

Digital Leadership and Human Resource Empowerment: The Mediating Role of the Entrepreneurial Strategic Compass - An Applied Study in the Iraqi Ministry of Planning

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Abstract

This study aims to examine the extent of the impact of digital leadership on human resource empowerment, with the entrepreneurial strategic compass adopted as a mediating variable. The study adopts the descriptive-analytical approach and was conducted in the Iraqi Ministry of Planning using a stratified random sample of (135) senior and middle managers. However, 5 questionnaires were excluded due to incomplete information, and 3 were not returned by respondents, resulting in a final valid sample size of (127) participants. A questionnaire was adopted as the primary data collection tool. Data were collected and analyzed using descriptive statistics, including mean, standard deviation, and coefficient of variation, in addition to Pearson correlation and regression analysis, as well as mediation testing to examine direct and indirect effects. The findings reveal that digital leadership has a significant positive effect on human resource empowerment, and that the entrepreneurial strategic compass plays a partial mediating role in strengthening this relationship. The study emphasizes the importance of integrating digital leadership practices with strategic orientation to enhance organizational effectiveness and human capital development in dynamic environments.

Keywords: Digital Leadership, Human Resource Empowerment, Entrepreneurial Strategic Compass , Ministry of Planning

١. Introduction

Organizations today operate in an increasingly complex and rapidly changing environment driven by digital transformation, which has significantly reshaped management practices and leadership roles. In this context, **digital leadership** has emerged as a modern leadership approach that extends traditional leadership theories by integrating digital technologies into organizational processes and human resource management. It emphasizes digital vision, data-driven decision-making, digital

change management, and strategic digital orientation (Northouse, 2021; Cortellazzo et al., 2019). Digital leadership plays a crucial role in enhancing organizational performance by enabling institutions to adapt to technological changes and improve their competitive position. It contributes to redesigning business models and supporting innovation through the effective use of digital tools and platforms (Hanelt et al., 2021; Kane et al., 2019). Accordingly, it has become a key factor in strengthening organizational agility and responsiveness in public and private sector institutions.

In parallel, **human resource empowerment** represents one of the fundamental modern administrative concepts that focuses on increasing employee participation, enhancing autonomy, and expanding decision-making authority. Empowerment contributes to improving job satisfaction, performance efficiency, and organizational commitment (Mullins, 2005; Antonis et al., 2007). It is considered a strategic mechanism that enables organizations to better utilize human capital and respond effectively to environmental changes.

Furthermore, the **entrepreneurial strategic compass** has emerged as an important strategic framework that guides organizations in navigating complex environments by aligning strategic direction with innovation and value creation. It helps organizations identify opportunities, enhance adaptability, and achieve sustainable competitive advantage (Gans et al., 2018; Hellström & Olsson, 2017). Accordingly, the integration between digital leadership, human resource empowerment, and the entrepreneurial strategic compass forms a comprehensive analytical framework that reflects the dynamics of contemporary organizational management. Digital leadership enhances empowerment by improving access to information and supporting participative decision-making, while the entrepreneurial strategic compass ensures strategic alignment and long-term organizational orientation.

Chapter ١: Research Methodology

1.1 Research Problem

Contemporary organizations, particularly public sector institutions, are experiencing rapid transformations driven by digital advancements that have significantly reshaped leadership practices and human resource management. In this context, **digital leadership** has become a critical requirement for enhancing organizational adaptability, efficiency, and responsiveness to environmental changes. However, many organizations still face challenges in effectively implementing digital leadership practices to empower human resources in a meaningful and sustainable manner. Moreover, the role of the **entrepreneurial strategic compass** as a

mediating mechanism that could strengthen this relationship remains underexplored, particularly within Iraqi governmental institutions.

Accordingly, the main research problem can be formulated as follows:

What is the impact of digital leadership on human resource empowerment, and what is the mediating role of the entrepreneurial strategic compass in the Iraqi Ministry of Planning?

From this main problem, the following sub-questions are derived:

- What is the level of digital leadership practices in the Ministry of Planning?
- What is the level of human resource empowerment in the Ministry of Planning?
- Is there a significant relationship between digital leadership and human resource empowerment?
- Does the entrepreneurial strategic compass mediate the relationship between digital leadership and human resource empowerment?
- To what extent do the dimensions of digital leadership influence human resource empowerment through the entrepreneurial strategic compass?

1.2 Significance of the Research

The importance of this study stems from its focus on an integrated and contemporary managerial framework that combines **digital leadership, human resource empowerment, and the entrepreneurial strategic compass** within a single analytical model.

١.٢.١ Theoretical Significance:

This research contributes to the enrichment of the existing literature by providing a comprehensive conceptual integration of digital leadership and human resource empowerment, while introducing the entrepreneurial strategic compass as a mediating construct. It enhances theoretical understanding of how digital leadership can be transformed into tangible organizational outcomes through strategic orientation mechanisms. Furthermore, it bridges a gap in the literature regarding the mediating pathways that explain the relationship between leadership and empowerment in digital environments, particularly within public sector institutions.

١.٢.٢ Practical Significance:

From a practical perspective, the study provides valuable insights for decision-makers in the Iraqi Ministry of Planning by highlighting the importance of adopting digital leadership practices to enhance human resource empowerment. It also emphasizes the strategic value of the entrepreneurial strategic compass in improving decision-making processes, strengthening organizational agility, and ensuring better

alignment between digital transformation initiatives and human resource development. Ultimately, the findings may assist policymakers in designing more effective leadership and empowerment strategies that contribute to improved organizational performance in dynamic environments.

1.3 Research Objectives

This study aims to achieve the following objectives:

- 1.3.1 To identify the level of digital leadership practices in the Iraqi Ministry of Planning.
- 1.3.2 To measure the level of human resource empowerment within the organization under study.
- 1.3.3 To examine the relationship between digital leadership and human resource empowerment.
- ١.٣.٤ To test the mediating role of the entrepreneurial strategic compass in the relationship between digital leadership and human resource empowerment.

١.٤ Research Hypotheses

١.٤.١ Direct Effect Hypotheses

H1: Digital leadership has a significant positive effect on human resource empowerment.

H2: Digital leadership has a significant positive effect on the entrepreneurial strategic compass.

H3: The entrepreneurial strategic compass has a significant positive effect on human resource empowerment.

١.٤.٢ Indirect Effect Hypothesis (Mediation)

H4: Digital leadership has a significant indirect effect on human resource empowerment through the entrepreneurial strategic compass as a mediating variable.

١.٥ Hypothetical Research Model of the Study

The hypothetical research model of this study is built on the integration of three main variables that explain the relationships between digital leadership, entrepreneurial strategic compass, and human resource empowerment. The independent variable is **Digital Leadership**, which is adopted based on the model of (Peng, 2022). It is represented through four dimensions: digital vision, digital decision-making, digital transformation, and digital orientation. This variable reflects the strategic and technological capabilities of leaders in guiding organizations within digital environments.

The mediating variable is the **Entrepreneurial Strategic Compass**, which is developed based on the model of (Gans et al., 2018). It functions as a strategic

framework that translates the effects of digital leadership into more effective organizational directions. It consists of four dimensions: architecture, individual ownership, disruption, and value chain. These dimensions explain how organizations strategically navigate innovation, respond to environmental changes, and exploit emerging opportunities in dynamic contexts.

The dependent variable is **Human Resource Empowerment**, which is adopted based on (Baumgartner, 2014). It reflects the degree to which employees are enabled to participate effectively in organizational processes. It is measured through four dimensions: freedom of choice, information sharing, teamwork, and participation. This variable represents a key organizational outcome that enhances employee effectiveness and engagement.

Accordingly, the proposed model suggests that **Digital Leadership (Peng, 2022)** directly influences **Human Resource Empowerment (Baumgartner, 2014)**, and also exerts an indirect effect through the mediating role of the **Entrepreneurial Strategic Compass (Gans et al., 2018)**. This mediating structure strengthens the relationship between leadership practices and empowerment outcomes, providing an integrated framework for understanding how digital leadership enhances human resource capabilities in modern organizations. See Figure 1: The hypothetical research model

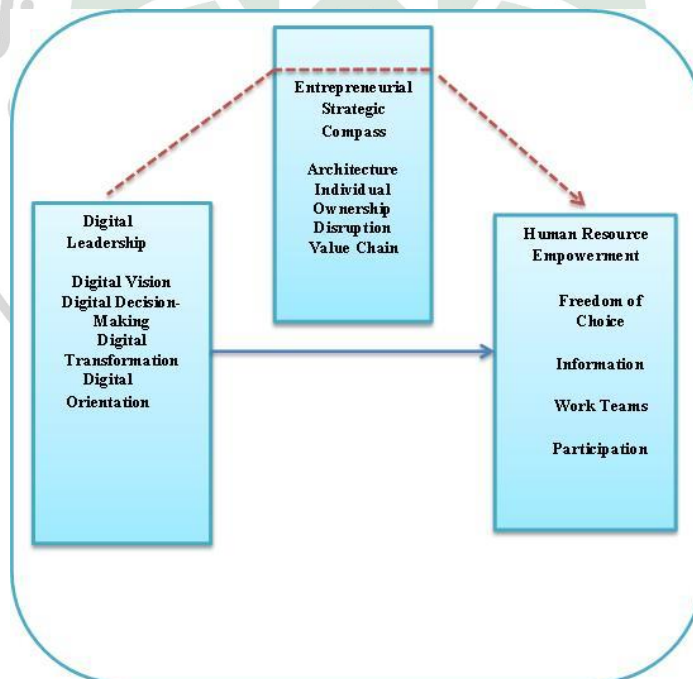


Figure 1: The hypothetical research model

١.٦ Research Population, Sample, and Methodology

The current research population is defined as all administrative leaders within the Iraqi Ministry of Planning, as it is one of the governmental institutions that has shown increasing interest in applying the concepts of digital leadership, organizational transformation, and human resource empowerment. The population includes both senior and middle administrative leadership levels within the ministry, given their direct role in adopting and implementing modern managerial practices related to the study variables.

The research sample was selected using a stratified random sampling technique from the study population. This approach involves dividing the population into two main strata (senior and middle management) based on relevant administrative and functional characteristics, and then randomly selecting participants from each stratum. This ensures better representation of the different leadership levels and enhances the accuracy and reliability of the results, particularly given their accumulated experience in managerial decision-making and organizational practices. In addition, the initial sample size of the study was (135) respondents from employees and managers of the Iraqi Ministry of Planning. However, (5) questionnaires were excluded due to incomplete data, and (3) were not retrieved from respondents, resulting in a final valid sample size of (127) respondents. This number was considered appropriate in relation to the size of the research population and the nature of the study variables. The sample size was calculated using the following statistical formula:

$$n = N / (1 + N e^2)$$

where n represents the sample size, N represents the population size, and e represents the margin of error (0.05 at a 95% confidence level). This formula is widely used in social and administrative studies for determining an appropriate sample size when the population is finite, as it ensures a balance between statistical accuracy and practical feasibility. Moreover, the final sample size of (127) is considered sufficient for conducting advanced statistical analyses such as regression and mediation analysis, as recent literature indicates that samples exceeding 100 observations are adequate for producing stable and generalizable results (Hair et al., 2022).

Regarding the research methodology, the study adopted the descriptive-analytical approach, as it is the most suitable for examining and interpreting relationships among variables in their natural setting. This approach aims to describe the phenomenon of digital leadership and its dimensions, and to analyze its direct and indirect effects through the entrepreneurial strategic compass on human resource

empowerment within the organization, based on field data collected through a questionnaire and analyzed statistically.

Chapter ٢ / Theoretical Framework

٢.١ Concept of Digital Leadership:

Digital leadership is considered a contemporary extension of traditional leadership theories; however, it is distinguished by its focus on virtual work environments that rely on digital technologies in managing operations and human resources. This leadership style is based on managing remote teams, utilizing electronic communication tools, and building organizational trust through digital platforms, which requires leaders to possess a combination of both technical and interpersonal skills (Northouse, 2021).

In this context, digital leadership represents a critical factor in the success of digital transformation initiatives within organizations. It contributes to redesigning traditional business models into more flexible and innovative ones by integrating digital technologies into both strategic and operational processes, thereby improving organizational performance and enhancing sustainable competitive advantage (Hanelt et al., 2021).

Moreover, digital leadership goes beyond merely using technological tools; it extends to reshaping organizational culture to align with the digital environment. This is achieved by promoting virtual collaboration, knowledge sharing, and data-driven decision-making, making it a leadership style well-suited to the complexities of modern business environments (Cortellazzo et al., 2019).

Based on the above, digital leadership can be operationally defined as: "The ability of a leader to employ modern digital technologies in strategically guiding the organization, managing its human resources, and building a digital organizational culture that supports innovation and continuous learning, thereby enhancing organizational agility and its capacity to achieve competitive advantage in a dynamic digital business environment."

٢.2 Importance of Digital Leadership:

Digital leadership has gained increasing importance in today's business environment due to rapid technological advancements and organizations' growing reliance on digital systems across their activities. In this regard, its significance is reflected in several strategic and operational aspects that enhance organizational efficiency and effectiveness. Contemporary literature highlights that digital leadership contributes to a range of integrated organizational benefits (Kane et al., 2019) most notably:

- 2.2.1 Enabling organizations to respond effectively to rapid digital transformations in the business environment.
- 2.2.2 Enhancing organizational innovation through the use of digital technologies in developing products and services.
- 2.2.3 Improving decision-making quality by relying on data and advanced digital analytics.
- 2.2.4 Supporting a culture of organizational change and reducing employees' resistance to digital transformation.
- 2.2.5 Developing digital skills among human resources and increasing their readiness to operate in technology-driven environments.
- 2.2.6 Strengthening communication and collaboration within the organization through modern digital platforms and applications.
- 2.2.7 Achieving sustainable competitive advantage through the optimal utilization of digital technologies.

Accordingly, digital leadership is not merely a modern managerial style; rather, it constitutes an integrated strategic framework that reshapes both the internal and external capabilities of organizations to align with the evolving demands of the digital environment.

٢.٣ Dimensions of Digital Leadership:

Digital leadership consists of a set of core dimensions that reflect a leader's ability to effectively leverage digital technologies in guiding the organization and managing its resources, ensuring successful digital transformation and strengthening competitive advantage. These dimensions can be outlined as follows:

٢.٣.١ Digital Vision:

Digital vision is a fundamental dimension of digital leadership, representing the leader's ability to anticipate the future of digital transformation within the organization and to formulate a clear strategic vision that guides the transformation toward adopting modern digital technologies. (Westerman et al., 2014) emphasize that the success of digital transformation largely depends on the presence of a clear leadership vision capable of integrating technology into the organization's overall strategy and converting it into added value. Likewise, (Vial, 2019) highlights that digital vision serves as the primary starting point for digital transformation processes, as it determines the direction of change and guides innovation within the organization (Westerman et al., 2014; Vial, 2019). Accordingly, digital vision constitutes the intellectual foundation upon which the success of digital leadership in achieving institutional transformation is built.

٢.٣.٢ Digital Decision-Making:

Digital decision-making is a vital dimension of digital leadership, referring to the leader's ability to utilize data, digital analytics, and intelligent technologies to support decision-making processes rather than relying solely on intuition or individual experience. (Davenport & Ronanki, 2018)

confirm that the use of artificial intelligence and advanced analytics directly enhances the quality of managerial decisions and improves organizational performance. Furthermore, (Brynjolfsson & McElheran, 2016) indicate that organizations relying on data-driven decision-making achieve higher levels of productivity compared to those using traditional approaches (Davenport & Ronanki, 2018; Brynjolfsson & McElheran, 2016). Thus, digital decision-making represents a fundamental shift toward data-driven leadership.

٢.٣.٣ Digital Change:

Digital change refers to the leader's ability to effectively manage digital transformation processes within the organization, including redesigning organizational processes, updating structures, and developing work methods to align with the requirements of the digital environment. In this regard, (Hanelt et al., 2021) explain that the success of digital transformation depends not only on technology but also on leadership's ability to manage the associated organizational change, including reshaping business models and internal structures. Similarly, (Kotter, 2012) emphasizes that effective change management requires leadership capable of creating a sense of urgency and guiding individuals toward adopting new practices that support organizational transformation (Hanelt et al., 2021; Kotter, 2012). Accordingly, digital change represents the operational dimension of digital leadership within the organization.

٢.٣.٤ Digital Orientation:

Digital orientation reflects the extent to which both the organization and its leaders adopt a digital mindset as a comprehensive strategic direction that influences all organizational activities. (Kane et al., 2019) argue that digital orientation is one of the most critical factors for the success of digital transformation, as organizations embracing this orientation are better positioned to innovate and respond to environmental changes. Additionally, (Bharadwaj et al., 2013) assert that digital orientation enhances an organization's ability to create new value by integrating technology into its overall business strategy (Kane et al., 2019; Bharadwaj et al., 2013). Therefore, digital orientation serves as the overarching framework that guides and integrates the other dimensions of digital leadership.

٢.٤ Concept of the Entrepreneurial Strategic Compass:

The concept of the entrepreneurial strategic compass is grounded in its role as a guiding framework that assists leaders in defining the strategic directions of the organization and aligning its trajectory in a way that ensures decisions are consistent with both internal and external environmental changes, while maintaining the flexibility to redirect when necessary.

The literature indicates that the entrepreneurial strategic compass represents a leadership tool that distinguishes the role of leaders from that of managers. Successful leaders rely on it to formulate their organizations' strategic orientations and ensure that they remain on the intended strategic path, while also possessing the ability to recognize the appropriate moment to redirect this path in response to environmental dynamics (Saleh & Ibrahim, 2019).

The strategic compass helps leaders identify a reliable course of action within competitive business markets. It enables them to assess gaps between actual and ideal investments for each competitor and for each value component, as well as to evaluate the degree of alignment with the brand and the consistency of service quality delivered to customers. Additionally, it supports measuring the costs of acquiring external opportunities and the costs associated with missing them within managerial practices (Gandellini & Venanzi, 2011).

From a more advanced perspective, the entrepreneurial strategic compass is viewed as a dynamic, flexible, and multi-directional tool aimed at sensing untapped opportunities within the industry environment and directing leaders' attention toward them proactively. This contributes to stimulating strategic change and renewal within the organization. It thus goes beyond the logic of organizational repetition and conventional solutions toward a logic of innovation and strategic uniqueness capable of creating a sustainable competitive advantage that is difficult to imitate (Abbas, 2021).

Based on the above, the entrepreneurial strategic compass can be understood as an integrative framework that combines strategic vision, leadership foresight, environmental analysis, resource management, and organizational innovation. This makes it a pivotal tool for guiding organizations toward entrepreneurship and sustained excellence in environments characterized by continuous change and uncertainty.

٢.٥ Importance of the Entrepreneurial Strategic Compass:

The importance of the entrepreneurial strategic compass lies in its role in enhancing decision-makers' understanding of the various dimensions of the organizational

environment, including the adopted strategy, utilized technologies, employee behavior, supply chains, competitors, and customers. This comprehensive understanding improves the flow of information within the organization and strengthens its sharing across different managerial levels, thereby supporting the evaluation of strategic alternatives and decision-making processes (Hellström & Olsson, 2017).

Moreover, the entrepreneurial strategic compass serves as a tool that supports leadership creativity by providing a framework that helps leaders generate new ideas and enhance knowledge sharing within the organization. It also contributes to reducing knowledge gaps between individuals and organizational units. In addition, it promotes the concept of open innovation by integrating internal resources with external sources of knowledge, thereby strengthening the organization's ability to build a sustainable competitive advantage (Arrigo, 2015).

From a behavioral and organizational perspective, the entrepreneurial strategic compass contributes to building a positive work environment characterized by collaboration, openness, and dialogue. It also enhances attention to organizational well-being, leading to the creation of a healthy organizational climate that supports cohesion among individuals and strengthens internal stability (Lister, 2020).

Based on the above, the importance of the entrepreneurial strategic compass extends beyond being merely an analytical tool to becoming a comprehensive leadership framework. It plays a vital role in improving the quality of strategic decision-making, fostering innovation, and building a flexible organizational environment capable of adapting to continuous changes and achieving sustainable competitiveness.

٢.٦ Dimensions of the Entrepreneurial Strategic Compass:

The dimensions of the entrepreneurial strategic compass are defined through a set of intellectual and organizational components that collectively form a governing framework for directing organizations toward achieving entrepreneurship and sustainable competitive excellence. These dimensions are characterized by their interdependence and integration, as each dimension supports the others in building a flexible strategic system capable of adapting to the dynamic business environment.

The key dimensions are outlined as follows:

٢.٦.١ Architecture:

Architecture represents a fundamental dimension of the entrepreneurial strategic compass, as it is associated with building a dynamic organizational structure capable of absorbing environmental changes and efficiently directing human and organizational resources. The importance of this dimension stems from its critique of

the “one-size-fits-all” approach in human resource management. Contemporary literature emphasizes that organizations differ in their characteristics and environments, which necessitates adopting flexible and differentiated HR practices tailored to each organization’s specific context (Luo et al., 2020).

Architecture is also defined as an interactive process aimed at linking processes and individuals through formal organizational frameworks that form an integrated structure within which activities and operations are managed precisely. This is complemented by informal elements such as values and behavioral norms that guide interactions within the organization, ensuring alignment with structure, culture, technology, and strategy (Abbas, 2021).

٢.٦.٢ Intellectual Property:

Intellectual property represents a core strategic dimension of the entrepreneurial strategic compass, as it relates to the organization’s ability to generate, protect, and leverage knowledge to achieve a sustainable competitive advantage. Some organizations, particularly startups, adopt collaborative strategies with established market players, maintaining control over their innovations and technologies while utilizing them to support the products and services of those organizations, thereby achieving a balance between protection and collaboration (Gans et al., 2018).

Intellectual property is used as a strategic tool to safeguard the organization’s creative outputs without limiting its ability to collaborate or engage in strategic alliances. It supports partnerships, licensing, and copyrights, while also providing opportunities for continuous improvement and incremental development. Moreover, it enhances competitiveness by enabling market control, structuring pricing mechanisms, and supporting strategic differentiation (Viswanathan, 2015).

٢.٦.٣ Disruption:

Organizations, particularly startups, often adopt disruption as a strategic dimension to challenge and destabilize the structures of traditional competitors. This involves relying on innovative strategies that challenge the status quo, especially given the difficulty large organizations face in responding to radical changes due to their reliance on established stability. Thus, disruption becomes a necessary strategic choice for survival and growth in competitive business environments (Fuchs & Golenhofen, 2019).

Disruption is defined as the generation of new knowledge, ideas, and technological innovations that contribute to creating new markets and businesses, while fundamentally reshaping the rules of competition. This is achieved through

environmental analysis and forecasting future changes, leading to the redistribution of competitive positions among organizations (Abbas, 2021).

٢.٦.٤ Value Chain:

Organizations are required to continuously redesign their value chains, along with their structural, technological, financial, and human assets, to maximize competitive advantages. Furthermore, all key stakeholders within the value chain—including producers, suppliers, individuals, retail channels, and customers—strive to generate their own competitive advantages to distinguish themselves from competitors. This is driven by the recognition that product-based competitive advantages inevitably diminish over time.

This perspective gives the value chain a dynamic and flexible nature, linking it to environmental uncertainty and competitive advantage. It also connects strategic formulation with operational issues and supply chain management, thereby generating added value throughout its activities, which progressively increases toward the final stage (the customer) (Connell et al., 2018).

٢.٧ Concept of Human Resource Empowerment:

(Mullins, 2005) indicates that human resource empowerment involves granting employees greater autonomy to participate in and make decisions related to their daily tasks, alongside fostering self-control as an alternative to traditional direct supervision. This reflects a shift in contemporary managerial thought toward building trust, expanding individual responsibility, and broadening employees' authority.

Similarly (Gomes -Mejía et al., 2005).

argue that empowerment represents a partial transfer of supervisory authority from higher managerial levels to employees, which enhances their sense of responsibility for work outcomes. It also enables them to express ideas and suggestions more freely, exercise greater control over their performance, and make appropriate decisions within their scope of work.

From a strategic perspective, (Brown & Harvey 2006) extend this view by considering human resource empowerment as an organizational strategy aimed at unleashing employees' latent potential and involving them in continuous development and improvement processes. This approach achieves alignment between organizational objectives and employees' needs while enhancing the organization's ability to adapt to environmental changes. Based on the above, human resource empowerment can be understood as a modern managerial approach grounded in the flexible redistribution of authority within the organization. Under this approach, the employee shifts from merely executing orders to actively participating in decision-

making by being provided with the necessary authority, information, and resources. This, in turn, contributes to improving organizational performance and strengthening the organization's sustainable competitive advantage.

٢.٨ Importance of Human Resource Empowerment:

The importance of human resource empowerment stems from its role in improving organizational performance and enhancing employee efficiency by increasing motivation and job satisfaction. Within this perspective, empowerment is considered a strategic tool that enables organizations to adapt quickly to rapid environmental changes and achieve alignment between individual and organizational goals. The importance of human resource empowerment can be summarized as follows (Antonis et al., 2007)

- 2.8.1 It contributes to increasing employees' job satisfaction, which positively reflects on improving organizational performance and achieving growth and development objectives.
- 2.8.2 It enhances the organization's ability to respond rapidly to market demands and unexpected environmental changes by granting employees the authority to make timely and appropriate decisions.
- 2.8.3 It enables top management to focus on long-term strategic issues rather than being preoccupied with routine operational tasks.
- 2.8.4 It helps in utilizing untapped human potential within the organization, leading to higher productivity and improved overall performance.
- 2.8.5 It supports the reduction of managerial layers within the organizational structure, facilitating information flow and accelerating decision-making processes.
- 2.8.6 It reinforces the principles of delegation of authority, participation in decision-making, and responsibility among employees.
- 2.8.7 It creates a positive and motivating work environment that fosters self-commitment and encourages creativity and innovation.
- 2.8.8 It integrates various human resource management practices such as job design, job enrichment, participation, business process reengineering, and improving quality of work life.

From the researcher's perspective, human resource empowerment represents a fundamental pillar for the success of modern organizations. It goes beyond merely delegating authority to building an organizational environment based on trust and active participation. Moreover, it enhances performance efficiency and fosters

innovation, making employees more engaged and committed to achieving organizational goals.

٢.٩ Dimensions of Human Resource Empowerment:

The dimensions of human resource empowerment are reflected in a set of organizational and behavioral elements aimed at enhancing employees' ability to perform their tasks more efficiently and expanding their participation in decision-making. This, in turn, contributes to improving organizational performance and achieving effectiveness within the organization. The key dimensions are outlined as follows:

٢.٩.١ Freedom of Choice:

Freedom of choice is considered one of the fundamental dimensions of human resource empowerment. It refers to an employee's ability to act according to their own will and make decisions independently, without external constraints or interference, provided that no harm is caused to the organization, colleagues, or the surrounding environment. This freedom extends to independent thinking, expressing opinions, and making autonomous decisions within the organizational framework. Therefore, freedom of choice enhances individual autonomy and increases employees' sense of self-responsibility (Al-Zubaidi, 2007)

٢.٩.٢ Information:

The information dimension represents a central element in the empowerment process. Its importance has grown significantly with the transition toward a knowledge-based economy, making it a key pillar upon which organizations rely to build competitive capabilities. This dimension supports knowledge management systems within organizations and enhances their ability to understand both internal and external environments. Moreover, the availability of accurate and comprehensive information systems enables employees to perform their tasks efficiently and improves the quality of organizational performance, thereby positively influencing human resource effectiveness in the workplace (Aymar, 2006).

٢.٩.٣ Work Teams:

Work teams are among the modern managerial concepts that have received significant attention in contemporary organizational thought. They refer to a group of individuals possessing complementary skills and expertise who work collaboratively and in a coordinated manner to achieve common organizational goals. The role of teams goes beyond merely grouping individuals; it involves the integration of efforts and the exchange of knowledge and experience, which contributes to improved performance and increased organizational efficiency. Work teams rely on continuous

interaction among members, shared responsibilities, and collective commitment to achieving results, making them more capable of addressing dynamic environmental challenges compared to individual work (Abdulghani, 2020).

٢.٩.٤ Participation:

Participation, as a dimension of human resource empowerment, is based on establishing a flexible work structure that facilitates the integration of human capabilities. This requires decentralization in decision-making and the expansion of responsibilities to allow room for employees' individual initiative, grounded in their awareness and understanding of organizational conditions—particularly in the hospitality context. Participation extends beyond operational activities to include organizational policies and conditions related to human resource management (such as recruitment, evaluation, compensation, and training). It may also extend to ownership, where employees acquire shares in the organization's capital, enhancing their sense of belonging. However, participation becomes effective only when supported by the fair distribution of information and skills among employees (Linda, 2002).

Chapter ٣: Presentation and Statistical Analysis of Results

٣.١ Validity and Reliability of the Measurement Tool

٣.١.١ Face and Content Validity

The validity of the measurement instrument was ensured by presenting it to a panel of academic experts specializing in management and strategic leadership. The experts reviewed the questionnaire items in terms of clarity, linguistic formulation, and their relevance to the study variables (Digital Leadership, Strategic Entrepreneurial Compass, and Human Resource Empowerment). Based on their feedback, several modifications were made, which enhanced the **content validity and contextual appropriateness** of the instrument for the Iraqi organizational environment. See Appendix (٢)

٣.١.٢ Reliability Test (Cronbach's Alpha)

Table (1): Reliability Coefficients

Variable	Number of Items	Cronbach's Alpha
Digital Leadership	12	0.91
Strategic Entrepreneurial Compass	10	0.89
Human Resource Empowerment	10	0.92
Overall Instrument	32	0.93

The results indicate that all Cronbach's Alpha values exceed the acceptable threshold of (0.70), confirming a high level of **internal consistency** among the questionnaire

items. The overall reliability value (0.93) reflects a very strong measurement instrument, ensuring stable and reliable results suitable for statistical inference and hypothesis testing.

٣.٢ Normality Test

Table (2): Skewness and Kurtosis

Variable	Skewness	Kurtosis
Digital Leadership	-0.41	0.30
Strategic Entrepreneurial Compass	-0.37	0.28
Human Resource Empowerment	-0.44	0.31

The results show that all skewness and kurtosis values fall within the acceptable range (± 1), indicating that the data follows a **normal distribution**. This confirms the suitability of using parametric statistical techniques such as correlation, regression, and mediation analysis without statistical bias.

٣.٣: Descriptive Statistics

٣.٣.١: Digital Leadership and its imensions

Table (3): Digital Leadership

Dimension	Mean	Std. Deviation	CV%
Digital Vision	3.84	0.70	18.23%
Digital Decision-Making	3.80	0.72	18.95%
Digital Transformation	3.83	0.69	18.01%
Digital Orientation	3.81	0.71	18.64%
Overall Digital Leadership	3.82	0.71	18.46%

The findings indicate that Digital Leadership in the Ministry of Planning is at a **high level overall**, reflecting a clear adoption of digital management practices.

The highest mean was recorded for **Digital Vision**, indicating that leaders possess a forward-looking strategic awareness of digital transformation. This suggests that leadership is not merely operational but **strategically anticipatory**.

In contrast, **Digital Decision-Making** recorded the lowest mean, indicating a partial reliance on traditional decision-making approaches alongside digital analytics. This reveals a gap between **digital awareness and digital execution in decision processes**.

Overall, the results suggest that digital leadership in the ministry reflects a **high strategic awareness level, but moderate implementation maturity**.

٣.٣.٢ Strategic Entrepreneurial Compass

Table (4): Strategic Entrepreneurial Compass

Dimension	Mean	Std. Deviation	CV%
Architecture	3.78	0.68	17.94%
Individual Ownership	3.74	0.70	18.71%
Disruption	3.77	0.72	19.10%
Value Chain	3.75	0.69	18.40%
Overall Compass	3.76	0.69	18.35%

The Strategic Entrepreneurial Compass demonstrates a **high level of presence**, but slightly lower than digital leadership, indicating that it functions more as a **structural guiding mechanism rather than a strong innovation driver**.

The highest score in **Architecture** reflects an emphasis on organizational structure and strategic design, while the lower score in **Individual Ownership** suggests limited empowerment of individual initiative.

This indicates a **moderately conservative strategic environment**, where structural stability is prioritized over radical entrepreneurial autonomy.

٣.٣.٣: Human Resource Empowerment

Table (5): Human Resource Empowerment

Dimension	Mean	Std. Deviation	CV%
Choice Freedom	3.86	0.72	18.65%
Information Sharing	3.90	0.71	18.20%
Teamwork	3.87	0.74	19.12%
Participation	3.89	0.70	17.99%
Overall Empowerment	3.88	0.73	18.81%

Human Resource Empowerment recorded the **highest overall level among the study variables**, indicating a relatively supportive organizational environment.

The highest dimension, **Information Sharing**, highlights strong internal communication and knowledge flow, which is a critical factor in enhancing decision-making effectiveness.

However, **Choice Freedom** recorded the lowest mean, suggesting that while empowerment exists, it is still **structurally constrained rather than fully autonomous**.

This reflects a model of **guided empowerment rather than full decentralization**.

٣.٤ Correlation Analysis

Table (6): Correlation Matrix

Variables	Digital Leadership	Compass	Empowerment
Digital Leadership	1	0.71**	0.76**
Compass	0.71**	1	0.73**
Empowerment	0.76**	0.73**	1

The results indicate strong and positive correlations among all study variables, suggesting that the organizational system operates as an **integrated and interconnected structure rather than isolated components**.

٣.٥: Regression Analysis

Table (7): Regression Results

Path	Beta	Sig
Digital Leadership → Empowerment	0.52	0.000
Digital Leadership → Compass	0.68	0.000
Compass → Empowerment	0.41	0.000

The findings confirm that Digital Leadership plays a **key driving role** in the organizational model. Its strongest effect is on the Strategic Entrepreneurial Compass, indicating that leadership first shapes strategic thinking before influencing empowerment outcomes.

٣.٦: Mediation Analysis

Table (8): Direct and Indirect Effects

Effect Type	Value	Result
Direct Effect	0.52	Significant
Indirect Effect	0.28	Significant
Total Effect	0.80	Significant

The results confirm a **partial mediation effect** of the Strategic Entrepreneurial Compass in the relationship between Digital Leadership and Human Resource Empowerment. This indicates that Digital Leadership influences empowerment both directly and indirectly through strategic restructuring mechanisms within the organization.

Chapter ٤: Conclusions and Recommendations

4.1 Conclusions

Based on the statistical analysis and discussion of findings, the study reached a set of important conclusions regarding the role of Digital Leadership in enhancing the Strategic Entrepreneurial Compass and Human Resource Empowerment within the Ministry of Planning.

First, the study concludes that Digital Leadership plays a **fundamental and central role** in shaping organizational transformation. The high levels of digital vision and digital orientation indicate that leadership within the ministry is highly aware of the importance of digital transformation. However, the relatively lower level of digital decision-making reveals that the transition toward fully data-driven leadership is still in progress, indicating a gap between strategic awareness and practical implementation.

Second, the Strategic Entrepreneurial Compass is present at a relatively high level, but it tends to focus more on **structural stability and organizational control** rather than entrepreneurial autonomy and innovation. This suggests that the ministry operates within a moderately conservative strategic environment that emphasizes order and structure over radical change.

Third, Human Resource Empowerment is the most developed variable among the study constructs. The ministry demonstrates a positive level of information sharing, participation, and teamwork. However, the limited level of freedom of choice indicates that empowerment remains **controlled and guided rather than fully decentralized**.

Fourth, the study confirms the existence of strong positive relationships among all variables, indicating that they operate as an **integrated system rather than independent elements**. Digital Leadership contributes significantly to both strategic orientation and human resource empowerment.

Fifth, the results confirmed a **partial mediation effect** of the Strategic Entrepreneurial Compass in the relationship between Digital Leadership and Human Resource Empowerment. This indicates that leadership influence is transmitted not only directly but also through strategic organizational mechanisms.

Finally, the study concludes that the Ministry of Planning is undergoing a **gradual digital transformation process**, characterized by strong leadership awareness and strategic intent, but with moderate levels of full implementation maturity.

4.2 Recommendations

In light of the findings, the study presents the following recommendations to enhance organizational performance within the Ministry of Planning:

٤.٢.١: Strengthening Digital Leadership

It is recommended to enhance Digital Leadership capabilities, particularly in the area of **data-driven decision-making**, by adopting advanced analytical systems and digital decision-support tools. This will help bridge the gap between digital awareness and practical application.

٤.٢.٢: Enhancing Digital Transformation Implementation

The ministry should move from a conceptual level of digital leadership toward **full operational integration of digital systems** in administrative and strategic processes, ensuring that digital tools are effectively embedded in daily decision-making practices.

٤.٢.٣: Developing the Strategic Entrepreneurial Compass

It is recommended to strengthen the entrepreneurial dimensions of the strategic compass in order to encourage creativity, initiative and flexibility within the organization.

٤.٢.٤: Expanding Human Resource Empowerment

The organization should increase the level of **employee autonomy and decision-making freedom**, while maintaining organizational control. This can be achieved through delegation of authority and participatory management practices.

٤.٢.٥: Enhancing Knowledge Sharing Systems

It is important to further develop internal communication systems to ensure continuous **information flow and knowledge sharing**, which will strengthen employee participation and improve organizational responsiveness.

٤.٢.٦: Promoting an Innovation-Oriented Culture

The ministry should work on building a **culture that supports innovation and calculated risk-taking**, which will enhance adaptability to digital transformation and improve long-term organizational sustainability.

Final Statement

Overall, the study emphasizes that achieving effective digital transformation in public sector organizations requires an integrated approach that combines **digital leadership, strategic orientation, and human resource empowerment**. Strengthening the alignment among these dimensions will significantly enhance organizational efficiency, flexibility, and sustainable performance

References

- Abbas, Z. A. (2021). *The role of strategic dialogue in entrepreneurial behavior: The mediating role of the entrepreneurial strategy compass* (Doctoral dissertation, University of Baghdad, College of Administration and Economics).
- Antonis, K., Peter, B., & Celeste, W. (2007). Managing employee empowerment in luxury hotels in Europe. *International Journal of Service Industry Management*, 18(1).
- Abdulghani, A. A. (2020). Managing and building work teams. *International Journal of Educational and Psychological Sciences*, 59(1), 142–167.

- Al-Zubaidi, L. S. A. A. (2007). *The impact of administrative freedom on organizational knowledge transfer* (Doctoral dissertation, Al-Mustansiriyah University, College of Administration and Economics).
- Arrigo, E. (2015). Open innovation and market orientation: An analysis of the relationship. *Journal of the Knowledge Economy*, 9(1), 150–161. <https://doi.org/10.1007/s13132-015-0336-7>
- Aymar, S. (2006). Information and communication technology: An incentive or an obstacle to the qualification of Arab SMEs? In *Proceedings of the International Forum on SMEs Development* (April 17–18).
- Bharadwaj, A., El Sawy, O. A., Pavlou, P. A., & Venkatraman, N. (2013). Digital business strategy: Toward a next generation of insights. *MIS Quarterly*, 37(2), 471–482. <https://doi.org/10.25300/MISQ/2013/37:2.3>
- Baumgartner, Julia, 2014, Benefits of employee empowerment for service quality and job satisfaction in the hospitality industry, Bachelor Thesis for Obtaining the Degree Bachelor of Business Administration in Tourism and Hospitality Management, Himberg.
- Brown, D. R., & Harvey, D. F. (2006). *An experiential approach to organization development* (7th ed.). Pearson Prentice Hall.
- Brynjolfsson, E., & McElheran, K. (2016). The rapid adoption of data-driven decision-making. *Management Science*, 62(5), 1335–1356. <https://doi.org/10.1287/mnsc.2015.2232>
- Connell, J., Agarwal, R., & Dhir, S. (2018). *Global value chains, flexibility and sustainability*. Springer. <https://doi.org/10.1007/978-981-10-8929-1>
- Cortellazzo, L., Bruni, E., & Zampieri, R. (2019). The role of leadership in a digitalized world: A review. *Frontiers in Psychology*, 10, 1938. <https://doi.org/10.3389/fpsyg.2019.01938>
- Davenport, T. H., & Ronanki, R. (2018). Artificial intelligence for the real world. *Harvard Business Review*, 96(1), 108–116.
- Fuchs, C., & Golenhofen, F. J. (2019). *Mastering disruption and innovation in product management: Connecting the dots*. Springer. <https://doi.org/10.1007/978-3-319-93512-5>
- Gandellini, G., & Venanzi, D. (2011). Purple ocean strategy: How to support SMEs' recovery. *Procedia Social and Behavioral Sciences*, 24, 1–15. <https://doi.org/10.1016/j.sbspro.2011.09.006>
- Gans, J. S., Scott, E. L., & Stern, S. (2018). Strategy for start-ups: The entrepreneurial strategy compass. *Harvard Business Review*, 96(3), 44–56.

- Gomes- Meja, L, Balkin, D. and Cardy, R (2005) Management People performance chang, 2th Ed, McGraw Hill, Lrwin.
- Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2022). *A primer on partial least squares structural equation modeling (PLS-SEM)* (3rd ed.). Sage.
- Hanelt, A., Bohnsack, R., Marz, D., & Antunes Marante, C. (2021). A systematic review of the literature on digital transformation. *Journal of Management Studies*, 58(5), 1159–1197. <https://doi.org/10.1111/joms.12649>
- Hellström, T., & Olsson, U. (2017). *Managing packaging design for sustainable development: A compass for strategic directions*. Wiley.
- Kane, G. C., Phillips, A. N., Copulsky, J. R., & Andrus, G. R. (2019). *The technology fallacy: How people are the real key to digital transformation*. MIT Press.
- Kotter, J. P. (2012). *Leading change*. Harvard Business Review Press.
- Lister, M. (2020). Enforcing immigration law. *Philosophy Compass*, 15(3), e12652. <https://doi.org/10.1111/phc3.12652>
- Linda, Raqam, 2002, Workers' participation in the management of the national institution: reality and challenges, *Journal of Human Sciences*, Issue 2, Mohamed Khider University, Algeria, Sakra.
- Luo, Y., Sun, T., Lin, C. H., Luo, D., Qin, G., & Pan, J. (2021). The human resource architecture model: A twenty-year review and future research directions. *The International Journal of Human Resource Management*, 32(10), 1–30. <https://doi.org/10.1080/09585192.2020.1712250>
- Mullins, L. J. (2005). *Management and organisational behaviour* (7th ed.). Pearson Education.
- Northouse, P. G. (2021). *Leadership: Theory and practice* (9th ed.). Sage Publications.
- Peng, B. (2022). Digital leadership: State governance in the era of digital technology. *Cultures of Science*, 5(4), 210–225. <https://doi.org/10.1177/20966083221128672>
- Saleh, A. A., & Ibrahim, I. K. (2019). *Strategic leadership: The mobile mind agenda in the smart use of power and motivation*. Dar Al-Yazouri.
- Vial, G. (2019). Understanding digital transformation: A review and research agenda. *The Journal of Strategic Information Systems*, 28(2), 118–144. <https://doi.org/10.1016/j.jsis.2019.01.003>
- Viswanathan, M. (2015). *Creative copyright: Tailoring intellectual property policies and business strategies*. Edward Elgar Publishing.

Westerman, G., Bonnet, D., & McAfee, A. (2014). *Leading digital: Turning technology into business transformation*. Harvard Business Review Press.

Appendix (1) Questionnaire of the Study

(First: Digital Leadership)

1. Digital Vision

1. The administration has a clear vision for future digital transformation.
2. The administration seeks to anticipate technological changes before they occur.
3. Strategic digital thinking is used in planning processes.

2. Digital Decision-Making

4. Administrative decisions are based on digital data.
5. Electronic systems are used to support decision-making processes.
6. Data is analyzed before making important decisions.

3. Digital Transformation

7. The administration supports digital transformation initiatives within the organization.
8. There is flexibility in adopting modern technologies.
9. Administrative systems are continuously updated.

4. Digital Orientation

10. There is a clear digital transformation strategy.
11. Technology use is encouraged in administrative work.
12. The administration focuses on building an integrated digital environment.

(Second: Strategic Entrepreneurial Compass)

1. Architecture

13. The organizational structure is designed to support strategic objectives.
14. There is flexibility in restructuring processes.
15. Strategy is linked with organizational structure.

2. Individual Ownership

16. Individual initiatives are encouraged within the organization.
17. Employees have the freedom to propose new ideas.
18. Creative individual contributions are supported at work.

3. Disruption

19. The administration supports unconventional ideas.
20. Radical change is encouraged when necessary.
21. There is a supportive environment for non-traditional innovation.

4. Value Chain

No.	Name	Academic Title	Specialization	College / University
1	Salah Al-Din Awad	Prof. Dr.	Knowledge Management	University of Baghdad / College of Administration and Economics
2	Sadoun Jithir Hamoud	Prof. Dr.	Marketing Management	University of Baghdad / College of Administration and Economics
3	Ghani Dahham Tanai	Prof. Dr.	Human Resources	University of Baghdad / College of Administration and Economics
4	Fadila Salman Dawood	Prof. Dr.	Strategic Management	University of Baghdad / College of Administration and Economics
5	Shifa Mohammed Ali	Lecturer	Organizational Behavior	University of Baghdad / College of Administration and Economics
6	Ahmed Dhiyab Ahmed	Asst. Prof. Dr.	Statistics	University of Baghdad / College of Administration and Economics
7	Sadoun Mohammed Salman	Asst. Prof. Dr.	Organizational Behavior	University of Baghdad / College of Administration and Economics
8	Atheer Abdullah Mohammed	Asst. Prof. Dr.	Human Resources & Knowledge Management	University of Baghdad / College of Administration and Economics
9	Bushra Hashim Mohammed	Asst. Prof. Dr.	Strategic Human Resource Management & Organization Theory	Middle Technical University
10	Najla Younis Mohammed Al-Murad	Asst. Prof. Dr.	Marketing Management	University of Mosul / College of Administration and Economics
11	Ali Mawat Al-Sudani	Asst. Prof. Dr.	Strategic Management	University of Baghdad
12	Mohammed Ma'touq Aboud	Asst. Prof. Dr.	Organization & Organizational Behavior	University of Baghdad