance their sense of control, reducing resistance and increasing acceptance.
- **Address job security concerns:** The study suggests that employees may fear job instability because of OC and technological change. Implementing clear job security policies and career development pathways can help mitigate these concerns.
- **Monitor the long-term effects of change:** Organisations should conduct periodic employee satisfaction assessments post-change implementation to track progress and make necessary adjustments.
- **Consider organisational culture and leadership as key enablers:** Future OC should consider the role of leadership and corporate culture in shaping employee responses. Leaders should foster a transparent communication culture, ensuring employees understand the rationale and benefits of changes.

Conclusions

This study provides empirical evidence on the impact of OC on job satisfaction within the Yemeni telecom sector. The findings indicate that organisational and HR changes have a significant positive effect on job satisfaction, while technological changes do not show a statistically significant impact. These results suggest that employee satisfaction is more closely linked to structural and HR-related factors than to digital transformations alone.

Practical implications

Given these findings, telecommunications companies should prioritise organisational and HR strategies when implementing change. Ensuring fair career progression, clear performance evaluation systems and participatory decision-making can significantly enhance job satisfaction. Additionally, addressing job security concerns and providing robust training programmes can help employees adapt to technological advancements, potentially altering their perceptions of technological change over time.

Future research directions

While this study contributes to the understanding of OC and job satisfaction, several research gaps remain. Future studies should:

- Investigate long-term effects of technological change on employee satisfaction through longitudinal research methodologies.
- Examine the role of leadership styles in moderating the relationship between OC and employee attitudes.
- Assess cross-sector comparisons to determine whether similar patterns exist in other industries beyond telecommunications.
- Analyse mediating factors such as organisational culture, employee adaptability and digital literacy, which may influence how employees respond to change.

By addressing these areas, future research can provide a more holistic understanding of the interplay between organisational transformations and workforce satisfaction, ultimately guiding policymakers and business leaders towards more effective change management practices.

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Authors' contributions

M.A.A. identified the idea of the research, formulated it, prepared the questionnaire, collected and analysed data, as well as developed conclusions and recommendations. A.M.A.-M. supervised, directed, and reviewed the components of the research and its dimensions and put forward the relevant scientific and literary observations.

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Data availability

The data and materials supporting the findings of this study are available from the corresponding author, M.A.A., upon reasonable request.

Disclaimer

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