

THE IMPACT OF STRATEGIC INTELLIGENCE ON CHANGE MANAGEMENT: APPLIED TO TELECOMMUNICATIONS COMPANIES OPERATING IN THE REPUBLIC OF YEMEN

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Abstract:

This research aims to investigate the impact of strategic intelligence on change management, applied to telecommunications companies operating in the Republic of Yemen. The descriptive-analytical approach was used, and a questionnaire served as the data collection tool from a study sample of (316) individuals representing top and middle management in Yemeni telecommunications companies (Sabafon, Yemen Mobile, and the Yemen Oman United Telecommunication Company (YOU)). The study reached several findings, notably that the level of strategic intelligence practice and change management was relatively high. Additionally, there was a statistically significant impact of strategic intelligence as a whole on change management. The results revealed a statistically significant impact of the dimensions of future vision and drive on change management. In contrast, the results showed no statistically significant impact for the remaining dimensions of strategic intelligence (foresight, systems thinking, and partnership) on change management. The study recommended working to enhance and sustain the practice of strategic intelligence and change management in all their dimensions to improve organizational performance in the telecommunications sector.

Keywords: Strategic Intelligence, Change Management.

1. Introduction:

Economic and service organizations, both public and private, worldwide live in a volatile, rapidly changing and continuously evolving environment characterized by complexity and ambiguity. This is due to the influences of globalization, the global business system, technological inventions and developments, and the information and communication technology revolution, which are constantly renewing. The continuous change in customer needs and demands, along with market changes and fluctuations, have compelled these organizations to either face this wave of changes with stagnation and inaction, thus condemning themselves to exit the market, or to live in a state of constant, diligent readiness and vigilance to achieve their strategic goals by keeping pace with these changes or preparing to adapt to them. Today, organizations are increasingly concerned with change management to confront internal and external influences, aiming to bring about change through which they can face difficulties and adapt to these influences in a scientific, organized administrative manner. This approach relies on diagnosing and studying the problem, then developing appropriate planning, organizing, directing, monitoring, and controlling, far removed from randomness and improvisation (Balout, 2005, p. 42) [5]. Leaders of organizations and management scholars have sought to investigate and develop modern approaches, methods, and tools suited to the dynamics of the era. Such instruments enable organizations to sustain continuity, ensure survival, and manage change effectively. Strategic intelligence has been one of the most important of these tools. Strategic intelligence plays a prominent role in providing mechanisms to confront various competitive challenges and manage the risks facing the organization, making it capable of predicting different changes in the business environment and identifying the requirements for responding to them. It also works to investigate competitors' future goals and understand their current capabilities and strategies, provides the ability to anticipate and respond to market trends, which enhances the organization's strategic position, and consolidates a culture of

teamwork and involving employees and their perceptions of the future in the decision-making process, which in turn contributes to effectively implementing approved strategies (Kannoush, 2017, p. 12) [26]. Given that the telecommunications and information technology sector is considered a fundamental economic component of national infrastructure for countries, and due to its significant role in Yemen's economic growth, as it is one of the most important revenue sources after the oil sector, not to mention its contribution to providing direct and indirect job opportunities linked to other sectors in the economy, this study came within the field of the impact of strategic intelligence on change management, applied to Yemeni telecommunications companies, as an important and vital part of this sector.

2. Study Problem:

Yemeni organizations face continuous changes and new challenges, as well as rapid developments in their environment, whether economic, technological, political, legal, and social, and special circumstances of division due to the war and imposed blockade. The telecommunications sector has not been immune to these challenges and changes, which have affected its ability to effectively and efficiently achieve its strategic goals, threatening its survival, continuity, and growth. Hence, change and development have become among the most important issues of the era in the modern business environment, and in light of globalization and the rapid and successive developments in information and communication technology, and in the context of the knowledge economy and digital economy. Since organizations are open systems that interact with their surrounding environment to survive, continue, and grow, their managers must adapt and adjust to these constantly changing environmental factors, and the necessity of continuously adopting a change and development management approach, for the purpose of seizing opportunities in the external environment and adapting to threats and risks that stand in the way of change and development and seizing such opportunities, as well as for the purpose of studying the strengths and weaknesses in the internal environment of these organizations to maximize their strengths and continuously address their weaknesses (Doudeen, 2020, p.17) [14].

Due to the shortcomings and problems faced by Yemeni telecommunications companies, as indicated by reports from the National Information Center, there are deficiencies in dealing with surrounding environmental changes and an urgent need to develop appropriate plans and strategies for change, put in place solutions for future problems, and proactive plans to avoid risks and threats before they occur, as well as weakness in their competitive capabilities in the local and consequently external telecommunications market (The National Information Center, 2018) [30].

Based on the foregoing, and to address the challenges and problems facing change management in telecommunications companies operating in the Republic of Yemen, the problem crystallized for the two researchers in conducting a study to answer the following main question: What is the impact of strategic intelligence on change management, applied to telecommunications companies operating in the Republic of Yemen, from the perspective of their leaders? Consequently, the following sub-questions must be answered:

1. What is the level of strategic intelligence achievement in telecommunications companies operating in the Republic of Yemen?
2. What is the level of change management achievement in telecommunications companies operating in the Republic of Yemen?
3. What is the impact of strategic intelligence on change management in Yemeni telecommunications companies from the perspective of the leaders of telecommunications companies operating in the Republic of Yemen?

3. Study Significance:

The significance of the study lies in the modern trends of both strategic intelligence and change management, considering them among the most important tools that support modern management and their role in solving problems, improving performance, and sustaining competitive advantage. It also aims to draw the attention of employees in the telecommunications sector and other sectors to the role of strategic intelligence as a supportive tool for the change management process and confronting environmental challenges in order to adapt to or anticipate upcoming changes in the continuously changing environment. In addition, the importance of the sector in which the study will be applied is highlighted, as the telecommunications and information technology sector is considered one of the most important economic sectors that affects all aspects of our lives (political, economic, social, and legal) as individuals and organizations.

4. Study Limitations:

Subjective Limitations: The impact of strategic intelligence with its dimensions (foresight, future vision, systems thinking, drive, and partnership) on change management with its dimensions (change in culture, change in organizational structure, change in technology, and change in human resources), applied to Yemeni telecommunications companies from the perspective of the leaders of telecommunications companies operating in the Republic of Yemen, according to their responses to the prepared tool.

Human Limitations: All managers in top and middle management.

Geographical Limitations: Telecommunications companies operating in Yemen, namely Sabafon, Yemen Mobile, and the Yemen Oman United Telecommunication Company (YOU) – Headquarters, Sana'a, Republic of Yemen.

Temporal Limitations: Academic year 2024.

5. Study Terminology:

- **Strategic Intelligence:** It is the foundation of good strategic thinking, providing management with the necessary information to monitor the surrounding environmental changes of the organization. Through this, management can define and implement its strategies to confront environmental changes, make strategic decisions, exploit opportunities to enhance its value and position, and avoid threats or adapt to them

(Al-Momeni and Al-Momeni, 2023) [32].

Operational Definition of Strategic Intelligence: It is a set of tools that provide the organization with information for early detection of opportunities and threats, reducing uncertainty and clarifying future directions, to support the preparation of future strategies and the taking of proactive decisions for change management, and to achieve a competitive advantage that aligns with the changes surrounding the organization as well as its internal resources.

- **Change Management:** It is "a structured approach aimed at making significant or partial modifications to issues, processes, and organizational culture to align with the demands of the external and future environment." (Al-Salemi, 2019, p. 53) [42].

Operational Definition of Change Management: It is a scientifically planned and deliberate process undertaken by the organization in response to its surrounding changes (internal and external), based on the intelligent information it possesses, its foresight into the future, and the creative thinking of its employees, in order to prepare itself by making proactive changes to confront rapid events and upcoming challenges or adapt to them, and to maintain its competitive advantage.

6. Theoretical Framework:

First Axis: Strategic Intelligence:

Strategic intelligence is considered one of the modern tools (methods) for dealing with rapid and continuous changes in the surrounding environment that affect the work of organizations. This is achieved by providing and analyzing data and building an information system to predict changes, extrapolate future trends, and use them to monitor and identify opportunities and strive to seize them, as well as to monitor and identify threats and strive to avoid them or minimize their effects. This helps organizational leaders in formulating strategic plans and making proactive decisions to maintain organizations' standing and update and sustain their competitive advantage. The main objective of strategic intelligence is to develop a set of tools that help organizations reduce uncertainty, provide early warnings and future trends, assist the company in detecting opportunities and threats, and prepare different scenarios to support proactive decision-making and prepare for the future or adapt to its changes by providing timely information about both internal and external environments to achieve a competitive advantage that is compatible with the changes surrounding the organization on one hand and with the organization's capabilities and resources on the other.

Yousuf (2021, p. 656) [35] defines it as a set of processes undertaken by organizations to search for, collect, analyze, and process information from the surrounding environment, with the aim of predicting and foreseeing the future according to systematic and organized thinking, thereby increasing the ability of those organizations to compete. While Al-Abidi & Al-Moussawi(2014, p. 150) [19] define it as "intelligence which is based on extrapolating the future through strategic analysis of internal and external environmental factors to help the organization in strategic decision-making and formulating long-term strategies, thereby ensuring the strategic sovereignty of the organization."

• Objectives of Strategic Intelligence:

Strategic intelligence works to achieve a set of objectives, the most important of which, according to Atta (2015, p. 143) [23] and Al-Azzawi (2016, p. 312) [22], are the following:

- Maintaining the quality of services and operations in organizations by enabling them to be open to modern technological changes.
- Granting leaders a unique process, meaning it helps them think of something others do not think of, grants them the ability to invent, imagine, program, and design, and helps them form a link between the past, present, and future.
- Anticipating the strategies of competing organizations by establishing alliances in many areas, most importantly the field of research and development.

Nikolic, et al., (2017, p. 39) [47] and Mohammed (2019, p. 131) [27] believe that strategic intelligence aims to:

- Achieve sustainability for the organization through the organization's ability to predict the future and its ability to form successful proactive crisis management.
- Provide early forecasts and warnings of threats surrounding the organization and take preventive measures. And enable organizations to respond to current and future environmental changes by planning and predicting results in a way that positively reflects on their reputation and position.
- Provide strategic information that enables the organization to understand threats surrounding it currently and in the future, develop predictive opinions regarding future events, and adopt these events as a basis for solving problems.

• **Importance of Strategic Intelligence:**

Strategic intelligence is of great importance in all areas of management through the following:

- Analyzing competitors' future goals and understanding their current and future strategies, and achieving a superior competitive position (Babakr and Al-Taj, 2017, p. 284) [3].
- It is considered a tool for reaching advanced positions locally and globally, being a highly important tool in the hands of leaders for taking a set of proactive steps to reach advanced competitive positions in the local and global environment (Al-Qarni, 2019, p. 2) [25].
- It also plays a role in the successful formulation of innovation policies and the creation of innovative methodologies to confront the problems it faces (Jathir et al., 2013, p. 373) [8].
- Its importance appears in qualifying organizations to be able to manage innovation and formulate innovative change strategy, make decisions effectively, and achieve competitive superiority compared to other organizations (Abuzaid, 2017, p. 885) [36].
- It also works to enhance interaction and cooperation processes among employees within the organization or with other organizations with which it has partnership relations, and this will reflect on creating a work environment that promotes the cohesion of the work group in the organization, which can be invested in achieving the organization's goals (Esmaeili, 2014, p. 1047) [41].
- Understanding the changes that may occur in the market and new technology (hardware, software, and techniques) helps in shaping strategic options, formulating plans and policies, and guide change and development processes to raise performance levels and face future challenges (Atta, 2015, p. 143) [23].

• **Dimensions of Strategic Intelligence:**

Strategic intelligence is considered a smart management system composed of a set of dimensions or elements that help in forming strategic information based on experience, research, environmental scanning, and understanding and analyzing the present and future to use it in perceiving events before they occur, responding quickly to changes, and gaining a competitive advantage. Through these dimensions, this study adopted the dimensions proposed by Maccoby (2015, p. 20) [45], namely (foresight, future vision, systems thinking, drive, and partnership), which are as follows:

1. Foresight:

"The art and science of shaping the future, it is a scientific skill that involves drawing a proactive approach and adopting scenarios that can be transformed into a tangible reality that elevates organizational work based on innovative foundations and standards," and setting medium- and long-term visions aimed at making implementable decisions in the present (Al-Hindawiet al., 2017, p. 23) [34]. It is "an organized process that seeks to identify events expected to occur in the future through the present, shaping and influencing the future, and making appropriate decisions concerning it" (Al-Dhubaibi, 2022, p. 55) [18].

The two researchers defined it, in line with the variables of this study, as the process of sensing future trends and detecting opportunities and threats by studying the past, understanding the present, and exploring and preparing for the future.

2. Future Vision:

The leadership's conception for the organization of what it will be in the future, considering available capabilities or those it seeks to achieve. Any organization has a conception, vision, and mission it strives to achieve, and it has a set of current and expected future capabilities through which it works to reach what it desires (Al-Hashimi., 2021, p. 50) [33]. The researchers defined vision as a future conception of what the organization will be, defining and unifying the efforts, goals, and directions of its members.

3. Systems Thinking:

"Systems thinking is the ability to synthesize, to integrate different elements in order to analyze them and to understand how they interact to create a whole that serves the purpose of the system." (Maccoby, M. 2015) [38]. The researchers defined it as a comprehensive understanding of the interconnected and integrated operations of all parts of the organization, used to develop and solve problems by considering their impact on the organization as a whole.

4. Drive (Encouragement):

It is the process of influencing behavior in terms of directing, sustaining, and intensifying the pursuit of a goal. It is a need or desire that acts to stimulate behavior and direct it towards achieving a specific goal. Motivation represents an effective tool in enhancing the strategic goals of the organization (Hamed, 2020, P. 51) [5]. The ability of leaders possessing strategic intelligence to encourage and motivate employees, urging them to work and elevate their enthusiasm, enables the organization to achieve a competitive advantage (Abu Asba, 2019, p. 135) [1]. The researchers defined it as creating motivation among employees in the organization to work efficiently and effectively through providing material and moral incentives such as training, promotion, and encouragement of innovation and creativity.

5. Partnership:

"Partnering is the ability to develop and sustain long-term relationships. It reflects the qualities leaders use in building effective teams and in creating alliances with other organizations in the same industry to share resources and to develop joint strategies." (Maccoby, 2015, p. 77) [45]. The researchers defined it as cooperation or alliance with internal and external stakeholders in certain aspects and resources to confront threats and achieve common goals and interests.

Second Axis: Change Management:

Change is a universal constant that has existed with humans, has remained, and will remain inseparable from them, and is a reason for the continuity of life and human growth. It is a phenomenon connected to various aspects of life: social, cultural, economic, and technological. The concept of change has become what distinguishes contemporary civilization and is one of its characteristics; it is rapid, wide-ranging, and far-reaching, leaving its mark on all areas of our lives, whether in health, education, transportation, communication, human rights, and even in the culture of peoples and their international relations (Alyan, 2015, p. 25) [24].

Robbins, a professor of management, believes that change management has become one of the most important tasks that modern organizations focus on. The majority of organizations have realized that preparation and planning are far better than randomness, guesswork, and lack of planning based on the assumption that business development occurs through gradual growth. For the change process to be effective, it must rely from its inception on a precise action plan that focuses on the organization's current situation and how to transition from it to a better situation in the future. This requires organizations to step outside the familiar framework of work and thinking and analyze all elements that create the desired change (Alyan, 2015, p. 35) [24].

Change management is considered "a planned approach aimed at improving and developing work in the organization and moving it from an undesirable current state to a desired future state, through making radical changes in all functional, human, structural, and technological aspects for the purpose of achieving continuous harmony with the internal and external environmental elements of the organization" (Saad, 2021, p. 669) [16].

To achieve its goals, change management must be characterized by several features, the most important of which, according to (Arafa, 2012, p. 21-22) [21], are: target-orientation, realism and compatibility, effectiveness, as well as participation, and the ability to develop, innovate, and adapt quickly to events.

• **Objectives of Change Management:** Arafa (2012, p. 23-24) [21] believes that the most important objectives of change management are to:

- Increase the organization's ability to deal and adapt to its surrounding environment, and increasing its ability to survive and grow.
- Increase the organization's ability to cooperate among specialized groups.
- Encouraging individual employees to achieve organizational goals and achieve job satisfaction for them.
- Help the organization solve the problems it faces by providing it with various information.
- Eliminate bureaucracy and administrative corruption, and reducing costs through efficiency and effectiveness of performance and good use of available organizational resources (Khairi, 2014, p. 120) [13].

• **Change Strategies:** Change strategies can be classified into three main strategies focusing on the area in which the change will occur (Al-Murhadi, 2021, p.146-150) [31]:

– **Organizational Structure Strategy:** This strategy focuses on changes in the organizational structure, which forms a framework showing sections, administrative divisions, levels, coordination mechanisms, and lines of authority and span of control.

– **Technological Strategy:** This strategy focuses on new developments in technological innovation and new technologies introduced by the organization, such as hardware, machines, applications, and software it uses.

– **Behavioral Strategy:** This strategy focuses on everything related to the behavior of human resources in the organization (individuals or groups) in terms of decision-making and participation in its creation, empowerment, motivation, promotion, and raising morale to achieve organizational goals, employment, and termination.

• **Dimensions of Change Management:** The dimensions relied upon in this study are the most discussed dimensions in previous studies, including the studies of Hamdan (2018) and Al-Ahmar (2015) [2], which are as follows:

1. **Change in Culture:**

Defined as "a system of shared values and behavioral patterns through which the behaviors of organization members related to their dealings with their subordinates, superiors, or each other and with external parties, and their use of resources are guided" (Al-Murhadi, 2021, p. 196) [31]. The researchers defined it as a change in the attitudes, values, beliefs, and behaviors of employees based on internal and external changes, and in line with the organization's goals and consistent with the community's culture.

2. **Change in Technology:**

Defined as "any change that occurs in the type of technology used in the organization to another more advanced technology, whether related to machines, work methods, raw materials, or even methods of distributing goods and services" (Bomenqar and Sharqi, 2015, p. 572) [7]. The researchers defined it as a change in work methods and approaches to become faster, better, and with high quality through updating devices, technologies, information systems, programs, or materials to keep pace with internal and external changes.

3. **Change in Organizational Structure:**

Al-Hajji defined it as the general framework of the organization that clarifies the administrative divisions of authority levels in the organization and grants powers, and it is a method of formal communication between individuals in the organization to achieve the organization's goals and activities (Al-Hajji, 2017, p. 72) [10]. The researchers defined it as a change in the internal structure of the organization by

changing authority directions, responsibilities, work divisions, and communications to align with internal and external changes.

4. **Change in Human Resources:**

Humans or individuals are considered the vital and important element in any organization because they represent the dynamic element within it. Therefore, change must focus on them by understanding and comprehending their behaviors and personalities, meeting their needs, and then working to develop and change them in a way that suits the organization's needs and roles. They also represent the primary source of renewal in the organization, due to the mental capabilities, skills, and experiences that individuals possess to find appropriate practical solutions to the requirements and desires of customers, and enable their organizations to survive and compete (Al-Shammari, 2018, p. 42) [17]. Al-Ameri and his colleagues considered the human element as one of the most important resources in the organization, especially the qualified and trained element capable of advancing the organization and contributing to its success. The change in this resource aims to improve the quality of the workforce within the organization and develop their capabilities (Zawaedih, 2018, 35) [15]. The researchers defined change in human resources as a process of changing employees either by termination, replacement, or by developing their capabilities, skills, knowledge, and work methods, or changing their behaviors and ways of thinking to raise their performance efficiency and effectiveness or to prepare them to face internal and external environmental changes.

Third Axis: The Relationship between Strategic Intelligence and Change Management:

Maccoby believes that there is no standard path or formula for change, but strategic intelligence equips organizations to follow a path for effective change. In general, the causes of change are related to adapting to threats or exploiting opportunities and innovations. The work team needs to develop a vision and encourage the organization, but there is no single best way to do so. It may combine top-down and bottom-up initiatives, along with interaction, as it is a system that combines the qualities of mind and heart, providing the organization and its leaders with the essential conceptual roles for creating a better future for the organization (Maccoby, 2016, p. 18)[44].

Tham & Kim also emphasize that strategic intelligence can be defined as what a company needs to know about its business environment in order to understand its present operations, predict and manage change in the future, formulate appropriate strategies that will contribute to creating business value for customers, and improve profitability in existing and new markets. (Baei, et al, 2017, p. 245) [41].

The researchers concluded through previous studies and existing literature in this field the possibility of conceptualizing strategic intelligence with its various dimensions (foresight, future vision, systems thinking, drive, and partnership) as one of the most important inputs of change management through the information it provides, exploring the future, anticipating visible and invisible environmental changes, and preparing strategic plans for change. Strategic intelligence can represent one of the most important tools of change management that provides it, through the foresight dimension, with the results of analyzing both internal and external environments, the most important future trends, detecting available opportunities and risks that can pose a threat to the organization's existence and survival, preparing different scenarios to confront them as threats or to seize them as opportunities, and developing proactive strategies and supporting the formation of the organization's future vision.

7. Previous Studies:

The researchers reviewed a number of previous studies related to the current study, and among the most important of these studies (14) studies, which are reviewed here in chronological order from the most recent to the oldest as follows:

- **Al-Badani's study (2024)**[4] aimed to identify the extent of change management practice among academic and administrative leaders at Ibb University. The researcher adopted the descriptive survey method. The sample consisted of (96) individuals selected by stratified random sampling, and a questionnaire was used as a tool to collect their responses. The results indicated that the study sample practiced change management at a moderate level, which is insufficient to bring about the desired change in (future vision, preparing the work environment, consolidating organizational culture, motivation, and effective communication). The most important findings included the absence of statistically significant differences in employees' perceptions regarding the extent of change management practice by academic and administrative leaders attributable to gender and academic degree variables.
- **Al-Sharjabi et al. study (2023)** [39] aimed to reveal the impact of strategic intelligence on knowledge management governance. The researchers used the descriptive-analytical method through two questionnaires distributed to a study sample of (36) individuals from academic and administrative leaders at the University of Science and Technology. Among its most important results were that the level of strategic intelligence practice and knowledge governance was high, as well as the existence of a statistically significant impact of strategic intelligence on knowledge management governance, and the absence of statistically significant differences between the opinions of the study sample attributable to the study variables.
- **Al-Momeni and Al-Momeni's study (2023)** [32] aimed to identify the impact of strategic intelligence on employee performance in telecommunications companies, through the dimensions of strategic intelligence (foresight, systems thinking, partnership). It used the descriptive-analytical method, and the questionnaire was the tool used to collect data, with a sample consisting of (75) individuals. The most important results were that the application level of strategic intelligence dimensions in telecommunications companies was high, with the foresight dimension ranking first, the partnership dimension second, and the systems thinking dimension third. The level of employee performance in Jordanian telecommunications companies was moderate, and there was a statistically significant impact of strategic intelligence dimensions on employee performance in Jordanian telecommunications companies.
- **Muhaysen et al. study (2022)** [29] aimed to identify the impact of strategic intelligence on enhancing organizational culture among employees in the Electricity Distribution Company in Gaza Governorates. It used the descriptive-analytical method, and the questionnaire as a data collection tool from the sample individuals. The study sample consisted of employees of the Electricity Distribution Company in supervisory positions, and a comprehensive enumeration method was used for all employees, numbering (192) individuals. The most important results reached by the study were that the level of strategic intelligence and organizational culture was high, and there was a positive significant correlation between strategic intelligence and organizational culture in both the total degree and each of their dimensions, and a statistically significant impact of strategic intelligence on organizational culture, with an effect size of (34.2%).
- **Bin Amara and Almawi's study (2022)** [6] aimed to identify the nature of the impact of foresight as one of the dimensions of strategic intelligence on the application of total quality management in Algérie Télécom, Ouargla Unit. It used the descriptive-analytical method, and the questionnaire as a data collection tool from the sample individuals. The study population was a group of managers, department heads, and others, and a purposive sample of (80) individuals were selected. The most important results

of the study were the existence of an impact of foresight on the continuous improvement of the organization.

- **Ayedh and Al-Awdi's study (2020)**[20] aimed to measure the impact of knowledge management on organizational development in Yemeni banks from the employees' perspective. It used the descriptive-analytical method, and the questionnaire as a data collection tool from the sample individuals, where the study population numbered (1912) employees, and the study sample consisted of a proportional stratified random sample of (314) employees. Among its most important results was that Yemeni banks pay great attention to organizational development in all its dimensions, and to the practice of knowledge management in all its dimensions, and that the most achieved dimension of organizational development was the technological dimension, and the least was the human resources dimension.
- **Al-Harirat's study (2020)** [11] aimed to identify the impact of strategic intelligence through its dimensions (foresight, drive, future vision, systems thinking) on organizational development in the Arab Potash Company. It used the descriptive-analytical method, and the questionnaire as a data collection tool from the sample individuals, which numbered (128) individuals. Its most important results were the existence of a statistically significant impact of strategic intelligence in its dimensions on organizational development in the Arab Potash Company.
- **Hussein's study (2019)** [12] aimed to identify the role of strategic intelligence in problem-solving through the dimensions of strategic intelligence (foresight, systems thinking, future vision, ability to motivate, partnership), applied to the banking sector operating in the Arab Republic of Egypt. The study used the descriptive method and the questionnaire as a data collection tool from a sample of (250) individuals. The most important results were the existence of a strong relationship between strategic intelligence and achieving strategic success.
- **Mahmoud's study (2019)** [28] aimed to identify the impact of strategic intelligence on the decision-making process at Tihama Company. It used the descriptive-analytical method, and the questionnaire as a data collection tool from the sample individuals. The research population consisted of Tihama Company employees at all different administrative levels (top, middle, and direct) in the Capital Secretariat (Sana'a), Yemen, numbering (122) employees, and the research sample consisted of (98) employees. The most important results were the high availability of strategic intelligence in Tihama Company at a rate of (80.11%). The level of availability of strategic intelligence elements varied, with foresight ranking first, followed by systems thinking, partnership in third place, future vision in fourth place, and drive as the last element. The level of the decision-making process in Tihama Company in the Capital Secretariat (Sana'a) was (82.78%).
- **Niavand & Rashid study (2019)** [46] aimed to determine the impact of organizational change on competitive advantage and to determine whether business size mitigates the relationship between organizational change and competitive advantage. It used the descriptive-analytical method, and the questionnaire as a data collection tool from the study sample consisting of (233) individuals from employees in companies in Chabahar industrial Zone in Iran. The most important results were that organizational change has a positive impact on competitive advantage, and business size plays a moderate role in the relationships between organizational change and competitive advantage.
- **Baei et al. study (2017)** [40] aimed to investigate the relationship between managers' strategic intelligence and organizational development in government agencies in Iran. It used the descriptive-analytical method, and the questionnaire as a data collection tool from the sample individuals. A random sample of (493) individuals was taken from a study population of (920) individuals. The most important results were a significant positive relationship between the dimensions of managers' strategic intelligence and organizational development. The most influential dimensions of strategic intelligence on

organizational development were knowledge and wisdom, and there was no significant relationship between the dimensions of managers' strategic intelligence represented by emotional intelligence, as well as creativity and innovation in organizational development.

- **Keikha, et. al study (2016)**[43] aimed to determine the impact of executive managers' strategic intelligence on employee performance in private banks in Zahedan City, Iran. The descriptive-analytical method was followed, and the questionnaire was used as a data collection tool from the study sample which consisted of (500) individuals from private banks operating in Zahedan City. The most important results of the study were that strategic intelligence in all its dimensions (competitive intelligence, business intelligence, knowledge management) has a significant impact on employees' organizational performance. Stepwise regression analysis also showed that all three aspects of strategic intelligence have the ability to predict employee performance. Structural equation modeling also showed that the causal impact of strategic intelligence on employee performance has a satisfactory level of fit.
- **Al-Ahmar's study (2015)** [2] aimed to clarify the role of change management in its fields (change management in organizational structure, change management in strategy, change management in organization's culture, change management in leadership style, and change management in technology) in achieving competitive advantage in its dimensions (cost, quality, differentiation, and innovation) in telecommunications companies in the State of Libya. It used the descriptive-analytical method, and the questionnaire as a data collection tool from the sample individuals. The study population included (625) employees at different levels, and the sample size was (270) employees. The most important results were a high approval rate for achieving change management and a moderate approval rate for competitive advantage for telecommunications companies in Libya, and the existence of an impact of change management in its fields (change management in strategy, change management in organization's culture, change management in leadership style, and change management in technology) on achieving competitive advantage, while there was no impact of change management in organizational structure on achieving competitive advantage in those companies.
- **Agha, et al, study (2014)**[37] aimed to identify the impact of strategic intelligence dimensions (insight, vision, motivation) on company performance, and to study the mediating role of strategic flexibility and its dimensions (production flexibility, marketing flexibility, and competitive flexibility) in biotechnology manufacturing companies in Jordan. It used the descriptive-analytical method, and the questionnaire as a data collection tool from the sample individuals, which consisted of (95) managers. The most important results were significant positive impacts of strategic intelligence on company performance, and positive impacts of strategic flexibility on company performance, as well as positive impacts of strategic intelligence on company performance in the presence of strategic flexibility as a mediating variable.

What Distinguishes the Current Study?

This study agreed with previous studies on the importance and novelty of strategic intelligence and change management. It distinguished itself from other studies in several aspects, including examining the impact of strategic intelligence on change management, in addition to the difference in the study's application location and its importance and surrounding environment, and the recency of the time period in which the study was applied. It also adopted the Maccoby model for strategic intelligence variables, which are (foresight, future vision, systems thinking, drive, and partnership), while the study of (Keikha et al, 2016) [43] relied on different dimensions: (competitive intelligence, business intelligence, knowledge management), and the study of (Al-Sharjabi et al, 2023) [39] relied on (foresight, economic intelligence, knowledge management, benchmarking) for strategic intelligence dimensions. Similarly, (Al-Ahmar, 2015) [2] differed in studying change management by focusing on some dimensions (change

management in strategy, change management in leadership style, change management in organization's culture, change management in technology).

8. Study Methodology and Procedures:

First: Study Methodology:

The quantitative approach, encompassing both descriptive and analytical, was used as it is the most suitable for such a study. Facts, data, and information regarding the impact of strategic intelligence on change management in Yemeni telecommunications companies (Sabafon, Yemen Mobile, and the Yemen Oman United Telecommunication Company (YOU)) were obtained as follows:

1. **Descriptive:** Through this, existing literature and previous studies, as well as books, and reports related to the study variables (strategic intelligence and change management) were utilized to present the theoretical and intellectual aspects and to clarify and explain these variables.
2. **Analytical:** This involves collecting, tabulating, and arranging the data gathered from the participating sample taken from the Yemeni telecommunications companies included in the study, from the perspective of their leaders at the top and middle levels, and statistically analyzing them to answer the study questions and to identify and explain the nature and level of impact between the variables of this study.

Second: Study Population and Sample:

The study population consisted of leaders, specifically top and middle management managers in telecommunications companies operating in the Republic of Yemen at their headquarters in Sana'a City, namely Sabafon, Yemen Mobile, and the Yemen Oman United Telecommunication Company (YOU), totaling (465) individuals.

The comprehensive enumeration method was used to collect data from all managers in the targeted administrative levels (Executive Managers, General Managers, Department Managers, Division Managers, and Section Heads) in the Yemeni telecommunications companies included in the study. The questionnaire was distributed to all members of the sample at their headquarters in Sana'a, numbering (465) individuals, and (316) questionnaires were retrieved from those distributed, thus representing the actual study population.

Characteristics of the Study Population:

- **Gender:**

Table (1) shows the frequency distribution of the study sample individuals according to the gender variable.

Table (1): Frequency Distribution of Study Sample Individuals According to Gender Variable

Gender	No.	Percentage
Male	282	89.2%
Female	34	10.8%
Total	316	100.0%

From Table (1), it is clear that the majority of the study sample consists of males, numbering (282) individuals with a high percentage of (89%), while the number of females was only (34), which is a small number compared to the number of males. This is attributed to the Yemeni society's culture that restricts women's participation in work, and the dominance of masculine tendencies in administrative positions.

- **Educational Qualification:**

Table (2) shows the frequency distribution of the study sample individuals according to the educational qualification variable.

Table (2): Frequency Distribution of Study Sample Individuals According to Educational Qualification Variable

Educational Qualification	No.	Percentage
High School	1	0.3%
Diploma	4	1.3%
Bachelor's Degree	240	75.9%
Master's Degree	70	22.2%
Doctorate	1	0.3%
Total	316	100.0%

It is clear from Table (2) that the study sample mostly included individuals holding a Bachelor's degree (240) individuals, representing (75.9%) of the study population, followed by (70) individuals holding a Master's degree with a percentage of (22.2%), then (4) individuals holding a Diploma with a percentage of (1.3%) of the study population, while there was only (1) individual holding a high school certificate with a percentage of (0.3%) and also (1) individual holding a Doctorate with a percentage of (0.3%) of the study population.

- **Years of Experience:**

Table (3) shows the frequency distribution of the study sample individuals according to the years of experience variable.

Table (3): Frequency Distribution of Study Sample Individuals According to Years of Experience Variable

Years of Experience	No.	Percentage
Less than 5 years	5	1.6%
5 to 10 years	35	11.1%
More than 10 years	276	87.3%
Total	316	100.0%

It is clear from Table (3) that the study sample included (5) individuals with less than 5 years of experience, representing (1.6%) of the study population, and (35) individuals with 5 to 10 years of experience, representing (11.1%) of the study population, while the majority of the sample individuals, numbering 276, had more than 10 years of experience, representing (87.3%) of the study population.

- **Job Level:**

Table (4) shows the frequency distribution of the study sample individuals according to the job level variable.

Table (4): Frequency Distribution of Study Sample Individuals According to Job Level Variable

Job Level	No.	Percentage
Executive Manager/General Manager	11	3.5%
Department Manager	52	16.5%
Head of Section	253	80.1%
Total	316	100.0%

It is clear from Table (4) that the majority of the study sample consisted of Heads of Sections, numbering (253) individuals, representing (80.1%) of the study population. The sample also included (52)

individuals who were Department Managers, representing (16.5%), followed by (11) individuals who were General Managers, representing (3.5%) of the study population.

Third: Data Collection Methods:

1. **Secondary Data Collection Methods:** This was accomplished by utilizing existing literature, previous studies, books, and reports related to the study variables (strategic intelligence and change management) to present the theoretical and intellectual aspects, and to clarify and explain these variables.

2. **Primary Data Collection Methods:** To achieve the study's objective, a closed-ended questionnaire was used to collect data and information from the participating sample and statistically analyze it to answer the study questions and to identify and explain the nature and level of impact between the study variables.

Fourth: Study Variables:

1. **Independent Variable:** Strategic intelligence with its dimensions (foresight, future vision, systems thinking, drive, partnership).

2. **Dependent Variable:** Change management with its dimensions (change in culture, change in organizational structure, change in technology and change in human resources).

Fifth: Study Tool Application Procedures:

After the questionnaire was prepared, validated by experts, and its validity and reliability were confirmed, and the necessary modifications were made to finalize it, the questionnaire was applied according to the following procedures:

1. Response alternatives for the items were set according to the seven-point Likert scale, which defines the response options as one of the seven alternatives (Strongly Agree - Agree - Somewhat Agree - Neutral - Somewhat Disagree - Disagree - Strongly Disagree).
2. The questionnaire was distributed to the study population (comprehensive enumeration) consisting of (465) individuals in the telecommunications companies operating in Sana'a, namely Sabafon, Yemen Mobile, and the Yemen Oman United Telecommunication Company (YOU).
3. A total of (316) questionnaires were returned and their results were sorted and analyzed using the statistical software (SPSS).

• Validity and Reliability Testing of the Study Tool:

1. Face Validity:

Before distributing the questionnaire to the research sample, its initial version was distributed to a group of (16) experienced and specialized validators in scientific research, namely faculty members from various Yemeni universities. This was done to solicit their opinions and guidance on the clarity, validity, and comprehensiveness of the questionnaire items in relation to the study problem and the achievement of its objectives. A matrix of required suggestions and opinions was created, and then deletions, additions, and modifications were made to the questionnaire items, making them more precise, more accurate, and more objective for data collection from the study sample. The questionnaire, in its final form, consisted of (50) valid items for application.

2. Tool Validity (Internal Consistency):

To measure internal consistency, the researchers calculated the correlation coefficients between each dimension and the overall variable it belongs to, as well as between each item of the questionnaire and the dimension to which it belongs. The following is a review of this:

1. **Validity of the Independent Variable (Strategic Intelligence):**

Table (5): Validity of the Independent Variable (Strategic Intelligence)

Strategic Intelligence	Correlation Coefficient	Significance
Foresight	0.866	0.000
Future Vision	0.887	0.000
Systems Thinking	0.923	0.000
Drive	0.885	0.000
Partnership	0.813	0.000

Table (5) shows a strong, statistically significant correlation between the independent variable and its dimensions, as all correlation coefficient values were statistically significant. This confirms that the dimensions belong to the variable and measure what they were designed to measure, which enhances the convergent validity between the variable and the dimensions.

2. **Validity of the Dependent Variable: Change Management**

Table (6): Validity of the Dependent Variable (Change Management)

Change Management	Correlation Coefficient	Significance
Change in Organizational Structure	0.895	<0.001
Change in Technology	0.873	<0.001
Change in Culture	0.854	<0.001
Change in Human Resources (Individuals)	0.898	<0.001

Table (6) shows a strong, statistically significant correlation between the dependent variable and its dimensions, as all correlation coefficient values were statistically significant. This confirms that the dimensions belong to the variable and measure what they were designed to measure, which enhances the convergent validity between the variable and the dimensions.

Sixth: Statistical Treatments Used:

1. **Frequencies and Percentages (Valid Percent):** To describe the sample characteristics.
2. **Construct Validity (Internal Consistency) Test using Pearson Correlation Coefficient:** To calculate the internal consistency of the tool.
3. **Cronbach's Alpha Coefficient:** To measure the reliability of the research tool and the credibility of the sample's opinions at the level of the main research variables and their sub-dimensions.
4. **Arithmetic Means and Standard Deviations:** To identify the average opinions of the sample, and the deviation of the sample responses from the average, for both: (Strategic Intelligence, and Change Management), and also to identify the impact between the research variables.
5. **Simple Linear Regression and Multiple Linear Regression:** To test the study hypotheses and the derived sub-hypotheses that measure the direct impact between the study variables.
6. The seven-point Likert scale was used to collect responses from the sample individuals regarding the study variable items. Table (7) illustrates the method of calculating the verbal estimation for the mean values of the study's dimensions and items.

Table (7): Method for Calculating Verbal Estimation for Mean Values of Study Dimensions and Items

Maximum Value	Category	Minimum Value	Category	Verbal Estimation
1.86		1		Strongly Disagree (Very Low)
2.71		1.86		Disagree (Low)
3.57		2.71		Somewhat Disagree (Somewhat Low)
4.43		3.57		Neutral (Moderate)
5.29		4.43		Somewhat Agree (Somewhat High)
6.14		5.29		Agree (High)
7.00		6.14		Strongly Agree (Very High)

9. Study Results, Discussion, and Interpretation:

First: Analysis of the Independent Variable (Strategic Intelligence):

Table (8) shows the results of analyzing the study sample's opinions on the level of strategic intelligence achievement.

Table (8): Arithmetic Means and Standard Deviations of Sample Individuals' Responses to Strategic Intelligence Dimensions

o.	Dimension	Rank	Mean	Standard Deviation	Importance Level (%)	Verbal Significance
1	Foresight	1	5.23	0.93	75%	Somewhat High
2	Future Vision	2	5.09	1.07	73%	Somewhat High
3	Systems Thinking	3	4.93	1.06	70%	Somewhat High
4	Drive	5	4.73	1.18	68%	Somewhat High
5	Partnership	4	4.80	1.07	69%	Somewhat High
Strategic Intelligence			4.97	0.93	71%	Somewhat High

The results in Table (8) indicate the study sample's consensus on the availability of all strategic intelligence dimensions, and that the overall level of availability and achievement of strategic intelligence among top and middle management leaders of Yemeni telecommunications companies (Yemen Mobile, Sabafon, Yemen Oman United Telecommunication Company (YOU)) was somewhat high, with an arithmetic mean of (4.97), a standard deviation of (0.93), and an importance level of (71%).

The foresight dimension ranked first with an arithmetic mean of (5.23), a verbal significance of somewhat high, a standard deviation of (0.93), and an importance level of (75%). The researchers attribute this to the continuous fluctuations and numerous crises facing this sector, leading telecommunications companies and their leaders to rely mainly on data and information, updating them, and using them for predicting and forecasting market, customer, resource, and future technological, political, and economic

trends, and everything that affects their operations, in order to keep pace with these changes in future needs and demands, try to obtain appropriate opportunities, and raise their internal capabilities to achieve their goals and distinctiveness. Meanwhile, the drive dimension ranked fifth and last with an arithmetic mean of (4.73), a verbal significance of somewhat high, a standard deviation of (1.18), and an importance level of (68%). This can be attributed to the lack of clarity in company vision and strategic objectives, which may lead to a reduced sense of responsibility and commitment among employees towards their work. Additionally, the lack of development opportunities and career advancement may

decrease employees' enthusiasm and motivation to work diligently. The absence of a stimulating reward environment may negatively affect employees' sense of appreciation and satisfaction with their contribution to the company, potentially leading to a decline in their performance and enthusiasm. Furthermore, if the work environment within the company is negative, employee morale may be affected, and their engagement and motivation to work efficiently and effectively may decrease. The lack of effective communication between management and employees can lead to employees feeling neglected and distrustful, which reduces their participation in the decision-making process and diminishes their engagement in the company.

The results of this study concurred with the findings of Al-Sharjabi et al.'s study (2023) [39], which indicated that the practice level of strategic intelligence was high at the University of Science and Technology. Similarly, it aligned with Al-Momeni and Al-Momeni's study (2023) [32], which reported that the level of strategic intelligence in Jordanian telecommunications companies was high, with an arithmetic mean of (3.77). Furthermore, Mahmoud's study (2019) [28] pointed to a high availability of strategic intelligence in Tihama Company, reaching (80%).

Second: Analysis of the Dependent Variable (Change Management):

Table (9) shows the results of analyzing the study sample's opinions regarding the level of change management achievement.

Table (9): Arithmetic Means and Standard Deviations of Sample Individuals' Responses to Change Management Dimensions

No.	Items	Rank	Mean	Standard Deviation	Importance Level	Verbal Significance
1	Change in Organizational Structure	3	4.93	1.14	70%	Somewhat High
2	Change in Technology	2	5.26	0.95	75%	Somewhat High
3	Change in Culture	1	5.32	0.97	76%	High
4	Change in Human Resources	4	4.82	1.20	69%	Somewhat High
Change Management			5.08	0.95	73%	Somewhat High

The results in Table (9) indicate the study sample's consensus on the availability of all change management dimensions, and that the level of change management practice among top and middle management leaders of Yemeni telecommunications companies (Yemen Mobile, Sabafon, Yemen Oman United Telecommunication Company (YOU)) was somewhat high, with an arithmetic mean of (5.08), a standard deviation of (0.95), and an importance level of (73%). The "Change in Culture" dimension ranked highest with a mean of (5.32), a standard deviation of (0.97), and an importance level of (76%). This is attributed to the leaders' understanding of the importance of cultural change, and that no change succeeds without it, as it is a means to achieve internal integration of employees and helps in adapting to the external environment. Meanwhile, the "Change in Human Resources (Individuals)" dimension ranked lowest with a mean of (4.82), a standard deviation of (1.20), and an importance level of (69%). This can be attributed to several factors related to company policies and procedures; there might be a lack of organized policies and procedures for human resource change management, which hinders planning and implementation and negatively affects employees' ability to adapt to changes. Also, unclear roles and responsibilities in the change management process might lead to confusion and delays in implementing plans. Other justifications might relate to the companies' internal culture, where a culture of resistance to change might be prevalent, making it difficult for employees to accept and adapt to changes. Additionally, a lack of psychological and moral support for employees can affect their psychological comfort and influence, weakening the possibility of successful change. Furthermore,

employees' fear of losing their jobs when presenting innovative ideas or accepting changes might lead to the failure of change management efforts. Other justifications relate to the lack of necessary skills and competencies for change management, including employees' ability to communicate effectively, train, and develop.

The results of this study agreed with Ayedh and Al-Awdi's study (2020) [20] on that Yemeni banks pay significant attention to organizational development in all its dimensions, and that the most achieved dimension of organizational development was the technological dimension, and the least was the human resources dimension. It also agreed with Al-Ahmar's study (2015) [2] in that the practice of change management achieved a high percentage in Libyan telecommunications companies.

Third: Hypotheses Testing:

Before using simple linear regression and multiple linear regression to test the study hypotheses, the suitability of the data and the availability of conditions for using linear regression were verified, namely the linear relationship between the dependent variable and the independent variables, as well as the normal distribution of variables, the absence of high correlation (multicollinearity) among independent variables, and homoscedasticity.

1. Results of Simple Linear Regression Test for Strategic Intelligence Variable in Change Management:

To test the main hypothesis which states, "There is no statistically significant impact at the significance level ($\alpha \leq 0.05$) of strategic intelligence on change management in Yemeni telecommunications companies from the perspective of top and middle management leaders in (Yemen Mobile, Sabafon, and the Yemen Oman United Telecommunication Company (YOU))," simple linear regression was used as shown in Table 10.

Table (10): Results of Simple Linear Regression Analysis

Model Summary			Regression Variance		Independent Variable	Regression Coefficient		
Dependent Variable	Correlation Coefficient (R)	Adjusted R ²	F	Significance		Regression Coefficient	T	Significance
Change Management	0.785	0.617	500.869	<0.001	Strategic Intelligence	0.787	22.380	<0.001

From Table (10), it is evident that there is a strong relationship and a significant correlation between strategic intelligence and change management. The correlation coefficient value of (0.785) indicates a strong positive correlation between strategic intelligence and change management, meaning that as the level of strategic intelligence increases, the level of change management significantly increases. On the other hand, the R-squared value of (0.617) indicates that approximately (61.7%) of the change in the level of change management can be explained by strategic intelligence. This means that strategic intelligence plays an important role in explaining the changes that occur in the level of change management. Furthermore, the F-value was statistically significant, confirming the significance of the relationship between strategic intelligence and change management. This implies the rejection of the first main hypothesis and the acceptance of the alternative hypothesis, which states that there is a statistically significant impact at the significance level ($\alpha \leq 0.05$) of strategic intelligence on change management in Yemeni telecommunications companies.

These previous results are consistent with the studies of Al-Harirat (2020) [11], which demonstrate the existence of an impact of strategic intelligence and its dimensions on organizational development in the

Arab Potash Company in Jordan; Baei, et al, (2017) [40], which found a significant positive relationship between the dimensions of strategic intelligence for managers and organizational development; and Muhaysen, et al, (2022) [29], which identified a statistically significant impact of strategic intelligence on organizational culture.

2. Results of Sub-Hypotheses Testing:

Table (11): Hypotheses Testing Using Multiple Linear Regression

Model Summary			Regression Variance		Independent Variable (Strategic Intelligence)	Regression Coefficient		
Dependent Variable	Correlation Coefficient (R)	Adjusted R ²	F	Significance		Regression Coefficient (β)	T	Significance
Change Management	0.794	0.624	104.678	<0.001	Foresight	0.043	22.380	0.509
					Future Vision	0.234	0.661	<0.001
					Systems Thinking	0.126	3.747	0.054
					Drive	0.278	1.934	<0.001
					Partnership	0.072	5.628	0.105

From the results in Table (11), a strong relationship and a significant correlation are observed between the combined dimensions of strategic intelligence (foresight, future vision, systems thinking, drive, partnership) and change management. The correlation coefficient value of (0.794) indicates a strong positive correlation between the combined dimensions of strategic intelligence and change management, meaning that as the level of strategic intelligence dimensions increases, the level of change management significantly increases. On the other hand, the adjusted R-squared value of (0.624) indicates that approximately (62.4%) of the variance in the level of change management can be explained by the dimensions of strategic intelligence. This means that the dimensions of strategic intelligence play an important role in explaining the changes that occur in the level of change management. The F-value was statistically significant, confirming the significance of the relationship between one or more of the strategic intelligence dimensions and change management.

Regarding the sub-hypotheses related to the impact of the five dimensions of strategic intelligence on change management, the results in Table (11) show that there is a statistically significant impact at the significance level ($\alpha \leq 0.05$) for the two dimensions: Future Vision (regression coefficient β equals 0.234 with a significance level <0.001) and Drive (regression coefficient β equals 0.278 with a significance level <0.001). In contrast, the results showed no statistically significant impact at the significance level ($\alpha \leq 0.05$) for the remaining dimensions of strategic intelligence, namely Foresight, Systems Thinking, and Partnership.

10. Conclusions:

Based on the results of the analysis reached by the study, the following can be concluded:

- Yemeni telecommunications companies give high importance to the concepts of strategic intelligence and change management.
- Strategic intelligence plays a significant role in explaining the changes that occur in the level of change management.

- Current organizations strive to adopt modern management tools and concepts, including strategic intelligence and change management, to keep pace with continuous changes and achieve a competitive advantage that enables them to maintain their survival and continuity.
- Previous studies have concluded the importance of adopting these concepts and their positive impact on organizational performance and success.

Recommendations:

In light of the results achieved, the research offers the following recommendations:

1. Enhance and sustain the practice of strategic intelligence in the telecommunications companies under study in all its dimensions, through:
 - Increase attention to foresight to anticipate the many threats facing companies and develop appropriate change strategies and proactive solutions for future problems, avoiding reliance on random reactions.
 - Develop employees' creative intellectual capabilities in data analysis and preparing future scenarios and perceptions.
 - Work to establish partnerships in their internal and external environments, fostering cooperation and exchanging experiences and resources to reduce costs, mitigate risks, and enhance creativity and innovation to achieve the desired change and provide the best telecommunications services.
2. Yemeni telecommunications companies should focus on enhancing future vision, through:
 - Develop clear and achievable strategic plans.
 - Involve all stakeholders in the vision-setting process.
 - Effectively communicating the vision to all employees.
 - Continuously monitoring internal and external environmental changes and making proactive changes based on them.
 - Follow the systems thinking approach to ensure coordination, cooperation, integration, and interconnectedness among the organization's parts to achieve strategic goals effectively and efficiently.
3. The necessity of focusing on the human resources dimension, considering it the most important dimension in any organization, and preserving it as the foundation for implementing and achieving successful change management by studying employees' motives and motivating them through various methods (moral and material), training them, developing their skills, and equipping them with new knowledge.

12. References:

- [1] Abu Asba, A. (2019). *The expected role of strategic intelligence in successful decision-making in Yemeni public universities: An analytical study* (Published PhD thesis), National University Journal, (9), Ibb University, Yemen.
- [2] Al-Ahmar, M. (2015). *Change management and its role in achieving competitive advantage: an applied study on telecommunications companies in the state of Libya* (Unpublished PhD thesis), Department of Management, Faculty of Graduate Studies, World Islamic Sciences and Education University, Amman, Jordan.
- [3] Babakr, M. & Al-Taj, A. (2017). *The impact of strategic intelligence on organizational creativity: an exploratory study of the opinions of a sample of faculty members in the Faculty of Administrative Sciences, Najran University*. Anbar University Journal for Economic and Administrative Sciences, 9(19), Iraq.
- [4] Al-Badani, F. (2018). *The degree of change management practice among academic and administrative leaders at Ibb University*, Al-Nasser University Journal, Yemen, (11), p. 359- 406.

- [5] Balout, H. (2005). *Principles and trends of modern management in institution management*, Dar Al Nahda Al Arabia, Beirut, Lebanon.
- [6] Bin Amara, S. & Almawi, A. (2022). *The impact of foresight as a dimension of strategic intelligence on the application of total quality management: A study of a sample of Algérie Télécom employees, Ouargla Unit*, Journal of Economic Studies, 22(2), p. 43-64.
- [7] Bomenqar, M. & Sharqi, M. (2025). *Technological change strategy under total quality management*, Journal of Human Sciences, (B) (44), p. 565-583, Algeria.
- [8] Jathir, S., Al-Abadi H. & Al-Qaisi, B. (2013). *Formulating customer relationship management strategy by achieving the relationship between strategic intelligence and organizational intelligence*, Anbar University Journal for Economic and Administrative Sciences, 5(10), p. 367-391.
- [9] Hamed, S. (2020). *The interrelationship between strategic intelligence and strategic vigilance and its contribution to enhancing strategic capabilities. An analytical study of a sample of administrative leaders at the University of Technology*, Anbar University Journal for Economic and Administrative Sciences, 12(29).
- [10] Al-Hajji, L. (2017). *The role of transformational leadership in change engineering in Yemeni banks*. (Unpublished master's thesis), Yemen Academy for Graduate Studies, Sana'a, Yemen.
- [11] Al-Harirat, A. (2020). *The impact of strategic intelligence on organizational development*. (Unpublished master's thesis), Human Resources Management, Department of Business Administration, Mutah University, Jordan.
- [12] Hussein, A. (2019). *The impact of strategic intelligence on achieving strategic success for service organizations*, Scientific Journal of Economics and Management, p. 661-702.
- [13] Khairi, A. (2014). *Organizational excellence*. Dar Al-Raya for Publishing and Distribution, Amman, Jordan.
- [14] Doudeen, A. (2020). *Change management and organizational development*. Dar Al-Yazouri for Publishing and Distribution, Amman, Jordan.
- [15] Zawaedih, M. (2018). *The impact of strategic leadership on organizational change management: The mediating role of strategic flexibility: An applied study on employees in supervisory positions in the Aqaba Special Economic Zone Authority in Jordan*, (Unpublished PhD thesis), Faculty of Graduate Studies, Mutah University, Jordan.
- [16] Saad, Y. *Sternberg's theory of successful intelligence*. Retrieved from <https://drasah.com/Description.aspx?id=4965>
- [17] Al-Shammari, N. (2018). *Intellectual capital and its impact on institutional performance: The mediating role of professional ethics: A field study on public educational institutions in the State of Kuwait*, (Unpublished PhD thesis), World Islamic Sciences & Education University, Amman, Jordan.
- [18] Al-Dhubaibi, A. (2022). *Strategic intelligence and its impact on the competitive advantage of Yemeni private universities in light of knowledge management governance*, (Unpublished PhD thesis), Faculty of Education, Sana'a University, Sana'a, Yemen.
- [19] Al-Abidi, A. & Al-Moussawi, H. (2014). *Diagnosing strategic intelligence indicators to ensure strategic sovereignty through strategic agility: an analytical study in Korek Mobile Telecom Company in Iraq*, Al-Ghari Journal for Economic and Administrative Sciences, 8(31), p. 143-167.
- [20] Ayedh, A. & Al-Awdi, N. (2020). *The impact of knowledge management on organizational development: A field study on Yemeni banks*, Journal of Arts and Humanities Research, 1(14), p. 432-476, Yemen.
- [21] Arafa, S. (2012). *Modern trends in change management*, Dar Al-Raya for Publishing and Distribution.

- [22] Al-Azzawi, F. (2016). *Enhancing strategic intelligence through extracting effective applied reality of strategic information systems: Applied research for mobile telecommunications companies in Kurdistan Region*, Journal of Economic and Administrative Sciences, College of Administration and Economics, University of Baghdad, 22(90).
- [23] Atta, Kh. (2015). *Strategic intelligence and its impact on determining strategic choice: An exploratory study of the opinions of a sample of employees in the General Company for Grain Manufacturing, affiliated with the Ministry of Trade*, Journal of Baghdad College of Economic Sciences University, (43), p. 135-166.
- [24] Alyan, R. (2015). *Change management*. (1st ed.), Dar Safa for Publishing and Distribution, Amman, Jordan.
- [25] Al-Qarni, A. (2019). *The impact of strategic intelligence on the decision-making process of school leaders in Tabuk City*, Journal of the Faculty of Education in Mansoura, 106(1), p. 70-148.
- [26] Kannoush, M. (2017). *The role of strategic intelligence in achieving and enhancing sustainable competitive advantage: A comparative study between Mobilis and Ooredoo Telecommunications Companies in Algeria*, (Unpublished PhD thesis), Faculty of Economics, Commerce, and Management Sciences, Ferhat Abbas University, Setif 1, Algeria.
- [27] Mohammed, M. (2019). *Defining strategic intelligence objectives to meet intellectual capital requirements*, Journal of Baghdad College of Economic Sciences University, (58).
- [28] Mahmoud, A. (2019). *The impact of strategic intelligence on the decision-making process at Tihama Company*, (Unpublished master's thesis), Faculty of Financial and Banking Sciences, Arab Academy for Banking and Financial Sciences, Sana'a, Yemen.
- [29] Muhaysen, A., Abu Swaireh, A. & Shamia, I. (2022). *The impact of strategic intelligence on enhancing organizational culture among employees in the Electricity Distribution Company in Gaza Governorates*, Islamic University Journal of Economic and Business Studies, 30(1), p. 60-82.
- [30] The National Information Center. *Discussion of the Central Agency report on monitoring telecommunications company resources*. Retrieved from https://www.google.com/search?sca_esv=369e25cd873469d4&sxsrf=AE3TifMXiLmrJdDrx05m4se8MvHf-dQAaQ:1752866978168&q=https://yemen-nic.info/news/detail.php?ID%3D73127+print%3DY&spell=1&sa=X&ved=2ahUKEwjX1smskseOAxUd9LsiHbcWOW8QBSgAegQIDhAB#sbfbu=1&pi=https://yemen-nic.info/news/detail.php?ID%3D73127%20print%3DY
- [31] Al-Murhadi, S. (2021). *Organizational change and development: An applied approach*, (1st ed.), Al-Amin for Publishing and Distribution, Sana'a, Republic of Yemen.
- [32] Al-Momeni, Y. Al-Momeni, L. (2023). *The impact of strategic intelligence on employee performance in Jordanian telecommunications companies*, Journal of Advanced Economic Research, 8(1), p. 143-165.
- [33] Al-Hashimi, R. (2021). *The role of strategic intelligence in improving the distinguished performance of business organizations: A field study*, (Unpublished PhD thesis), Department of Management Sciences, Faculty of Economics, Business, and Management Sciences, University of Ahmed Draia Adrar, Algeria.
- [34] Al-Hindawi, A., Al-Hamouri, S. Al-Ma'aitah, R. (2017). *Foresight and future-making: Pre-strategic planning. Smart preparation*, (1st ed.), Qindeel Printing and Publishing, United Arab Emirates.
- [35] Yousuf, Sh. (2021). *The role of strategic intelligence in supporting sectoral competitiveness in Egyptian private universities*, Scientific Journal of Economics and Commerce, October 6 University, June: p. 643-676, Egypt.

- [36] Abuzaid, A. N. (2017). *Exploring the impact of strategic intelligence on entrepreneurial orientation*. International Journal of Business Management and Economic Research, 8(1).
- [37] Agha, S., Atwa, E., & Kiwan, S. (2014). *The impact of strategic intelligence on firm performance and the mediator role of strategic flexibility: An empirical research in biotechnology industry*. International Journal of Management Science, 5(1), p. 65-72.
- [38] Maccoby, M. (2015). *Strategic intelligence: Conceptual tools for leading change*. Oxford University Press.
- [39] Al-Sharjabi, A. M., Al-Dhobaibi, A. A., & Al-Abidi, S. N. (2023). *Strategic intelligence and its impact on knowledge management governance: A field study on the University of Science & Technology-Yemen*. Journal of Statistics Applications & Probability, 13(1), p. 323-337.
- [40] Baei, F., Ahmadi, M., Malafeh, N. S. A., & Baei, A. (2017). *The relationship between manager's strategic intelligence and organization development in governmental agencies in Iran (Case study: Office of Cooperatives Labor and Social Welfare)*. International Review of Management and Marketing, 7(2), p.244-249.
- [41] Esmaceli, M. R. (2014). *A study on the effect of the strategic on decision-making and strategic planning*. International Journal of Asian Social Science, 4(10), p.1045-1061.
- [42] Al-Salemi, Y. (2019). *Change management: Theory and application*. Dar Al-Fikr Al-Arabi, Arab Republic of Egypt, Cairo, p. 53.
- [43] Keikha, A., hadada, E., & Keikha, A. (2016). *Investigating effects of strategic intelligence of managers on the performance of employees: A case study of private banks in the city of Zahedan*. International Journal of Scientific & Engineering Research, 7(3), p. 263-277.
- [44] Maccoby, M. (2016). *Perspective on strategic intelligence: Conceptual tools for leading change*, IBM Center for The Business of Government. Retrieved from www.businessofgovernment.org
- [45] Maccoby, M. (2015). *Strategic intelligence: Conceptual tools for leading change*. Oxford University Press, USA, p.77.
- [46] Niavand, A., Cetinkaya, A. S., & Rashid, M. (2019). *Organizational change and competitive advantage: Business size matters*. BMIJ (Business & Management Studies: An International Journal), 7(3).
- [47] Nikolic, N., Jankovic, S., & Vuletic, D. *Interdepartmental cooperation in defence issues and strategic intelligence management*. Journal of Sustainable Business and Management Solutions in Emerging Economies, 21(80), p. 35-44.